

MEĐUNARODNI NAUČNI SKUP „DANI ARČIBALDA RAJSA“
TEMATSKI ZBORNIK RADOVA MEĐUNARODNOG ZNAČAJA

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THEMATIC CONFERENCE PROCEEDINGS OF INTERNATIONAL SIGNIFICANCE

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P R E F A C E

In front of you is the Thematic Proceedings of the International Scientific Conference “Archibald Reiss Days”, which was organized by the Academy of Criminalistic and Police Studies, with the support of the Ministry of Interior of the Republic of Serbia and the Ministry of Education and Science of the Republic of Serbia, and held at the Academy of Criminalistic and Police Studies.

This International Scientific Conference is held for the second time in the context of initiated reforms of the security services and police education, and also in memory of one of the founders and directors of the first modern police high school in Serbia, Dr. Rodolphe Archibald Reiss, after whom the Conference was named.

The Thematic Conference Proceedings contain 76 papers by eminent experts in the field of law, security, criminalistics, forensic sciences, medicine, members of national security system or participants in education of the police and army, as well as other security services. Each paper has been reviewed by two competent international reviewers, and the Thematic Conference Proceedings in whole has been reviewed by four competent international reviewers.

The papers published in the Thematic Conference Proceedings contain the overview of contemporary trends in the development of police educational system, development of the police and contemporary security, criminalistic and forensic concepts. Furthermore, they provide us with the analysis of the rule of law activities in crime suppression, situation and trends in the above-mentioned fields, as well as suggestions on how to systematically deal with these issues. The Thematic Conference Proceedings represents a significant contribution to the existing fund of scientific and expert knowledge in the field of criminalistic, security, penal and legal theory and practice. Publication of this Thematic Conference Proceedings contributes to improving of mutual cooperation between educational, scientific and expert institutions at national, regional and international level.

Finally, we wish to extend our gratitude to all authors and participants at the Conference, as well as to reviewers: Mr Mykhail Tsymbalyuk, PhD, Mr Janko Jakimov, PhD, Mr Vid Jakulin, PhD and Mr Miodrag Simović, PhD. We also wish to thank the Ministry of Interior of the Republic of Serbia on its support in organization and realization of the Conference, as well as the Ministry of Education and Science of the Republic of Serbia, for its financial support in publishing of the Thematic Conference Proceedings.

Belgrade, July 2012

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P R E D G O V O R

Poštovani, pred Vama je tematski zbornik radova učesnika međunarodnog naučnog skupa „Dani Arčibalda Rajsa“, koji je u organizaciji Kriminalističko-policijske akademije, a uz pomoć Ministarstva unutrašnjih poslova i Ministarstva prosvete i nauke Republike Srbije, održan na Kriminalističko-policijskoj akademiji.

Međunarodni naučni skup se održava drugu godinu za redom u kontekstu započetih reformi službi bezbednosti i policijskog školstva, a istovremeno u znak sećanja na jednog od osnivača i direktora prve moderne visoke policijske škole u Srbiji, prof. dr Rudolfa Arčibalda Rajsa, po kome skup i nosi ime.

Tematski zbornik sadrži 76 radova čiji su autori eminentni stručnjaci iz oblasti prava, bezbednosti, kriminalistike, forenzičkih nauka, medicine, pripadnici nacionalnog sistema bezbednosti ili učestvuju u edukaciji pripadnika policije i vojske, kao i drugih službi bezbednosti. Svaki rad su recenzirala dva stručna međunarodna recenzenta, a celokupan zbornik četvorica recenzenata.

Radovi objavljeni u tematskom zborniku sadrže prikaz savremenih tendencija u razvoju sistema policijskog obrazovanja, razvoja policije i savremenih koncepata bezbednosti, kriminalistike i forenzike, kao i analizu aktivnosti pravne države u suzbijanju kriminala, zatim prikaz stanja i kretanja u tim oblastima, kao i predloge za sistemsko prevazilaženje postojećih problema u njima. Tematski zbornik radova predstavlja značajan doprinos postojećem fondu naučnog i stručnog znanja iz oblasti kriminalističke, bezbednosne i kaznenopravne teorije i prakse. Izdavanje ovog zbornika doprinosi uspostavljanju i unapređivanju međusobne saradnje obrazovnih, naučnih i stručnih institucija na nacionalnom, regionalnom i međunarodnom nivou.

Na kraju, želimo da zahvalimo svim autorima i učesnicima skupa, kao i recenzentima, uvaženim prof. dr Mykhailu Tsymbalyuku, prof. dr Janku Jakimovu, prof. dr Vidu Jakulinu i prof. dr Miodragu Simoviću. Takođe zahvaljujemo Ministarstvu unutrašnjih poslova Republike Srbije, koje je podržalo organizaciju i održavanje skupa, kao i Ministarstvu prosvete i nauke Republike Srbije, koje je finansijski potpomoglo izdavanje ovog tematskog zbornika radova.

Beograd, jul 2012. godine

Programski i Organizacioni odbor

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OBLAST II

POLICIJA I SAVREMENI KONCEPTI BEZBEDNOSTI

PROFILE OF A TERRORIST

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Abstract: In order to scientifically investigate all aspects of modern terrorism, which is a precondition for a successful fight against this global security threat, it is necessary not only to scientifically explain its phenomenal forms and modalities of its suppression but also all essential dimensions of this form of political violence. This is, above all, applied to the study of motives, causes, and goals that characterize terrorist activities, and links between terrorism and other security threats. Given the known scientific analysis of causes and motives that characterize most of the terrorist organizations, scientific research of a profile of terrorists as individuals who, being indoctrinated and motivated, are consciously opting for terrorist activity, requires an enormous research effort. The authors of this paper seek to comprehensively examine the very profile of a terrorist through psychological analysis of personality structure of a terrorist, channels of social communication through which planned and thorough terrorist indoctrination of individuals is carried out, as well as analysis of social surroundings in which, for many different reasons, political violence characteristic of terrorists is being generated.

Key words: terrorism, political violence, security threat, profile of a terrorist, personality psychology, motives and causes of terrorism.

SUICIDE TERRORISM AS A FRAMEWORK FOR RESEARCH OF TERRORISTS PROFILES

“Terrorism is about one thing: Psychology. It is the psychology of fear”

(Philip G. Zimbardo)

A large number of conceptual definitions of terrorism can be found in scientific literature. However, we can estimate that in spite of many ideological, conceptual and other restraints and disputes, a high degree of consensus in this area has been achieved, particularly bearing in mind the main characteristics of terrorist acts, ter-

¹ Professor Radoslav Gaćinović, PhD, is a scientific advisor at the Institute of Political Studies in Belgrade, Serbia. This paper is the result of realization of scientific research project no.179009 Democratic and National Capacities of Serbian Political Institutions in the Process of International Integration, carried out by the Institute for Political Studies, funded by the Ministry of Education and Science of the Republic of Serbia.

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rorist goals and motivations, and other elements of terrorism as a form of political violence and global threat to security. In a numerous attempts of conceptual determination of terrorism as a political and security phenomenon, crucial importance of its constituent elements particularly stands out, which is a result of consensus of most researchers that for the proper understanding of the nature and inner essence of terrorism, it is the most important to focus on determining its constituent elements (motives, causes, consequences, etc.). Therefore, as one can detect and evaluate through detailed analysis, in order to define terrorism as precisely and universally as possible, it is essential that the following should be taken into consideration: 1) a terrorist commits violence or threats with violence, he is inevitably politically motivated (*animos terrorandi*) and belongs to an organization; 2) terrorist activities are directed toward the far-reaching psychological consequences (for a terrorist, a target of his attack itself is not as important as political resonance of action); 3) terrorism is largely a secret activity, fatal, deadly, technologically advanced and destructive; 4) demands of terrorists are never realistic and law-based, they are always illegal; 5) terrorist actions are planned in detail, focusing on the so-called soft targets (innocent civilians) and performed at the time when they will reach their greatest effects, etc. (Gaćinović, 2010).

Given the current research of this phenomenon, the opinion prevails that basic or constitutive elements of any terrorist act are: 1) the very act of violence (the conscious and deliberate use of violence or threat of violence); 2) illegal and criminal act; 3) political, religious and ethnic motivation; 4) political objectives and messages; 5) criminal character, unpredictability, cruelty and ruthlessness; 6) creating an atmosphere of fear, dread, panic and mistrust; 7) innocent (intentional or random) civilian casualties, and 8) his public desire for publicity. In addition to this there are other constituent elements of terrorism, such as methods, means, tactics, arbitrariness, impersonality, randomness, blackmail, coercion, lack of discrimination, incitement to obedience, and others. However, given the multitude of definitions, the above mentioned elements can be used to properly determine the content of the concept of terrorism in relation to similar concepts (terror, violence, etc.).

As a type of political violence, terrorism is a phenomenon which degrades the fundamental moral values and confronts not only individuals and societies linked to terrorist activities, but also the very moral values, and thus the total personal and social life (Kegley, 2003). Terrorism implies the use of violence or threat of violence, which is applied predominantly from political reasons, to intimidate and mercilessly crush the resistance of the one (target) whom it is performed against (Gaćinović, 2010). Walter Laquer defines terrorism as the use of violence for the purpose of realization of political aims, directed against governments, ethnic groups, classes, race, religion, or political movements (Laquer, 1999). Terrorism is also defined as a specific "synthesis of war and theatre", a dramatization of the most forbidden types of violence, committed against innocent victims before the public eye, in the hope that it will induce a state of fear for political purposes" (Combs, 1997). Since the Al Qaeda attacks on the World Trade Center in New York on September 11, 2001, the nature of that mega media "theatrical terrorism" has radically changed, because the terrorists have begun choosing new targets, which intensely require not only a shift in policy of the enemy, but also a way to destroy them along with many casualties. Somewhat broader is a definition of terrorism which indicates premeditated use of violence in order to achieve specific political, social, or religious goals, by causing fear to the general public (Falkenrath, 2001). Changes in tactics of terrorists, expressed primarily on September 11, indicate the development of terrorism in a new direction and the fact that the terrorism today represents growing threat to global security. The goal of global terrorism - a new age terrorism, is to cause fear using the impersonal and unjustified terror which, with *the publicity* - the desire to

draw attention and win sympathy for terrorist aims and killed humans - became the main feature of terrorism in the first decade of the XXI century, the most terrible "violence destined to create alarm and fear" (Kegley, 2003). The terror, fear and general panic are particularly caused by the most dramatic form of a new age terrorism - suicide terrorism, which in its very root is based on individuals "committed" to sacrifice their lives for the sake of ideologically defined, first of all ethnic and religious beliefs and goals. This form of terrorism surpasses the "standard framework" of terrorist behaviour and actions based on extreme political orientations and the application of force through the most serious acts, and it becomes a favourite tactic of terrorists in the world in recent decades.

A definition of suicide terrorism is a complex theoretical question, as well as a definition of terrorism in general. This is due to an even greater difference and disagreement regarding the determination of its key elements and characteristics in the case of terrorism in general (Žarković et al, 2010). The problems also appear in the terminology, as there are many terms (phrases) to denote suicide terrorism: suicide bombing (Oliver and Steinberg, 2005), which is too narrow a term, because it applies only to the terrorists as suicide bombers; suicide missions (Gambetta, 2005); genocidal bombing; suicide/martyrdom attackers (Vertigans, 2008); martyrdom operations (Springer et al, 2009); or suicide operations. Genocide bombing and suicide attacks are terms which orientate the analysis to the victims of assault and criminal nature of violence used against them (Cronin, 2003). Martyrdom operations (Cook, 2005) represent a term that suggests an association between suicide as an individual activity, as political violence terrorism and radical religious beliefs, which implies martyrdom as blind and unlimited devotion and unconditional fulfilment of a promise of sacrifice for "brothers" in faith and their objectives and, in this regard, the present strategy of the so called Holy War – Jihad. These operations, therefore, as a term, indicate the cause of the perpetrators of suicide attacks and their association with the terms of holy war or self defence (Cronin, 2003). However, in the case of suicide attacks carried out by Islamic extremist terrorist organizations that advocate Jihad against nonbelievers, extremists uncritically call on to the Koran to convince recruits for suicide acts that this kind of their self-sacrifice and death will provide them eternal bliss and reward in heaven (Franks, 2006). Finally, the term - suicide operations - emphasizes the character and nature of the military tactics of terrorist organizations that carry out suicide attacks.

In order to accurately define the concept of suicide terrorism, it is essential to answer numerous questions, first of all, why this form of terrorism is peculiar and more efficient than others, which sources of fascination and surprise of the public by this act are, what is the superiority of the motivation of suicide terrorists who, by showing to the others not to be afraid of death, cause tremendous fear and so on (Crenshaw, 2007). Despite these concerns, according to Martha Crenshaw, suicide terrorism is not only a result of religious passion, whether Islamic, or any other, because the state of mind of a suicide bomber is no different from the state of consciousness of Tibetan suicides, the Irish political prisoners who are willing to die by famine strike or determined terrorists around the world who want to survive the attack, but they know that their chances for survival are low. Ami Pedahzur, for example, defines suicide terrorism as suicide attacks aimed at creation of an atmosphere of fear by causing as many civilian casualties as possible (Pedahzur, 2005). The same author opens the question of whether, for example, campaign in which the terrorists know that there is little chance of survival, should be considered as suicide terrorism or just the actions in which there is no chance to survive, but also concludes that both of these categories represent suicide terrorism. Therefore, the phenomenon of suicide bombers can be considered as subcategory of suicide terrorism.

For Yorem Schweitzer suicide attacks imply violent, politically motivated attacks that are executed in a conscious state of determination of a person who blows up both himself and a set goal. Previous preparation for the certain death is a prerequisite for a successful attack (Schweizer, 2002). Scot Atran defines suicide terrorism as a terrorist act in which the attacker destroys or attempts to destroy the target, consciously sacrificing, at the same time, his own life (Atran, 2004). Robert Pape defines suicide terrorism in two ways: in the narrow sense, suicide terrorism implies a situation where an attacker (consciously) kills himself, and in the broader sense, as any situation in which the attacker is expected to be killed by others during the execution of a terrorist act (Pape, 2003). Bruce Hoffman (Hoffman, Bruce, 2004) emphasizes that the use of suicide terrorism destroys the faith of the public that the top authorities are able to preserve and protect its citizens, causing a climate of fear that terrorists use. Given that suicide terrorism can usually be defined as "the willingness of sacrificing one's life in the destruction or attempted destruction of targets which will support political efforts," Dragan Petrović believes that suicide bombings are "a reflection of extreme helplessness and despair that often stems from a deep injustice or the pursuit of higher goals, in the absence of adequate resources for their achievement" (Petrović, 2009).

Whichever term is used for the suicide terrorism in theory, a high level of agreement about its nature and the motives and the consequences it causes is achieved, so it can be concluded that suicide terrorism is a form of physical threat to the safety of people and society and causing of horror, fear and panic, which is performed by one or more people (terrorists), by using various means (explosive devices, firearms, vehicles - cars, planes, etc.), from which themselves are dying, in order to completely destroy the direct victim of terrorist attack, cause general fear and panic, with extensive property damage, to achieve the given terrorist goals. Thus, the essence of suicide terrorism attacks is that a direct perpetrator consciously dies in order to achieve the goals of terrorist organizations, as holders of suicide terrorist attacks. Suicide terrorism is a specific and aggressive form of terrorism, and essentially represents a strategy of force, which is the central logic to inflict enough pain to the victim, cause general panic and terror, and to punish broader environment (the whole society, state and government/regime) and force them to make concessions to terrorists (Pape, 2003). In other words, suicide terrorism is a special terrorist strategy and tactic, especially in terms of forms, and one of its main features is an intentional act of suicider (Žarković et al, 2010). This consists of the intentional or random suicide terrorist attacks against people and property, wilful sacrifice of life of terrorists, in order to achieve the set terrorist goals. Its proponents are the world's most extreme terrorist organizations, and it is characterized by secrecy, brutality, amorality, surprise, and other tactical advantages. In carrying out suicide attacks, a suicide terrorist is a direct perpetrator, which is both an effective means and way to commit a terrorist attack. In the background of these attacks there are different terrorist organizations, which means that suicidal terrorist himself is organizationally the last link in the chain, which involves a range of stakeholders, from religious leaders, commanders, ideologues, associates, assistants and other persons of the same and/or similar orientation, which are not directly involved in carrying out of a terrorist act, but without their participation and assistance a suicide terrorist attack could not be carried out. In fact, as it is known, all modern terrorist organizations, similar to other organizational systems (state structure, intelligence, police and military organizations, companies, etc.), have highly developed organizational structure and managerial component. The top management consists of religious leaders, ideologues and top command staff, planners and instructors, while below them there are the operating parts of the organization: operational commands, the perpetrators (individuals and terrorist cells) and active and passive supporters (Ronczkowski, 2007). However, ultimately, the success of the operation depends directly on the conscious death of terrorist bombers.

Suicide terrorism is not unique to only one religion, one nation, and one country or continent, although the first association to suicide terrorism is an extreme Islamist terrorism and its most famous protagonists: Al Qaeda, Hamas and Hezbollah. Suicide attacks, in various applications, are used by different religious groups, including Muslim (Sunni and Shiite), Christian and Jewish and secular organizations, and many other groups and organizations in different parts of the world. Among others, the terrorist groups that use suicide attacks are Palestian Islamic Jihad, al-Aqsa Martyrs' Brigades, Al-AnsarMujahidin in Chechnya, Egyptian Islamic Jihad, Lashkar-e-taiba of Pakistan/Kashmir, Armed Islamic Group-GIA, Turkish Kurdistan Workers' Party, Liberation Tigers of Tamil Eelam, etc. (Franks, 2006; Cronin, 2003). Suicide terrorism is a special kind of terrorist tactics, especially in terms of forms, and its main features are careful selection, indoctrination and thorough operational training of recruits, deep secrecy (conspiracy), the preparation and execution of a terrorist act, unpredictability, and thus a risk to the victim and less possibilities for the realization of actions in preventing violence. Suicide terrorism by definition implies a conscious act that requires sacrifice and death of the perpetrator - of suicide terrorists, which is the largest dilemma in the analysis of this phenomenon.

In fact, with many other elements, the basic research problem of suicide terrorism is to understand the motives and other important features of psychological personality structure of those individuals who are willing to sacrifice and destroy their lives without question because of the higher (political, religious and ethnic) goals. In fact, suicide terrorism is characterized by a complete and strong motivation and commitment of a terrorist to sacrifice because of "higher" political, religious or other ideological goals (Gaćinović, 2010). Also, the fact that the suicide terrorist acts are terribly effective and are considered to be the "perfect terrorist weapon" opts any serious analysis of the political, sociological and psychiatric phenomenon, to address not only the roots and causes of (suicide) terrorism, but also psychological and economic aspects as well as aspects of identity (tradition, culture, morality, religion, ethnicity, value systems, etc.), its protagonist and the societies in which this type of terrorism has become almost commonplace. However, the focus of many studies of this phenomenon and manifestation of terrorism is the act of suicide as a completely nihilistic relation and self-determination of an individual towards his own life. However, suicide that occurs for the purpose of terrorism is significantly different from the everyday (general) meaning of suicide from a variety of reasons, out of which the decisive one is that the terrorists' ultimate goal is not sacrificing their own lives, but rather a tool to achieve given political goals.

In the field of psychiatry, suicide (from the Latin words *sui caedere* – to kill yourself) indicates intentional deprivation of one's own life for various reasons. The general term implies a suicide as the act auto-aggression, the expression of person's sadistic super-ego that has turned against itself. It is a desperate protest, the act of rebellion of ego against the tyrannical superego, and simultaneously, the last attempt of gaining its favour. **According to Freud's drive theory it is the most direct expression of death instinct or impulse for total destruction. Many persons react with suicidal ideas in crisis, or use suicidal intentions to trigger the attention of their environment. Consciously or unconsciously, suicide is predominated by aggression and impulse for destruction. Each suicidal act is auto-aggression - the destruction, but also a call - function: addressing environment to protest for its problems.** That is why modern science is no longer asking the question "why someone wanted to die", but "what he wanted to achieve". Psychiatry as a science has held earlier that suicide is a symptom of mental disorder and disease. However, with the development of both theory and practice, understanding of suicide and its definition have significantly changed, and the crucial factor in these changes is the consciousness of the act.

In case of suicide terrorism, there is no general agreement on whether the suicide terrorists are disturbed, psychopathological personalities, which are releasing their own problems with the environment with an act of suicide, or it is conscious destruction of life and sacrifice for the sake of more general (group) and pre-defined goals. However, bearing in mind all the characteristics of terrorist organizations which undertake suicidal acts, one can argue that they do pick those individuals which consciously go into self-destruction and death in order to contribute to organizational goals. The reason is that terrorist organizations do not want to risk the success of their actions and, in the event that suicide recruits show signs of pathological behaviour, remove them, because of the inability to completely control them, the lack of trust that they will unconditionally execute orders, and the ability to threaten the security of the whole organization, its operational cells or a specific terrorist act. Therefore, the prevailing opinion is that the majority of suicide terrorists are psychologically normal individuals, aware of their ultimate fate and the fate of their victims, and that the attacks are always pre-designed, although there are examples of coercion or deception in recruiting of suicide terrorists. It is believed that suicide terrorists are neither impulsive nor crazy, organizations carefully select them and, if necessary, subject to indoctrination. We should add that the act of suicide itself is not the ultimate goal, or even the death or destruction of selected targets. Regardless of whether the targets of suicide attack are intentional or random, a terrorist act always has a deeper/wider meaning. If the strategic objective is causing fear, then the specific targets are chosen with which a wider group of people (ethnic, religious and beyond) can identify, in order to achieve intimidating and paralyzing influence and change their behaviour or actions. If the goal is gaining support, the victims whose death will cause a feeling of satisfaction and encouragement are selected for the target.

According to a study, there are several reasons why suicide terrorism, as the most effective tactic, is used by many terrorist organizations in the world. These are primarily:

- Suicide attacks can cause major harm and considerable damage;
- Suicide mission's success is almost guaranteed when the attacker starts on operation;
- Suicide attacks have a major psychological impact on the public by inducing a feeling of helplessness;
- Suicide attacks are relatively cheap but very effective;
- Suicide attacks are usually less complicated than other terrorist operations;
- The use of suicide terrorism presents minimum security risk to the organization, and
- Media coverage of suicide attacks is almost guaranteed (Ronczkowski, 2007).

Suicide or total self-sacrifice, as a tactic of execution of a terrorist act, is in particular characteristic for "Tamilee Tigers", whose perpetrators of suicidal acts are mostly teenagers, who demonstrate commitment to the group by carrying cyanide. Stronger fatalistic attitude is manifested by the Palestinian suicide terrorists, who believe that they will some day certainly end their life with a violent death. That is why they decide for a suicide terrorist attack, believing that they give their lives to achieve the right goal. Even some families of these suiciders, majority of which are young, aged between nineteen and twenty-two years, and more recently even women, accept suicide as a heroic act. However, there are families who oppose it and publicly condemn the leaders and people responsible for recruiting and training in these terrorist organizations.

Motivations for the suicide attacks do not differ substantially from motives for other types of terrorism, including the conducted indoctrination, the commitment to aim, personal resentment, anger, revenge and retaliation for injustice. Religion, politics, culture or ethnic ideology must not be ignored when it comes to suicide terrorism. In literature, as the most common motives for suicide actions, the following are listed:

- A strong belief in the goal and obligation to glorify a terrorist group. For some individuals, the survival of their terrorist group is more important than their lives;
- Revenge for some types of humiliations or atrocities committed by certain states to his relatives or close friends;
- Frustration or humiliation with the lifestyle and current positions, as a result of someone who oppresses them for a longer period (refugee camps throughout the Arab region);
- Death, as a result of suicide terrorist attack, is not considered to be a suicide, even though Islamic law strictly forbids suicide, suicide is considered “Shehida”, a martyr, who died while fulfilling a religious command for Jihad;
- Tendency to impress the public and to remember the suicides (Ramasubramanian, 2004; Cronin, 2003). For example, the Tamil Tigers mark “Heroes Day” in honour of all the suicide terrorists who sacrificed their lives for their cause;
- Financial securement of the family of a suicide terrorist;
- Religious motivation and religious/ethnic nationalism (Gunaratna, 2000);
- The desire of women for the gender equality in some communities (Beyler, 2003);
- Indoctrination with martyrdom and volunteerism for the suicide operations, and
- Manipulation by terrorist organizations which seek and manage to persuade young people and inspire the idea of martyrdom, etc.

For example, a growing number of terrorist groups in Egypt, Chechnya and Afghanistan whose ideological basis belongs to radical Islamism are committed to suicide terrorism in the last decade. The tradition of martyrdom is strong even in secular Islamic societies, or the glorification of martyrdom for the sake of the community. In this context, we should particularly mention members of nationalist groups al-Aqsa Martyrs’ Brigades (Ronczkowski, 2007; Franks, 2006).

Terrorist organizations have long-term benefits from death of their members - suicide terrorists, because they provide them a dose of legitimacy. Their death sends the message that there is no return. A group glorifies such an act and inspires a culture of martyrdom, which is a way to inspire others to join its ranks. In fact, even before he performs an attack, a suicider is in many ways a living martyr. The rituals he is involved in are designed so that it looks impossible to retreat from the attack and desist and at the same time not lose their honour and place in society. There are numerous examples of Palestinian suicide bombers who have decided to such an act to avenge the death of a family member. The martyr is then celebrated in the family, they praise him for what he has done and he thus contributes to improvement of the family status. To strengthen the culture of martyrdom in some societies, suicide bombers appear on television and posters in the occupied territories, even in schools children are told that they are martyrs, which had died a heroic death and should be moral example for the future generations. In this way, the existing cultural patterns are used and strengthened in order to legitimize suicide terrorism.

DIFFICULTIES AND STEREOTYPES IN RESEARCH OF A TERRORIST PROFILE

The scientific study of terrorism as a political, legal and security phenomenon carries a multitude of complex dilemmas and it is difficult to solve. Agreeing that the three key tasks in researching of terrorism are the description of the phenomenon, its explanation, and selection of remedy/measures and methods for its suppression (*description, explanation and prescription*), the key challenge, however, represents an attempt to explain all aspects of terrorism, that is analysis of all conditions and causes that lead certain individuals and entities to seek to achieve their political goals by terrorist acts (Gaćinović, 2010; 2011; Gaćinović & Bajagić, 2011). This means that without research into the causes, motives, goals and ways of manifestation of terrorism, scientific analysis of terrorism as one of the threats to security in the XXI century cannot exist. In addition to observing its structural elements, one of the main challenges in research of terrorism has been providing answers to the following questions: How and why someone chooses to become a terrorist and becomes one? Which factors decisively contribute to such self-motivation? Are they psychopathic personalities, or not? (Ramasubramanian, 2004). Providing answers to these questions is the beginning of serious dealing with a terrorist profile. Many studies indicate the crucial importance of both individual and group psychological aspects (Reich, 1998; Merari, 2007; Horgan, 2003), that is, that terrorists are insane, sick, frustrated and fanatical individuals who are emotionally vulnerable (rage, alienation etc.), who feel different political and social discontent and express unlimited hatred toward others, and are systematically indoctrinated especially in the religious sense, are identifying themselves with victims close to them through personal victimization, are dedicated to the goals of the organization they belong to up to the readiness for self-sacrifice, etc. (Horgan, 2008). There are disputes among the authors about the methodology in research and other determinants of personality profile of terrorists. According to White, the essence of disputes comes down to three perspectives: *practical, nonpromising and promising*. The practical point of view is represented in division of terrorists on criminals, crazies and crusaders. Criminals, organized into groups, terrorize for material benefits; the insane (mentally ill people) are serial killers who terrorize for psychological profit: excitement and sense of superiority over ordinary people. These two groups, however, may be psychologically profiled, and they are not terrorists who deserve special treatment. The real terrorists, according to White, are the crusaders, who wish to change the world. Walter Lacquer and Jerrold Post represent non promising viewpoint that it is not possible to make a terrorists profil because it does not exist. The only certain thing is that they are young people. White agrees with this, adding that the terrorist groups are led by charismatic leaders and their followers are "weak personalities" imbued with religious fundamentalism or political fanaticism, and eager to be guided (White, 2004). Post also states that terrorists are true believers, extremely fanatic, and that this fanaticism in groups produces exclusivity of absolutist rethoric (Post, 1998), although terrorists are not frustrated and sick persons, but very rational and extremely intelligent.

Heuristic (promising) viewpoint that promises making of a terrorist profile is represented by Jeffrey Ian Ross, who combines the individual with the group psychology and lists five psychological factors that form the personality of a terrorist: suitable/prognostic personal features, frustrated feelings of narcissism resulting in aggression, a tendency to association, the ability to learn, and calculation of costs and benefits (Ross, 1996). First, there are several *notable features* of individual ter-

rorists - favorable character. Terrorists show fear, anger, depression, guilt, antisocial behavior, a strong ego, the need for excitement and a sense of disorientation. The more such characteristics a person has, the more likely he is to become a terrorist. Second, the state of *frustration and narcissism generate aggression*. These conditions create possibility to single out the important personality features of a terrorist from the motivation for joining a terrorist group: susceptibility to frustration (low frustration tolerance), and omnipotent arrogance (narcissism), which, in interaction, constitute aggression. The third determinant, by Ross, is the tendency to association, although in our opinion, a tendency to association is not necessarily characteristic of a terrorist personality – it is more likely that group action is the result of fighting tactics, rather than its cause. Of course, learning the terrorism tactics and techniques strengthens the commitment of individuals for terrorism, not because the terrorists are friendly and eager to learn, but because it is both (groups and learning in groups) the way of achieving the goals of terrorism. The fact that terrorists are associated, however, is not because of their emphasized friendliness, but because of the technology of terrorism, thus our opinion is that the theses here are substituted: the terrorist goal is not a terrorist group - it is a tool to achieve terrorist goals. Fourth, the association to the group increases the opportunity to learn, thus reinforcing terrorist activity. The fifth factor is the *calculation of costs and benefits* (Ibid). However, if we accept the discussion about mechanisms of integration of individual-terrorist in terrorist entities as valid, and their indisputable youth with all immanent characteristics (plasticity, reformist desires, vulnerability, suggestibility and desire to test the limits of power), it is logical that the “calculations of cost and benefit” cannot be a relevant base for terrorists personality profiling. In fact, any reasonable person would give up terrorism if he was able to soberly and objectively “calculate costs and benefits”, and it is known that the terrorists are at least average, and even more often above average intelligent persons.

Thus, in our opinion, there are two reasonable options why investigators of terrorism deny the possibility of terrorist personality profiling: 1)gnoseological overlooks, as a less likely option, and 2) already traditional secrecy and one-sidedness of experts. An oversight as an option has a clear psychological component. Starting from the fact that previous studies have not resulted in creating a stable profile of terrorists (Gupta, 2011), we can evaluate that it is not possible to create a personality profile similar to that used by police in the fight against organized criminals and the insane. The key reason is simple: terrorists are trained. Namely, immanent to each training system is that, by shaping behavior in a controlled environment, a personal stamp of an individual is deleted, the ways of conduct (*modus operandi*) are levelled and far more efficiently the way of life (*modus vivendi*) structured, which is not prone to criminals. Terrorism requires operational and professional behavior patterns, so it is logical that individual, intuitive and inspirational personal models by which the “signature of an individual” could be recognized are lost. After all, the claim that any human being willing to kill innocent people, and often, at the same time willing to die himself, *has no* support in the structure of personality, would contradict elementary logic of psychological functioning and the way of rational behavior.

THE FORMING OF TERRORIST PERSONALITY

According to some studies, the formation of a terrorist personality is decisively affected by two psychological processes: *motivations for joining and mechanisms of integration of individuals into a group*. Unchanged and controlled environment (physical and social), possession of information, the maximum physical exhaustion, gradual dosage of psychological demands and gradual modelling of the de-

sired values, are sufficient conditions for shaping the behavior that will, eventually, create consciousness and feelings of individuals. Of course, this is the most extreme Skinnerism⁴ (Evans, 1988), but fully explains the behavior of terrorists who were trained under the assumption that prior to training they had been moderate religious skeptic. In theory, the two qualitative meta-theories about the motivation to join terrorist groups are well known, on which postulates one could seek an answer to the question where from the hopelessness generated by modern terrorism comes. The first is *Freud's concept* of death drive, as well as some neo-Freudian theories (Reich; 1998; Post, 1998) which recognize the lack of serious psychopathology in terrorists, thereby acknowledging their normality, claiming that terrorists suffer from one type of personality pathology, whose cause is in childhood trauma, that is that they are forced to violence by some psychological forces. These personality disorders include a permanent model of inner experience and behavior, including control elements of cognitive, affective, interpersonal, and impulsive, which deviate noticeably from the expectations of the individual. This pattern of behavior is pervasive and inflexible; it begins in adolescence or early adulthood; it is stable over time and followed by deterioration. Second theory is *Enzensbergers theory* about terrorist as a radical loser, group which offers him a support (terrorist group), and the media spectacle (which both to the individual and group) provides the way out in the "fusion of destruction and self-destruction" in front of the curious audience which, having no such destructive potential, expresses attention or admiration for those who own one. This attention/admiration is necessary and sufficient to the terrorists as reinforcement (reward) and encouragement (incentive) to persevere in the chosen path (Enzensberger, 2005). Although inspiring, these theories are inadequate for personality profiling of the so-called "radical loser".

In the literature at least four hypotheses can be found about the reasons why an individual approaches a terrorist group: a) the hypothesis of necessity (White, 2004); b) hypothesis of frustration - aggression, c) hypothesis of the negative identity (Hudson, 1999; Knudson, 1981), and d) narcissistic rage hypothesis (Crayton, 1983; Pearlstein, 1991; Post, 1998).

The hypothesis of necessity is based on the premise that terrorists like all other human beings, want to extend their duration, to be productive and happy and live life on the trail of values, myths and ideas of the community to which they belong. However, at an early age they already recognize that "the forces of evil" do not allow the fulfillment of ideals. In such a world, which requires denial of everything that gives meaning to their lives, there is no reason to live - the terror against such a world is necessity, and to die fight along that path is the only happiness they can hope for.

The hypothesis of frustration - aggression is old model within psychology that attempts to explain the violent and aggressive behavior. The proponents of this model argue that "great deal of the behavior of terrorists occurs in response to different kinds of preventions (frustrations) of needs and goals of terrorists: religious, political, national, economic, etc., that is, that violent behavior of terrorists arises from feeling of hopelessness and anger, and is caused by belief that society does not allow them to demonstrate their opinion". This hypothesis is just a special form of a negative identity hypothesis (Margolin, 1977; Knutson, 1984). However, the hypothesis of frustration and aggression suffers from not only uncertainties, but also has a reflective element - aggression inevitably follows frustration. The operations of

⁴ See more in: Skinner (1953), *Science and human behavior*. New York: Macmillan; Leon Festinger, L., Riecken, H.W. & Stanley Schachter, S (1956), *When Prophecy Fails: A Social and Psychological Study of a Modern Group that Predicted the End of the World*, Minnesota, University of Minnesota Press; Zimbardo, P. G. (1970), *The human choice: Individuation, reason, and order versus deindividuation, impulse, and chaos*. In W. J. Arnold & D. Levine (Eds.), *Nebraska Symposium on Motivation*, Lincoln: University of Nebraska Press, Vol. 17, 1969, pp. 237-307.

global terrorist networks are long and thoroughly planned, as it was indicated by the attacks of September 11, which were planned for over two and a half years. Planning of bombing attacks on the U.S. embassies in East Africa in 1998 lasted about 5 years. It was not a reflexive action. It is precisely the practice of long and deliberate planning that undermines the hypothesis of frustration and aggression. How long does the frustration last? Does it ever fade? The long term is not consistent with the well-known flexibility of human emotions that can change quickly. The general condition of frustration could possibly lead to aggression, but not every non-reflexive aggression can be explained by frustration.

The hypothesis of a negative identity is based on one of the theories of personality development according to which some people under unfavorable conditions of development accept "negative identity" (identity of the "wicked, violent guy"). Jeanne Knutson says that terrorists have a negative identity, caused by a failure of individuals to achieve a status that is considered as a desired and expected by the individual, his family and social environment. According to this, one becomes a terrorist due to feelings of rage and hopelessness, due to the lack of alternative paths (Knutson, 1984). For example, Ahmad Fadeel al-Nazal al-Khalayleh from Zarga, better known as Abu Musab al-Zarqawi, "the commander of the living bombs", has completed only primary school, came from a working class family, even as a young man was in prison (possession of drugs and rape), but some top positions in the Kingdom of Jordan are occupied by several members of his tribe.

The hypothesis of narcissistic rage is supported by psychologists Jerrold Post, John Crayton (Post, 1998, 2007; Crayton, 1983) and others. This approach is to some extent influenced by in-depth psychoanalysis, which considers terrorists as borderline disturbed personalities, where this disorder occurred in the early stage of the so-called primary narcissism, which occurs in the form of "grandiose sense of self" and idealized parental imago (*If I can't be perfect, at least I'm in a relationship with something perfect*). If a primary narcissism in the form of a "grandiose sense of self" is not neutralized by reality testing, the "grandiose sense of self" makes a person sociopathic, arrogant, with a lack of feeling for others. Similarly, if it receives a form of "idealized parental imago" and is not neutralized in the reality testing, it can produce a state of hopeless defeat, and this may lead to feelings of anger and a desire to destroy the source of object's frustrations. Such individuals will accept a terrorist group as a means to meet the idealized, grandiose sense of self (Crayton, 1983). In this sense, terrorism is an attempt to achieve power and verify their greatness. However, none of these hypotheses has sufficient analytical and explanatory power to explain the motivation of individuals to accept the ideology of violence with which they approach the terrorist groups, but it is indisputable that all four, with mutual integration and interaction, can do this.

In literature, several comprehensive studies of terrorist profiles emerged, among which the work of American psychiatrist Marc Sageman stands out, according to which the search for common features that could explain why individuals opt for terrorism can be divided into three main approaches: 1) terrorists share a common social fabric, 2) they share a common psychological upgrade and 3) some people become terrorists because of their specific situation at the time of recruitment (Sageman, 2004).

Focus on the *social milieu* of terrorists provides a basis to empirically verify the stereotypical sociological explanation that terrorism is a product of poor, desperate, naïve, young single from Third World countries, susceptible to brainwashing and recruitment for terror. However, Sageman thinks that, according to this formula, geographical origin of the terrorists should not be the Third World, but the poorest Third World countries. This stereotype suggests that terrorists come from the

lowest socio-economic strata, that they are brainwashed from an early age to hate the West, or that they are relatively uneducated and susceptible to brainwashing in that age. In this sense, their views would be relatively simplified and of local character. Their despair would imply that they have no professional opportunities or are extremely limited, that they are single, because strong family commitments may prevent their complete commitment to things that require the ultimate sacrifice. Generally accepted belief is that *poverty*, as an element of socio-economic status and in a situation of asymmetric power, fuels terrorism and that terrorism is a weapon of disinherited and powerless against the powerful state (Pape, 2006). This argument, in our opinion, is a little too easily generalized in the discussion of terrorism. By exploring this problem on a representative sample, Sageman (2004) came to the conclusion that most leaders of terrorist organizations (including Al Qaeda), come from upper middle class, and finally that about three-quarters of global terrorists emerge from the middle class or higher, which denies the claim that terrorism grows out of poverty.

Contrary to the claim that terrorists in general are brainwashed by religious beliefs of childhood (the theory of “*the green diaper baby*”), Sageman has come to the conclusion that many terrorists were secularists, which disproves the mentioned theory. Sageman rejects the claim that the terrorists are desperate people, of modest economic opportunities, and without decent jobs. Empirically exploring this area on a sample of 134 persons, the author points out that at the beginning of the terrorist “career” 57 of them were in high professions (doctors, architects, ministers, teachers), 44 had a job with partial professionalism (police, military, mechanics, civil service, small business and students), and 33 had no profession. Therefore, the decision of many to join terrorist organizations is not the product of failed expectations.

Sageman particularly investigated *psychological explanations* based on the claim that “normal” people do not kill civilians randomly. Such killings, especially when combined with suicide, are looked at as irrational, based on the widespread belief in general goodness of a man. When it comes to mental sickness as a psychological cause, it is rather a quick explanation for terrorism. If you talk about major mental disorders (DSM-IV), according to Sageman, the data confirm the absence of serious mental disorders of terrorists. The only version of the thesis of mental sickness is the assertion that terrorists suffer from overpriced ideas, similar to people with physical dismorphic disorder, or those who suffer from the problem of *anorexia nervosa* (McHugh, 2001). This is another way of saying that the terrorists are fanatics. But this is not a mental disorder, but the definition and implementation of their life principles. Otherwise, we would have to include all strong beliefs into mental disorders, whether they are religious, political, and professional or hobbyist. Another version of the thesis of abnormalities is that the terrorists are insane, that is, sociopaths and psychopaths (McCauley, 2007), or people suffering from antisocial personality disorder (DSM-IV). These terms are mostly used in the sense that the terrorists are *recidive criminals* (criminals returnees), due to a defect of personality. By definition, the modern concept of antisocial personality has its origins in childhood and requires evidence of behavior disorder prior to the fifteenth year of age.

It is logical that, although antisocial personalities may become *individual terrorists*, they will not go well in a terrorist organization. Because of their personalities, they would not get along well with others, nor would they be well fitted into organization. They would lack commitment, perseverance and ability to sacrifice for the cause, which is required for martyrdom. In group activities they would not be able to coordinate with others, and would be a disturbing factor incapable of discipline. The prospect of joining the organization that puts great demands upon them would be very small, and even if they tried they would be quickly eliminated. A charac-

teristic of terrorists is also self-sacrifice, as the highest form of altruistic sacrifice for the cause/idea, which is, for example, characteristic of salafist oriented terrorists, who certainly are not mentally ill, but sacrifice their lives for God (Ohnuki-Tierney, 2002). The craving for martyrdom in the last phase of the global terrorism is expressed in threat addressed to the United States: "*We love death more than you love life.*" The failure of attempts to explain terrorism with mental sickness corresponds with the research conducted for decades that have not revealed any significant models of mental sickness of terrorists. On the contrary, these studies have shown that the terrorists are surprisingly normal when it comes to mental health. Sageman correctly criticizes the thesis of pathological narcissism as a source of terrorism, although some studies tend to indicate that the terrorists are aggressive, focused on action, hungry for stimuli and seeking excitement. Their common defensive mechanisms are externalization and separation, the characteristics that are often found in individuals who suffer from narcissistic personality disorder, as defined by neo-Freudian theorists Otto Friedmann Kernberg and Heinz Kohut, who claim that the characteristics are the result of narcissistic injuries from childhood (Post, 1998).

Sageman found no evidence of any "childhood trauma" described by terrorists themselves or their friends and relatives. Of course, psychological trauma and humiliation may leave no external trace which would be noticed by friends and relatives. However, if the trauma was significant, perhaps someone would know about it. Another form of collective experience, which could be interpreted as a "trauma" that leads to long-term resentment is humiliation or discrimination because of growing up in a foreign country. However, even then, in accordance with the theory of pathological narcissism, their hostility would sooner be directed to the host country rather than the U.S. or the West in general (Pearlstein, 1991; Akhtar, 1999; Gilmartin, 1996) which is the case with members of Al Qaeda. As an example that rejects the thesis of pathological narcissism, biography of Osama bin Laden is taken, whose most attractive personality traits are the lack of narcissism and modesty that impresses his followers and admirers - especially because he had the means to live luxuriously, and chose to give up that life in order to live a simple life among his followers. His statements are more underestimating rather than grandiose. The only trauma of his childhood was the death of his father while in all other aspects he lived a life of a prince. Also, although Al-Zawahiri does not share Bin Laden's humility, there is no evidence of traumas in his childhood (Ibid).

Another variant of the thesis on pathology of personality says that the terrorists are suffering from paranoid personality disorder, as defined by DSM-IV. In particular, they show immersive distrust and suspicion toward others, to the extent that their actions are interpreted as mean-spirited (Robbins & Post, 1997). However, according to Sageman, this clinical definition was quickly modified to include a broader definition of personality style and appearance, including vigilance, suspiciousness, hypersensitivity and isolation and particularly defense mechanisms of projection. Despite some claims that pathology of personality has an important role in shaping terrorists (Varnik, 1997; Robbins & Post, 1997), Sageman found no models of paranoid sickness of individuals before joining terrorist organizations (Sageman, 2004).

Sageman does not agree with the formulation of the authoritarian personality that results in a series of propositions that characterize the relationship between a charismatic leader and followers, because it suggests that group blindly supports the directives of leaders. This, for example, does not apply to Al Qaeda, which is characterized by very local initiative and decentralized decision-making. The leadership of Al Qaeda is not authoritarian, there is no firm decision-making chain which starts with the leadership, its structure is not hierarchical and divisions did not hap-

pen because of the decisions of the leadership. So, even though such behavior or relationship was characteristic for a particular terrorist organization (Silke, 1998; Horgan, 2003), in the case of Al Qaeda this has no foundation, says Sageman, and the thesis of personality pathology is not relevant to all organizations, particularly Al Qaeda. Sageman examines the circumstances of the accession to terrorism such as age, place of recruitment, employment and relative poverty. Each of these factors according to Sageman suffers severe criticism, especially the claim that terrorists join the organization as immature, naive young men, susceptible to indoctrination (Merari, 2007). In the Sageman's sample, the average age for joining the global terrorist organizations is 25.69 years, which does not support the thesis of immaturity.

MECHANISMS OF INTEGRATION OF INDIVIDUAL AND STRUCTURING OF TERRORIST GROUPS

Having agreed that terrorism must be predominantly cooperative group activity in order to be effective, we believe that the existence of multiple mechanisms and conditions for this integration of individuals into groups is necessary.

The increased physiological alertness - In the state of increased alertness of the body and senses, all contents that influence person are uncritically adopted, strongly imprinted in the mind and their influence on thought and behavior is relatively durable. How else can we explain unfounded and groundless fears of people (phobias), or understand that the former prisoners of war remember the details of camp life until their death, etc. Strong arousal of the body and receptivity of senses for terrorist doctrine is achieved by the parallel and alternating combat training. Physical fatigue, exhaustion, pain and extreme effort of body and mind to avoid collapse, as a response to training, are at the same time the optimal conditions for receiving and supporting even those ideas, contents and plans that are contrary to the character and psychology of the individual when he is in a state of physiological vigilance. On the other hand, there is no exposure to other options (training is done indoors) or different influences (the individual is completely focused on his group) and thus a complete control of physical and social environment for optimal modelling of future behaviour is provided. This provides a condition known in psychology as the Stockholm syndrome. The very Stockholm syndrome explains two phenomena: fanatical devotion to the goals of struggle of terrorist groups, and difficulties in profiling of terrorist personality, that is, observation that such completely different individuals behave similarly (Strenz, 1979).

Self-criticism as an assumption implies that any submission to "higher power" and higher principles demands a degree of humility from individuals. This is achieved with rituals, prayers and activities. Self-criticism serves the same principle - from time to time individuals are invited, encouraged and rewarded because they verbally express their weaknesses, flaws and imperfections in front of rest of the group. Practical "brainwashing" is impossible without self-critical sessions (Molnar, 1966).

The processes of satanization of the opponent - Killing of innocent people in terrorist attacks is not possible if the killers do not have a psychological justification for themselves. This view of the roles must be redefined: the victims are not innocent, and terrorists are not murderers. Redefinition of the roles is achieved by satanization process. Satanization (Vajt, 2004) takes place in three phases: marking a scapegoat, the construction of conspiracy theory and conspiracy countermeasures, and a necessary stage of the conflict of the forces of evil (the scapegoat and his allies) and the forces of good (terrorist group).⁵

⁵ The term "scapegoat" comes from the Hebrew religion: the high priests take all human sins and lay them

Continuous and complete indoctrination - All social systems accept the necessity of constant and complete control of the behavior of individuals and groups. Repetition is not only “the mother of knowledge” but also the essence of all control mechanisms of behavior. The more frequent and more present in the consciousness something is, the more coherent behaviour is. Nowadays, indoctrination is not so naked and brutal: it is nicely packaged in attractive and seemingly optional wrappings of modern information and gives an individual the illusion of freedom of choice.

The principle of democratic centralism and the delegation of their will through the committee is a way for an individual to feel as a part of the group and therein gain and maintain self-esteem, with at least minimal satisfaction of ambitions of people prone to leadership. Individuals will support any decision if they were allowed to express their opinions, regardless of whether they will be accepted. Committees provide everyone a kind of “representative” in the management, making the desire fulfilled – “that the every Indian, from time to time, gets to be a chief.” Thus, alleviated sick ambitions of those who have them increase the group cohesion and effectiveness (Molnar, 1966).

Terrorism is a profession - The obligation of every terrorist is to keep his own knowledge and skills in the optimal operating condition at all times. The psychological principle that “repetition is the mother of knowledge” is the maxim of terrorists. Given the specificity of terrorist knowledge, it is conceived and repeated in the cruel reality of war. For example, several thousand people in the early 1990s gained BiH citizenship, most of them because they were soldiers of the Army of BiH, and after the war they had been scattered around the world and founded numerous branches of Al Qaeda (Shindler, 2007). According to the Washington Post, the wider network of terrorists is operating under the name “Maximus” and is just one part of Al Qaeda. The headquarters of ‘Maximus’, which was headed by Mirsad Bektasevic until his arrest (Maroevic & Williams, 2005) were first in Sweden and then in Bosnia and Herzegovina. About 200 of the mujahedin, members of Hesbolah, fought in Kosovo within the KLA, and their leader was Samidina Xhezairi ‘Hoxha’, who has organized the destructive demonstrations in Kosovo on March 17, 2004 (Ibid). They transferred the spirit of terrorism throughout Chechnya, the U.S., Spain, France and the UK.

The assumption of *terrorists’ youth* indicates that a young body is almost infinitely plastic, responsive and accepts any type of influence (the ideas, doctrines, teachings and psychophysical experience), and ready to change the world on the one hand, and prepared to invest all their resources (the very life) for their achievement. No foolishness is crazy enough, nor option impossible and no claim excessive when it comes to young creatures. It is a paradox that the young have experienced the smallest portion of life but they are however ready to give the maximum for its meaning.

Financial autonomy - In order for an individual to be fully committed to terrorism, a group he belongs to must provide the conditions for it, especially financial independence. In order for someone to be able to put his own resources and psychological support systems at the service of terrorism, he must be free of financial problems: not only him but also his close family. Terrorism is primarily funded from illegal sources (drug trafficking, oil, arms and human trafficking) in cooperation with the secret services of countries that have interests in a particular area, usually under the disguise of humanitarian organizations. Michael Chossudovsky

on a goat that is forced into the wilderness to be sacrificed, and the people are freed from sins. Of course, in this sense sins (evil) are rulers, thus not even the people who elected such government are innocent. The evil rulers secretly join Satan. Killing of Satan’s servants is not a crime – it is a deed pleasant to God. Satanizing of victims must be continuous and complete, and it is achieved by indoctrination.

(2005) believes that the secret support to the KLA (Kosovo Liberation Army) was established as a joint action of the CIA and the BND, that the foreign mercenaries in the KLA and funds came from fundamentalist organizations of Saudi Arabia and Kuwait, and that the German, Turkish and Afghan instructors trained the KLA.

CONCLUSION

In order to comprehensively investigate the profile of terrorists, that is to process and analyze known scientific views on the causes and motives that characterize individuals as terrorists and terrorist organizations in its broadest context, special attention has been focused on the more decisive factors that influence the willingness of individuals to choose violence through practicing terrorism for the sake of fulfilling pre-defined political, religious and other goals. Through a comprehensive and thorough research of profile of terrorists through psychological analysis of their personality structure, socioeconomic background, and channels of social communication through which planned and thorough terrorist indoctrination of individuals is carried out, as well as through the analysis of social environment in which for various reasons political violence is systematically generated, we have concluded that opting for terrorism is the result of complex social conditions and processes, rather than individual and group psychological aspects (psychopathological disorders narcissism, emotional vulnerability, pathological hatred, anger, etc.). In this sense, the motivation for terrorism and the causes of terrorism should not be sought in the hidden diseases of the mind or in the inmost depths of the brain, because terrorism as a political and social phenomenon arises from the social processes that determine our various motivations.

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THE POLICE ROLE IN PROTECTING NATIONAL MINORITIES

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Abstract: It is difficult to conceptualize a state in the modern world without minority groups neither their significance in interior and international plan could nor may be ignored.

Respect and protection of principal human rights as well as of those colloquially called “minority rights” represent civilization imperative, the base of security in each state and a measure of democratic character in any society.

In protecting and securing of linguistic, religious, cultural and other individualities of national minorities, a significant role belongs to the police as a specially designed segment of social structure conducting the most effective interactive communication with the citizens of a state.

Due to the specific jurisdictions and authorities and comparing to other state bodies, the police have a particular capacity to influence positively on “terrain promulgation” of legal and international duties in this field.

This paper generally considers the legal position of national minorities from the internationally legal and interior aspect as well as the matter of the role, position and significance of the police force in protecting national minorities.

The authors of the paper were free to suggest specific measures or to say solutions, which according to them, would improve police operation in multiethnic societies.

Key words: national minorities, police, international law, protection and rights of national minorities, human rights.

INTRODUCTION

Actualizing of human and minority rights and interest protection in minorities represent a serious task set before each governmental authority especially in the complex multiethnic societies. In a state with national minorities and with institutional attention paid to them, there is an appropriate coexistence model between the persons belonging to national minorities and majority of citizens, which is different in different states and depends primarily on historical circumstances having existed in such environments but on a current international constellation as well. Unsolved relations concerning legal position and legitimate interest protection of national minorities represent a real and potential source of conflict and negative consequences for interethnic relations not only within one state but between states as well. Inciting of intolerance, hatred and prejudices towards certain national minorities or their members or tolerating such circumstances leads to social intolerance and represents a danger of disintegration of the whole society. To prevent or possibly eliminate these negative implications, apart from an appropriate legal frame, and it is also necessary for the institutions to react in that direction. Without legal and democratic state or social tolerance there are no serious conditions for exercising the rights of national minorities regardless of how quality and wide the

range of the rights national minorities enjoy in a state or what support the state has in the international community. All attempts to widen the rights of national minorities using international instruments and national legislation are unsuccessful without states establishing the rule of the law, democracy and tolerance related to all individuals and all human groups existing in their area. In that context, Venice Commission¹ concludes correctly that responsibility for position improvement of national minority members is primarily on the states providing them citizenship.

International, legal and political constellations of facts related to minority issues do not provide general and uniform approach to the matter. Main reasons, due to which general international law has neither built nor made any steps towards constructing of this regulative, are found in political opportunism and pragmatism, fear and historical distrust of countries towards their own national minorities and minority groups in general.

The matter of position and protection of national minorities is also considered within the context of bilateral relations. Bilateral agreements in this matter should represent further elaboration and defining or at least repeating of already existing international standards determined on general and regional level.² In that context, if the solutions of relevant internationally legal documents are repeated in them, it only means that contracting parties agreed on what international standards are in this matter and accepted to respect them legally. At the same time, that represents an encouragement of further operation towards their development on multilateral plan.³ During the last decade, bilateral agreements on the position and rights of national minority members are more often, as a special dimension of cooperation between states, primarily between frontier states and states in the region. Main goal of these bilateral agreements is the improvement of life standards and identity protection of their compatriots in other states. For that reason, the matter of national minorities is extremely important for Serbian legislation and our society as a whole. It is not necessary to remind of numerous existing national minorities living in the region of RS or of the fact that many people of Serbian origin live in frontier states enjoying minority status. In accordance with the reciprocity principle, depending on up to what degree our state respects the rights and freedoms of national minority members, other states, but primarily frontier states will respect our national minorities living on their territory. Thus, position and actualizing of national minority rights are not the matters of their members only but of majority as well⁴. In that context, constructive regional cooperation contributes to both improvement of position and rights of majority on international (regional) level and improvement and actualizing of national minority legitimate rights in a specific state. Both groups, in the environments where they represent majority, could learn from each other, exchange experiences, question their cultural patterns, value systems and use all the advantages that the wealth of language, culture and tradition provide⁵. In this manner, protection of national minority rights becomes a part of regional and local community politics whereas the state itself sets thorough premises on equality and egalitarianism of all the citizens.

1 The Council of Europe's advisory body composed of experts in the fields of human, constitutional and international law from all Council of Europe member states and the European Commission for Democracy through Law.

2 Krivokapic, B., *Zastita manjina u medjunarodnom i uporednom poretku*, knjiga II: *Zastita manjina u regionalnim okvirima i putem bilateralnih medjunarodnih sporazuma*, Belgrade 2004, pp. 144-145.

3 Ibid. p. 145.

4 Vodic za bolje i kvalitetnije ostvarivanje manjinskih prava na lokalnom nivou, p. 9. (www.centarzaregionalizam.org.rs, November 2011).

5 Ibid. p. 9.

The police role in protecting national minority rights is very significant and delicate. Roughly, it could be expressed by the provisions of the Article 38 of Code of Police Ethic which appoint: "Police officials fulfill their duties observing the principle of legitimacy, upholding the rule of law, protecting the legal order and the institutions and granting realizations of human rights and freedoms in line with the Constitution and law provisions, with Universal declaration of human rights and with other international acts in the field of human rights that the Republic of Serbia is obliged to implement".⁶

NATIONAL MINORITIES⁷ IN THE POSITIVE INTERNATIONAL LAW

Starting aspect of the international minority concept is in understanding that minority rights are, in fact, a part of human rights expressed in different international instruments. According to this legal-political premise, basic minority rights (consequently the rights of national minorities as well) are possible to be constructed by the analogy of basic human rights and freedoms of individuals, e.g. the right to existence as a correlate of the right to life, etc. Consequently, legal protection concept of national minority members on international level is based on the consistent conducting of general indiscriminate principle (as a basic precondition of enjoying all human rights) with the addition of special measures ensuring preservation of their national, religious, cultural and linguistic identity. It is about so-called "indirect protection" based in international practice on the ground of political will inexistence between international union members to approach the problem of collective human rights, but primarily minority rights, in a thorough and general manner. It is the protection, which national minority members enjoy according to the general standards and norms concerning protection of individual freedoms and rights not according to some general international rules, which would arrange this type of collective human rights. The reason for this is a pragmatic attitude of states towards national minorities, which is politically motivated up to a degree that the very defining and acknowledging of certain national minority existence is a problem per se not to mention the matter of their legal position in a specific state. In practice, minority rights are commonly acknowledged as individual rights whereas minority members are attempting to equalize themselves with majority members.⁸ In certain national legal systems (e.g. the USA and France), such constitutional policies is brought to an absurd so it more associates with an assimilation process than emancipation of national minority member status and discredits collectivistic nature and the very moral philosophical atmosphere of consuming these rights according to the logic of understanding human rights as an organic indivisible whole. To the above stated, we add the fact that minority groups do not have the access (*locus standi*) to general and regional court bodies which considerably relativizes the mechanisms and possibilities of their legitimate interest protection as an entity with a special group identity content. This is a discriminatory circumstance if seen through the Article 34 of the Stat-

⁶ Code of Police Ethic ("Sluzbeni Glasnik R.Srbije" no 92/2006), Article 38 (www.projuris.org, November 2011)

⁷ International Law does not dispose of strict definition of the term minority which would represent *opinio iuris* of most international union member states. The same is for the subgroup of national minority. However, there are some mutual directives in defining the term of national minorities and this term mainly determines groups of individuals, citizens of a state deferring from dominating citizen group for its ethnic origin, language, national or religious affiliation. Ethnic origin obviously represents main criterion for dividing national minorities within separate groups.

⁸ Lutovac, Z., *Nacionalne manjine u evropskim standardima i politickom zivotu Srbije*, Political studies in Serbia and European Union, 2007, p. 212.

ute of the European Court of Human Rights in Strasbourg which anticipates that the Court receives applications from a group of individuals as well.

In the positive international law, in the light of above named legal political circumstances and generally acknowledged practice in states, it is possible to notice the difference between national minority status as seen by the norms of general international law embodied in the UN Charter and status of minorities according to the regional or particular law.

Although the United Nations Charter set position and fate of man and human groups in the epicenter of the target existence, national minorities or minority groups in general are excluded from the organized norm system within the international law. Positive international law is only indirectly and sporadically engaged in the minority issues and almost exclusively through regulative norms in the field of individual rights and obligations. Thus, it is possible to talk about minority rights, in terms of a well-rounded and relatively independent part of the positive international law, only from the aspect of *de lege ferenda*.

UNO activism in terms of regulating legal majority position has been based, up until now, on organizing disobligatory international instruments. One of these, which is related to the current matter and exceptional for its specific meaningfulness, is the Declaration on the Rights of Persons Belonging to National or Ethnic, Religious and Linguistic Minorities adopted in 1992. The Declaration is the first international document which broadened the rights of national minority members by placing the obligation on the states to develop and help implementation of primarily cultural minority rights.⁹ The Declaration emphasizes that "states shall protect the existence and the national or ethnic, cultural, religious or linguistic identity of minorities and shall encourage conditions for promotion of that identity."¹⁰ Also, the Declaration in the Article 2 proclaims that "persons belonging to minorities have the right to enjoy their own culture, to profess and practice their own religion..."; "the right to participate effectively in cultural, religious, social and public life", then "the right to participate effectively in decisions on the national and, where appropriate, regional level concerning to minority to which they belong to or the regions which they live in", "the right to establish and maintain their own associations" and "the right to establish and maintain, without any discrimination, free and peaceful contacts with other members of their group and with persons belonging to other minorities, as well as contacts across frontiers with citizens of other States to whom they are related by national or ethnic, religious or linguistic ties."¹¹ In terms of obligations of the persons belonging to minorities, the Declaration emphasizes only one yet very important obligation related to constraining of persons belonging to national minorities from activities "contrary to the purposes and principles of the United Nations, including sovereign equality, territorial integrity and political independence of States."¹²

The Declaration from 1992 represents an expression of the international union agreement on minority issues. Although not being an obligatory act, determined standards and principles of this Declaration are examples for national legislation as well as standards for certain regional and bilateral agreements and surely a good

⁹ Samardzic, M., *Zastita nacionalnih manjina*, Belgrade 2002, p.17.

¹⁰ See: The Declaration on the Rights of Persons Belonging to National or Ethnic, Religious and Linguistic Minorities, Article 1, National Minorities in International and Yugoslav Law Order, Belgrade 1997.

¹¹ See: The Declaration on the Rights of Persons Belonging to National or Ethnic, Religious and Linguistic Minorities, Article 2, National Minorities in International and Yugoslav Law Order, Belgrade 1997.

¹² See: The Declaration on the Rights of Persons Belonging to National or Ethnic, Religious and Linguistic Minorities, Article 8, National Minorities in International and Yugoslav Law Order, Belgrade 1997.

initial base for future general convention in this matter.¹³ However, the Declaration is not essentially distant from the basic principle of “indirect protection”, or from organizing the legal status and minority protection through achieving the rights and interests of individuals - persons belonging to minorities.

On general international level, related to minorities, it is opportune to look at the Article 27 of the International Covenant on Civil and Political Rights containing the following anti-discriminatory provision: “In the states with ethnic, religious and linguistic minorities, persons belonging to these minorities shall not be deprived of the right to have, in communities with other persons belonging to their own group, their own life, profess and practice their own religion or use their own language.” Although according to this provision it could be concluded that the states have discretion right concerning determination of national minorities existence, Human Rights Committee UN approached the attitude that the existence of national minorities is a fact, not a legal system matter of each individual state and that the answer to this matter is obtained through objective criteria: self determining, numbering and long term presence on a specific territory.¹⁴

The International Covenant on Civil and Political Rights is the only legal obligatory international instrument containing, at least indirectly, the provision on the rights of persons belonging to national minorities. However, it is obvious that the provision of the Article 27 of this Covenant is incomplete since the prohibition of discrimination is related only to “persons belonging to... minorities” but not to minorities as such. As professor Kreca concludes “Without anchorage in specific collective rights of minorities, prohibitive rule from the Article 27 of the Covenant seems abstract and imprecise without its natural subject.”¹⁵

On the level of regional and particular law, European international institutions – European Council¹⁶ and Organization for Security and Cooperation in Europe¹⁷ had a significant influence on the development of legal and political awareness of the importance of national minority position improvement. In the documents of European Council and OSCE, unlike dominating passive approach towards protecting minorities through general prohibition of discrimination, there are provisions demanding an active attitude towards preserving minority identity by taking necessary and special measures.¹⁸ Attitude of states towards the persons belonging to national minorities became for OSCE not only contribution to security in Europe but one of the criteria for qualifying of states as democratic, respecting human rights and freedoms. Standards adopted within OSCE very quickly become widely accepted in the international union and thus, formally obtain universality.¹⁹ Concerning this matter, within the Conference on Security and Cooperation in Europe, it is very important to mention the Copenhagen Document and Charter of Paris for a New Europe adopted in 1990. Both documents emanated from the principles deliberated by the Final Act of CSCE in 1975 and the Concluding Document of the Madrid Meeting in 1983. Not long after their adoption, the function of the High Commissary of CSCE for national minorities was established.

13 Krivokapic, B., *Ujedinjene nacije i zastita manjina*, Foreign Legal Life, no 2-3/2003, p.91.

14 Public Participation and Minorities, Yash Ghai, *Minority Rights Group International*, 2001, p. 7.

15 Kreca, M., *Medjunarodno javno pravo*, Belgrade 2010, p. 257.

16 European Council dealt with the matter of national minorities directly, through protection of human rights and freedoms on the ground of the Convention for the Protection of Human Rights and Fundamental Freedoms and Mechanism for Conducting in Life.

17 Basic, G., *Zastita prava nacionalnih manjina u SRJ prema standardima Okvirne konvencije za zastitu nacionalnih manjina Saveta Evrope*, Belgrade 2002, p.7.

18 Lutovac, Z., *op. cit.* p. 212.

19 Samardzic, M., *op. cit.* p. 24.

The Copenhagen Document acknowledges the rights of national minorities as a part of generally accepted human rights and as irreplaceable factor of peace, justice, equality, stability and democracy in the member states.²⁰ The Copenhagen Document introduces an innovation in minority matter by adding the obligation to the states to protect ethnical, cultural, linguistic and religious identity of minorities as a collectivity and to create conditions for improvement of this identity. In that direction, states are motivated to undertake all the necessary legal, administrative, judicial and other measures as well as to use the appropriate international instruments from the field. Section 30 of this Document acknowledges the right for national minorities to exercise their rights individually as well as in the community with other persons belonging to the group in a democratic political environment based on the rule of the law and independent judiciary, which is a boundary to political pluralism and social tolerance and full respect for basic human rights and freedoms without any discrimination, with total equality before the law. However, collective rights of minorities are not acknowledged, especially not the right to secession as seen from the provision of Section 37, defining that none of the provisions of this Document can be interpreted as alluding the right to any activity or practice contrary to the goals and principles of the UN Charter as well as to other obligations according to the international law or provisions of the Final Act including the principle of state territorial integrity.²¹ Section 32 of the Copenhagen Document attributes that belonging to a national minority is an individual matter of choice and that such a choice cannot cause any distresses.²² Section 35 is very significant for determining that national minorities have the right to participate effectively in public affairs related to protecting and improving of minority identity. According to this standard, contracting states are obliged to establish specific forms of local governments in the parts of the state inhabited by minorities, which should be highly in agreement with historical and territorial characteristics of these areas.²³

The Copenhagen Document has quite comprehensively organized the content of minority rights and exclusively confirmed that respecting the rights of the persons belonging to national minorities as a part of general human rights is an important factor of peace, justice, stability and democracy in contracting states.²⁴ However, without legal obligation, minority rights and adequate state obligations related to their respecting and securing remain in the domain of moral-political recommendations and directives – nothing more than that.

The Framework Convention for the Protection of National Minorities was adopted within the European Council. This Convention is very significant since it represents the first legal obligatory multilateral instrument dedicated to the protection of national minorities. The provisions of the Convention are not directly applicable, they concern neither the law nor practice of contracting states nor including international agreements in interior law order but they set the goals for the contracting states.²⁵ Concerning that, the Convention assigned a part of the discretion law to states in terms of determining modality and implementing goals.

Two key principles of the Framework Convention are contained within the Article 1 and 22. The first one classifies the protection of national minorities as a whole into the protection system of human rights corpus, whereas the Article 22 anticipates that the standards from the Convention cannot alter the existing right

20 Samardzic, M., *op. cit.* p. 25.

21 Krivokapic, B., *op. cit.* p. 93.

22 Krivokapic, B., *op. cit.* p. 92.

23 Samardzic, M., *op. cit.* p. 26.

24 Krivokapic, B., *op. cit.* p. 91.

25 Lutovac, Z., *op. cit.* p. 214.

protection level of persons belonging to minorities in any manner in contracting states.²⁶ The provision of Article 15 is extremely important for committing the states to create conditions necessary for effective participating of persons belonging to national minorities in cultural, social and economic life as well as in public relations especially those related to them.²⁷ Obvious intention of this provision is to encourage real equality of persons belonging to national minority and the ones belonging to majority.²⁸ Framework Convention appoints a series of rights for persons belonging to national minorities, which can be enjoyed individually or in community with others, such as: freedom of peaceful assembly; freedom of speech and thought, belief and religion; freedom of association; freedom of expressing religion and establishing religious institution, organization or association; freedom of thinking; right to use mother tongue privately and publicly, orally and by letter; learning mother tongue; right to educate in that language on all levels; effective participation in economic, social and cultural life and administering public affairs; right to establish and maintain free peaceful contacts across frontiers with persons of the same ethnic, linguistic, cultural and religious identity or mutual cultural heritage; right to access means of information without discrimination, etc. Absolute implementation of these rights should ensure, according to the idea of the Convention redactor, the development of basic identity elements in national minorities: religion, language, tradition and cultural heritage (Article 5, Paragraph 1).²⁹ The Framework Convention recommends to the states to constrain from violent assimilation of national minorities as well as active participation of state institutions towards creating conditions for maintaining development of national minority culture and identity. Apart from the rights, certain obligations are appointed as well. They are primarily related to respecting of national legislation and prohibition of taking any activities contrary to the sovereign equality, territorial integrity and political independence of the states inhabited by national minorities. Thus, according to the Article 20 of the Convention, every person belonging to a national minority is obliged to respect national legislation and rights of others, especially the persons belonging to majority or other national minority while enjoying their rights and freedoms contained in the Convention. The Convention encourages contracting states to, where necessary, conclude bilateral and multilateral agreements with other states especially the frontier ones, with the goal of providing protection for persons belonging to national minorities as well as to stimulate and take measures in across frontier cooperation.³⁰

The Framework Convention once more confirms that protecting of national minorities is not within exclusive domain of states but that the rights defined in it, regardless of whether enjoyed “individually or in community with others”, are still individual not collective – thus, they are exclusively related to “the persons belonging to national minorities” not to national minorities as such. Therefore, the Framework Convention essentially does not exceed the range of indirect protection of national minorities and in that segment; there is the ratio of boundary to its material-legal range. It does not stipulate collective minority rights, which, in fact, are the very substance of minority protection institute.³¹

26 Samardzic, M., *op. cit.* p. 19.

27 See: Framework Convention for the Protection of National Minorities, Section II, Article 15, Nacionalne manjine u medjunarodnom i jugoslovenskom pravnom poretku, Belgrade 1997.

28 Lutovac, Z. *op. cit.* p. 216.

29 See: Framework Convention for the Protection of National Minorities, Section II, Article 5, Nacionalne manjine u medjunarodnom i jugoslovenskom pravnom poretku, Belgrade 1997.

30 See: Framework Convention for the Protection of National Minorities, Section II, Article 18, Nacionalne manjine u medjunarodnom i jugoslovenskom pravnom poretku, Belgrade 1997.

31 Kreca, M. *op. cit.* p. 575.

The European Charter on regional and minority languages is adopted to, on one hand, protect and develop European cultural tradition and heritage, and on the other, to provide respect of infeasible and general right to use minority languages in private and public life.³² The Charter obliges contracting states to respect and protect the language within a geographic region where it is traditionally used, to create conditions, to stimulate and encourage the usage of regional and minority languages both in public and private life. The Charter anticipates numerous specific measures and manners of use in order to encourage, protect and improve the usage of regional and minority languages primarily in education, public services, judiciary, administration, state media, cultural, social and economic activities and international exchange. The European Charter anticipates that a state during ratification determines its obligation degree in accordance with its potential. Each state during the Charter ratification names all the minority and regional languages in terms of which it takes the obligations from the Charter.

CONSTITUTIONAL LEGAL FRAME OF PROTECTING NATIONAL MINORITIES IN THE REPUBLIC OF SERBIA

A considerable number of state constitutions contain the provision on obligation priority from the international contract on interior jurisdiction regulations, which automatically includes all those provisions in national law order subsequently taken over by the states. This group includes the Constitution of the Republic of Serbia as well.

National minorities are mentioned within preamble,³³ in the first³⁴ and the third Article.³⁵

The Constitution of the Republic of Serbia, apart from the human rights enjoyed by all the citizens, guarantees special rights and freedoms to the persons belonging to national minorities contained in the Section named: "Rights of persons belonging to national minorities". Individual constitutional record on the rights of the persons belonging to national minorities is not a sign of their discrimination, but to the contrary, it represents the way for the state and society to establish mechanisms for respecting specificities of the persons not belonging to the national majority through democratic constitutional law.³⁶ Thus, general care for national minorities was institutionalized by the highest legal act and became a part of social contract through which the citizens define the state they live in and strive for.³⁷

Constitutionally guaranteed rights of national minorities in Serbia are: right to preservation of specificity, including the right to expression, preservation, fostering, developing and public expression of national, ethnic, cultural and religious specificity; education in their languages in public institutions and institutions of autonomous provinces; founding private educational institutions; use of their name and family name in their own language; traditional local names, names of streets, settlements and topographic names also written in their languages, in areas where they make a significant majority of population; use of their symbols in public plac-

32 Samardzic, M. *op. cit.* p. 22.

33 See: Preamble to the Constitution of the Republic of Serbia 2006, (www.srbija.gov.rs November 2011).

34 "Republic of Serbia is a state of Serbian people and all citizens who live in it, based on the rule of law and social justice, principles of civil democracy, human and minority rights and freedoms, and commitment to European principles and values."

35 "The rule of law shall be exercised through free and direct elections, constitutional guarantees of human and minority rights, separation of power, independent judiciary and observance of Constitution and Law by the authorities."

36 Djordjevic, S. *O Mitrovdanskom ustavu*, Kragujevac 2010, p. 261.

37 Lutovac, Z. *op. cit.* p. 223.

es; use of their language and script; have proceedings also conducted in their languages before state bodies, organizations with delegated public powers, bodies of autonomous provinces and local self government units, in areas where they make a significant majority of population; complete, timely and objective information in their language, including the right to expression, receiving, sending and exchange of information and ideas; establishing their own mass media in accordance with the Law; right to association and cooperation with compatriots.

According to the Constitution Article 14, it is determined that the state shall guarantee special protection to national minorities for the purpose of exercising full equality and preserving their identity.³⁸ According to the international standards, any form of direct or indirect discrimination as well as discrimination on any base or any personal individual reason (race, gender, nationality, social origin, birth, religion, political and other beliefs, possessions, culture, language, and age, physical or mental invalidity) is prohibited. Forced assimilation of the persons belonging to national minorities is absolutely prohibited by the Constitution of RS (Article 78). Any inciting of racial, ethnic, religious or other inequality or hatred shall be prohibited and punished.³⁹ National affiliation may be expressed freely and no person shall be obliged to declare his national affiliation.⁴⁰ Freedom of expressing national affiliation is an absolute and protected right in terms that during a war or emergency this freedom is not to be withdrawn.

Since the most reliable and efficient protection against offence and deprivation of human and minority rights are the court protection, this means of protection is explicitly determined by the Constitution.⁴¹ Apart from the interior law order, the Constitution admits the citizen right to turn to international institutions for the protection of their rights and freedoms if possibly being offended but guaranteed by the Constitution.

Persons belonging to national minorities are guaranteed additional, individual or collective rights. Individual rights are exercised individually and collective ones "in community with others, according to the Constitution, law and international contracts". In addition, the right to minority self government is anticipated and guaranteed in the regions significant for preserving their national identity or exercising other rights of persons belonging to national minorities. The right to minority self government is exercised in the field of culture, education, informing and public use of language and script and implemented through the right of national minorities to form national councils of national minorities and to vote their members.⁴²

The Constitution Article 76 prohibits discrimination of national minorities on the grounds of equality before the law and equal legal protection. According to the Article 77, the persons belonging to national minorities are equal in administering public affairs. Thus, while exercising this constitutional stipulation, it is important to consider the national composition of citizens as well as the appropriate presence of national minority members, especially in the regions they live in, which is crucially important for achieving institutional-legal possibility of effective national minority participation in the public life of Serbia.

Finally, the Constitution of RS obliges the state to encourage the spirit of tolerance and intercultural dialogue and to undertake efficient measures for the enhancement of mutual respect, understanding and cooperation among all people living on its territory regardless of their ethnic, cultural, linguistic or religious identity (Article 81). These obligations are particularly concerning the field of education, culture and information.

38 See: The Constitution of the Republic of Serbia ("Sluzbeni glasnik R. Srbije" no 98/2006)

39 The Constitution of the Republic of Serbia ("Sluzbeni glasnik R. Srbije" no 98/2006), Article 49.

40 The Constitution of the Republic of Serbia ("Sluzbeni glasnik R. Srbije" no 98/2006), Article 47.

41 Djordjevic, S., *op.cit.* p. 217.

42 Pajvancic, M., *Komentar Ustava Republike Srbije*, Belgrade 2009, p. 98.

POLICE AND NATIONAL MINORITIES

Ethnic pluralism and multiculturalism are often experienced as a burden and problem, as a factor which restricts and aggravates establishing of democracy.⁴³

The police, as the body of the highest authority, in whose jurisdiction are to maintain public tranquility and to combat crime, represent the most transparent integral part of the government structure. The very social position it takes, additionally commits the police to operate and proceed in accordance with the law, the rules of the international law as well as the norms and standards from the fields of human rights. When the police conduct the obligations in the manner adjusted to the principles of the rule of the law and democracy, the state legitimacy is improved, the trust of the public in the police is increased and the preconditions for efficient operation are established. States are, on their part, obliged to create a structural and administrative environment which enables the police to conduct effective and efficient implementation of the norms of the mentioned legal resources.

Successful functioning of each multiethnic state is highly based on the police operation. The police are obliged to provide exercising of the law on the base of an absolute indiscrimination, of course, according to the valid process procedures and rules on responsibility determined in each state respectively, especially in nationally mixed environments. If the police in these obligations act in ethnically biased manner towards national minorities or there is an impression of such an act, they will lose all the legitimacy as a state representative from the aspect of national minorities.

In addition to other, regular activities, the police bodies must observe independently and continually whether there are nationally based incidents or some other events disturbing the stability of international relations. An open ethnic conflict could endanger the very base of social state cohesion considering that the acts of physical or any other form of violence directed towards individuals for their ethnic affiliation represent a latent threat to all the communities as elemental tissue of each society. Although the police have no exclusive responsibility to prevent international conflicts and to undertake necessary sanction measures, it could play a decisive role. Establishing close contacts with the citizens and creating "outer connections" with other public bodies in that direction, especially on the local level, is an essential priority providing necessary coordination and compatibility of police operations with a broader activity directed towards national minority integration within all the spheres of public life. As stated in the Code of Police Ethic "The Police set and promote its internal organization so as to improve good relations of the police and the citizens, and where possible, efficient cooperation with other authorities, agencies, local communities, non-governmental and other civil organizations, minority ethnical groups included."⁴⁴ The police establish a very close cooperation, due to the nature of its elemental obligations and authorities, with other services responsible for security. Considering the fact that the main security challenges of today (on international and interior level) are the combat against organized crime and terrorism, which affect equally all the citizens of a society regardless of the existing differences including their national affiliation, good cooperation and communication with the members of national minorities, who yet belong to specially vulnerable and sensitive groups, are of a crucial significance. Relevant researches show that in certain states there are nonexistent institutional mechanisms for the support of interaction and cooperation between the police and members of national minorities.

43 Vodic za bolje i kvalitetnije ostvarivanje manjinskih prava na lokalnom nivou, p.11. (www.centarzarregionalizam.org.rs November 2011).

44 Code of Police Ethic, ("Sluzbeni Glasnik R.Srbije" no. 92/2006), Article 10.

Due to the parallel nonexistent appropriate training for operating in a multiethnic society and an often monoethnic structure of the police service and discriminatory operations, the police caused negative reactions in national minority communities and even became a catalyser of conflicts in many situations. On the other hand, it is noticed that the efforts of the police to reflect more efficiently the attitude of its community as well as the improvement of the communication between the police and national minority communities, not only strengthen interethnic relations but also enhance the results of police operations.⁴⁵

The OSCE High Commissioner on national minorities also paid attention to police operation in the context of engaging its members in nationally mixed environments expressing it formally in the document known as “Recommendations on Policing in Multiethnic Societies”.

The basic slogan “recommendation” means that a good police operation depends on the trust which the police cannot enjoy without regular communication and cooperation with national minorities. All sides, in our opinion, have benefits from promulgation and encouragement of such a relation; minorities, from the police guaranteeing security and reacting to the needs related to their differences; police, for becoming more efficient; the state, for benefits from both minority integration and better police operation. Total effects reflect on a more quality citizen position in a state and on better state reputation on international level.

Some of the key recommendations of the High Commissioner on national minorities related to police operation in multiethnic societies will be further presented and analyzed.

1. States should adopt policies which clearly recognize the importance of policing for interethnic relations. These policies should form part of wider policies and programmes to promote the integration of minorities on national and local levels. They should also be coordinated with wider action to promote professionalisation and a service-orientation in policing, and to ensure that all policing is carried out in accordance with international standards on human rights, including rights of persons belonging to minorities. States will need to ensure that the police and the general public, including minorities, media as well, understand the role of the police in promoting good interethnic relations.⁴⁶

It should not be forgotten that the matter of national minorities is primarily political and then normative and institutional. Related to that, both characteristics and individualities of each community as well as security and other sociopolitical circumstances should be considered during implementation of this recommendation. Considered collectively, these parameters condition a policing model towards its adapting to a specific environment with presumed respecting of guaranteed human and minority rights. Integrated, political and institutionally legal operating is definitely the best manner of solving the problem of national minority protection and in that matter the authors have nothing revolutionary to add that theory and practice have not known of.

2. The composition of the police – on local, regional and national levels and including senior as well as junior ranks, and also civilian personnel – should reflect the diversity of the population.

Public police image as a body reflecting an ethnic population image is good to promote actively. An important step towards gaining trust of minority communities is also their integration in the police on all levels and functions. Their integration

⁴⁵ Recommendations on Policing in Multi-Ethnic Societies, February 2006, p. 2. (www.osce.org/hcnm December 2011).

⁴⁶ Ibid. p. 5.

represents not only the means of gaining trust but also introduces the police to the knowledge and skills necessary to operate in multicultural environments (language, customs and traditions of the persons belonging to specific national minorities, etc.). The intention of the Recommendation is in encouraging of minority member recruitment since, according to the generally and empirically confirmed attitude, being insufficiently present in the police composition of most multiethnic states.

3. Police should be tasked with developing methods and practices to communicate and cooperate with minorities and to build confidence together on local, regional and national levels.

In other words, the police must be trained for communication with national minorities in minority languages. In achieving that goal, wherever possible, it should be insisted on recruitment and training of multilingual personnel as well as on usage of qualified translators. The Framework Convention for the protection of National Minorities in Article 10 states the right "to use a minority language publicly as much as possible before administrative authorities."⁴⁷ The right to use minority languages is named in the situations including detention and prosecution. Thus, the police should enable the use of minority languages when operating with the members of national minorities whether they are recruited, suspects, witnesses or only parts of a wider public.

4. All the community parts should be aware of their rights and obligations related to the police as well as of jurisdictions and services it should provide.⁴⁸

In that direction, it is useful for the police, whenever possible, to send ethnically mixed teams in regular patrols in the multiethnic environments. On one hand, it is a precondition for gaining public trust, and on the other, the police improve the operation on the base of reached consensus on the acceptability on the terrain.

5. The police should be trained to play an active role in developing relations with minorities, primarily for locating and possibly, for reducing tension which could lead to interethnic conflicts. However, it must be trained and equipped to control possible interethnic riots and incidents to reduce their intensity in a professional and objective manner and whenever possible, to solve them with minimal use of force.⁴⁹

Accepting the police as legitimate and efficient, on national, regional and local level, mostly depends on gaining the trust relation based on good communication and practical cooperation between the police and national minorities. Establishing such a relation will not only improve interethnic relations but will contribute to police efficiency as a whole. The point of this concept is that the police are approaching the problems not waiting for them to develop, solving them *ab ovo* primarily within the cooperation with citizens and other subjects of social control.

6. The police policy should be a part of a wider part of the national strategy for improving the integration and creating a multiethnic society.⁵⁰

Policing must not and cannot be an isolated "Don Quixote act" which it would eventually become without including the measures for participation encouraging of national minority members in total political and economic life, primarily in the fields of education, language, politic presentation, electronic media and combat against poverty and exclusion.

47 See: Framework Convention for the Protection of National Minorities, Nacionalne manjine u medjunarodnom i jugoslovenskom pravnom poretku, Belgrade 1997.

48 Recommendations on Policing in Multi-Ethnic Societies, February 2006, p. 7.

49 Ibid. p. 8.

50 Recommendations on Policing in Multi-Ethnic Societies, (www.osce.org/hcnm December 2011).

7. It is significant for police attitude to reflect the ethnic environment attitude in a multiethnic environment.

The presence of national minorities in the police composition is important for many reasons: as an indicator that the members of all ethnic groups have as individuals equal employment and promotion opportunities in the police; as an improvement means of national minority integration through their participation in state public life and its institutions; as a means of helping police to create relations with minorities based on effective communication, cooperation and mutual trust.⁵¹

Underpresence of national minorities in the police occurs for various reasons. They include lack of information on employment opportunities, lack of educational qualifications, and previous experience of policing in such communities as well as direct and indirect discrimination for specific national minority affiliation.

In order to increase participation of national minority members not only in the police but also in whole state and political life, it is necessary to determine authentic reasons of their under presence in a certain state and then solve this issue by using special measures with the goal of better national minority informing on employment opportunities in the police, creating a better police image and encouraging interested persons in applying for police positions.⁵² Such initiatives could include distribution of leaflets, use of radio and television (including promotive messages), police visits to schools and local centers (including cultural and religious centers), enabling young people to visit police stations or training centers, etc. Where possible, police officers should patrol in walking patrols for better interaction with citizens unlike the car patrols. It is important for police multiethnic character to be present and visible in all areas even for the members of national minorities to be on higher hierarchy positions not only on the lowest ones. This not only proves that the members of all groups have an opportunity to promotion but it also directly includes minority perspective in policy creating on higher executive levels and shows that police organization in its policy is truly multiethnic.⁵³

There is a principle question in this segment: Should conditions and standards for recruitment in the police be different for the persons belonging to national minorities? Does this manner represent a segregation of the persons belonging to national minorities in the very beginning?

Our attitude is that the standards must not be lower for the persons belonging to national minorities during their recruitment since this could cause not only problems between the members of the police force but it would also be a negative influence on the very functioning of the police as a whole. Such situation development would eventually represent a potential danger for other aspects of social life as well. We believe that the police officers – national minority members are the most interested in not lowering the standards and conditions of employment since it is in the nature of a human being not to be observed as “a second class citizen” or in this specific case “as second class police officers.” Thus, it is very important to ensure “a neutral work environment” or the environment where the minority origin police officers are absolutely accepted as equal and in their individual capacity, where they are not placed in any unfavorable position or faced with negative stereotypes for their national identity.

In the states where national minorities are usually concentrated in specific areas or regions, there is a great probability that most police officers – national minority

51 Recommendations on Policing in Multi-Ethnic Societies, February 2006, стр. 13. (www.osce.org/hcnm децембар 2011).

52 Recommendations on Policing in Multi-Ethnic Societies, February 2006, p. 16. (www.osce.org/hcnm December 2011).

53 Ibid. p. 14.

members are interested in operating in such state parts. Basically, minority origin police officers must not be subjected to pressure to operate in minority parts and communities of a state. To the contrary, they should be encouraged to gain experience by operating in ethnically mixed parts and communities of the state they do not originate from. If however, the police officers from the mentioned category operate in their environments, they should, whenever possible, be organized to operate within ethnically mixed teams. Mixed patrols and teams for investigation and other operations appear to significantly help the police in achieving this goal. Firstly, mixed teams have the capacity to facilitate communication in an operation through usage of multiple languages in multiethnic environments, whereas the police set an example of a good practice of multiethnic cooperation in providing mediatory service in solving potential interethnic conflicts of the lowest social degree danger.

For the subject essence of the paper, it is important to emphasize the need of formulating professional behavior code for the police force members related to operating in multiethnic environments. Namely, the states should ensure the presence of a clear policy and professional standards enjoining equal treatment and prohibiting discrimination during law enforcement by the police with the training and detailed practice code. Such practice code should precisely determine the behavior expected from the police officers during operating so the risk of discriminating or other unprofessional behavior would be reduced to the lowest possible.⁵⁴

Police training programmes should contain specially designed components for reaching the above stated standards. The training should provide to police officers the possibility of thinking about their personal attitudes and prejudices as well as of certainty they do not affect police operation. Education on minority issues and ethnic, primarily national relations should be an integral part of the initial police training and it must necessarily include the matters such as: human rights, policing in communities and approach oriented towards service providing. Considering the fact that personal attitudes are deeply rooted in many adults and that all attempts of their changing during trainings would encounter resistance (even may be counterproductive), it is very important for trainings to be conducted by experienced, skillful and expert teachers.

Conceptual solving of the problem of police operation in mixed communities implies that the citizens' voice is to be heard related to the policing, in exchange for participation support in problem-oriented operation in preventing and problem solving, in the manner ensuring the citizen security and community contentment for a long term.⁵⁵ Public support to the police is necessary not only for the imperative of fulfilling the democratic responsibility principle in exercising authorities but also because a practical cooperation of the public is a condition for quality policing role. Related to that, power and influence of the public media should not be underestimated. Namely, apart from the public authority, it is possible to detect so-called "media authority" in each democratic society. Its role and power must be observed primarily from the aspect of public body influence on the public opinion and "its degree of potential discrimination effect."⁵⁶

54 Recommendations on Policing in Multi-Ethnic Societies, February 2006, p. 32. (www.osce.org/hcnm December 2011).

55 Nikac, Z., *Koncept policije u zajednici i pocetna iskustva MUP RS*, Pravni zivot no. 9/2007, p. 811.

56 Djordjevic, S., Palevic, M., *Zakon o zabrani diskriminacije-pravna analiza*, Kragujevac, 2010, p. 84.

INSTEAD OF CONCLUSION

The matter of position and protecting national minority groups has exceeded the sphere of exclusive state jurisdiction and become the interest subject of primarily regional but also of general international law since long time ago. Observed from the aspect of state reason and international security, there is a visible need for one general, relatively uniform applicable system of protecting minorities on international level. Normative potential of positive rules in the international law which are directly and indirectly related to minorities appears to be enough to be the ground for creating one general system of protecting national minorities. However, due to the absence of political will and precise pragmatic relation of states and minorities, the matter of rights and protecting minorities (even national one) is still in the gap between indirect protection, offered by general norms on individual human rights, and particular protection, based on the norms of regional rights.

Within its legal authorities, the police can and must enhance its operation efficiency and gain trust of the members of national minorities primarily through preventive operation and regular communication. For that goal, a proactive-preventive approach is necessary not only for the police but also for the state as a whole, through appropriate panels, round tables and projects in order to gain the trust, establish cooperation and better communication between the police and the members of national minorities.

There is no general formula for the policing in a local community. Each programme and plan of the policing in a local community must be formulated and implemented considering political and cultural situation in the community (which is very important for environments with mixed national structure of population). Anyway, it is necessary to conduct a campaign directed towards creating awareness of values in multiethnic society and democracy, encourage the knowledge on ethnic differences as well as on the measures of protecting and operating on ethnic or other conflicts on local, regional and national level.

While operating on multiethnic incidents, the police must not be restricted to technical efficiency domain but must persevere personal legitimacy in the eyes of all the groups, operating at every moment and every place according to internationally accepted human rights. Through professional, transparent and objective operating, the police contribute to respecting custom, religious, cultural, and other specificities of the persons belonging to national minorities, as one of the segments important not only for the confirmation of the rule of law, tolerance and indiscriminate principle in a state but also as a support to police reform process and fulfilling conditions for possible state international integration.

It is presumed that the stated police goals in terms of protecting legitimate interests of national minorities are achievable only if the persons belonging to national minorities, apart from demands for exercising their rights, consistently respect their obligations before the state they inhabit, national legislation, and the rights of other citizens, territorial integrity and national state sovereignty.

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ESTIMATES OF CASUALTIES IN THE SUICIDE TERRORISM ACT¹

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Abstract: Suicide terrorism as a phenomenon is present in different countries and parts of the world. In this paper an attempt has been made on the basis of an appropriate mathematical model to assess the number of victims of such acts. The relation was found between the number of casualties in the function of the distance from the explosion and the spatial distribution of people in the explosion. It also provides an overview of a model, which was made in Israel for urban areas, where the sensors can detect a suicide bomber and analyzes the possibilities of reducing the number of victims in this case. They found that there is a little time for an adequate response and therefore an effective method of fighting suggests preventive action and enhanced intelligence.

Keywords: suicide terrorism, estimate the number of casualties, the network model to detect suicide bombers.

INTRODUCTION

First decade of the 20th and the beginning of the first decade of the 21st century didn't bring the expected diminishing of the violent behavior in general and armed violence apart. Instead of losing its significance as anti-legal use of force in solving different social problems, it still has a character of basic social-safety problem in great number of countries of the world. Within that context, terrorism, as one of the special forms of politically motivated violence, becomes the object of general social concern, as first grade internal safety problem of the states, but also as a global phenomenon and a mean of pressure for achieving goals in international relations. By it, independently of causes and goals, basic human rights are more and more frequently endangered, as well as territorial integrity and sovereignty of the states and safety of the international community.

In the first part of this work, the basic terms of terrorism in general will be brought up, with a special review of suicidal terrorism. Then, the historical insight of the suicidal terrorism will be brought up, in order to notice the roots of this occurrence. The organizations which perform this type of terror are named, as well as geographical regions and countries which are the most endangered ones. Further on, a mathematical model of effect of suicide bombers, with an aim to determine the number of victims from range to the center of explosion, from an angle of explosion fragment dispersing, as well as spatial allocation of people exposed to the explosion. The goal of this modeling is to determine the quantitative values of the parameters which influence the number of victims in a certain act and to compare them to the empiric data. The analysis follows the mathematical model in which the

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well-timed detection of explosives is assumed, by sensors allocated in the surroundings of potential targets, as well as finding of suitable parameters which influence the timely reaction and reduction of number of victims in that case.

HISTORICAL AND OTHER CONTEXTS OF TERRORISM

Apart from the fact that terrorism is most often disputed as of a phenomenon of the recent times, specific for the second half of the last and the beginning of this century, the history of terrorism is a few centuries long. That social phenomenon has evolved over the centuries, and its first roots are in the killings of innocent civilians, regicides and tyrants. For historical roots of terrorism are specific the terrorist organizations such as Zelots-Sicaris from the 1st century, then Assassins from 11th to 13th, and Tagi from the end of 19th century. All three organizations can be considered prototypes of religious terrorist organizations (Lewis, Bernard, 2004). They were religiously motivated, acted internationally and in spite of primitive arms (dagger, sword, and loop), and acted more destructively than the most significant contemporary terrorist organizations.

The members of the extreme Jewish religious group (sect) of the zealot Jews (Laqueur, W, 1977)-Sicaris, led the campaign of terrorism against Roman occupation of Judaea in 1st century of the new era, and also against all Jews who cooperated with Roman authorities. The rebels were killed with a dagger or a sword, and later openly led wars against Greeks and Romans. The riots which they provoked left catastrophic consequences, which led to extermination of Jews in Egypt and in Cyprus and to almost total depopulation of Judaea. That example is used as the most drastic example of catastrophic influence of terrorism on the fate of one (Jewish) people.

The radical Shiites religious group (sect, brotherhood) the Assassins, also known as Smailis, Nizars, seriously endangered the governments in a few states, especially in the empire of Turks Selduks in Persia and Syria, acting to spread the pure Islam. Every murder of the assassin was a sacred duty. The victim was attacked with knives, in public, during the day, without the possibility of escape, by which they practically sacrificed their own lives, reasoning that in that way they sacrifice their lives to God. This phenomenon of self-sacrifice imposes the comparison with the phenomenon of contemporary terrorists-suicide bombers. At least 6 of the last decades of the 19th centuries, the members of the terrorist group Tagi were active in India. Their victims were passengers who were strangled, ripped apart, robbed and buried. The basic goal of Taga was to bring victims to goddess Khali. They tended to make the agony of the victim as long as it was possible and their sufferings the most intense, believing that goddess enjoys the horror of the victims. It's estimated that Tagi killed more than half a million people in the end of the 19th century.

The term terrorism changed its meaning throughout history (Stern, J, 2004). In contemporary meaning it dates from the French revolution (1789-1797), when it was used to mark the violent actions of the French government against the counter-revolutionaries. Until 1848 the meaning of that term changed, so it was used to describe the actions of violent revolutionaries, who rebelled against the government. Until the end of the 19th and beginning of 20th century, terrorism was used to describe the violent actions of workers organizations, anarchists, national groups and ultra nationalistic political organizations, when Europe was disturbed by series of sensational murders.

The precursor of terrorism in workers movement is often considered the secret terrorist organization "Narodnaja rasprava" with Sergej Hjecajev as a leader, from

the second half of the 19th century. From its short-term activity, the Katahizis of revolution is known, in which it is mentioned: "The horrid, total, pervasive and relentless destruction...with all the forces and means...everything that hampers the triumph is immoral and criminal" (Boskovic M, 1995.).The Marxists dissociated themselves from those methods and Hjecajev movement was called "the butcher communism", judging his methods (Marx, K. and Engels F, 1870).At the very end of the 19th and the beginning of the 20th century the intellectual elite in Russia considered terrorist violence as the only effective way of modernizing Russian society. Militant members of the populist group "Land and freedom" found the terrorist organization "People's will" which performed many political murders between 1879. and 1881. and the climax of that violence was the murder of Tzar Alexandar the 2nd in 1881.That murder set the standards of brutality which became *modus operandi* of the last two rules of the dynasties of Romanovs.

Although terrorism got later to the US than to Europe, America wasn't immune to that type of terrorism. The Civil War from 1861. to 1865. inspired both sides to use terrorism. Among the defeated southerners the resistance organization was created, called the Ku Klux Klan, resolved to fight against the Renovation. Anarchists and social revolutionaries killed kings and queens, aristocrats and civil servants, causing great concern in the lines of ruling elites. In 1878 terrorists attacked German imperor, Spanish king and the king of Italy. After 1880-those years in US, especially Chicago, the anarchists were active. During 1890-ies and 1900-ies, the president of the US William McKinley in 1901. and Serbian king Aleksandar Obrenovic in 1903. were killed and a series of attempts of killing the state officials of the lowest level occurred.

After the 2nd World War, when nations rise against European domination in the world, the meaning of the term terrorism alters again, and nationalistic groups which used violence were considered terroristic. From mid sixties to early eighties, the term terrorism was ascribed to left groups which used violent methods. In the second half of the twentieth century, as a special kind of terrorism there was also a random violence. More and more people who didn't have any noticeable connections to the social occurrences which terrorists criticize were terrorists' targets. Taking hostages by hijacking was a dominating form of terrorism at the end of the last century, mostly at seventies. When hijacking planes became boomerang for terrorists, they changed that tactics by occupation of diplomatic representation position buildings or kidnapping the prominent individuals (Tomasevski, K, 1983).In mid seventies, terrorism was supported by some states.

The end of cold war led to intensifying of the clashes of the nations against the state, as the suppressed ethnical tensions and hatreds grew into armed conflicts. The riots which unrarely and largely used terrorism, moved into two directions: towards the organized crime(Latin America) or towards religion(North Africa, Near and Far East).Archetype terroristic campaigns which occurred in the late sixties and seventies led the fractions PLO(Barry Rubin,1994) like Al Fatah. The success of Palestinians in gaining the great publicity and international attention influenced the other militant groups of that time in the world (Wilkinson, 2002).Although the ethno-nationalistic and separatist terrorism first occurred within Ottoman and Habsburg Empire, that kind was practiced by Zelots-Sikaris, Assassins and Tagi.

Up till today, great efforts of science and significant international organizations haven't brought the results of commonly accepted definition of terrorism on international level and there almost isn't an author who doesn't refer to the absence of unique-universal definition of that term. The difficulties in its defining are conditioned by the series of different factors, of which the most significant are: 1) com-

plexity of terrorism as a socially-historical occurrence, 2) clashes of the political interests, or politically motivated acting of the states towards terrorism, 3) incomplete arrangement of the terminology apparatus and inconsistency in classification of terrorism and determining its constitutive elements, as well as 4) its changeability and different contexts. For those reasons, in greatest number of definitions of terrorism, the meaning of that term is too simplified or too generalized, and partially suggestive in the sense of revolutionary or contra-revolutionary violence.

What is in common to every definition of terrorism is that terrorism is a violent activity. Terroristic organizations use different forms of violence to achieve publicity, cause fear and reach political goals. Incidents include assassinations (political murders), bomb attacks, plane hijackings, arsons and fires, taking hostages and kidnapping, telephone bomb threats and life kidnapping threats, armed attacks (shooting from the fire arms directed towards offices and apartments, etc.), commercial and sabotage equipment, violence of the crowd etc. Other methods which terrorists use include different forms of organized crime, like selling drugs and weapons to get money, human trafficking, and other forms, as well as malicious property destruction.

The basic considered insignia of terrorism are: 1) the act of violence, 2) causing fear, 3) accomplishing political (criminal) goals, 4) transferring a certain message, 5) organizing, 6) brutality, immorality and irrationality of terroristic act, 7) the choice of victim and object of attack, 8) illegality of the terroristic act and 9) judging of terrorism.

Analyzing hitherto definitions of terrorism, it can be concluded that it is directed towards the civilians and institutions of the state in the battle for achieving political goals. It is very significant that systematically terrorist activities differ from criminal actions and pathological killers. In terms of the most acceptable defining of terrorism the following should be considered.

- That terrorist performs violence or threatens with violence, that he is inevitably politically motivated and a member of some organization
- Terrorists' actions are directed towards the long-term psychological consequences (a terrorist doesn't care as much about the target of the attack as for the political echo of the action)
- Terrorism is never supported by the majority of population, and if a certain type of violence is supported by majority of population, then it isn't terrorism, but guerilla or mass uprisal.
- The demands of the terrorists are never real or based on the law, they are always the offspring of political motives-separatism or releasing of their members from state prisons,
- Terrorists consider that it is easy to implement their will on an intimidated person, and on these premises they create their strategy, keeping the tension within the public, because no one is intimidated of what is in the past, but of what is yet to come,
- Terrorism is always a step ahead of the organs of state security among other things because the civil servants think about the problem only during their working hours, and the terrorists 24/7, which can be confirmed by the numerous examples from the past,
- Terrorists sometimes prepare the action for years, and it only takes minutes for them to perform the same,
- Terrorist has the advantage comparing with the organs of state security, they prepare for as long as it takes, they chose the target themselves, as well as the time of the attack.

- One of the most important, and probably the crucial element of which the future of terrorism depends is the reaction of society, not only reaction of the state organs, but also the behavior of the public. The army and the police cannot exterminate terrorism. Unfortunately, it is impossible to be done today. But only the determination of the public can keep the modern terrorism under control (Gacinovic, 2010).

In the beginning of the 21st century the phenomenon of terrorism outgrows its conventional and regional forms and frames and becomes a global safety threat. It most commonly appears in symbiosis with transnational organized crime, which includes proliferation of the weapons for mass destruction. Sometimes it is a part of the transnational non-state actors (global terroristic networks) and sovereign states or interstate (ethnic and religious) conflicts. According to the power of ideas, political, religious and ethnical commitment and organization of the carriers, cruelty, consequences and other important elements, global terrorism is now one of the "more determining elements of the world politics" (Kegley, Ch. W. Jr 1977)

It is interesting that before September the 11th 2001, terrorism was neglected as a significant danger on a global level, although the international terrorism at every moment drew great attention and was more and more lethal. In the meantime it has become a global threat to safety, and fighting it was proclaimed as one of the priorities of the international community. To the battle itself it is approached by implementing of overall measures of anti-terrorist actions, inside the state, as well as on the international level - from verbal condemnation, legal repressions and safety-intelligence measurements, to organizing of interstate special organizations for armed opposition.

It is considered that before September the 11th, the primary purpose of terrorism was publicity, or getting attention and sympathy for terroristic ideals. Accordingly, the terror was formerly viewed as a kind of a theater and there was often an opinion that "terrorists want a huge number of viewers, not a huge number of dead." That is not the case anymore. The terrorist started a new practice for new goals - consciously tending not only to force the enemy to change the politics, but to destroy it; they now want a huge number of the dead. In the past, when terrorists hit the targets, they killed a small number of people with modest weapons; September the 11th was the turning point in another direction (Kegley, 2004).

There are many things new, and therefore different connected to the terrorism of today compared to the terrorism from the end of the 20th century, or before September the 11th, for which many claim to be remembered as „the day when the world changed“. What is today different is that the new era of terrorism is:

- Global, in a sense that with the distance reduction, the borders are no longer barriers for terrorism
- Lethal, because the new terrorists changed the tactics of the efforts to disturb the public with impressive tough actions and so gain publicity, to the thoughtful destruction of the target inhabited exclusively with civilians who are not fighters, to a killing of the larger possible number of victims in order to cause fear of the most possible number of people
- Completely new, in its range, destruction and professional sense of coordinated planning of attacks from September the 11th
- Led by civilians without state sanctioning in a way that erases classic boundaries between terrorism and announced war between states
- Relied on the most developed technology of the contemporary civilisation in destruction in the most developed ways of technology because it is considered that modern civilisation poses a threat to sacred traditions of terrorists

- Organised by transnational, non-government organisations through global conspiracy networks of terrorist cells which are in many countries, engaging accordingly the unseen levels of communication and coordination
- Led by fanatic extremists with an aim to destroy with highest possible bloodshed, without the wish to negotiate, doing crimes against humanity with suicidal methods which cannot be diverted or prevented with negotiation or compromise
- Guided by the hatred towards the target - the wish of the terrorists that target is exposed to suffering, because of what it is and what it does and the values that it stands for.

Besides being traditional and global, modern terrorism is extremely deadly as well. The earlier tactics of theatric, selective and symbolical attacks, modern terrorists changed with tactics of killing the highest number of people in order to shake the whole society and culture of the enemy. Modern terrorists are fanatical extremists, without state responsibility, and who are directed by sides of international non-government organizations through global terrorist network. Led by the hatred towards the target, the wish for the target to suffer and relying on the most advanced technology, they, by suicide actions, rather destroy than persuade and convince. By that fact, the need for negotiation compromise is ignored and classical boundaries between terrorism and proclaimed war between states (Kegley, Ch. W. Jr., 1977).

In the Resolution of the Security Council nb. 1373, which was voted for in 28.9.2001., it is said that international terrorism poses the challenge to all the states and to complete mankind, because with terrorism the dignity and safety of people is endangered, the social and economical development of all states and in world proportions undermines the stability and well-being. In November 2004 the UN marked terrorism as any act "which includes killing or hurting civilians or non-fighters, for intimidating of population, governments or international organizations, with an aim to do or not to do something, what is the product of that act".

The new forms of performing terrorism, before all suicidal terrorism mostly refer to the possibility that suicidal terrorist attack is done in a hidden and passive way, by weapons for mass destruction. The progressing attainability of nuclear, biological and chemical weapons gives new dimension to terrorism in general, and therefore suicidal terrorism as well. The possibility of terrorist organizations to obtain nuclear, biological and chemical weapons illegally poses an objective threat that it could be used for, among other things, performing the suicidal terrorist attacks. Taking in consideration that the smallest amounts of chemical or biological agents are enough to cause disproportionate consequences to people, it is possible that suicidal terrorist at a certain time on the certain place activates the capsules filled with some poison gas.

So, there's a possibility that suicide terrorist, previously, consciously infected himself with a deadly virus and, in that condition moved in public places (squares, bus stations, airports etc.) and infected the people there present. Apart from that, the possibility of terrorists to use chemical weapons in terrorist purposes is inclined with the use of suicidal terrorism, for the tactical advantages which characterize suicidal terrorism.

The danger of those and similar ways of performing suicidal terroristic acts increases for more reasons.

First, starting from the fact that in the beginning the standard ways of performing suicidal attacks were used, such as sticking the explosive to the body, the use of suicidal vests and suits, then use of cars, boats and at last planes for performing

suicidal attacks, it is very realistic to expect performing suicide attacks in that way. Second, there is no effective system of protection from terrorist suicidal attacks performed in that way. A terrorist suicide doesn't carry explosive, doesn't have to have weapons, looks like any other citizen, seems inconspicuous, therefore doesn't draw attention to the safety service. Third, the consequences of the suicidal terrorist attack performed in that or similar way, can be far more dangerous and lasting than the consequences of the suicide bomber attacks (Shikman, 2006).

SUICIDAL TERRORISM

Suicidal terrorism can be defined as a form of terrorism which consists of suicidal terrorist attacks to people and property, with conscious sacrifice of own lives for accomplishing the set (imaginary) terrorist goals.

Suicidal terrorism, in its today's form, appeared in 1980-ies in Shri Lanka, Kuwait and Lebanon.

First major terrorist suicidal attack in modern era happened on October 23rd 1983 in Beirut (Lebanon), when in explosive loaded vehicles' explosions, in barracks of the American and French contingent of the peace forces, died 241 American marines and 58 French parachutists. With suicidal terrorism, a full effect of the terrorist act is accomplished: American and French forces withdrew Lebanon, and the panic of similar attacks caught the US. During the nineties there is a gradual spread of suicidal terrorism, and it reaches Israel (West coast and Gaza), Egypt, India, Pakistan, Avganistan, Panama, Algiria, Russian Federation (Chechnia, Northern Ossetia, Dagestan), Tajicistan, Argentina, Turkey, Tansania, Kenia, Yemen, Indonesia, Saudi Arabia. From the beginning of the 21st century by suicide terrorism are caught also the USA, France, Peru, Tunisia, Columbia, Iraque, Morrocco, the Philipines, Usbekistan, Spain and Finland.

In the beginning, the suicidal terrorism was used unselectively and individually, and later the terrorist organizations started to develop a special suicidal tactics and they are using it permanently and systematically. The essence of attacks of the suicidal terrorist, in the most general sense is in the conscious dying for accomplishing the set goals. In that way, the suicide terrorist appears at the same time as an effective means and way of performing the act. In this, the suicide is usually the last link in the organizational chain, in which the whole chain of caters is included, starting from the orderer, ideologists, cooperators, accomplices and others, without whose part (planning and help) a suicidal attack couldn't be performed. Their carriers are certain extreme terrorist organizations.

It is evident that suicidal attacks of terrorists, apart from the general characteristics which are common for every form of terrorism, is marked by specifics inherent only to this type of violence. For example, fear caused by a suicidal attack has a much stronger effect than the one caused by a classical terroristic act. Psychological effect of the suicidal act is far beyond its destructive possibility. The feeling of non-protectiveness of the citizens is created, which has the direct impact on the public and media. All that leads to the overwhelming feeling of helplessness at one side, and the feeling of superiority on the other.

Apart from the general characteristics which characterize terrorism, suicidal terrorism is characterized also by: immorality, secrecy and covering, cruelty, surprise, unselectiveness and randomness of the terroristic act, as well as possession of certain tactical advantages. (Shikman, 2008). Regardless to the high degree of organizing, basically, those are very simple operations. Therefore, the way out for the

performer doesn't have to be planned, or the dangerous rescue actions for the performer don't have to be taken. That very much eases conspiracy and efficiency of the act. Also, compared to the other forms of terrorism in suicidal attacks, less number of people is involved, so there is only a logistics team as a planner and performer of the entire operation, while only one performer acts (the cases of multiple performers actions are rare). By that, the possibility that any of the performers would be arrested and reveal information in interrogation is excluded (Micic P, 2006).

Analyzing the suicidal terroristic attacks in the world, in the period from 1.1.1995. to 1.6.2005., it's confirmed that 231 suicidal terrorist attacks was performed, and, according to the reliable sources, 15.459 people were injured. The suicidal terrorism is present within 7 regions of the world (African, Asian, Euroasian, and European, Latin American, Middle American and Near Eastern region, which is the most endangered by this type of terrorism).

21 terrorist organizations have been identified which use suicidal terrorism, with the fact that most attacks are performed by the fractions of the terrorist organizations which act in Iraqi and Hamas, which acts in Israel. Al Qaeda performs the deadliest suicidal terrorist attacks, which can be noted according to the number of the killed in those attacks. Also, Al Qaeda is the only terrorist organization which performs suicidal terrorist attacks in all the regions of the world. By suicidal terrorism, seven regions of the world are endangered: African, Asian, Euroasian, Latin American, Middle American and Near Eastern region, which is the most endangered with this form of terrorism. Until 2001, vulnerability of the regions was relative and was reduced to constant vulnerability of the Near Eastern and Asian region, and occasional vulnerability of the rest of the regions of the world, with less suicidal terrorist attacks (up to 10 attacks of that kind). The largest number of the killed is in the Near Eastern region, and then in other regions of the world. By suicidal terrorism 28 states in the named regions are endangered, and the greatest number of terrorist attacks is performed in Israel, while the largest number of the killed in suicidal terrorist attacks, not counting in the number of the killed in suicidal terrorist attacks on September 11th 2001 in USA, in Iraqi.

The target of the suicidal terrorism can be anything which could enable the fulfillment of the purpose of terrorism, to cause fear at a broader circle of people, with the aim to accomplish the set goals, with the least possible terrorist forces and means. Exactly because of that, suicidal terrorism has got numerous advantages in terms of choosing the target for suicidal terrorist attacks. Consequently, the targets of the suicidal terrorism can be, in the most general sense, placed in four categories: a certain person (assassination), human collectivity, public buildings, state facilities and means of transport.

When assassinating, terrorist attacks are used for purpose of killing the highest representatives of the state and its officials. There are more examples of assassinations and attempts of assassination by suicidal terrorism, and they are performed by different forms of suicidal terrorism. Most often, the direct performer is a suicide bomber, but also the cases of using vehicles in terrorist suicidal attacks at a certain person are not rare.

Human collectivity can be a small or large group of people, who are mutually connected, or accidentally on a certain place at the same time. Very often, groups of people at certain manifestations, religious events and other activities pose a direct victim to a suicidal terrorism. Public buildings are those spaces in which the highest number of people is located while performing a suicidal terrorist attack. The most common targets of the suicidal terrorism are: bus stations, train and taxi stations, hotels, restaurants, cafes and disco clubs, shopping malls, hospitals, schools, city squares, sports objects. Their basic characteristics, from the point of the terrorist act, are that they cannot be easily and adequately protected.

Public buildings which can be the targets to a suicidal terrorism are the official state objects (the government buildings, the Parliament, etc.), diplomatic buildings (the Ambassies, consulates, representatives of the states, etc.), religious buildings (churches, synagogues, mosques, etc.), military and police buildings (military bases, storages, police institutions), those are the targets that present status symbols of the certain state. Means of transport are often the targets to a suicidal terrorism. Most commonly, the buses, trains, ships (tourist, transport, military), as well as different convoys (military, diplomatic etc) are attacked. The highest number of attacks is performed by the individual terrorist-suicide bomber and by using vehicles for performing suicidal terrorist attacks. The highest number of suicidal terrorist attacks is directed towards military and police buildings and vehicles, while the highest number of the killed is in the suicide terrorist attacks to the state buildings (Shikman, 2008).

THE MODELS OF ESTIMATION OF THE NUMBER OF VICTIMS

It is evident that suicide terrorism presents a global threat and therefore it is necessary to make an adequate and efficient way of protection from the carriers of the suicidal terrorist attacks. Israel is the country which has been mostly exposed to this type of violence for years. In Israel, in the period from 2001 to 2003, 471 persons were killed and 3.390 injured in 85 suicide bombers attacks with an average of 5.5 lethal cases and 40 injuries per one suicidal act. Only in 2003 in Israel, 14 suicide attacks were performed in which averagely 10 people died, 43 injured (table 1). Common suicide attacks set the demand for the Israel scientists to qualitatively study the effect of suicide bomber and to suggest measures of the possible protection of them. In this respect, the attempts of mathematical modeling of the situation were done, when a suicide bomber activates an explosive device in alleged space with a certain distribution of people, with an aim to determine the dependence of the number of victims of the distance from the suicide bomber, of the angle of dispersing the fragments of explosion, of the number and spatial allocation of the present people at the moment of activating the explosive device and other parameters. The effect of the influence of the crowd (screening) wasn't taken in consideration.

In this work, the mathematical model of estimation of the number of victims after activating the explosive device will be shown, depending on the distance and the angle of dispersing of the fragments of explosion.

Since the largest number of suicide attacks are performed by individuals-suicide bombers, by using the explosive wrapped around their body, the object of analysis in the work will be that kind of act. This form of demonstration of the suicide terrorism represents one of the basic ways of performing the suicide terrorism and can be done by a terrorist-a suicide bomber, weather he attaches the explosive to his body or uses other means of performing a suicidal terrorist attack. At first, the explosive was tied or stuck to the body, while later they started using suicidal vests and body suits. The most common amount of explosive is around 20 kilograms.

| Date | Place | Killed | Injured |
|----------------|-----------------|--------|---------|
| 4 October 03 | Haifa | 21 | 60 |
| 8 September 03 | Jerusalem | 8 | 30 |
| 8 September 03 | Zrifin Junction | 9 | 20 |
| 19 August 03 | Jerusalem | 24 | 102 |
| 12 August 03 | Ariel | 2 | 4 |
| 12 August 03 | Rosh Ha A'yn | 1 | 9 |
| 19 June 03 | Sde Trumot | 1 | 0 |
| 11 June 03 | Jerusalem | 17 | 50 |
| 19 May 03 | Afula | 3 | 47 |
| 18 May 03 | Jerusalem | 7 | 20 |
| 30 April 03 | Tel Aviv | 3 | 60 |
| 30 March 03 | Netanya | 0 | 58 |
| 5 March 03 | Haifa | 17 | 40 |
| 5 January 03 | Tel Aviv | 23 | 100 |

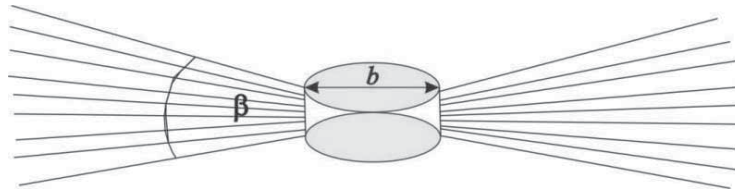
Table 1. The number of casualties in suicide attacks in Israel in 2003 (taken from (Kress, 2004))

The suicide vest is used in the way that a vest filled with explosive is put on under another piece of clothes, in order not to be noticed. The fuse is often camouflaged into some button or other part of clothing (badge, pocket), which is within reach of hand, in order not to draw attention. Upon arriving at a confirmed place of execution, a terrorist suicide bomber by pressing the button-fuse activates the explosive, performing the suicide attack. Commonly, as an explosive trinitrotoluol (TNT) is used. Also commonly, the Czech explosive "sentex" is used, which is used because of its destructive power, but also goes through the standard explosive detectors undetected. Most commonly, this explosive is illegally obtained from the countries of the Western Europe. The advantage of this explosive is that, while using it, the very small amounts are needed, which facilitates the performance of suicide attacks. Besides, different plastic explosives are used, as well as different kinds of lighters, of which the most sophisticated are laser and radio-electronic. C-4 is the "plastic explosive" which is suitable for different types of terrorist attacks, including the suicide terrorist attacks.

In this model it is assumed that a smaller amount of explosive is used (3-4kg) and it is not the specified type of explosive. It is also assumed that in this model subjects close to the suicide bomber get killed due to the fragments of the explosive, and that secondary effects of the explosion (burns, shock wave, etc...) are neglected¹⁷ (E:H:Kaplan, 2005). An individual is presented in this model as a height cylinder, with the height $h = 2h_0$ and with the base width of b . It is assumed that the distribution of people in the band operation of the fragments of the explosion is given in Puason's territorial distribution with the density λ (number of subjects per unit area). The expected number of subjects, who are at a distance R and exposed to the explosion, according to Puason's distribution is equal to $e^{-\lambda b R}$. When the potential suicide bomber is found in the centre of the designed target (for which we assume it is circular in form), then at the distance of $R + dR$ from the centre of the

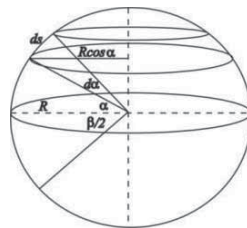
target, the number of potential casualties is equal to $\lambda 2\pi R dR$. The total number of subjects exposed to the terrorist act is equal to $\lambda \pi \tau^2$, where the τ is radius of circular target area. We will assume that the explosive tied around the waist of the bomber, at the height of h_0 and that at the moment of explosion activation n number of fragment disperse around the bomber with the angular dispersion β .

Under the term of fragments of explosion we entail the little parts of explosive device which can be different depending on the type of the explosive device used.



Picture 1. Fragments dispersion during the explosion

Effective target area exposed to fragments of the explosion can be determined from the Picture 2.



Picture 2. Effective target area during the explosion

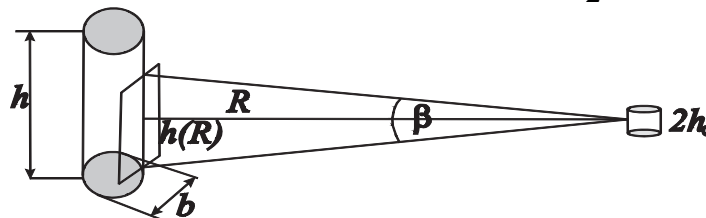
$$dS = 2R \cos \alpha ds = 2R \cos \alpha R d\alpha \tag{1}$$

$$S = 2 \int_0^{\beta/2} 2R^2 \pi \cos \alpha d\alpha = 4R^2 \pi \sin \frac{\beta}{2} \tag{2}$$

Expected density of the explosion fragments density is

$$\sigma = \frac{n}{4R^2 \pi \sin \frac{\beta}{2}} \tag{3}$$

The exposed height at which fragment with angular dispersion β can hit the target at the distance x is $h(x)$ and can be from $h_0 - R \tan \frac{\beta}{2}$ to $h_0 + R \tan \frac{\beta}{2}$



Picture 3. Effective area of the individual target

Area of the individual target exposed to explosion fragments is

$$A = bh(R) = b2R \tan \frac{\beta}{2} \quad (4)$$

With the assumption that explosive fragments are evenly distributed, the probability that one subject, in the area of the radius R , is hit by one fragment is equal to:

$$P_n(R) = 1 - \left(1 - \frac{A}{4\pi R^2 \sin \frac{\beta}{2}}\right)^n \quad (5)$$

Combining (4) and (5) we find the corresponding probability¹⁵(Kress, 2004)

$$P_n(R) = 1 - \left(1 - \frac{A}{n \frac{\sigma}{\sigma}}\right)^n \approx 1 - e^{-A\sigma} = 1 - e^{-bh(R)\sigma} \quad (6)$$

Expected number of casualties among the subjects at a distance R from the centre of the explosion is equal to multiplication of three items: the expected number of subjects to be at the distance R from the explosion, probability that the subject is exposed to the explosion and the conditional probability that due to explosion he/she will be hit by at least one fragment.

$$\bar{c} = \int_0^{\tau} \lambda 2\pi R e^{-\lambda b R} (1 - e^{-bh(R)\sigma}) dR \quad (7)$$

If we assume that the bomb is dispersed into great number of fragments, which is reasonable, then we can conclude $n \rightarrow \infty$ и $\sigma \rightarrow \infty$, and the equation (7) becomes

$$\bar{c}_{\infty} = \int_0^{\tau} \lambda 2\pi R e^{-\lambda b R} dR = \frac{2\pi}{\lambda b^2} [1 - (1 + \lambda b \tau) e^{-\lambda b \tau}] \quad (8)$$

The values of the parameters for the estimates of number of casualties are the following:¹⁸(taken from(E.H.Kaplan,2005))

τ – radius of the area of 10 m

λ – target area density $1/\pi$ person m^2

b – individual base width of 0,5 m

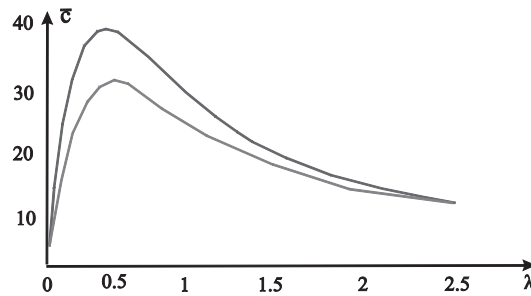
h – individual height 1,75 m

h_0 – height of the bomb at the waist $h/2 = 0,875$ m

n – number of expected bomb fragments 100

β – dispersion angle of fragments 10°

Graphical dependence of number of casualties in the function of distance from the centre of explosion is given in the picture

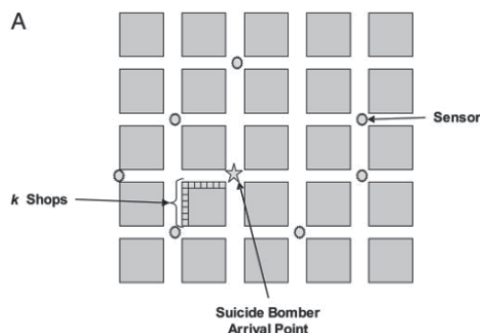


Picture 4. Dependence of number of casualties on the number of people per area unit for the different number of explosion fragments (the blue curve-number of fragments endlessly great, the red curve- number of fragments 100)

In the Picture 4 we can see that the greatest number of casualties would be in the case of $\lambda = 0.3$ person/m² and the number would be, depending on the number of explosion fragments, around 35-40 people. In this model it is shown that the number of casualties is slightly dependable on the dispersion angle of explosion fragments. Even with the help of these completely simplified assumptions, which are accepted in this model, it can be seen that the number of casualties in this act is in accordance with the empirical data.

Frequent suicide bomb attacks in Israel, made Jerusalem Post to ask the Israel Government that weapon industry develop such technological solutions which could detect suicide bomber before he gets to the target and detonates the explosive¹⁹(E.H.Kaplan,2005). Current sensors are cumbersome and expensive, for example, detectors of millimeter waves weigh 650kg and cost hundreds of thousands of dollars per device and cannot meet the needs. Optimal distribution of sensors for explosion detection is mathematically modelled in order to cover certain endangered area and to detect potential suicide assassin in time. Early detection of explosive would provide some time to alarm the present people and time necessary for intervention of special anti-terrorist units.

In the model with the use of sensors for early detection of suicide bombers, an urban environment (so-called model "the network") has been taken into consideration i.e. composed of building blocks, length 200 x 200 m, which are separated by 10 m wide streets and sidewalk width of 4 m, each with $k = 10$ stores per block (which are potential targets). The sensors register the explosives within 10 m



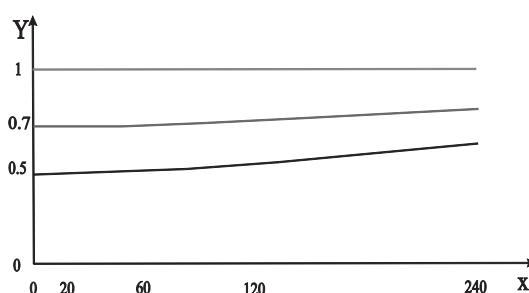
Picture 5. Model „networks“

The probability of timely registration of suicide bomber using the sensor given as

$$p = \frac{f}{f + (1-f)(1-(1-q)^\kappa)} \quad (9)$$

where f - distribution of sensors $f \in (0-1)$, q - expected attractiveness of shops for terrorist act, κ - number of shops in the block. It is assumed that the suicide bomber getting out from the car at one of the crossroads and moving along the street with speed v (picture 5).

Adopted values for the model are $f = 0.5; 0.75; 1$ $q = 1/3$ $v = 1 \text{ m/s}$ and the results are shown in the Picture 6.



Picture 6. Probability of detecting suicide bombers Y in the mean function of elapsed time from the detection to activation of explosives X ($f = 0.5$ black, $f = 0.75$ blue, $f = 1$ red line)

The Picture 6 shows that if the sensors are arranged so that ($f = 0.5$) the probability of registration of suicide bombers is equal $p = 0.5$ and the time to activation of explosives is about 60 s, for $p = 0.54$ the time of explosion is 120 s, and for $p = 0.63$ time to explosion is 240 s. It is clear that with increasing time of detecting suicide bombers to blast increases the possibility to intervene and prevent an explosion. The question is how to intervene: does it include any special units that are able to act for a short period of time, whether it's an automatic closure of potentially vulnerable buildings or there is some other way?

If the sensors are arranged at each crossroads $f = 1$ potential suicide bomber will be registered with the probability $p = 1$.

Existing and potential technologies for detecting explosives give us the opportunity to realize suicide bomber detector schemes. However, even perfect detection may not lead to significant reduction in casualties from random suicide bombings. For timely detection of more than 80% of all attacks, with the use of perfect sensors, it is necessary to use a fraction $f = 0.7 - 0.8$ (depending on the relevant urban topology), which does not give enough time for significant reduction in casualties, which, in turn, requires prompt intervention.

The use and deployment of sensors to detect suicide bomber makes sense provided that such devices are confirmed as effective. Terrorists may be deterred from attempting suicide bombing if they believe they will be disclosed, and the public can be confident that it is protected. However, SB showed on several occasions, readiness to attack. This fact and frequency of random killing of passers-by, indicating that deterrence is difficult to accept as argument. English experiment with widely deployed visible cameras in public places, in order to prevent crime and to assure the safety of citizens, failed.

These and similar models have imposed the following conclusion to professionals involved in the fight against terrorists in Israel. Instead of focusing on the technology that allows detection of suicide bombers and action in the last seconds, they put prevention on the first place, i.e. the intelligence work and access control of potential suicide bombers. Most of the planned suicide bombing was anticipated by arresting of potential bombers or destroying bomb-making laboratories before the attacks began.

CONCLUSION

Suicide terrorism is becoming a global terrorist threat. It becomes apparent that suicide terrorism is not only related to the Middle East and Islamic fundamental organizations. Actuality of suicide terrorism in the Middle East, South Africa and Chechnya increases the risk of its spreading mainly in the U.S., Asia and Western Europe and other areas that are characterized by extreme activity of terrorist organizations. Suicide terrorism, because of its specificity, and possibility to success and easy way to realize, can affect any part of the world, and its proponents could be various terrorist organizations that this type of action considered purposeful. Accordingly, suicide terrorism becomes a world problem, which at present reaches its peak.

Suicide terrorism is analysed here as the most dangerous form of terrorism that can be done anywhere and anytime, in any way by any means. An attempt was made to present a mathematical model developed by Israeli scientists in order to determine certain quantitative parameters that influence the number of victims in such acts. It has been established dependence between the number of victims of the distance from the explosion and the dependence of the scattering angle fragma-nata explosion. In addition, it is analyzed the dependence of the number of victims of their distribution in space. It is obvious that many people suffer in case of explosion. As this kind of terrorism is very prominent in the Near and Middle East, there have been attempts to places that are reasonably expected to be targets of protection sensors to detect explosives that carry risk of suicide in order to gain time for an adequate response. However, existing technologies are not sufficiently reliable and affordable for a wide range of applications 20 (E. H. Kaplan, 2005). The presented mathematical models indicate that even the widespread application of the ideal sensor would not reliably reduce expected losses. Although it is believed that the sensors to detect suicide bombers may play an important role in the defense of known targets (when it comes to assassination), the model results presented show that the application of SB-detector schemes is not effective in protecting civilians from the indiscriminate suicide bombings.

Preventive work in this area is imposed as a basis to oppose this kind of terrorism. Investment in intelligence operations, to prevent suicide bombers before they attack, is most appropriate strategy. One possible approach to prevention has been analyzed here ²¹(Zorić, 2011).

Preventing terrorism presupposes knowledge of criminal phenomena, political, economic, and social and community causes and conditions that lead to them. It takes place through preventive activities of state bodies and social institutions, followed by variety of political, social, economic, educational and other measures aimed to eliminating the factors that lead to terrorism. Up to date sources and forms of terrorists that threaten the values of the state, make high level of material-technical equipment of the state security organs necessary, their effective organization and increasing the space for the application of the results of natural and social sciences

in exercising their roles. In addition to this the fact that terrorist organizations are now equipped with the latest weapons and equipment, that many experts from different fields of science work for them and that they are materially and financially well secured and in some cases better than the security services ²²(Vejnovic, 2007).

Against the terrorist activities and other forms of threats, the very system of government and society must fight in the first place by its strength, quality, vitality, democracy, which is in its basis, the legal state and further development of freedoms and rights, and by strengthening of these relationships in all spheres of social life. If a democratic society is ethically, economically and organizationally stronger and more stable - so it feels more responsible for the process of protecting society and the more it reduces possibility of terrorist activity. In future, the international security system is faced with great challenges as how to preserve the security of the population and protect the citizens of this difficult controlled risk. That, among other things, can be achieved: through the organization, excellent training and modern equipping of anti-terrorist unit operations; constant monitoring of scientific achievements in the fields of military, social and technical sciences, analyzing past experiences in anti-terrorist activity, improving the system of measures to deter terrorist activities. In addition to these prerequisites, a basic condition for success is a determined commitment of public opinion to oppose modern terrorism. Placing the modern terrorism under the control would be a great success of the UN, because eradication of terrorism in the world is now just a wish of the majority of humanity ²³(R.Gacinovic, 2010).

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POLICE DEPLOYMENT IN EMERGENCY SITUATIONS CAUSED BY THE ABUSE OF WEAPONS OF MASS DESTRUCTION¹

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Abstract: In their line of work police officers face a large number of emergency situations-criminal incidents related to hazardous materials that can be abused as the weapons of mass destruction. Deployment of police officers in cases of terrorist attacks has its specific features, since it is carried out in extreme circumstances with outstanding dangers to life and health. Apart from the emergency medical service and fire and rescue units, the police have a decisive role in the elimination of consequences of such incidents. In these emergency situations, police staff offers primarily assistance to the injured persons, prevents the expansion and elimination of consequences of the emergency situation, and pays considerable attention to the criminal processing of the scene of incident. Apart from giving the overview of police officers deployment in priority tasks, this paper also gives a comprehensive review of their position in the emergency management system, where the emergency situation has been caused by the abuse of this destructive weapon.

INTRODUCTION

The combat against international terrorism is no longer a matter of ideology, as the terrorists cannot be persuaded that they live in a democratic society and they will not calm down until they have accomplished their projected terrorist goals. Having such a difficult situation in mind, protection and rescue forces² must be adequately prepared for reacting in emergency situations³ caused by the abuse of weapons of mass destruction used for terrorist purposes. Authorities in charge of planning defense against terrorist attacks have finally realized that planning a response to incidents that are very likely to happen instead of making plans of everything that might happen was not an appropriate approach, and the consequences were catastrophic. Terrorists' imagination exceeds all the thoughtful boundaries, and is so versatile that anything could be expected from them. Secondary explosive devices that are set up in such a way that they

1 This paper is the result of the realization of the Scientific Research Project entitled "Development of Institutional Capacities, Standards and Procedures for Fighting Organized Crime and Terrorism in Climate of International Integrations". The Project is financed by the Ministry of Science and Education of the Republic of Serbia (No. 179045), and carried out by the Academy of Criminalistic and Police Studies in Belgrade (2011-2014). The leader of the Project is Associate Professor Saša Mijalković, PhD.

2 Protection and rescue forces consist of headquarters for emergency situations, civil protection units, fire-rescue units, police, Serbian military, and other stakeholders whose regular activities include protection and rescue, as well as corporate units and other legal entities, the Red Cross of Serbia, the Mountain Rescue Unit of Serbia, and associations capable of and equipped for protection and rescue.

3 An emergency situation represents a state in which the risks and threats or consequences of disasters, emergency incidents and other dangers to population, environment and material goods of such a volume and intensity that make it impossible to prevent or eliminate their occurrence or consequences by regular actions of the authorities and services in charge, because of which it is necessary to apply special measures, forces and means, with the intensified work regime, in order to mitigate or eliminate them (The Law on Emergency Situations, the Official Gazette of the Republic of Serbia, No 111/09 and 92/11).

are detonated after the arrival of the police⁴, fire and rescue teams and emergency medical service units, as well as the attacks by automatic weapons on the mass of bystanders gathering at the incident scene, represent only a small piece of the pervert terrorist conception (Heyer, 2006).

During their work police officers face a large number of criminal incidents related, directly or indirectly, to hazardous materials that may be abused for terrorist purposes. Protection and rescue forces, primarily police, emergency medical service and fire and rescue units have a decisive role in the elimination of consequences of emergency situations caused by these weapons. Procedures of these forces at the scene of the terrorist incident consist of priority rescue of the injured, as well as of prevention of the expansion of further consequences - bringing them under control, which are complicated for the reason of contamination - pollution of the incident scene caused by the use of nuclear, radiological, biological and chemical weapons. The fact of the additional complication itself which occurs during the activity of protection and rescue forces, make at the same time these terrorist organizations abuse these weapons (Taylor, 2000).

EMERGENCY SITUATIONS AND WEAPONS OF MASS DESTRUCTION

Emergency situations caused by the use of weapon of mass destruction (WMD) represent the incidents that require realization of special measures by one or more intervention services and generally include the participation of a large number of rescue officers (Mladjan, 2009:255). Such a chaotic condition at the site of a terrorist attack involving a large number of protection and rescue forces gives motives to the terrorist organizations to perform secondary attacks. The consequences of the abuse of these weapons could be catastrophic, and thus the end of the XX and the beginning of the XXI century can be called a global anarchy of the weapons of mass destruction (Bajagic, 2007:206). The scenario that took place on September 11, 2001, showed that even small groups of individuals are capable of provoking massive human casualties and material damage.

Terrorist organizations use various kinds of weapons, where all these weapons can be classified into four categories (Heyer, 2006:3): conventional weapons and explosives; nuclear and radioactive weapons; chemical weapons and biological weapons.

Contrary to conventional weapons, these weapons possess such unique features that make them very attractive for terrorist acts. Namely, they represent any weapon intended for or capable of causing death or severe bodily injury to a large number of people (Hawley, Noll, Hilderbrand, 2002). Weapons of mass destruction (CBNRE) in a narrow sense of words include nuclear, chemical, biological and radiological weapons, as well as their agents. In the broader sense, they include all toxic chemical agents, if used as a means or a target of an attack, all micro-organisms and their products, if they are a means or a target of an attack, all industrial plants producing toxic chemical materials and micro-organisms in their production process, as well as all warehouses and traffic and transport means serving for warehousing and transporting, but being a target to military or terrorist acts or means for accomplishing determined goals.

The sources of materials that can be used for the production of these weapons are not easy to find due to rigorous security measures of their protection (Bowman,

⁴ The term police used in this work refers to all the police staff organized within the Police Directorate.

2007). The only way in which one can get them is a theft, illegal transfers by sponsoring states. Also, terrorist organizations can develop them by using materials that have a twofold purpose.

The terrorist organization Al Qaeda has developed plans for the construction of explosive radioactive devices (dirty bombs), but it is also trying to make the uranium-based weapons. Efforts of terrorist organizations in making weapons of mass destruction on their own have been aggravated by the facts such as insufficiency of adequate infrastructure and resources that are usually available only to the states.

Since September 11, 2001, concerns have grown due to the fact that the terrorists might be able to get and use the weapon of mass destruction and thus cause more severe material and human destruction in order to accomplish their political goals. Regardless of how high or low is the likelihood that a terrorist attack might occur, the threat is real as the members of criminal groups will not stop searching for adequate weapons that could make possible the realization of their projected goals.

POLICE TASKS IN EMERGENCY SITUATIONS CAUSED BY THE ABUSE OF THE WEAPONS OF MASS DESTRUCTION

During the emergency situation caused by the abuse of weapons of mass destruction, the police have a key role in the process of identification of the terrorist attacker, as well as in the elimination of consequences of emergency situation. The main objectives of police procedures at the scene of incident are self protection, saving human lives and preservation of the scene of a terrorist attack (Burke, 2007:358). Police have acquired such a position and role on the basis of their jurisdiction and scope of work, organizations' ability to adjust to the newly created circumstances and intermittent performance of different security-related tasks on the territory of the whole country, including the possibility of an efficient additional expert training. Due to the nature of the work that they perform, the number of employed officers and equipment, the police are capable of reacting efficiently and timely, as well as of activating other stakeholders from the protection and rescue system, and the local community as a whole (Maric-Tomic, 2010). Protection and rescue forces that are the first emergency responders at the scene of incident, should manage the scene of the terrorist attack⁵; victims, bystanders and cooperative volunteers; hazardous materials⁶ and terrorists.

Police officers are by the nature of their profession, in charge of securing the scene of incidents. However, in emergency situations (ES), the final result of the police deployment will depend on these characteristics, the manner of approach to the scene of the terrorist attack and the way in which the dangers have been tackled. (Burce, 2007:338).

In all the countries around the world, the jurisdiction and scope of work of the police have been defined by laws and by-laws. However, in terrorist incidents, the tasks assigned to the police are often wider than the legally defined jurisdiction and depend to a great extent on the very situation at the scene of attack. In Germany, police have the following tasks in emergency situations⁷: giving warning to the

⁵ It is a location where an action has been undertaken or failed, as well as the location where a consequence has occurred, completely or partially (Article 17, paragraph 1 of the Criminal Law).

⁶ Hazardous materials include all those materials whose characteristics may provoke consequences detrimental to health or environment, due to unskillful and irresponsible work, or due to any other incident during their production, transport, storage or handling. We often use as synonyms the terms "dangerous goods" and "hazardous materials", which is not correct.

⁷ PDV100- "Führung und Einsatz der Polizei" Teil I- "Leitlinien für den Einsatz der Polizei bei größeren Schadenlagen.

population about the dangers; protection of lives, health, environment and material goods; blockage of the endangered site; providing free passage for vehicles that are taking part at the protection and rescue actions; cooperation when saving people in jeopardy and provision of a safe place for them; police measures in traffic; protection of property; prevention of thefts; identifying a cause of death; identifying unknown helpless and dead people; accommodation of the injured; making reports on the accommodation of the injured; investigation of the course and cause of the incurred incident, especially for the purpose of determining eventual criminal acts; determining the suspects and eye-witnesses; surveillance.

Given the legal role of the police⁸ in the Republic of Serbia, police tasks important for the protection of citizens in all types of emergency situations⁹ can be conditionally divided into groups of tasks from the public security jurisdiction providing:

1. Provision of a security system by using measures and activities from the framework of regular jurisdictions, by adjusting these activities to the incurred changes in the legal regime, due to the emergency situations in place;
2. Provision of conditions for the execution of functions of other state bodies, legal entities or citizens when these stakeholders are disabled for executing their functions and roles in emergency situations. In case of use of the CBRNE weapons during the war actions¹⁰ that affect the population, organizational units of the police, together with the competent units of the civil protection, will be deployed in various tasks concerning protection and rescue of the endangered population, where priorities must be taken into account. Based on these legally determined police tasks, we can say that in emergency situations caused by the abuse of weapons of mass destruction, the police execute to a great extent their regular tasks, though under aggravated circumstances.

8 The Law on Police (Article 2) (the Official Gazette of the Republic of Serbia, No 101/05, 63/09 – Decision of the US and 92/11) also gives a definition of the activities of the Ministry of the Interior that are in function of providing public security, and include undertaking the measures that are necessary for the elimination of the immediate danger to people and property, when these measures cannot be undertaken in a timely manner by other authorities in charge; providing assistance to the state administration organs, the organs of the territorial autonomy and local self-government, legal and natural entities, in case of general danger caused by natural disasters, epidemics, or other types of destruction: ordering evacuation from the area or facilities in question. Police participate in these activities as well and offer rescue and first aid services to the population. Also, Article 15 stipulates: “If the Government of the Republic of Serbia decides that it is not otherwise possible to provide public order or protect the health and lives of the people, it can give an order to the Minister: 1) to restrict or prohibit movement in certain facilities, certain areas or in public places; 2) to prohibit settlement in certain areas or abandonment of certain areas; 3) to order evacuation-abandonment of certain areas or facilities.

9 The Article of the Law on Emergency Situations stipulates that: “The Ministry of the Interior executes the following activities in the field of protection and rescue during the emergency situations: “Provide participation of the police and other organizational units of this Ministry in the realization of measures and accomplishment of protection and rescue tasks.”

10 The Law on Police (Article 14) stipulates that police, according to their scope of work set up by the Law, make preparations for action during the emergency situation or the state of war. During this emergency situation or the state of war, police execute tasks from their scope of work in such a way that they adjust their organization, forms and methods of work to the newly created changes, in compliance with the Law and acts made for the purposes of eliminating this emergency situation, and the state of war. The use of material and technical means, infrastructure, land and objects of the police during the emergency situation or the state of war, is planned by the police. The equipment and means acquired on the basis of material obligation can be allocated during the emergency situation or the state of war for the execution of certain tasks of the police. The police adjust their preparations and tasks for the state of war with the Ministry in charge of defense.

ACTIVITIES OF POLICE OFFICERS FROM THE CALL UNTIL THE ATTENDANCE OF THE SCENE OF INCIDENT IN THE EMERGENCY SITUATION CAUSED BY THE WEAPONS OF MASS DESTRUCTION

Police officers receive the first pieces of information about the incident through a direct observation¹¹ or via numbers 92 and 93 (emergency services). The following indicators can represent the grounds on which a policeman being on duty can conclude that an emergency incident has occurred and suspect that the terrorist attack may have happened¹²: numerous reports from the people about persons who felt sick or were injured in an unusual way; a large number of people with the same symptoms asking for help; a lot of calls from the same geographic region or from mass rallies reporting about unusual health problems; symptoms indicating exposure to chemical substances (tearful eyes, lack of air, breathing difficulties, irritation of eyes, nose, throat, redness or itching of the skin); reports concerning small explosions with slight damages; suspicious devices and equipment; personal protective equipment that is thrown away (masks, gloves, clothes); plants and animals died under inexplicable conditions.

Police officers attending the scene of incident must be ready and trained to recognize these indicators. However, it is always so obvious that a scene with dangerous surroundings is in question, i.e. that an emergency situation has occurred as a result of the abuse of this destructive weapon. Numerous emergency situations caused by hazardous materials and the abuse of the weapons of mass destruction are reported as cases of fires, road accidents, technical interventions, etc. Police officers who find themselves at the scene of incident can confirm that the abuse of the weapons of mass destruction has occurred, according to the following indicators (Levy, 2010): information provided by a citizen who is reporting the case or by a service in charge in a police station or any other operations centre; unusual colors, sounds, smells or clouds; visible chemical reactions or release of hazardous liquids or steam and smoke; alarms coming from the fixed and portable equipment for monitoring; tables, labels and lists of hazards from containers and other vessels; people flee from that area; illnesses and injuries that can occur due to contamination only.

Before approaching the scene of incident, police officers in the field must pass the information of utmost importance for further proceeding to the service in charge, urgently and without delay (Law enforcement officers guide for responding to chemical terrorist incidents, 2003): if it is the open or closed area; the type and kind of hazardous material (if they do not know, it is necessary to describe the tables, labels and lists of hazards or anything else that could help with the identification of a hazardous material); whether there are any injured and how many of them; the approximate size of fire or release of the chemical substance; the consequences on the environment; which actions are currently in place; whether there are any suspicious criminal activities.

They must also inform the service in charge in a police station about the following: the types of injuries and symptoms; the assessment of the number of fatalities; the size of the endangered zone; the direction of wind and tracks for a safe access; the information about witnesses. After the report has been made by the service in

¹¹ Patrol and constable activity enable an immediate insight into the state of security in a patrol and constable area.

¹² Law enforcement officers guide for responding to chemical terrorist incidents. Prepared by the U. S. army soldier and biological chemical commands improved response program for the department of justice office of justice programs, January 2003.

charge in a police station, police officers must be provided a safe access to the very scene of incident (Levy, 2010:2-7): activities carried out by police officers (criminal processing) must be methodical, but not hasty; they should always have safety in mind; the scene of the emergency situation is accessed from the direction of the wind, upwards; they must not drive through liquids or clouds of gases and vapors; they must be at a safe distance and use binoculars; police vehicles should be parked out of the scene of incident and be prepared to leave it quickly; they should prevent the blockage of other vehicles of the protection and rescue forces; they should be ready to react to secondary terrorist attacks.

After a police patrol has arrived to the scene of incident, their self-protection becomes a priority issue. Before approaching closely to the scene of emergency situation, police officers should do the following (www.icpprogram.org): inform protection and rescue forces, request additional units and other necessary assistance; protect themselves; keep a distance (at least 200 m behind, in the direction of wind unless the headquarters in charge has decided otherwise); it is necessary to know the level of protection provided by the protective clothes; they should not enter into closed areas; they should avoid physical contact with victims; they should coordinate the action with the fire and rescue team and also with the emergency medical service; if possible, they should identify the nature of the problem; they should consider possibilities of existing secondary hazards in the endangered zone.

Timely recognition of a type of a hazardous material is of ultimate importance for the safety of policemen. Also, it is very important for the first police officers who have arrived to the scene of incident to try to be indirectly involved in rescuing people (which is very difficult), organizing also other people to do that, as well as to do the scouting and make assessment of the situation and inform their superiors form the police station about all these issues.

Given that a very serious emergency situation, with a hazardous environment, is in question, officers from the service in charge must take care about the policemen taking measures in the field. None of the calls is as urgent as the one coming from the injured policeman and a policemen asking for assistance. They have to react urgently in the following situations: sudden interruption of contacts with policemen who are already in the field (police officers securing the site of incident and traffic police); policemen who are reporting signs and symptoms of exposure to the effects of hazardous materials; automatic alarm signals (an alarm button in the radio station) coming from the area of the site of the emergency situation.

Police officers, who have arrived first to the scene of terrorist incident, carry huge responsibility and are under big pressure. They find themselves in a chaos, and must establish peace. These first intervention units must make an assessment of the situation, secure themselves and manage the oncoming means necessary for the elimination of consequences of the emergency situation caused by a terrorist incident.

Terrorist attacks automatically imply the deployment of more various services that can have different responsibilities, though they all have common goals. The usual duties that must be carried out by the police in emergency situations, which are the result of terrorist incidents, include (Kramer, 2009:22): coordination of work with other services; securing the scene of incident; identification of victims; collection of information; launch of an investigation of the emergency situation.

Therefore, the primary role of the police during a terrorist incident is the coordination of work of other protection and rescue forces. Police will usually coordinate all activities that are taking place at the very scene of incident, as well as in its vicinity. Finding the appropriate services, establishing communication, setting up one's assignments, etc. is not at all an easy task to do in the emergency situation. Securing

the scene of incident does not necessarily have to be a priority to other services, but it is of great importance to the police. In order to secure adequately the scene of the terrorist incident for investigation purposes, it must be previously observed and accurately identified (Krivokapic, 2005).

Securing the scene of the terrorist incident is a very important action that is undertaken with the aim of preventing the very scene of incident from sustaining material changes before the investigation has been done, as well as in order to enable the work of other protection and rescue forces. It understands prohibition of access to all unofficial persons, as well as no entry and motion within the circled area. How fast the police officers will have the scene of the terrorist incident secured depends on the level of organization, technical equipment, preparedness, work discipline of police officers who are part of these security teams. Securing includes several simultaneous actions and procedures such as: setting up and blocking of the site of terrorist incident; removal of all persons from that area; offering assistance to victims of the criminal act; ensuring trails and objects of criminal acts against their modification and destruction, if such a danger is currently threatening; keeping eye-witnesses and executors until the arrival of the prosecutor; having informative talks with the suspects.

Securing the scene of the terrorist incident is very complicated as it involves adjustment of other goals, such as: prevention from further spreading of detrimental consequences, and occurrence of new damages; offering assistance to the injured; regulating movement of people and vehicles in the closer and wider zone of the incident; enabling the work of different rescue teams; special protection of certain trails and objects.

In an agreement with other protection and rescue forces, police officers make cordons (blockages). Namely, the scene of the terrorist incident is divided into the following zones: restrictive zone, a zone with a limited access and a safe zone. The restrictive (inaccessible, forbidden, exclusive, red, hot¹³) zone is the area which immediately surrounds the scene of the incurred incident and is spread at a distance sufficient to prevent detrimental effects of dangers¹⁴ from the released hazardous materials on people outside that zone (it is the most endangered – polluted – contaminated part of the inner cordon for the police organization) and can be accessed exclusively by the fire-rescue unit, police and other specialized units with a special equipment. This restrictive zone has one entrance and one exit (control of access) in order to prevent any entry without protective equipment. Police officers make the control of victims' objects and also the control of the suspects. Due to limited possibilities of work while in a personal protective equipment, it is necessary to make planned replacements of police officers.

The zone with a limited access¹⁵ (area of the reduction of contamination, yellow, warm, offering specific types of help and assistance) leans on the restrictive zone and covers the area where there are no detrimental effects-pollutions from the released hazardous materials on people, but where the equipment and people coming out from the restrictive zone can be contaminated. This zone serves for decontamination of people and equipment and offers the support to the staff deployed in the restrictive zone. It is also necessary to use appropriate personal protective equipment in this zone. From the point of view of police organization, these two zones together make the inner police cordon (blockage) that has a limited number of places (control points

13 EPA Standard Operating Safety Guidelines, OSHA29CFR 1910, 120, NFPA472.

14 According to the EPA Standard Operating Safety Guidelines, the zones of danger from inhaling hazardous materials are divided into four groups (A, B, C and D), regarding the LC50 (Lethal Concentration for 50% of the population (50% of population is dead), in a determined time period of exposition of the population).

15 EPA Standard Operating Safety Guidelines, OSHA29CFR 1910, 120, NFPA472.

- posts) for entry to and exit from this zone. Police officers from this zone control the mass and assist the firemen-rescuers in the process of isolation of victims, according to the rules governing the priorities for assistance and decontamination.

The safe zone (supportive, clean, cold, green¹⁶) is the area in which there are no pollution (contamination). Conditionally, the safe zone has two sub-zones: 1. a part containing equipment and devices of all services taking part in the intervention, of operations and integrated headquarters for intervention management, of a developed system of emergency medical assistance (triage system, field hospital, a landing area for helicopters, etc); 2. a part of the traffic cordon aimed at preventing unauthorized access of vehicles into the scene of incident, where the media room is located (sometimes media people can be located together in a part of the zone, in the vicinity of the headquarters) and also gathered people and families of the casualties¹⁷. Special protective clothes are not necessary in this area, though it is wise to have them at hand in case of a wind blowing or other unforeseeable circumstances. This common zone has two cordons: 1) outer police cordon with an appropriate number of control points-posts between the sub-zones which contains the equipment and devices of all deployed services, headquarters and the landing area for helicopters, and the boundary of the traffic cordon, 2) a traffic cordon, that is located out of the outer cordon and is aimed at preventing the unauthorized access of vehicles to the area surrounding the scene of incident (pedestrian activity is forbidden in this zone). The appropriate number of control points - posts is also located at the rim of the traffic cordon, aimed at regulating access to the scene of incident. Securing the place of terrorist incident is carried out by means of cordons for the following reasons: protection of the scene of incident, protection of the public, control of the passers-by, and prevention of unauthorized interference with the investigation and facilitation of work of the emergency services. It is very important for the police to check all suspicious objects in all three cordons. Police must register all its officers entering into the inner cordon at the place that may be called a gathering point. The task of the traffic police is to provide the corridors for the movement of vehicles of the emergency services at the scene of incident, and also alternative driveways for access and evacuation. It also has to regulate traffic in the wider environment. Traffic police determine, organize and regulate traffic at the gathering point for the vehicles and equipment of rescue teams. If terrorism has been confirmed as a cause of the emergency situation, police, i.e. special police forces must undertake additional protection measures in order to prevent the consequences of the secondary terrorist surprises. Police participate in the process of identification of the dead and victims, determine and secure the place for a temporary disposal of corps of the deceased.

In emergency situations such as this one, police have a priority role and fire-rescue units should have consultations on security issues with the representative of the service competent for the combat against terrorism. In emergency situations with terrorist incidents or in cases such situations are suspected, all deployed services in the intervention must be aware of the possibility that there may have been installed some secondary devices for the execution of the terrorist act.

In case the terrorist has fled from the scene of incident, immediately before the arrival of the authorized officials or at the moment of their arrival, the primary task of police officers will be to undertake immediate search in order to find and catch the executor even on condition of changing the state of facts at the scene of incident, of course, if there are reasonable grounds for a fast finding and arrest of this terrorist.

16 Ibid.

17 Ibid.

PROCESSING OF THE SCENE OF INCIDENT OF THE EMERGENCY SITUATION CAUSED BY THE ABUSE OF THE WEAPONS OF MASS DESTRUCTION – DATA COLLECTION

The top priority police procedure in this emergency situation is certainly data collection¹⁸. Police officers more often face the hazardous materials during their work. Data collection in a dangerous environment requests compliance with a large number of procedures and can also require the additional staff. Apart from all the complications in the work with pieces of evidence, crime scene technicians are obliged to wear personal protective clothes. Training regarding wearing of personal protective equipment must be carried out before the terrorist incident.

Police officers involved in the criminal processing at the scene of the terrorist incident must follow standard rules governing the whole structure of the evidence material. Work with the evidence material in a dangerous environment requires specific training and methodical approach. If the rules concerning the evidence material have not been observed, that could lead to the overruling of this evidence material in a court proceedings and release of the suspect.

Evidence collection process (Hawley, Noll, Hilderbrand, 2002) includes: preparations (carry out appropriate training of staff in charge of evidence collection, prepare necessary paper work and laboratory); access to the scene (the staff allowed to enter must be adequately prepared, in physical terms, and must consider all the aspects of the personal security. In this phase, it is necessary to provide a search warrant from the court or other warrants from the authorities in charge); securing and protection of the scene of incident (it is necessary to identify the zones of dangers, obtain information from the first intervention units, be confident that the scene is safe); beginning of the preliminary research – scouting – (in this phase, the initial visit by the team of scouts is carried out, accompanied by a detection and control of hazardous materials, as well as by an assessment of the working conditions. Initial photos and a rough sketch are also being made. After the visit, the team of scouts returns to the safe zone in order to share information with the team leader); assessment of possibilities for material evidence (after the information from the team of scouts have been obtained, it is necessary to establish the type of the evidence material, check if the quantity of equipment for collecting and packing is sufficient. When entering into the restrictive zone, volatile evidence material is collected first); preparation of the negative description (before the collection of the evidence material has started, a description of the scene of the terrorist incident is prepared, including all the information related to the initial examination. It is usually prepared by the team leader or anyone appointed by him. This is for sure a continual process); present the scene of incident by means of photographs (it is necessary to make photographs of all the evidence material before the process of sampling has started. It is necessary to take pictures of the entrance area, then of the scene of incident, from near and far, with and without scaling. All the photos must be entered into the diary. They can help with the preliminary research and making of the plan of sample taking; prepare a diagram sketch of the scene (the orientation of the evidence material can be seen in the sketch. It contains: date and time, but is not scaled, legend, orientation to the north, evidence material and appropriate measurements); carry out a

¹⁸ The evidence includes statements of the persons, objects or trails that confirm or refute the relation of a person with the criminal act or with the offenders, or indicates the truthfulness or falsehood of any other disputed fact that is in relation with the criminal affair. The ultimate end of evidencing is the resolution of the criminal act, i.e. a successful start and end of the criminal proceedings.

detailed search (it is based on the assessment of the evidence material and is carried out starting from the general to the specific. It is compulsory to make photographs of the objects before collecting them); note and collect material evidence (it is necessary to follow the evidence collection plan. Evidence material that may be lost or destroyed must be collected first. It is necessary to make a decontamination of the evidence material. Evidence material should not be decontaminated directly, but it should be packed so that it could not get wet or sustain any damage. Therefore, only the outer layer of the package should be decontaminated. Decontamination should be organized in phases, such as: initial rinsing, soap and scrubbing, rinsing and drying. Problems which the staff in charge is facing with during the decontamination process include: damage to the evidence, size of the evidence material, loss of identification information; final search (all the staff participating in the search is considering what has been done and whether the additional work is needed, and also note whether the whole evidence material and the equipment have been provided); it is also necessary to take pictures of the scene of terrorist incident in order to document the conditions of the scene after the search has been completed; leaving the scene of incident (give advice to the owner in terms of potential dangers, leave the scene of incident for further handling to the services in charge, make the transport of the evidence materials).

Priorities of the police team for evidence material include (www.icpprogram.org): identification of potential evidence material; preventing evidence material from damaging; documentation of the evidence material; collection of the evidence material (by using an accurate, scientific, forensic and legal method).

PERSONAL PROTECTIVE EQUIPMENT OF THE POLICE AND DECONTAMINATION

Safety and health of all protection and rescue staff is of primary importance for an efficient elimination of consequences of an emergency situation (Kahn, 2004). Even if the prevention of exposure to hazardous materials often makes a primary concept, police must consider the threats from potential terrorists at the scene of incident, without neglecting the stress from work incurring from the personal protective equipment¹⁹, state of physical and mental condition, as well as from appropriate procedures of decontamination based on the volume and size of the emergency situation (Kayem, 2003). Emergency situations including hazardous materials imply work in a dangerous environment²⁰ that may pose an immediate danger to the lives and health, and which is not obvious or can be easily identified as such.

Protection measures intended for police officers can vary depending on the tasks that should be accomplished, as well as on the very location at the scene of terrorist incident, and can be changed depending on the activities at the scene of incident. Protective means of the police staff depend directly on physical and chemical characteristics of hazardous materials present at the scene of terrorist incident. Police officers deployed at the elimination of consequences of an emergency situation that include hazardous materials can be contaminated in one of the following ways (Hawley, Noll, Hilderbrand, 2002): by inhaling, through respiratory system; by absorption through the skin; by swallowing; by injecting.

¹⁹ Any type of clothes or devices that are worn by the protection and rescue forces in order to protect themselves from dangers that may be present at the site of terrorist incident

²⁰ This is the place which contains hazardous materials or other kinds of hazards, such as potential terrorists.

It is of priority importance that police officers participating in the intervention have clothes of a suitable level for their personal protection, as well as adequate equipment for the expected tasks. When selecting protective clothes, the type of material must be taken into account, as well as the strategy of response that should be carried out. The protective suits will change depending on several factors, but most often on the task, i.e. whether police officers will be given offensive, defensive tasks, or they will be taking certain measures and actions, with the absence of an appropriate intervention. Therefore, apart from the tasks, it is important to consider the following (Levy, 2006): a danger to be faced with; specific tasks that should be accomplished; a level and type of protective clothes that will be used as a psycho-physical condition of the user of protective clothes. Police officers will be facing with a large number of dangers and detriments at the scene of incident, such as: thermal (coldness and heat); radioactive (alpha, beta, gamma, X rays, neutrons); chemical (corrosive and toxic materials); biological (pathogens carried in the blood and biological toxins); mechanical (danger of sliding, stumbling, explosion, being hit by objects); suffocation (lack of oxygen).

Personal protective equipment represents any kind of clothes or devices that are worn by the protection and rescue forces in order to protect themselves from dangers that may be present at the scene of terrorist incident (Hawley, Noll, Hilderbrand, 2002). Undertaking of operational-tactical measures and actions by the police will require a certain kind of respiratory protection, as well as the protection of the skin. Wearing personal protective equipment can generate considerable mental and physiological dangers, especially if these forces are not used to wearing personal protective equipment. Consequences of wearing can be manifested in different ways, such as claustrophobic reactions, hyper-ventilations, stress from heat, tactile dermatitis and reduction of physical ability. Working time under personal protective clothes is limited. Also, there are a large number of restrictions, such as stress from heat, limited mobility, limited visibility, and difficult communication. In order to be adequately protected during the undertaking of necessary measures and actions, police officers should do the following: make the assessment of the danger; carry out health control; choose suitable equipment; carry out the training program.

It is very important to mention that no chemical clothes offer protection from all the kinds of hazardous materials, and that there is practically no protection from a large scale radiation, as the majority of these clothes offer a weak or no protection at all from heat and fire. There are several general factors that affect the selection of the sets of protective clothes, which concerns the persons, missions and the environment where certain measures are taken. Chemical protective clothes consist of a suit, gloves and boots. It is necessary to carry out decontamination at the scene of incident, the aim of which is to ensure the safety of deployed protection and rescue staff and the public by lessening the quantity of contamination on persons, equipment and the living environment. Decontamination itself must be set up properly and be undertaken in cooperation with the tactical operations of the police. Decontamination in the emergency situation should be a part of each action plan for terrorist attacks. Decontamination of a large number of people will be a challenge for the protection and rescue forces. One of the most important methods of decontamination is certainly taking off the clothes. 80% of the contaminating substance is removed by taking off the clothes. On the other hand, rinsing by water in the duration of three minutes offer extraordinary effects in the removal of the contaminating materials. Decontamination should be carried out quickly and without delay.

CONCLUSION

Readiness and preparedness of police officers for reaction in terrorist attacks will be put to the test many times in the forthcoming period. The future brings bigger challenges for police readiness and capability to combat these attacks properly. Conventional weapons easily give way to more lethal descendants. As the most important security service, police must be ready to respond to emergency situations brought about by the abuse of the weapons of mass destruction. In order to fulfill all that is expected from it in such situations, police must have developed action procedures, trained staff and appropriate equipment. Police officers must be trained for work in dangerous environment and understand well their own role at the scene of terrorist incident. Each police officer has to be ready to identify the indicators of a terrorist attack so that he/she could undertake further operational-tactical measures and actions, in an adequate manner. Authorities in charge of strategic planning of police activities should certainly recognize future security requirements and react timely and accordingly.

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JOINT EU POLICY ON FIGHTING ORGANIZED CRIME INVOLVING ILLEGAL IMMIGRATION

Irina Chudoska

Abstract: The European Union is a region that attracts enormous number of immigrants - around one million people per year over the last ten years. The illegal immigration in the EU countries reaches the number of half million immigrants annually.

When such mass immigration takes place, the illegal immigration stands out as the biggest problem. When concerning the protection of the borders it is obvious that the long coastline is the fundamental problem. In particular, the south of Europe is the place of permanent entrance of illegal immigrants. It is well organized business and it is impossible for the border guards to fight with it alone. It is well known that at the Mediterranean Sea there are flotillas that are transferring refugees and economic migrants from the Middle East and Africa to the distant European shores. Land borders need special protection as well, primarily the border line with the Balkan countries, especially with Macedonia, Serbia, Bosnia and Herzegovina and Albania.

Governments of the concerned countries, above all, are trying to reduce the Migration flows using the traditional methods: the tightening of migration policy and stimulation of political and economic development in countries of emigration, through conclusion of bilateral economic agreements and joint financing of projects.

It is obvious that European countries individually are not capable to stop the migration caravans. There are problems that can be effectively solved only at European level, using all the organizational, legal and financial capacities of the Union.

Key words: illegal immigration, immigration policy, border control.

INTRODUCTION

A huge number of people is entering the countries of the European countries on daily basis looking for a better future. In 2003 a joint conference was held in Brussels, dedicated to the current issues of international migration, noted that "the European Union and the U.S. are regions that attract huge numbers of migrants from one million people annually over the last ten years. The illegal immigration in the EU reached a figure of around half a million immigrants per year".

When such mass immigration takes place, the illegal immigration stands out as the biggest problem. According to the recognized definition of the EU, illegal immigrants are considered to be "citizens of third countries which do not meet or no longer meet the requirements for entry and residence in the territory of Member States². Nobody can tell the exact number of illegal immigrants that entered the EU territory. The European statistics indicates very vague number -more than three million illegal immigrants. These data were presented by the International Organization for Migration (IOM) in 2000, and now, after twelve years, the actual number should be much greater.

It is obvious that the long coast line is the main problem regarding the protection of the borders of the European countries. Or to be more specific, the south of

Europe is a place for permanent entrance of immigrants. European border patrols often found bodies of dozens of those who tried but failed to reach European shores with the help of illegal carriers. It is well organized business and the border guards cannot fight with it alone. It is common knowledge that there are organized flotillas in the Mediterranean Sea that are transferring of refugees and economic migrants from countries of the Middle East and Africa to the distant shores of Europe. The need for special protection has the land borders as well, primarily the border with Balkan countries, especially countries such as Macedonia, Serbia, Bosnia and Herzegovina, and Albania.

The national governments of the concerned countries are trying to reduce migration flows, using traditional methods: the tightening of migration policy and political incentives and economic development in countries of emigration, by concluding bilateral economic agreements, joint financing of projects... The ultimate goal of using these methods is the improvement of living conditions in emigrant countries, and the reduction in unemployment that will lead to the reduction of the intensity of the factors that "push" people (pushing factors) out of their countries.

The first instrument in fighting the illegal immigration, despite the support of the European population, is often criticized by the opposition in many European countries and by the non-governmental organizations for the protection of human rights. However, the straitening of the European legislation is a tendency that can be observed in many European countries. Such measures were taken by the authorities of France, Italy, Spain, Germany, Austria, Denmark, Holland and Great Britain.

The results of providing economic and social assistance and stimulation of economic development in countries of emigration are not optimistic.

It is obvious that each European country separately is unable to stop migrating caravans. There are problems that can be effectively solved only at European level, using all organizational, legal and financial capabilities of the European Union. The need to develop closer and dynamic European cooperation on issues of migration policy and asylum provision is approved by both the majority of European politicians and European citizens³.

The necessity of common European struggle against organized crime had been repeatedly declared by many leading European politicians. According to them, "the fact that in Europe in the XXI century such unjustifiable barbaric practice of human trafficking is widespread. The very nature of these problems does not recognize national borders. They have influence all over the Europe, so it can be properly resolved only on a common European level"⁴.

Once the border control within the EU ceased to exist, applying traditional national methods of fighting this type of crime no longer corresponded with the common, European level of security. The absence of borders within the EU undoubtedly has a range of benefits for the law-abiding Europeans, but the problem lies in the fact that these benefits are, above all, used by those very criminal organizations, which is repeatedly emphasized in EU documents.

On the other hand, the introduction of the Schengen regulations is at the same time a major step towards fighting human trafficking and illegal immigration as a whole. In particular, a legal basis was established for regulating issues connected to issuing visas, border and other methods of controlling the external EU borders and cooperation between the police and official authorities, primarily in the IT and the penal and legal field. Upon their incorporation in the legal system of the European Union, these norms obtained a universal character.

The activity of the EU Member States geared towards fighting illegal immigration and its connection to crime was reinforced in 1999 with the coming into effect of the Treaty of Amsterdam, after which, as it is well known, part of the legal and internal affairs issues fell under the jurisdiction of the supranational authorities. It is then that the EU states got a chance to develop a strategy on fighting illegal immigration in a new legal institutional format. Simultaneously, they began developing the fundamental elements of this strategy, such as the visa issuing policy and the practice of granting political asylum, joint border control of external borders and the participation of European immigration officers in border controls in third party countries, exchange of information and creation of a common European database in the area of migration policy and asylum granting policy, as well as the development of repatriation and readmission policies, both in multilateral and bilateral relations of EU countries with countries belonging to the so-called "group of risk". Regrettably, within this paper we can only briefly review the basic directions of the EU activity regarding fighting illegal immigration.

VISA ISSUING POLICY

A coordinated visa issuing policy establishing a common entry procedure for third world country citizens and persons with no citizenship onto the territory of EU states is an important part of controlling both legal and illegal immigration. Within this policy, the EU introduced a uniform visa format,² and in September 2003 the European Commission put forward a proposal before the Council of Europe and the European Parliament to review the issue of tightening the visa protection and the types of citizenship by using biometric data.³

In order to reinforce the protection, in addition to photographs on passports and residency permits, it was suggested that a second biometric indicator, a fingerprint, be used. Therefore, on 15 February 2004, the first automated biometric border control system was activated at the Frankfurt Airport Terminal 1 (arrivals from/ departures to non-Schengen area countries) within a pilot-project, enabling passengers to avoid the usual queues for the standard border control procedure.⁴ The data on the passenger who passed this control once is entered into the base of the national border service and the personal identification for future entries and departures is automatic.

The new technologies are already used in practice in France's visa issuing policy. In accordance with their new migration legislation, for the purpose of fighting illegal immigration and migration flow management, a database of fingerprints of applicants for a visa is established and a new type of a sticker-visa with a photograph of the owner is introduced. Despite difficulties in financing, the French consulates were quickly supplied with the necessary material.

1 Comprehensive plan to combat illegal immigration and trafficking of human beings in the European Union, 28 February 2002.

2 Council regulation (EC) No 1683/95 of 29 of May 1995 laying down a uniform format for visas [Official Journal OJ L 164 of 14.07.1995].

3 Council regulation (EC) No 1030/2002 of 13 of June 2002 laying down a uniform format for residence permits for third country nationals [Official Journal OJ L 157 of 15. 06.2002].

4 Киятин В.Г. Нелегальная миграция в Евросоюзе, вызовы-ответы; В.Г.Киятин, Т.Т.Кадыров, Бишкек, 2005г.; С.133.

INFORMATION EXCHANGE AND DATA ANALYSIS

The inability to provide an exact assessment of the scale of migration flows pointed to the necessity to establish common European centers for information and statistical and analytical data exchange.

The Schengen Information System (SIS), consisting of the national systems of EU countries is of the utmost importance. Upon the latest EU enlargement and the accession of new Member States, the SISII database was established. The Schengen Information System contains data on all wanted and searched persons- from dangerous criminals to runaway children. It also contains data related to illegal immigration, as well as data on foreign citizens who are prohibited from entering or are unwelcome in the Schengen area (including persons who have violated passport and visa procedures and the rules and regulations of EU stay, or persons legally prosecuted on EU territory).

Due to the fact that the existing technical database of the Schengen Information System proved insufficiently capacitated after the accession of the new EU Member States, it was decided to work on improving its technical capacity, in addition to extending it. It envisages a new category of persons introduced in the database, for example persons suspected to engage in terrorist activities, as well as entering the first letter of the name in addition to the surname, and even more importantly, new identification material, such as the biometric indicator, was introduced in the system, significantly improving the personal identification.

The Center for Information, Discussion and Exchange -CIREFI, ⁵established upon a decision adopted by the Ministers as early as 1992 is also a part of the EU system for informational security, and an early-warning system operates within this Center as of 1999⁶.

The computerized dactyloscopy information system Eurodac has also proven to be very effective.⁷ The Eurodac Central Bureau operates since 2003 and gathers data on persons who have crossed the EU border illegally or reside on EU territory illegally, as well as persons who have applied for refugee status. The basic function of the system is providing effective functioning of the concept of asylum in EU countries to the best of its ability. This is most evident in „asylum shopping“- cases when there is simultaneous asylum seeking in several countries or application for refugee status in another EU country, having previously been denied in a different country. According to the last Eurodac report the average rate in 2009 of rejected transactions for all Member States was 7,87%, which is a slight increase from the previous years (2008: 6,4%; 2007:6,13%).⁹ Member States had rejection rates of over 10%: the Netherlands (19,28%), Malta, Estonia, Luxembourg, Finland, Sweden, United Kingdom, France and Germany. 11 Member States had a rejection rate above the average. It has to be highlighted that the rejection rate does not depend on technology or system weaknesses.⁸

In order to follow all illegal crossings of borders, there are two more types of control in addition to the visa issuing policy and the information exchange- border and pre-frontier control.

⁵ Council Conclusion of 30 November 1994 on the organization and development of the Center for Information, Discussion and Exchange on the Crossing of Frontiers and Immigration (Cirefi).

⁶ Resolution of 27 May 1999 on the creation of an early warning system for the transmission of information on illegal immigration and facilitator networks.

⁷ Commission of the European Communities, Brussels, 5.5.2004 SEC(2004)557 Commission Staff Working Paper, First Annual Report to the Council and the European Parliament on the Activities of the Eurodac Central Unit, p.10

⁸ Commission of the European Communities, Brussels, 2.8.2010 COM(2010)415 Report Form the Commission to the European Parliament and the Council, Annual Report to the Council and the European Parliament and the Council on the Activities of the EURODAC Central Unit in 2009, p.9

BORDER ACTIVITIES

The success of the border activities within the EU regarding the prevention of immigration and related criminal activities depends above all on the willingness for active cooperation in the given area on part of national migration and political authorities.

In this field, the Schengen rules for cross-border and police monitoring and following of natural persons, obliging police authorities to assist one another in accordance with the national legislation and their jurisdiction are invaluable. Thus, police officers from Schengen countries are entitled to order following and monitoring of a person or a group of persons suspected to have committed criminal acts on the territory of another Member State, with their subsequent handing over of the perpetrators to the national authorities.⁹

The decision to introduce a European arrest warrant for the territory of the entire EU adopted in 2002 has enormous impact on the fight against illegal immigration-related crime. This warrant introduces a new, simplified procedure of handing over prosecuted persons and suspects between EU countries. Back at the Tampere EU Summit a decision was adopted to replace the complicated, outdated extradition mechanism with simple handing over of persons.

The European arrest warrant applies to those criminal acts which are immediately related to illegal immigration: human trafficking, participating in illegal entry and stay, passport forging, engaging in a criminal organization exploiting children, child pornography and spreading racism and xenophobia.¹⁰

The coordination of the operation of state authorities for the protection of rights takes place through establishing special units on a common, European level such as Europol, which also has jurisdiction in the field of fighting illegal immigration,¹¹ in particular offences such as a network of organized illegal immigrants transportation and engaging in human trafficking.¹²

Europol provides assistance to legal aid authorities of the countries by conducting operative analysis, sharing know-how and experience and enabling technical assistance for investigations and operations carried out within the EU, preparation of strategic analysis of criminality based on the information made available by the Member States, prepared by Europol or obtained from other sources.

Nowadays, the EU carries out a series of corresponding programs and activities within the common border operation.

Starting from 2002, the ARGO program aiming to enable administrative cooperation in the sphere of outside borders, visa issuing policy, asylum granting and immigration as a whole is in effect.¹³ Several activities, such as detaining illegal immigrants and singling out criminal networks on the territory of EU countries have been carried out within ARGO¹⁴.

⁹ Convention established by the Council in accordance with Article 34 of the Treaty on European Union, on Mutual Assistance in Criminal Matters between the Member State of the EU, Council declaration on Article 10(9), Official Journal C 197, 12/07/200, p.3

¹⁰ Council Framework decision of 13 June 2002 on the European Arrest Warrant and the Procedure between Member States 2002/584/JHA.OJ L 190, 18.07.2002.

¹¹ Joint Action 96/748/JNA of 16 December 1996 extending the mandate given to Europol Drugs Unit

¹² Commission of the European Communities, Brussels, 2.8.2010 COM(2010)415 Report Form the Commission to the European Parliament and the Council, Annual Report to the Council and the European Parliament and the Council on the Activities of the EURODAC Central Unit in 2009

¹³ Council Decision 2002/463/EC of 13 June 2002 adopting an action programme for administrative cooperation in the fields of external borders, visas, asylum and immigration (ARGO) [Official Journal L 161 of 19 June 2002]

¹⁴ Council Decision 2004/867/EC of 18 December 2004 adopting an action programme for administra-

A series of mutual operations were carried out in major European airports in Hungary, Latvia, Poland, France, Norway and other European countries (RIO I,II, III, IV), and on EU roads, in particular, the operation "Pegasus" with the aim to fight transportation of illegal immigrants in car and train containers. Similar operations were carried out in seaports where hundreds of illegal immigrants and dozens of middlemen from Albania, Portugal, Spain and Morocco were detained.

In 2003, five western European countries (France, Spain, Portugal, Italy and Great Britain) carried out a successful naval operation in the western region of the Mediterranean Sea in order to prevent illegal immigration from western Africa and as a result 11 ships with 326 illegal immigrants were detained.¹⁵

From 1996, countless programs aimed at fighting human trafficking and sexual and labor exploitation of women and children have been implemented in the European Union. First and foremost, those are the STOP¹⁶ and DAPHNE¹⁷ programs, created in order to stop violence against women and children. In their work, the two programs rely on the assistance and active participation of local civil and non-government organizations. Latest final report of DAPHNE program shows the confirmation of its effectiveness mostly by playing a part in the empowerment of a number of victims and increasing awareness of how to access assistance, reinforcing the services offered and contributed to the understanding of some mechanisms of violence.¹⁸

Starting from 1 May 2005, the European agency for the management of operational cooperation at the external EU borders began to operate. This Agency is responsible for the operational coordination and assessment of pilot-projects and joint operations undertaken by the border police authorities in EU countries, while the political control remains under the jurisdiction of the EU Council.

At present, active preparations are underway for establishing a European Border Guard Corps, which in the future may play the vital role in carrying out the common border operations for preventing cases of illegal immigration into EU countries.¹⁹ Some researchers recognize a certain type of "unique concept of external border management which does not exist in other world countries" in this structure.²⁰

The main problem regarding the establishment of the European Corps lies precisely with its cross-border nature, entailing its common financing. The other problem connected to its establishing is determining the level of authority awarded to Corps members. These are the main reasons due to which the European Corps won't be able to replace the national structures charged with maintaining the law and order on European borders, as well as securing internal stability for EU Member States.

tive cooperation in the fields of external borders, visas, asylum and immigration (ARGO) [Official Journal L 371/48 of 18 December 2004]

15 Кияутин В.Г. Нелегальная миграция в Евросоюзе, вызовы-ответы . В.Г.Кияутин, Т.Т.Кадыров, Бишкек, 2005г. С.137

16 Joint Action 96/700/JNA of 29 November 1996 adopted by the Council Pursuant to Article K/3 of the Treaty on European Union, establishing an incentive and exchange programme for person responsible for combating trade in human beings and the sexual exploitation of children (STOP) [Official Journal L 322, 12.12.1996]

17 Decision No 293/200/EC of the European Parliament and the Council of 24 of January 2000 adopting a programme of community action (the Daphne programme) (2000 to 2003) on preventive measures to fight violence against children, young persons and women [Official Journal L 34 of 09.02.2000]

18 Final Report from the Commission to the European Parliament and the Council of Daphne Program final (2000 to 2003) on preventive measures to fight violence against children, young persons and women, Brussels, 22.12.2004 COM (2004)824.SEC (2004) 1595.

19 Communication from the Commission to the Council and the European Parliament towards Integrated Management of the external Borders of the Member States of the European Union, Brussels, 7.5.2002 COM(2002) final.

20 Кияутин В.Г. Нелегальная миграция в Евросоюзе, вызовы-ответы . В.Г.Кияутин, Т.Т.Кадыров, Бишкек, 2005г. С.137

The adoption (for all EU Member States) of the universal definitions of refugee²¹, illegal immigrant²², human trafficking, sexual and labor exploitation (differentiating between the definitions of underage and adult victims of exploitation)²³, cooperation regarding illegal entry, movement and residing in the EU²⁴, as well as the definition of child and child pornography²⁵ have played a major role in the fight against human trafficking and illegal immigration on a common, European level.

EU documents on the fight against illegal immigration set the eradication of human trafficking and transportation by undertaking joint actions against all participants in these organized crime recruiters, transporters, exploiters and clients²⁶ as a priority. The involvement of all institutional and legal instruments, whose application would prevent the criminals from using the differences in interpreting the committed crimes and punishments thereof existing in the national legislations of EU Member States from the very beginning, is considered necessary.

The Member States began dealing with this problem immediately and on a joint, European level in the mid-1990s by developing a corresponding regulatory and legal base, fines and certain requirements for transporters.

Within the EU, the following fines for transporters carrying third country citizens into the EU without passports and necessary documents were established:²⁷

- a maximum fine of no less than 5.000 EUR or
- a minimal fine of no less than 3.000 EUR or
- a maximum combined fine for each offence of no less than 500.000 EUR

At the same time, imposing the minimal fine does not rule out additional financial or other sanctions (for example, confiscation of a vehicle) being imposed on the transporter.²⁸

Persons enabling illegal entry stay and residence of foreign citizens on EU territory with the aim to acquire some benefit may be sentenced to no less than 8 years²⁹ if:

- the act has been committed as part of a criminal organization activity
- the act has been committed in life-threatening conditions with regard to the persons who were objects of the criminal act.

In this case not only natural, but legal persons immediately cooperating or intending to cooperate in illegal entry, stay and residence of third country citizens on EU territory are fined as well. The fines for such cases have not been determined, but nevertheless should reflect the severity of the crime committed.

21 Joint Position 97/196/JNA of 4 March 1996 defined by the council on the basis of Article K.3 of the treaty on EU on the harmonized application of the definition of the term "refugee" in Article 1 of the Geneva Convention of 28 July 1951 relating to the status of refugees.

22 Council regulation determining obligations as between the Member States of the re-admission of third-country nationals [Official Journal C 353 of 7.12.1997]

23 Council Joint action 97/154/JNA of 24 of February 1997 concerning action to combat trafficking in human beings and sexual exploitation of children [Official Journal L63 of 04.03.1997]

24 Council Directive 2002/90/EC of 28 Of November 2002 defining facilitation of unauthorized entry, transit and residence [Official Journal L328 of 05.12.2002]

25 Framework Decision 2004/68/JHA of 22 December 2003 on combating the sexual exploitation of children and child pornography [Official Journal L13 of 20.01.2004, p.13]

26 Commission Communication of the Council and the European Parliament on combating trafficking in human beings, the sexual exploitation of children and child pornography; Council Framework Decision 2002/629/JNA of 19 July 2002 on combating trafficking in human beings [Official Journal L203,01.08.2002]

27 Council Directive 2001/51/EC of 28 June 2001 supplementing the provisions of article 26 of the Convention implementing the Schengen Agreement of 14 June 1985

28 Council of Europe/Commission for Human rights/Criminalization of Migration in Europe: Human Rights Implications, Strasbourg, 4 February 2010, www.wcd.coe.int/ViewDoc.jsp?id=1579605 (14.02.2012)

29 Council Framework Decision of 28 of November 2002 on the strengthening of the penal framework to prevent the facilitation of unauthorized entry, transit and residence [Official Journal L328 of 05.12.2002]

Also, appropriate measures for fighting illegal immigration on state levels are taken on state. For example, the adoption of the new Law on immigration in 2002 in Italy envisaged drastically increased fines imposed on Italian employers exploiting illegal immigrants labor (up to 5.000 EUS per employee).

In France, the illegal immigration fight is lead not so much on the borders, but directly on the territory of the country itself, where most foreigners enter legally, but overstay after the visa expiration date. According to official data, 90% of all illegal immigrants fall into that category. It is believed that there are around half a million foreigners with undefined status in France, many of which attempt to legalize their stay through fictitious marriages or recognition of parental rights. This is precisely why the new Law on immigration, residing with foreigners and acquiring citizenship which came into effect in December 2003 is designed so as to fill in certain blanks in the French legislation in this area:³⁰

- the time period of living together necessary to obtain a residency permit (card) in the event of marrying a French citizen is increased from one to two years
- the attempt to obtain citizenship through fictitious marriage is sanctioned with a 5 year prison sentence and a 15.000 EUR fine
- for persons involved in criminal groups organizing fictitious marriages, a 10 year prison sentence and 750.000 EUR fine

Fictitious marriages are also sanctioned by the Italian legislation. The residency permit obtained as a result is subject to annulment.

The success of the fight against this type of human trafficking and transportation depends largely on the protection of the injured parties in the given crimes, providing the appropriate assistance and every type of support by state authorities and different legal organizations.³¹ The assistance for victims of criminal activities of organized criminal groups may include awarding temporary residence permits to illegal immigration and human trafficking victims in return for their consent to cooperate with the competent authorities.

PRE-FRONTIER ACTIVITIES

The decision to treat immigration policy issues as international matters, outside of EU borders, was adopted by the Ministers of EU Member States at the informal meeting in Scheveningen towards the end of September 2004.

The pre-frontier activities as means to prevent immigration outside one's own territory primarily envisages dispatching European migration services officials to third countries, as a rule through diplomatic missions abroad. Thus, Spain has its officers in Morocco, France in China, the Netherlands in Istanbul, Dubai, Beijing and Bangkok. At the same time, the migration officers often operate on the territory of EU neighboring countries immigrants may also enter from. Great Britain carries out checks on the territories of France, Belgium and the Netherlands. Since 2001, EU migration officers operate in the Balkans as well. From the late 1990s onwards, the EU dispatches documents experts to the main countries of emigration to the EU who assist the local border authorities in recognizing forged visas, passports and permits.

³⁰ Maloi sur l'immigration, Entrttenavec le ministre de l'InterieurNikolas Sarkozy, le Figaro, Mercedi 30 Avril 2003, p.6

³¹ Council Directive on the short-term residence permit issued to victims of action to facilitate illegal immigration or trafficking in human beings who cooperate with the competent authorities COM (2002) 71 final

Great attention is paid to financial and technical assistance to transit and emigration countries by dispatching liaisons officers and taking measures for increasing the protection of documents necessary for providing assistance for the technological equipping of borders, carrying out informational campaigns aimed at the local population of transit and mass emigration countries, organization of expert meetings, holding workshops and seminars, as well as establishing centers for admission of illegal immigrants in transit countries, as well as refugee camps.

With regard to carrying out informational campaigns in emigration countries, we should above all note their importance for potential immigrants. The persons striving to leave their country shall continue to use the "services" of organized crime unless they are educated about the risks and dangers. Potential immigrants would be more inclined towards remaining in their countries of origin, if they are aware that they shall be repatriated and their application for refugee status shall be denied, or understand that, should they not have the proper documents, they will be detained.

As for establishing centers for admission of illegal immigrants and refugee camps in transit countries, it should be noted that this initiative of some EU countries was not met with much interest by their partners. According to Mohamed Mezgani, councilor in the Ministry of international affairs of Tunisia in charge of liaisons with EU countries and the Mediterranean, "this is not the most fruitful of ideas, since it is merely an exportation of problems outside of one's borders, and not a constructive solution thereof."³² It should also be mentioned that EU itself has yet to reach a joint standpoint.

The proposal to establish refugee camps along the EU border put forward by Germany's and Italy's Ministers of interior in October 2004 sparked lengthy political debates. The Italian and German initiative was reviewed on 17 and 18 October in Florence, where the Ministers of Italy, Germany, Great Britain, Spain and France met. The most extreme option had already been rejected by the European Commission in June, but France, Spain and Great Britain did not agree upon the new plan which envisaged renaming the camps into centers. According to Italy's proposal, the centers would admit immigrants who failed to enter EU territory by sea, until their return to their home country. The countries opposing this project did not question the necessity to send immigrants back to their countries of origin, but felt that the opening of such centers would only aggravate the situation. Numerous non-government organizations organized protests against the initiative violating human rights.

It is easy to understand that the intention to re-export immigrants was not encountered with enthusiasm by the courtiers of northern Africa bordering with the EU. At the same time, the proposal of the European Commission for the Mediterranean Convention, envisaging triple cooperation- of immigration, transit and emigration countries was well received.³³

Nowadays, border control takes center stage in the European immigration and asylum policy. Illegal immigrants, as well as those being processed, are placed in centers for admission.

The centers-camps for admission of immigrants differ from country to country, but the criticism aimed towards all of them is growing both on part of separate politicians in the EU countries themselves and other countries which are not members of the Union, as well as numerous international organizations.

First and foremost, it should be defined what these camps are, where they are located and which features they have in common. They all house people who have

³² Степанов А., В гостях хорошо а дома лучше, интервью с М.Мезгани, Европа, №11(45), декабрь, 2004, с.24.

³³ Сотрудничество в сфере внутренних дел и правосудия, Европейский Союз: фати и комментарии, выпуск 38, сентябрь- ноябрь 2004г, Ассоциация европейских исследователей (АЕВИС), <http://www.aes.org.ru/show.php?doc=231>

crossed or have attempted to cross the border without the appropriate documents. The attitude towards illegal immigrants in these camps is not individual; they are viewed as a group and the inability to check for violation of basic human rights there is particularly evident³⁴. As for their location, they are situated within the EU, and there are a lot of them, up to 200 camps.³⁵

The criticism regarding the immigration centers is above all motivated by the fact of constant violation of human rights. In its three reports on Great Britain, Spain and Italy issued at the same time in honor of the World Refugee Day, Amnesty International notes that “EU countries increasingly fail to comply with their international obligations regarding asylum seekers”³⁶. The reports covering a range of issues concern the detention of people who seek asylum and the pressure imposed on them by the “European fortress”³⁷.

The recommendations come down to the following:

- detaining immigrants and those seeking asylum should be the last resort for EU countries faced with this problem, meaning state authorities should make decisions which immigrant should be detained in the center and which not on an individual case basis, where the detention must be carried out in accordance with the law
- detention of vulnerable groups of people should be avoided
- the detention decision itself should always be subject to judicial revision
- no person should be deported outside of EU borders if there are no sufficient guarantees that the person in question won't have his/ her human rights violated upon return to the country of origin
- the procedure for return of immigrants must be executed carefully, respecting their dignity and making medical assistance available at all times.

The recommendations of this international organization partly coincide with the 2003/9/EC Directive dated 7 January 2003 on the minimal standards required for admitting people seeking asylum. This Directive applies to both persons seeking asylum and those seeking international protection, but does not apply to family reunification. It also applies to persons seeking asylum or apatrides seeking protection both at the border of the EU and in it, as well as members of their families accompanying the applicant.³⁸

In accordance with this Directive, the EU Member State is obligated to explain all his/her rights and obligations to the applicant, as well as to issue them with a document confirming their status of asylum seeker. Detaining such a person is allowed solely in order to check their identity. The movement of such persons may be restricted within a certain territory only if for some reason necessary³⁹.

The factual state in the camps in EU countries where dozens of thousands of asylum seekers are detained is in contradiction with this Directive and the Amnesty International recommendations. The detention of immigrants is in many cases long-term and takes place in unsuitable conditions: the camps are described as places with sub-standard hygiene and poor medical assistance. As a consequence of this treatment, cases of mental illnesses and suicide attempts have been noted among immigrants⁴⁰.

34 www.nolager.org/files/0407camps_in_europe

35 www.nolager.org/files/0407camps_in_europe.pdf

36 www.amnesty-eu.org/static/documents/05

37 www.liberysecurity.org/imprimer.org

38 www.europa.eu/cgi-bin/etal.pl, [Official Journal L 31 of 06.02.03]

39 *Ibid*

40 <http://www.amnesty-eu.org/static/documents/05>

Placing unaccompanied underage persons in the centers for illegal immigrants is an especially delicate situation, in particular when there is a human rights violation, specifically children's rights. According to the 97/C221/03 Resolution dated 26 June 2007, when detained, this category of persons must be provided with special conditions regarding accommodation, food, special medical assistance if necessary as well as treatment in accordance with their age and stage of development⁴¹. These minimal standards are described in detail in the UN Convention on the rights of the child (UNCRC), adopted by the EU and its institutions. Adopting it means that the Union shall operate in accordance with the rules contained in the Convention which is ratified in other world countries as well. The primary obligation of countries regarding immigration is reflected in treating children "first and foremost as children, and then as immigrants"⁴².

Having ratified the Convention and its incorporation into their domestic law, EU Member States accept the corresponding obligations.

Another important document containing provisions concerning child immigrants is the document on basic human rights of the European Union CFREU from 2002, aimed at incorporating the basic rights contained in UNCRC into Union and Member States institutions. Article 24 of CFREU defines the rights of children, stating that they are entitled to "appropriate protection and care, necessary for their well-being" and "that they have a right to freely express their opinions, which should be taken into consideration in situations when it is for their well-being, in accordance with their age and maturity"⁴³. State authorities or private institutions must put the child's best interest first.

According to the Council of Europe Directive on the minimal standards for admitting persons seeking asylum, special attention is to be paid to underage persons seeking asylum and the treatment they receive is to be solely in their best interest.⁴⁴ This Directive automatically applies to the domestic law and is in effect since February 2005, requiring states to create appropriate conditions for accommodation of children in accordance with their needs. But, this does not mean that children should be detained.

The Recommendation of the Committee of Ministers Rec (2003)5 precisely defines the situation in relation to detaining minors in centers for illegal immigrants in the amendment regarding underage persons. The Recommendation states that, as a rule, underage persons should not be detained, except as a last resort and for the shortest time period possible; they should not be separated from their parents or adult caregivers against their wish; if they are detained, children are not to be kept in prison conditions and all effort are to be made to take them out of there and place them in more appropriate conditions.⁴⁵

In addition to these, there are many other EU and UN documents interpreting the correct way to treat children seeking asylum, and not one document points to detaining underage persons, unless as a last resort and for the shortest possible time period. Nonetheless, children are detained in various situations, both alone or accompanied by their parents, and are treated as adults. In such cases, the main principle when dealing with children is to treat them in their best interest. This principle comes before the immigration policy of the state itself.

The centralized gathering and analyzing of information on child immigrants in Europe is considered to be the principle method of fighting children's rights viola-

41 <http://www.europa.eu/cgi-bin/etal.pl>, [Official Journal C221 of 19.7.1997]

42 <http://www.unhchr.ch/html/menu3/b/k2crc.htm>

43 Official Journal of the European Communities(2000/C 364/01)

44 European Commission<Council Directive 2003/9/EC (Article 18, 19)

45 www.unhcr.bg/euro_docs/en/ce_rec2003_5_en.htm

tions⁴⁶, because until such a database is created, the scale of the problem and the objective evidence which would assist the sanction of this occurrence cannot be defined. Still, minors are firstly treated as immigrants, and only then as children.

Detention of immigrants as part of determining a refugee status is an administrative measure which is not a part of the penal and legal system of Member States. Despite detention being considered a last resort measure, the statistics for each country nonetheless show a large number of detained children. The number of children detained with families is easier to determine than that of unaccompanied children.

The circumstances surrounding detention and the conditions the minor is to face having been detained are still well below the minimal standards which must be fulfilled, as well as the obligations related to basic human rights. In reality, "the detention procedure has lasting consequences and threatens the psychological and physical health, as well as the wellbeing of detained children in light of their psychological unpreparedness and their wishes and emotions"⁴⁷. Establishment of special centers for rehabilitation and recovery of children-victims of torture and inhumane or degrading treatment is necessary. Although the situation differs from one European country to the other, as a whole it still paints a sad picture of the unsuccessful protection and failure to secure children's needs and interests. Therefore, the recommendations are as follows:⁴⁸

- the rights of child migrants should be monitored by the Agency for fundamental rights (FRA) as a basic element of the EU policy on respecting and promoting basic rights
- detailed statistics on detaining child migrants must be kept by all Member States, so that it serves as basis for the efforts of the states to fulfill children's needs
- access to physical and psychological care for children in care-giving centers should be made available
- access to a legal representative for the detained child who shall convey the child's wishes and emotions should be made available in order for the decisions adapted by the state authorities to serve in the best interest of the child

As depressing as the situation in relation to the centers for illegal immigrants is, the politicians who show interest in these problems and provide feedback do give hope. Such an example is set by the Italian members of the European Parliament Gusto Cataña and Luisa Morgantini who in April 2006 declared the beginning of a campaign to close all camps for illegal immigrants on the territory of the EU and outside its borders, for example the Lampedusa camp in Italy and around 170 similar camps all over Europe.⁴⁹

After reviewing the border and pre-frontier activities of EU Member States aimed at immigration control, it is necessary to analyze one of the fundamental reasons for immigration in the EU, the right to family reunification.

⁴⁶ www.libertysecurity.org/imprimer.php

⁴⁷ The detention of Children in Member States' Migration Control and Determination Processes; Bolton Syd for Directorate-General Internal Policies, Policy Department C, Citizens Rights and Constitutional Affairs; www.libertysecurity.org/imprimer.php?id_article=1185, Requested by European Parliament's Committee on Civil Liberties, Justice and Home Affairs.

⁴⁸ Ibid.

⁴⁹ <http://www.euobserver.com/22/21068>

FAMILY REUNIFICATION

During the last 20 years, the family reunification has been one of the main sources of immigration in the European Union. Family reunification is not only a way for families to be together again, but is essential for relieving and improving the integration of immigrants in the EU. In order for the right to family reunification to be accepted in the entire EU, the European Commission has put forward a draft Directive regarding this issue in 1999, and the body of the Directive was subsequently discussed for several years until it was adopted by the European Council on 22 September 2003, and came into effect on 3 October 2003⁵⁰.

The Directive applies to persons who are not citizens of the EU, but have legally regulated their stay valid for at least one year, or persons with refugee status, whereby they have the right to reunite with their families through the process of reunification. The following fall under this procedure: "spouse of abovementioned persons, legitimate, biological or adopted children of the couple; the Member State allows reuniting of unwed partners or grown children dependent on their parents"⁵¹.

Member States are entitled to impose additional requirements in the family reunification process, such as having suitable accommodation, sufficient living funds and medical insurance, or to determine a time period of no longer than one year for evaluation. Polygamy is not recognized, so the right to family reunification only applies to one spouse and their children.

The terms and conditions set forth in the Directive may nominally be divided into three sets. The first set applies to the duration of the process of waiting and receiving the necessary permit and corresponding documents, as well as the time period one of the spouses is legally required to spend in an EU Member State. The second set of terms determining which persons are considered to be family members and to whom this Directive applies may be basis for discrimination. It is clear that it applies to spouses without recognizing polygamous marriages, but there is no mention of same-sex partners. In this case the basis for discrimination would be the sexual orientation. The third set of terms applies to children in the family and is criticized the most, primarily regarding articles of the Directive defining age limitations for family reunification: 12 years with the requirement of taking an "integration test", whereas the requirement for underage children must be submitted until turning 15 years of age, which is thought to be "a prominent example of the possibility for Member States to compromise human rights, specifically the rights of children"⁵².

Regardless of the criticism, the fact that such a Directive has been adopted and accepted is of great significance for the process of building a common European immigration policy, as well as achieving satisfactory results regarding the respect for migrant rights.

READMISSION AND REPATRIATION POLICY

As for the fight against illegal immigration, one of the most popular and effective measures is the readmission and repatriation policy which deserves a more detailed analysis. The basis for the joint European repatriation and readmission policy is

50 Council Directive 2003/86/EC of 22 September 2003 on the right of family reunification [Official Journal L251 of 03.10.2003]

51 Court of Justice Judgment of 27 June 2006 on the action for annulment brought by the European Parliament against the Directive (Case C-540/03).

52 www.safethechildren.org

contained in the "Green Paper" of the EU Commission, issued in 2002 and fully dedicated to the abovementioned issue.⁵³

This policy applies to third country citizens who do not wish to leave the Union after the expiration date of their permit to stay on its territory, as well as third country citizens who have entered the territory of the EU member state illegally and do not own the appropriate documents and permits to stay in the country.

EU's partnership with third countries- transit and emigration countries is the key moment in combating illegal immigration. The basis for such cooperation is contained in the Readmission agreement which may be signed as an individual document or a corresponding article of a Cooperation agreement in one area or another, along with other items. Taking into consideration the complicated immigration situation and according to European Council convictions, all future agreements between the EU and third countries must contain articles dealing with mutual management of migration flows and obligations for illegal immigrants' readmission. In these cases, the readmission must apply to both the country's own citizens and foreigners who have transited through the territory of the country which has accepted the obligations stemming from this type of agreement. For its part, the EU is ready to cover the expenses for providing the necessary technical and financial assistance to third countries.

Over the past few years the EU has been in readmission negotiations with Morocco, Algeria, China and its administrative region Macao, Turkey, Pakistan, Sri Lanka, Russia, Ukraine and Albania. The negotiations with Macao, Albania and Sri Lanka have been successfully completed, and are ongoing with the other countries. Often times the desired success may be achieved on bilateral basis. But, reaching an agreement on readmission does not equal deportation or repatriation of immigrants. Deportation can be both voluntary and forced.

Undoubtedly, from a humanitarian standpoint of view, voluntary deportation is preferable, since it involves fewer administrative procedures than the forced one. In this respect it is possible to establish a system of financial assistance for repatriated persons in the period immediately following the repatriation as a type of measure which would stimulate voluntary leaving.

Voluntary leaving occurs rarely. In a large number of cases requiring deportation, the immigrants strive to stay on European grounds any way they can. They often pretend to have no citizenship, and having stayed in an immigration center up to the maximum allowed time (every country has its determined maximum time period: 32 days in France, 40 days in Spain, 60 days in Italy and Germany, and 90 days in Greece), the illegal immigrants is free to leave.

The procedure of forced deportation itself may turn into a heavy burden for the budgets of these countries, taking into consideration the number of illegal immigrants in a range of EU countries. At the same time, many European countries avoid undertaking collective deportations of illegal immigrants, above all for fear of internal political consequences, the existence of a politically active migration population in many European countries and the interest in maintaining a steady flow of work force. This may be the reason European countries rarely undertake mass deportations.

⁵³ Green Paper on a Community return policy on legal residents, COM (2002) 175 final, Brussels, 10.04.2002 and Green Paper on a Community return policy for illegal residents [COM (2002) 175 final - Not published in the Official Journal].

CONCLUSION

According to some analysis, only 20-25% of illegal immigrants in Western Europe choose to return to their home countries voluntarily or under the auspices of the country of immigration⁵⁴. According to official data from France, there were 80.000 applications for asylum in 2002, where 85% of the applications, or 68.000 people, were denied. 7.500 illegal immigrants were sent out of the country.

Nonetheless, sometimes the immigration flow which has gone out of control forces local authorities to take drastic measures. For example, at the beginning of October 2004 as a result of a mass arrival of immigrants in Lampedusa, the small Pelagie islands south of Sicily turned into a large camp for illegal immigrants in a matter of days. In mid October all unwelcome foreigners were returned to Latvia with Italy's air force airplanes, and so Italy began to establish a mechanism of coordinated activities in the migration policy.

In order to make deportation more efficient and faster, EU countries often agree upon a joint financing of charter flights. In March 2004, Belgium, the Netherlands and Luxemburg undertook the first mass deportation of Albanian and Kosovo illegal immigrants who have been denied asylum applications⁵⁵.

The legislations of EU countries in the area of repatriation policy also have their individual national characteristics. The new French immigration legislation, for example, defines 4 categories of foreigners having practically absolute protection from being expelled from the territory of France: foreigners born in or moved to France before turning 13 years of age; foreigners living in France on legal grounds for over 20 years; foreigners living in France on legal grounds for 10 years who have been married to a citizen of France in the course of 3 years or a foreigner who has spent their childhood in France; foreigners living in France on legal grounds in the course of 10 years and are parents to French children⁵⁶. At the same time, all foreigners involved in terrorist activity or pronounced guilty of committing acts against the fundamental interests of the country and provoking racial hatred may be expelled.

The new immigration legislation envisages immediate deportation of the foreigner out of Italy's territory if they have been detained by the authorities without the necessary documents permitting them to stay. The foreigner is placed in a center for temporary detention for 60 days for not having certain documents for personal identification. Within this timeframe the authorities should identify and determine the nationality of the immigrant, which is to aid the forced deportation. Furthermore, such persons are denied the right to enter Italy for 10 years. Repeat stain on the territory of a country from which a person has already been deported is considered a migration offence and is punishable with a prison sentence. Moreover, when taking measures to stop the arrival of illegal immigrants to the shores of Italy, the new legislation allows for the intervention of the navy force.

Anyhow, it is impossible to send all illegal immigrants who have entered and stayed in the country out, and European authorities are well aware of this fact. The Governments of EU Member States often opt for a legal solution for the status of this category of persons. In the fighting illegal immigration practice, this measure is known as legalization of illegal immigrants and represents a kind of amnesty within the borders of one country, as well as an independent solution to the difficult problem of migration.

54 Положение беженцев в странах мира, УВКБ ООН, С..237

55 Кютин В.Г. Нелегальная миграция в Евросоюзе, вызовы-ответы . В.Г.Кютин, Т.Т.Кадыров, Бишкек,2005г. С.148

56 Kepel, G. Les Banlieues de l'Islam: Naissanced'uneReligion en France. Paris: EditionsduSeuil. 1991

By taking this step, the Member States shall increase the social funds and the state budget through the “coming out of the shadow” of a larger part of the immigrants, and the fight with the local organized crime unscrupulously exploiting the illegal immigrants will become more efficient. At the same time, the legalization allows the state to establish triple migration control and to determine the number of immigrants on her territory.

One of the first countries to have carried out the legalization of illegal immigrants was Spain in 2000. As a result, over 200.000 applications for legalization were filed and 140.000 were accepted⁵⁷.

Although in Italy such legalization actions, *santoria*, have been undertaken 5 times, the most comprehensive campaign for legalizing illegal immigrants was carried out in 2002 by legalizing over 650.000 immigrants simultaneously⁵⁸. The last legalization in 2003-2004 was also the most comprehensive one. According to official data, 705.000 applications were signed. The legalization applications were often submitted by employers who guaranteed with 280 to 700 EUR per employee, depending on the type of work in question. In the event of a positive outcome, the immigrant would obtain a permit to reside in Italy, an individual tax number and all the rights pertaining to a legal foreigner, including the possibility to visit relatives abroad.

Italy's Ministry of Interior experts feel that the *santoria*, carried out with the aim to monitor and deal with the general migration situation in the country in the context of fighting illegal immigration has fulfilled its purpose. Legal employment was on the rise, and black labor market was reduced. The only downside noted was that the burden of the financial costs which should have been covered by the employees often fell on the employees themselves.

As for the repatriation, special attention is to be paid to unaccompanied underage persons as the most vulnerable type of immigrants. The 97/C221/03 Resolution dated 26 June 1997 of the Council of Europe applies to unaccompanied children who are citizens of third countries, have not yet turned 18 years of age and have reached the Union territory unaccompanied by an adult responsible for them. In accordance with the internal legislation of EU Member States, entry to their territory without the necessary documents and permits for such children is forbidden and they are entitled to taking appropriate measures not only so as to stop the entry, but the stay of such children on Union territory as well. These regulations only apply if the child does not seek asylum, and every unaccompanied underage immigrant has a right to seek asylum⁵⁹.

The unaccompanied minors who have to stay at the border until it is decided on a permit to enter the EU or sending them back must receive full financial assistance and be provided with the necessary care meeting their basic needs such as food, accommodation suitable for their age, sanitary conditions and medical care. The state authorities are obligated to determine the child's identity as soon as possible, as well as to confirm the fact that they are unaccompanied.

If a decision is made that the minor cannot enter the member state, the child is either returned to their country of origin or to another country prepared to accept them, provided that the country where the underage person is sent is capable of accepting them according to their age, needs and level of independence and with the necessary level of care. The necessary accommodation of the child may be carried out both by their parents or other adults willing to take care of them, as well as by state authorities or non-government organizations⁶⁰.

57 Орлов А., Иммиграционный бум. Где решение проблемы, *Международная жизнь*, №7, 2001, с.83

58 Петров Г., Популярные Мухаммеды, *Европа*, №2(47), февраль, 2005 г., с.8.

59 <http://www.hrw.org/world-report-2011/european-union>

60 <http://www.europa.eu/cgi-bin/etal.pl> [Official Journal C221 of 19.7.1997]

The above mentioned demonstrates that a successful development of the process of integration of immigrants within the EU is determined by a coordinated fight with various types of immigration on a common European level, combined with effective national methods for solving the problem.

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THE ROLE OF THE POLICE IN COUNTERTERRORISM

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Abstract: Today police face a range of tactical challenges that, while not necessarily new, require an evolved operational response.

In the new millennium, policing throughout the world has gradually more taken a contemporary security role, such that it might be expected that policing should be rapidly changing to meet its new challenges and to deal with contemporary security threats.

This paper seeks to answer the question “What are police doing to counter terrorism?” Certain density in the roles, functions, strategies, structures, and cultures of the police, modern-day policing has become even more multifaceted, being concurrently focused on preventing and responding to “ordinary crime,” and now to responding to domestic and international terrorism.

Counterterrorism refers to proactive policies that specifically seek to eliminate terrorist environments and groups. Domestic operations involve coercive use of military, police, and other security forces against domestic threats. Many nations have special units within their police forces that participate in counterterrorist operations.

Knowledge about nature and police counterterrorism strategies is an essential and currently missing component in a contemporary security agenda.

Key words: Police, counter-terrorism, special operation forces, contemporary security concepts.

INTRODUCTION: POLICE ROLE IN COUNTERTERRORISM IS IT HIGH POLICING OR LOW POLICING?

While it is not necessary to define terrorism, it is necessary to state what we mean by counterterrorism. Counterterrorism will be used as a synonym for high policing, that is, it will refer to the covert activities of intelligence gathering and disruption directed against people considered to be terrorists. Counterterrorism is a complex and multifaceted subject that encompasses a host of different strategies for dealing with violent extremism. Its central purpose can be described as devising methods and policies to cause non state groups that employ [terrorism] to stop using violence to achieve their political objectives.¹

Counterterrorism can be criminological analyzed as a matter of social control, including various mechanisms and institutions that define and respond to terrorism.² The most formal component of social control is represented by the criminal justice system, including its agents and organizations, such as the police. In the realm of social control and criminal justice, the counterterrorism activities of police have been of growing importance.³

1 Robert J. Art and Louise Richardson, Introduction, in Robert J. Art and Louise Richardson (eds.), *Democracy and Counterterrorism: Lessons from the Past*, Washington: United States Institute of Peace Press, 2007, 1.

2 Costanza, Steven E., John C. Kilburn Jr., and Ronald Helms, Counterterrorism., in *Terrorism in America*, K. Borgeson and R. Valeri (eds), Sudbury, MA: Jones and Bartlett Publishers, 2009, 91-115.

3 See Steven G. Brandl, Back to the Future: The Implications of September 11, 2001 on Law Enforcement Practice and Policy, *Ohio State Journal of Criminal Law* 1, 2003, 133-154. Oliver, Willard M, *Homeland Security for Policing*. Upper Saddle River, NJ: Pearson/Prentice Hall, 2007.

When we speak of police, we will be referring to agencies of law enforcement that operate exclusively within a country. This stipulation is necessary in order to distinguish police from the military whose unique responsibility is to protect countries from external threats. We will also confine our examination of terrorism's impact only to the public police, that is, to agencies of law enforcement that are authorized and maintained by government.⁴

Although there is debate that the police should not be involved in counterterrorism, their precise role is unclear and indeed controversial. Some are concerned that expanding the police role in counterterrorism will change the character of policing in democratic states. In particular, that police will emphasize covert prevention of terrorism to the neglect of publicly visible policing of individual criminal victimization.⁵ Policing of this kind has been called "high policing."⁶

High policing has two distinguishing features – its substantive focus and its methods. High policing targets what might be called macro-crimes, that is, crimes that are considered threats to society in general, such as drug trafficking and an illegal immigration, as opposed to micro-crimes that affect only individuals.⁷ In high policing, prevention is the key objective, utilizing the tactics of covert intelligence gathering, surveillance, and disruption.

"Low-policing," by contrast, emphasizes prevention through visible patrolling and deterrence through the application of criminal law.

High policing differs sharply from the standard practices of normal or "low" policing because it is less transparent, less accountable, and less careful with respect to human rights.⁸ In general, high policing encourages a top-down command structure and changes the orientation of police from servicing to controlling the population.

At the same time, other analysis explains that full-service or general-duties policing should play a large role in counterterrorism, indeed, that it has unique advantages in a war on terror that should be exploited.⁹ For example, general-duties policing provides unprecedented access to communities. Properly focused, it can obtain information about activities that are the precursors of terrorism. Furthermore, by being responsive to the mundane concerns of individuals, it raises the likelihood that the public will assist the police by providing information or accepting direction in the event of disasters. More particularly, routine policing can build bridges to communities that may shelter or give rise to terrorists. In short, the activities of low policing are not a distraction from counterterrorism but an essential "force multiplier."

So two questions about the future of policing arise out of the new emphasis on counterterrorism post 9/11. First: what has happened to policing since 9/11? In particular, has high policing replaced low policing? Second: what is the appropriate role for uniformed, full service policing in counterterrorism? Should it undertake high policing? What are the advantages and disadvantages of doing so?

It is impossible to say with confidence whether the war on terrorism has changed the character of policing in developed democracies, in particular whether high policing has significantly impacted low policing. The evidence is fragmentary and

4 David H Bayley, *Patterns of Policing*. New Brunswick, NJ: Rutgers University Press, 1985.

5 Michael Kempa, Philip Stenning, and Jennifer Wood, Policing communal spaces: A reconfiguration of the 'Mass Private Property' hypothesis, *British Journal of Criminology* 44(4), 2004, 562-581.

6 Jean-Paul Brodeur, High and low policing: Remarks about the policing of political activities, *Social Problems*, 30(5), 1983, 507-520.

7 David Bayley, *Changing the Guard: Developing Democratic Police Abroad*, New York, NY: Oxford University Press, 2006.

8 David Thacher, The local role in homeland security, *Law and Society Review*, 39(3), 2005, 635-676.

9 George L Kelling and Bratton J William, *Policing Terrorism*. New York: Manhattan Institute, 2006, Manhattan Institute, <http://www.manhattan-institute.org>.

impressionistic. It appears that specialized capabilities, especially for intelligence gathering and analysis, have been augmented in all countries. It is not at all clear how much traditional frontline policing in the form of uniformed patrol, response to calls-for-service, and criminal investigation has been.

There is impression that general policing has been affected most in Israel and least in the United States. Great Britain seems to have adapted its policing more to the requirements of counterterrorism due largely to the terrorism associated with the "troubles" in Northern Ireland during the last 35 years. Australia, Canada, and New Zealand, cluster toward the American end of and India tends more to the intermediate position. Countries in Western Europe range somewhere in the middle of this continuum.

The critical question is whether a shift to high policing, especially by general-duties police agencies, in Western democracies should be applauded or prevented. As we have pointed out, there are reasons why uniformed, general-duties police should take on a greater role in the prevention and control of terrorism, in addition to their inevitable role in responding to terrorist events and ameliorating their impacts. Local police can be enormously helpful in detecting terrorist-related activity, building bridges to informants in critical communities, and in coordinating security responses between public and private agencies. At the same time, acting as high police may come at a cost that policy makers and the public should be aware of. It may lead to a decline in crime-prevention services to the general public and undermine the investigation of ordinary crime, thereby separating itself from the population in general and reducing the possibility of obtaining useful information about terrorist activities.¹⁰

Taking stock of the advantages as well as the disadvantages of using general-duties police in counterterrorism, we believe that they can contribute more by focusing and fine-tuning their standard operations than by creating specialized high policing capabilities.

EVOLUTION OF POLICE TACTICS AND THE BEGINNINGS OF AN OPERATIONAL APPROACH

Terrorism and counterterrorism have historically evolved in various ways. Terrorism has increasingly diversified in terms of the objectives that are pursued and the means that are used. Counterterrorism efforts have likewise proliferated across a range of institutions. Criminologists contribute to the study of terrorism and terrorism-related phenomena by focusing on terrorism as crime or deviance and counterterrorism as social control. Studying counterterrorism as a form of social control, criminological research can reveal important elements of counterterrorism that are not of a military, legal, or political character. Much of the contemporary public discourse typically focuses on counterterrorism in the world of politics and in relation to military interventions and war. Yet, every dimension of counterterrorism has to be researched carefully before any general pronouncements can be made.

The role of most police activities is not "operational" in the military sense. Police forces are small, and with the exception of large metropolitan regions, barely comprise the strength of a tactical military unit. Their role, however, is just as complex. Police have the responsibility to keep the peace in complex and diverse multi-ethnic urban environments, carry out counter-gang operations, and protect a broad array

¹⁰ David Weisburd, Orit Shalev, and Amir Menachem, Community policing in Israel: Resistance and change, *Policing: an International Journal of Police Strategies and Management*, 25(1), 2002, 80-109.

of targets from terrorists. Yet for most police doctrine has remained tactical in orientation. Additionally, the decentralized nature of American policing—in marked contrast to many European police services—limits the conceptual development of synchronized, operational responses.

A long-term police campaign against a gang, organized crime family, or terrorist group, can compromise many different tactical operations nested together. In adapting the operational language to police purposes, we argue that the level of command is not what determines whether something is tactical or operational per se, rather the purpose of the action or mission(s) determines the echelons needed for successful engagement.

As recounted by Lindsay Clutterbuck, the first shift in the expansion of policing outlook was the 19th century anarchist challenge, which created a pre-modern network of police forces. The elimination of the pre-modern “anarchist wave” of terrorism is a relevant (and hopeful) sign that today’s terrorism challenge is not insurmountable. This, however, would be the first of many advances in police doctrine and functions in response to the challenges of the industrial era.¹¹

Police tactical doctrine changed again during the 1970s, when paramilitary terrorist attacks exposed weaknesses in command and control and tactical response. Police, in addition, can utilize organic “combined arms” abilities through the combination of foot (dismounted) intervention, helicopters, and tactical response teams (special weapons teams, bomb squads), including the use of armored rescue vehicles.¹²

The purpose of violent responses is to attack and degrade the operational capabilities of terrorist. This can be done by directly confronting terrorists or destabilizing their organization.

Table 1. Counterterrorist Options: The Use of Force¹³

| Counterterrorist Option | Activity Profile | | |
|----------------------------|--|---|--|
| | Rationale | Practical Objectives | Typical Resources Used |
| Suppression campaigns | -Symbolic strength -Punitive measures -Preemption | -Destructions of the terrorists -Disruption of the terrorist | Military assets Paramilitary assets |
| Coercive covert operations | -Symbolic strength -Destabilization -Preemption | -Disruption of the terrorist -Deterrent effect on potential terrorists | Military assets Paramilitary assets |
| Coercive covert operations | -Coercive covert operations -Destabilization -Preemption | -Disruption of the terrorist -Deterrent effect on potential terrorists | Military and Police assets |

Creating an operational concept for police counterterrorism response is a worthy project. Indeed to be effective, it needs to go beyond counterterrorism to address the whole range of complex police responses. This includes emergency and

11 Lindsay Clutterbuck, Developing a Counter-Terrorism Network: Back to the Future? in Peter Kationa, Michael D. Intriligator, and John P. Sullivan (eds.), *Countering Terrorism and WMD: Creating a Global Counter-Terrorism Network*, Routledge, 2006, 33-51.

12 John P. Sullivan and Adam Elkus, Beyond Active Response: An Operational Concept for Police Counterterrorism Response, *New Criminologist*, 14 May 2010, Available at <http://www.newcriminologist.com>.

13 Gus Martin, *Essentials of Terrorism-Concepts and Controversies*, Sage Publications, 2011, 272.

disaster response, counter-gang and counter-violence activities, organized crime suppression, public order (civil disturbance and riot response), and wide-area crime control efforts (pattern and series crimes). The need to mobilize and synchronized distributed police operations across and among metropolitan regions, and across jurisdictional and disciplinary boundaries are essential to addressing complex disasters, complex criminal networks, and terrorist attacks.

A wide range of counterterrorism strategies have been developed to deal with the causes and consequences of terrorist activities. Politically, counterterrorism involves measures taken by the governments of national states and by international governing bodies (INTERPOL and EUROPOL). Such (inter) governmental responses to terrorism are historically most developed, dating back to at least the second half of the nineteenth century, when governments in Europe sought to disrupt political activities aimed at overthrowing established regimes.¹⁴

There is a strong preference among police to engage in international counterterrorism missions in a unilateral manner or to engage in cooperation with only a limited number of counterparts from other nations. Larger international partnerships occur in a collaborative form, thereby affirming the contributions and perceptions of participating police agencies in the individual states. Though affording advantages in terms of the preservation of national sovereignty, this national persistence can also produce rifts in the global order of counterterrorism as the strongest participating agencies are the ones most likely to go about it alone in fulfilling stated counterterrorism objectives. Such unilaterally conceived counterterrorism strategies can produce unintended consequences, inasmuch as the security and police forces of otherwise friendly nations may turn against their more powerful counterparts, such as the law enforcement institutions in the United States, only because a more egalitarian cooperative spirit was missing.

NATIONAL MODELS OF COUNTERTERRORISM

We begin by asking who has responsibility for counterterrorism in Western democracies. In particular, is counterterrorism assigned to specialized agencies or to the police? If counterterrorism is a responsibility of the police, how are they organized to carry it out? Finally, in large police organizations is counterterrorism concentrated at central levels of the organization or delegated to subordinate commands, especially dispersed geographical commands?

Most countries have specialized agencies entirely separate from the police that engage in counterterrorism abroad—collecting information, penetrating potential terrorist and/or criminal groups, and taking preventive action. In several studies, the responsibility for counterterrorism – clandestine intelligence collection and disruption – is distributed domestically in three ways:

1. To a national agency specializing in counterterrorism,
2. To one or more national police services, and
3. To all police agencies at any governmental level.

These modes of organization are not exclusive but may coexist in the same country.

All the countries in our review have created an agency that specializes in collecting domestic intelligence about potentially violent subversion – Australia (ASIO),

¹⁴ Mathieu Deflem, *Policing World Society: Historical Foundations of International Police Cooperation*, Oxford, UK: Oxford University Press, 2002.

France (DST), Israel (Shin Bet), Japan (PSIA), the United States (FBI), Serbia (VBA), and Macedonia (SAIS). At the same time, they vary in their powers to take preventive action. Some national counterterrorism agencies do have full police powers and can detain, arrest, and submit for prosecution - India's Central Bureau of Investigation (CBI), Italy's Intelligence and Democratic Security Service (SISDE), Japan's Public Security Investigation Agency (PSIA), Spain's National Intelligence Center (CNI), Sweden's National Security Service (SAPO).¹⁵ For this reason, they should be regarded as police forces that specialize in counter-espionage.

All countries that authorize the creation of police at sub-national, decentralized levels require them to undertake counterterrorism operations. Indeed, all sub national counterterrorism is carried out by police. There are no cases of agencies specializing in counterterrorism at sub-national levels. Thus, the police in all federal systems have counterterrorism responsibilities. The police in centralized systems may also delegate counterterrorism functions to subordinate levels of command for reasons of operational effectiveness. This occurs, for example, in France, Japan, and Israel.¹⁶

In sum, police in all democratic countries, centralized and non-centralized, are authorized to engage in high as well as low policing and the extent to which they actually do so varies widely.

CATEGORIES OF POLICE ACTIVITY

There is universal agreement among police officials, academics, and other observers that terrorism has sharply impacted the activities of full-service police departments since 9/11. This is true not only in the United States but for police agencies around the world, even those with longer histories of dealing with terrorist threats.

The IACP's¹⁷ own survey of changes in policing as a result of terrorism showed that 86% of forces reported operational or policy changes since 9/11. Most of these (48%) were in strategic planning with respect to national alerts, WMD response, risk assessment, and first responding procedures. The other major areas of impact were in training, equipment, reorganization, redeployment, and interagency collaboration.

The impact of terrorism on policing, however, involves more than high policing. Besides collecting intelligence and undertaking preventive actions, counterterrorism involves limiting the damage from terrorism and investigating, arresting, and prosecuting those who have done it.¹⁸ It is important to remember that all terrorist attacks are local. This means that although some counterterrorism functions can be made the responsibility of dedicated units deployed at centralized levels of organization, police on the ground will necessarily become involved wherever terrorism strikes or is likely to strike.

If the police are to be effective in the war on terrorism, there are at least ten categories of police activity that could properly be considered counterterrorism.

1. Covert detection
2. Disruption/dismantling of terrorist plots

¹⁵ One of structural elements of the (sub) System of internal security of R. Macedonia includes Ministry of Interior (Police, Special Police and Special Forces, Crime Police and Security and Counter-intelligence Administration.

¹⁶ The UK is a special case. It doesn't have a federal system of government, nor does it have a national police force, but all of its 43 police forces have a dedicated intelligence capability (Special Branch) and, since 2004, a "Counter Terrorist Security Advisor."

¹⁷ International Association of Chiefs of Police.

¹⁸ James M Bradley and Richard L Lyman, The public safety model: A homeland security alternative, *The Police Chief* 73(3), 2006.

3. Risk analysis
4. Target hardening
5. Community mobilization for prevention
6. Protection of important persons and infrastructure
7. Emergency assistance at terrorist incidents
8. Order-maintenance when terrorism occurs
9. Mitigation of terrorist damage
10. Criminal investigation of terrorist incidents

Full-service police agencies can make essential contributions to the war on terrorism in terms of preparedness planning, threat analysis of critical infrastructure, target protection, first-responding, order-maintenance, and post-event criminal investigation. Although not all frontline police agencies can do all of these things unassisted, their expertise and resources must be used because they are the first line of defense with respect to these tasks.

FACTORS AFFECTING THE IMPACT OF COUNTERTERRORISM ON POLICE

Turning to the global dimensions of counterterrorism policing, variable legal and political contexts are seen to bring about differences and similarities in the policing of terrorism worldwide. In autocratic and highly centralized states, counterterrorism policing is generally subsumed under a national security regime, whereas more autonomy is accorded to police in democratic states. The institutional independence that modern police agencies can acquire across national boundaries also enables international police organizations with multilateral membership to address terrorism issues through enhanced means of communication and information exchange. As is the case with other crimes of a distinctly international nature, international cooperation is a central concern in the policing of terrorism. In the context of the persistent globalization of terrorism and related security concerns, counterterrorism functions transcend the jurisdictional boundaries of single national states and their institutions.

Terrorism does not impact the status and prominence of high policing in all police forces equally. We suggest that there are six factors that determine whether a police force alters its activities to include a greater number of high policing functions.

1. Local incidents of terrorism. In countries where terrorist threats are serious and where the attacks are common, high policing is likely to have a much larger place in police operations.¹⁹ Furthermore, after a dramatic terror attack police responses will be affected by perceptions of local vulnerabilities. The greater the number of likely targets for terrorism, the greater will be preparations made by local police.²⁰
2. The structure of police organization. The higher the governmental level at which police are organized, the more likely it is that preventive counterterrorism will be undertaken. Police agencies that are organized at a national level, such as the Israeli or the French, appear to take on high policing tasks with greater ease than police organized in a decentralized way. As a corollary

¹⁹ This is clearly the reason why Israel and the UK have a long history of police involvement in homeland security and counterterrorism functions.

²⁰ Lois M Davis, Jack K Riley, Greg Ridgeway, et al, *When Terrorism Hits Home: How Prepared are State and Local Law Enforcement?* Santa Monica, CA: RAND Corporation, 2004.

to this, it seems likely that local police who are decentralized units within a national organization are more likely to undertake high police functions than those which are independent.

3. The size of the police unit. Specialization of function can only take place in organizations of scale.
4. Time under threat. Terrorism will have a greater impact on policing the longer a country has experienced it.
5. Intolerance of political dissent. Acceptance of "high policing" occurs more frequently in countries where dissent is not tolerated, whether for ideological, cultural, or political reasons.²¹ Authoritarian governments, notably, view dissent as a threat, and therefore treat it with the tactics of high policing.
6. In countries which allow sub-national levels of government to develop autonomous police forces, such as federal systems (Brazil, India, Australia, Germany, the United States), local police may be required to do modify their operations by national laws, administrative directive, or inducements of money.

In sum, the threat of terrorism impacts almost all police agencies in one way or another. Centralized and higher level police agencies will engage more in specialized counterterrorism intelligence gathering and surveillance (high policing) than local ones. But most will be affected by the need to analyze risk and to respond to terrorist attacks, to maintain order, to relieve distress, and to investigate incidents. The extent to which they do so is only partly under their control. Subordinate police in decentralized systems will have greater control over their adaptations than police in centralized systems. But even the police in decentralized systems may find themselves powerless in the face of directives, mandates, and events.

DIFFERENCES IN APPROACHES IN COUNTERTERRORISM POLICE VERSUS ARMY

In matters of terrorism, there is today arguably no dimension more relevant and more discussed, next to the policing of terrorism, than the military involvement in counterterrorism and the conception of counterterrorism in terms of war. However, the ambitions that are connected to the war on terrorism from the political and legal viewpoint—to coordinate and centralize all aspects of counterterrorism—have not been accomplished at the level of the various institutions involved with counterterrorism. In the case of police, most distinctly, terrorism is not pursued in terms of a war but on the basis of acquired professional standards of crime control.

The purpose of legalistic responses is to provide protection to the general public, protect the interests of the state, and criminalize the behavior of the terrorist.

The confrontation of the policing of terrorism with the war-related dimensions of counterterrorism is of considerable importance as the differences between the policing of terrorism and terrorism-related military actions are profound.²² From the policing point of view, the targets of counterterrorism are treated as suspects who are accorded certain rights of due process on the basis of publicly presented evidence in courts and who, upon a determination of guilt, can receive punishment. Military counterterrorism operations, by contrast, are oriented at enemies who can

²¹ David H Bayley, *Patterns of Policing*. New Brunswick, NJ: Rutgers University Press, 1985.

²² Clark McCauley, War Versus Justice in Response to Terrorist Attacks: Competing Frames and Their Implications, in Bongar, L. M. Brown, L. E. Beutler, et al, (eds), *Psychology of Terrorism*, Oxford, UK: Oxford University Press, 2007, 55-65.

Table 1. Counterterrorist Options: Legalistic Responses²³

| Counterterrorist Option | Activity Profile | | |
|-------------------------|--|---|--|
| | Rationale | Practical Objectives | Typical Resources Used |
| Law enforcement | -Enhancement of security apparatus -Demilitarization of counterterrorist campaign | -Day-to-day counterterrorist operations -Bringing terrorist into the criminal justice system | -Police personnel -Specialized personnel |
| Domestic laws | Criminalization of terrorist behavior | -Enhancement of criminal penalties for terrorist behavior -Bringing terrorist into the criminal justice system | -Criminal justice system -Legislative involvement |
| Domestic laws | International consensus and cooperation | Coalitional response to terrorism | -International organizations -State resources |

be killed in combat or who can be temporarily detained to be released when a cessation of hostilities has been declared.

The respective logics of criminal justice policy and military counterterrorism operations, then, are very different, although they coexist in the wider constellation of counterterrorism, which is essentially multi-dimensional in nature.²⁴

The aims of this paper should not be misunderstood to imply a defense of the policing approach to terrorism against the military model. The normative debate on counterterrorism has in this respect again been less than useful in occasionally assuming that a policing response and, more generally, a criminal justice model are better suited in terrorism cases. It is, therefore, typically assumed that a police response would not bring about the problems associated with military counterterrorism operations, such as the enormous loss of innocent lives in large-scale military operations (e.g., those in Iraq and Afghanistan). However, problematic consequences can also be involved in the criminal justice and police approach to terrorism. A large body of criminological research that exists has exposed many potential and real concerns in policing, such as the lack of democratic oversight that marks the actions of highly bureaucratized police agencies and the differential enforcement of criminal justice along the lines of existing disparities in race, gender, age, and class. If a sound normative debate is to take place in the case of counterterrorism, such problems cannot simply be ignored.

CONCLUSION

This paper shows whichever policy models that are suggested at the national and international levels of law and politics to more effectively detect and deter terrorism must also take into account the manner in which counterterrorism operations are undertaken by various institutions. From the viewpoint of the policing of terrorism, counterterrorism does not involve a war on terror but is instead viewed as a permanent function of crime control. Counterterrorism police strategies, therefore, adopt an approach that may very well be realistic in being based on the notion of terrorism

²³ Gus Martin, *Essentials of Terrorism-Concepts and Controversies*, Sage Publications, 2011, 291.

²⁴ Mathieu Deflem, *The Policing of Terrorism-Organizational and Global Perspectives*, Routledge-Taylor & Francis, 2010.

as a permanent risk. In contrast, the war on terror is failing, not only because it has not been able to effectively coordinate and centralize all counterterrorism functions but, also because it offers an unwarranted optimistic sense of the possibility of a victory and a lasting peace without terrorism.

Counterterrorism police strategies can be developed on the basis of an explicit awareness that the world today is highly interconnected. Rather than trying to build a security order exclusively modeled after the experiences of the United States (or any other nation) in matters of security and law enforcement, a collaborative model of cooperation that can be elaborated takes into account the concerns faced by nations across the world. In this respect, it makes sense to contemplate further strengthening the global security order that has already developed, even among countries that can be very different in political, legal, and cultural respects.

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THE STATE OF INTERNAL SECURITY IN THE EUROPEAN UNION¹

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Abstract: Organized crime is growing in scale and sophistication and it is responsible for sustaining a buoyant international trade in illicit drugs and other commodities, propagating dangerous new threats across the Internet, and generating exceptionally high criminal profits. The affluent consumer base and open business environment of the EU makes the region particularly vulnerable. A large number of illicit drug users and trafficked victims in the EU, and the multibillion Euro industry in organized fraud, are among many indicators of the widespread impact of organized crime on our society. The number of terrorist attacks in the EU is declining, but both violent separatist groups and Islamist extremists remain active and pose a clear threat to internal security. The threat of a mass-casualty terrorist attack remains very real. Most threats to internal security are generated outside the EU. Africa, South Asia, the Former Soviet Union, and the Western Balkans carry particular significance. European citizens and businesses are increasingly exposed to systematic violence and corruption at the hands of organized crime groups, terrorist groups, and, increasingly, street gangs. The substantial illicit proceeds generated by organized crime deprive millions of citizens and their governments of significant revenue.

Key Words: European Union, security, organized crime, EUROPOL, EUROJUST, FRONTEX, Western Balkans.

INTRODUCTION

The Stockholm Programme aims to build an open and secure Europe to serve and protect its citizens. The adoption of an Internal Security Strategy for the EU³ is a major underpinning element in efforts to realize this goal. It provides the basis for concerted action in the EU to tackle the threat from organized crime, terrorism, and illegal migration. This Strategy assumes that effective action against these threats will be informed by a clear understanding of their nature and impact, as per the methodology set out in the European Criminal Intelligence Model.

This Report satisfies this requirement by providing a current assessment of the principal threats to internal security in the EU. It has been drafted jointly by EUROPOL, EUROJUST, and FRONTEX, based primarily on three strategic documents – EUROPOL's Organized Crime Threat Assessment (OCTA) and Terrorism Situation and Trend Report (TE-SAT), and FRONTEX's Annual Risk Analysis (ARA).

¹ This paper is the result of the realisation of the Scientific Research Project entitled "Development of Institutional Capacities, Standards and Procedures for Fighting Organized Crime and Terrorism in the Climate of International Integrations." The Project is financed by the Ministry of Science and Technological Development of the Republic of Serbia (No 179045), and carried out by the Academy of Criminalistic and Police Studies in Belgrade (2011–2014). The leader of the Project is Associate Professor Saša Mijalković, PhD.

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³ Adopted by the European Council, 25/03/10 (5842/2/10)

The Report analyses the specific threats posed by organized crime, terrorism and illegal migration, highlighting both their distinctive characteristics and the commonality they share in terms of modus operandi and impact. The Report is a relatively short assessment. The three strategic documents on which it is based offer a more comprehensive analysis of the issues involved.

Most threats to the internal security of the EU either originate outside Europe or have a clear nexus to other parts of the world. All heroin and cocaine consumed in Europe, for example, is trafficked here from a different continent. Such is also the case of the estimated 900,000 illegal migrants entering the EU each year, while Colombian, Nigerian, Russian, Albanian, Turkish, and other non-EU groups, have important roles in organized crime activity in the region. In regards to terrorism important exceptions remain, such as in the case of ETA. Islamist extremism, however, is very much a transnational problem, even if certain home-grown elements have become a significant part of the threat in recent years. Meanwhile, the rapidly growing threat from cyber crime represents the best example of modern criminality operating on a truly global basis.

This fundamental aspect of the internal security threats we face holds the key to our analysis. We see the development of organized crime and terrorist groups which are increasingly mobile, technologically competent, and adept at operating on a global basis, across national boundaries and between business sectors. They have acclimatized well to opportunities offered by modern society, particularly in regard to the Internet, generating enormous profits from multi-dimensional criminal activity. According to IMF estimates, the profits generated by financial crimes alone account for up to 5% of the global GDP.

The EU offers an attractive consumer base for organized crime, with half a billion relatively affluent citizens, liberalized markets and an enterprising business culture, along with freedom of movement facilitated by the Schengen Agreement. Prior to this, transnational criminal activities were more constrained by national borders. The creation of the borderless Schengen zone has increased the attractiveness of key locations close to the EU which feed the EU's demand for illicit commodities. These are situated in North and West Africa, the Middle East, the Former Soviet Union (FSU), Turkey, and the Western Balkans.

The borderless nature of cyber crime and certain financial crimes are key features of the modern threat from organized crime and terrorism. They are explored later in this Report. But the Report first considers those geographical factors highlighted above, namely the threats generated externally in the key feeder locations and channeled to the EU via nodal hubs⁴.

EXTERNAL THREATS

Africa and the South Western Route to the EU

West Africa's strategic position between Latin America and the EU is increasingly exploited by cocaine and synthetic drug traffickers, assisted by an increasing flow of licit commodities between West Africa and the EU. Nigerian organized crime groups are active in the EU, particularly in terms of organized fraud and trafficking of human beings for sexual exploitation. East Africa, specifically the Horn of Africa, is increasingly a transit region for Afghan heroin. North Africa (Morocco), meanwhile, continues to be the most prolific supplier of cannabis resin to the EU and acts as a distribution centre for counterfeit Euros.

⁴ For further explanation of the concept of the criminal hub, please, see EUROPOL's Organized Crime Threat Assessment (OCTA) 2009.

The risk of illegal migration by North, East and West African nationals to the EU remains high, due to geographical proximity, wide economic disparities compared to the EU and sizeable communities already established in several Member States. The West African sea route to Spain from Senegal and Mauritania via the Canary Islands continues to be used by West African nationals. Libya remains a focal point for the Central Mediterranean route to Italy and Malta, despite recent success in disrupting entry into the EU by this route. Sustained disruption of these routes may lead to a displacement of flows elsewhere, such as to the Western Mediterranean, where some evidence of this happening is already apparent.

Al-Qaeda affiliated groups such as al-Qaeda in the Islamic Maghreb (AQIM) and al-Qaeda in the Arabian Peninsula (AQAP) not only pose direct threats to the EU, but also use the EU as a platform for preparing and initiating terrorist attacks elsewhere. EUROPOL records show that 40% of individuals arrested in the EU for suspected Islamist terrorist activity were born in North Africa. Weak states with un-governed spaces, largely Muslim populations, and socio-economic vulnerabilities are potentially fertile ground for Islamist terrorism throughout the region.

Radicalized EU-based Islamists travel to conflict areas such as Somalia to participate in armed struggle or to attend training camps. Radicalized individuals from elsewhere, such as the US, also use routes through Europe. These individuals are a risk to the security of Member States on their return, because of their acquired skills and experience and their potential readiness to engage in or provide logistical support to terrorist activities. Meanwhile, the number of Somali nationals heading to Europe is increasing. In this context the Somali terrorist organization Al Shabab's recent statement of alignment to the ideology of al-Qaeda will be subject to continued monitoring in the EU.

Piracy off the coast of Somalia appears to be motivated largely by criminal opportunity. Somalian organized crime groups are also engaged in the illegal arms trade: geographical proximity of these groups to terrorist cells raises the possibility of future collaboration.

North and West Africa have emerged as significant feeder regions for the South West criminal hub around the Iberian Peninsula. This hub is a key distribution centre for cocaine, cannabis products, trafficking in human beings and illegal migration to markets including the North West criminal hub, located in The Netherlands and Belgium. Moreover, South West Europe is the region in the EU most preferred by terrorist groups with links to North African al-Qaeda affiliates, with active AQIM cells in Spain engaged in recruitment and the provision of logistical support to cells in North Africa.

The Balkan Route

Turkey is one of the most important transit countries for illicit heroin trafficking from Afghanistan and Pakistan to the EU. From Turkey, heroin enters the EU via the Balkans and travels onward to North West Europe for distribution. Turkish, Kurdish, Pakistani, and Iranian organized crime groups predominate due to their geographical proximity to source countries. In Turkey, heroin is exchanged for synthetic drugs, precursors, and cocaine, which are trafficked to Middle East markets.

Following reductions in departures from Libya and Western Africa, Turkey is now the principal transit country for illegal migration to the EU. Irregular migrants transit Turkey en route to Greece, Bulgaria and Cyprus, with Greece as the main entry point into the EU for onward travel to other Member States, including Italy. FRONTEX assesses that Greece now accounts for 75% of all detections of illegal border-crossings in the EU.

The proceeds from these activities are used in part to fund terrorist activity by groups such as the PKK, which has carried out several arson attacks in Western Europe in recent years, and which receives financial and logistical support from Turkish individuals of Kurdish ethnicity resident in the EU.

Illicit commodities from Turkey enter the EU via the Balkan Route, either overland or through the Black Sea port of Constanta. In the Western Balkans, Albania, Serbia, Montenegro and FYROM are transit countries to the EU for illegal migrants and victims of human trafficking for sexual exploitation, cannabis products, heroin, cocaine, cigarettes, synthetic drugs and precursors, counterfeit Euros and firearms. Albanian-speaking organized crime groups are prominent, particularly in trafficking heroin and women for sexual exploitation. The establishment of Outlaw Motorcycle Gang (OMCG) chapters and evidence of Islamic terrorist activity in the region pose additional threats both to local security and that of the EU.

The South East criminal hub (Romania, Bulgaria and Greece) is a gateway to the EU for both licit and illicit commodities thanks to its situation on Europe's border with Asia, and serves as a transit, stockpiling and redistribution zone, e.g. for counterfeit and smuggled cigarettes from the FSU, the Balkans and East Asia.

Romania and Greece are significant entry points for illegal migrants. Romanian organized crime groups, in particular, facilitate illegal migration from Afghanistan and Pakistan, while Bulgarian groups arrange illegal border-crossings and illegal stays in the EU. The likely expansion of the Schengen area to the Black Sea border in 2011 will make Bulgaria and Romania even more attractive to illegal migration flows from Turkey.

Bulgaria also plays a central role in the production and trafficking of synthetic drugs and counterfeit Euros, and in payment card fraud. In addition to routes via the Balkans and Turkey, illicit activity in the South East hub is fed from the North (via Ukraine and Moldova).

The North Eastern Route

The criminal environment of the Baltic States is shaped by its location between supply countries for illicit cigarettes and synthetic drug precursors, and significant destination markets for these and other illicit commodities in other parts of the EU.

In addition, Member States on the eastern border of the EU are at risk of exploitation by terrorists moving people and equipment from South West and Central Asia to Europe.

The region is defined by the border between the EU and Russia. High volumes of traffic passing through the border regions encourage both legitimate and illicit trade. At the same time, Russian organized crime groups use banks located in the Baltic countries to launder criminal proceeds from the FSU.

St. Petersburg is an important feeder location for the North East criminal hub. Stockpiled commodities are re-directed from there to Russian, Nordic, Baltic and Western European markets. Cocaine arriving directly from South America or transiting South Africa or the Baltic States is forwarded from St. Petersburg to the North East markets. Large-scale smuggling of highly taxed goods such as cigarettes from Kaliningrad and St Petersburg is conducted towards the Baltic countries and other EU destination markets.

Lithuanian groups play a significant role in the North East criminal hub, trafficking commodities from East to West (women for sexual exploitation, illegal

immigrants, cigarettes, counterfeit goods, synthetic drug precursors and heroin), and vice versa (cocaine and cannabis products). Furthermore, they traffic synthetic drugs from the North West hub to the Nordic markets, where Lithuanian-produced methamphetamine is in demand, as well as stolen vehicles and other property. They also act as “bridging groups” in the North East, North West and South West criminal hubs, procuring commodities from other Baltic organized crime groups including Outlaw Motorcycle Gangs (OMCGs), for distribution in destination markets.

The North West Criminal Hub

The North West criminal hub, characterized by high levels of criminal coordination and organization, and extensive transport facilities, is the EU centre of gravity for drug trafficking and provides the necessary logistics for illegal migration and THB. Suspects of Turkish ethnicity based in this hub and those in contact with Turkish trafficking groups dominate the wholesale of heroin through the Netherlands. Moroccan groups in Belgium and the Netherlands move cannabis products from Morocco through Spain to the North West criminal hub for distribution to EU markets. The same routes are increasingly used for the transport of cocaine through the EU.

Synthetic drugs produced in the Netherlands and Belgium are trafficked to North America, Israel and Australia as well as to the Middle East and Asian markets, often in exchange for heroin. Precursors for their production are procured from China and the Russian Federation. Meanwhile, indoor cultivation of cannabis by Vietnamese and other groups is increasing, with an impact on the availability of cannabis products in the EU, which has a market of 22.5 million users. This in turn encourages illegal migration and trafficking in human beings (THB): illegal Vietnamese and Chinese immigrants and Bulgarian trafficking victims required to pay for their transportation and upkeep are often put to work tending cannabis plantations.

Despite certain attempts to procure drugs directly from their origin, the role of the North West criminal hub in the distribution of heroin, cocaine, synthetic drugs and cannabis products remains central.

BORDER SECURITY

Growing uncertainty in parts of the world, stemming from a decline in the security and economic situations of third countries, particularly those in Africa, the Middle-East and the Caucasus, have increased the pressure for illegal migration to the EU. This has led to a diversification in modus operandi and transportation routes, as explained in Section 3. In particular, organized crime groups are seeking to take advantage of vulnerabilities at the EU external borders along the Eastern Mediterranean route. These include difficulties in returns operations, simple administrative requests to leave the territory once detected, and over-crowded detection centers preventing effective implementation of legal detention time.

Difficulties in maintaining effective border security conditions contribute to these problems. Organized crime exploits the transport sector, infiltrating or using their own import-export and transport companies to traffic illicit commodities. The requirement for customs control measures taken in the country of departure to be accepted by transit and destination countries, assisted in some cases by corruption;

likewise, it enables illicit commodities to cross national borders unchecked. With regard specifically to crimes against persons and terrorism, the rise of low cost airlines has become a key enabler in recent years. Meanwhile, in contrast to the low number of detections of clandestine entries at border control points, Member States have reported a large number of inland detections of illegal migrants hiding in vehicles. This may be an indication of inadequate vehicle checks at the EU external borders.

Counterfeit, forged documents and fraudulently obtained documents, are indispensable facilitators for illegal migration, trafficking in human beings (THB), stolen vehicle trafficking, identity fraud, and terrorism. Counterfeit birth certificates are commonly used to obtain legitimate documentation, letters of invitation to academic or sporting events to obtain temporary visas, and forged bills of lading to conceal the transnational movement of illicit commodities. Fraudulent claims of those nationalities granted asylum by Member States are made in order to benefit from EU residency. Forged documents, particularly EU passports and ID cards, which are used to cross the external border illegally, are subsequently used in association with other criminal activities or types of fraud, such as the abuse of social benefits. With biometric security features becoming more common in travel documents, there is growing abuse of documentation by impostors. Unconfirmed identities undermine border controls and are a threat to the internal security of the EU, particularly if migrants are able to conceal a criminal or terrorist past. There is also an increasing risk of the use of regular, legal entry channels to enter the EU, with intent to overstay. Overstaying is probably the most common path for illegal migration to the EU. FRONTEX assesses that over 350,000 illegal stays in the EU were detected in 2009.

Operations have always been at the heart of FRONTEX's activities. Coordinating Member States' joint cooperation at Europe's external borders and detecting the criminal networks behind the smuggling and trafficking of human beings, is the essence of what FRONTEX does. From Joint Operation Illegal Laborers, launched in the first year of the agency's existence and targeting over-stayers, to current joint operations like "Poseidon" on the Greek-Turkish border, land, sea and air operations are the driver behind FRONTEX's core mission: To implement the EU concept of Integrated Border Management (IBM). Besides planning and implementing joint operations, the operations division is also tasked with providing a situational picture of migration flow at the EU's external borders and with creating analytical products and a network for Member States and other stakeholders.

Joint operations coordinated by FRONTEX represent Europe's biggest search and rescue operation. The agency's first joint sea operation "Hera" deterring irregular migrants from embarking on a perilous voyage from West Africa (Senegal, Mauritania and Cape Verde) to the Canary Islands across the high seas in unseaworthy small boats without doubt prevented countless deaths. "Hera I" and "Hera II" effectively closed the West African route for irregular migration (from a peak of almost 32,000 arrivals a year). But smuggling and trafficking networks are not easily deterred. Organized crime is profit-motivated and the methods employed become ever more complex and sophisticated.

Since the inception of "Hera", the people-smuggling route has shifted systematically through the Central Mediterranean to the Eastern Mediterranean route, with the Greek-Turkish border representing the focal point of facilitators' actions by mid-2010. Here, FRONTEX has been active with its biggest joint operation to date "Poseidon" as well as with its first ever deployment of Rapid Border Intervention Teams (RABITs). Though coordination of joint operations is at the heart of FRON-

TEX's mandate, the amount of planning involved and the expense incurred mean that the search for systemic solutions in the area of border management will always be the Agency's chief goal. This means seeking mechanisms that would enhance the cooperation of the Member States and thus reduce the necessity of short-term actions. A clear example of this approach was a 2007 feasibility study on reinforcing monitoring and surveillance of the EU's southern maritime border, namely in the Mediterranean Sea (the MEDSEA study), carried out by FRONTEX, which led to the creation of the European Patrol Network (EPN). EPNs bring together the day-to-day surveillance activities of neighboring Member States with a view to minimizing the duplication of efforts and maximizing the efficient use of assets and sharing of intelligence gathered. These networks have become long-term features of a unified approach to border security and play an important role in all the operational division's activities, from risk assessment to the implementation of operations and beyond.

Another important feature of FRONTEX's activities are Focal Points: Permanent platforms for the professional assistance, experience exchange and training at regional hot spots or along illegal immigration routes or major international routes at the external borders of the Member States/Schengen Associated Countries (MS/SAC). Guest officers and assets from other MSs/SACs deployed at the Focal Points perform border checks and border surveillance together with officers of the host MS/SAC. Though originally intended for MSs and SACs now also involve guest officers from third countries. As with all other operational activities, Focal Points are based on risk analysis, and the details of the operation (location, duration, number of personnel and profile of skills/experience required as well as any necessary technical equipment) are determined by the specific needs identified in each case by the Risk Analysis Unit (RAU).

Whether at a land, sea or air border, all joint operations are based on risk analysis. Because each joint operation addresses the specific needs of an external border area identified as a potential weak point, each operation is uniquely tailored to the circumstances identified by FRONTEX's Risk Analysis Unit. Every year RAU produces an Annual Risk Assessment (ARA), which presents a full picture of the irregular migration picture across the European Union and includes specific conclusions and recommendations. Based on these recommendations, the Joint Operations Unit may start the process of formulating an Operational Plan. The first stage of this is a Tactical Focused Assessment, prepared by RAU, which paints a much more detailed picture of the situation at a specific point at the external border. Once identified as a potential joint operation, the unit then approached the potential host country (which will always lead any FRONTEX coordinated operation) with a proposal. Once accepted in principle, the initiative is then presented to other potential EU partners for participation, after which a document is prepared that is binding at EU level and which details the cooperation required, including technical equipment, specialist personnel and other operational details.

Over the years, as FRONTEX has achieved ever increasing credibility and a reputation for delivering results, and as Member States have come to appreciate the advantages of sharing the burden and benefits of dealing with irregular migration, this process of attracting and achieving commitment has become progressively easier. A good example of this was the response to JO RABIT 2010 at the Greek-Turkish land border. The anticipated first deployment of Rapid Border Intervention Teams (RABITs) is a milestone in the operational history of FRONTEX. Having been established in 2007 as part of the Agency's founding mandate, RABITs represent one of the cornerstones of FRONTEX's role as a supporting agency of the Commission

and the EU's Member States and is at the forefront of the value it adds to management of the EU's external borders. There have to date been six RABIT exercises to practice and refine the deployment mechanism from activation, through planning and coordination, to completion and evaluation of results. With the first "real life" deployment of border control experts, to the Greek-Turkish land border, Member States committed to participating in RABIT deployments have responded positively and have made available both human and technical resources for use in the support of Greece's border authorities. A total of 175 guest officers were deployed from 24 Member States and Schengen-Associated Countries. All FRONTEX operations were based on detailed reports from the Agency's Risk Analysis Unit, with specific provisions customized to the specific requirements of the operational area concerned. Detailed provisions of the Operational Plan remain restricted, but some elements could be made public. Among these were the RABIT deployment objectives, a broad definition of the operational area, officer profiles and technical equipment to be deployed and the operation's assumed timescale. The prime objective of RABIT 2010 Deployment was to assist Greek border control authorities in securing the land border with Turkey from a heavy influx of irregular migration. This entailed the deployment of 175 specialist border control personnel from 24 European countries for 24-hour joint surveillance of the land border in the area between Orestiada and Alexandroupolis, as well as additional officers at the Border Crossing Point (BCP) at Kipi. In addition, guest officers were also stationed at Athens airport and the operation was supported by FRONTEX's Return Coordination Office in Athens with a view to enhancing Greece's capacity to return irregular migrants found to be staying illegally on EU territory. In addition to surveillance and border control, FRONTEX provided interviewers to assist in the screening of apprehended migrants to ascertain their nationality and identity, as well as debriefers to gather evidence on the involvement of people smuggling networks and trafficking rings as well as other relevant intelligence on cross-border criminal activities. A significant deterrent effect was expected in terms of the activities of organized crime rings and other facilitators of illegal border crossings in the area. Observance of fundamental rights and respect for human dignity were central components of all FRONTEX operations. At all stages of the operation the highest standards of ethical conduct and professionalism were expected from all participating officers. "Zero tolerance" policy to infringement of fundamental rights was applied throughout the operation, particularly with regard to people in need of international protection.

RABIT 2010 Deployment was implemented in the areas of the Police Directorate of Orestiada, specifically at the Border Control Units (BCUs) at Didymoteicho, Orestiada and Filakio and the Police Directorate of Alexandroupolis, specifically at the BCUs at Ferres, Soufli and Tychero and the Kipi BCP. There were also guest officers deployed at Athens airport and at the Bulgarian village of Kapitan Andreevo, for reporting purposes. FRONTEX's Returns Coordination Office in Athens also assisted in the building of capacity in return flight operations. The RABIT 2010 deployment was expected to last for an estimated duration of up to eight weeks.

All participating officers were drawn from FRONTEX's Rapid Pool with support also to be provided by interviewers and debriefers with a view to identifying apprehended migrants, collecting evidence on cross-border crime and assisting with the return process of undocumented persons. Among the specialized skills represented in the Rapid Pool were: false document experts, stolen vehicle experts, dog handlers, experts in clandestine entry and first- and second-line border control checks. All RABIT officers received mandatory training in human rights as part of their RABIT training by FRONTEX. In addition, special briefings in fundamental human rights were delivered on the spot as a provision of RABIT 2010 Deployment.

FRONTEX maintained a Centralized Record of Available Technical Equipment (CRATE) for use in both Joint Operations and RABIT deployment. The technical assets made available by Member States from CRATE for RABIT 2010 Deployment were:

- 1 Helicopter (Romania)
- 1 Bus (Romania)
- 5 Minibuses (1 Romania, 2 Austria, 1 Bulgaria, 1 Hungary)
- 19 Patrol cars (7 Romania, 3 Austria, 2 Slovakia, 7 Germany)
- 9 Thermo Vision Vans (2 Austria, 2 Bulgaria, 4 Germany, 1 Hungary)
- 3 Schengen buses (1 Austria, 2 Hungary)
- 3 office units from Denmark — 1 unit to be deployed in Orestiada, 2 in Fylakio

As an integral part of the FRONTEX mission, the establishment of operational cooperation with third countries is valued as an indispensable tool for effective management of the global fight against illegal migration and cross-border crime. It promotes and contributes to the implementation of the EU integrated border management concept. FRONTEX aims at intensifying the existing bilateral cooperation with the competent authorities of neighboring States as well as countries of origin and transit of illegal migration to the EU, based on the findings of FRONTEX risk analyses. In this context FRONTEX is building up and maintaining, at the operational level, a reliable, accessible, and effective network of partnership with the competent authorities of countries situated outside of the EU, which are in effect the law enforcement authorities with operational responsibility for the border control as well as with regional border control cooperation structures. Intensifying and expanding these ties will also fully take into account the EU external relations policy priorities, and in particular the Global Approach to Migration, the European Pact on Immigration and Asylum as well as the Stockholm Programme. Operational cooperation is taken forward in the areas of information exchange, risk analysis, training, research & development, joint operations and pilot projects. FRONTEX will continue to take forward bilateral cooperation based on concluded working arrangements as its preferred option. It takes into account the mutual interests of the parties and such coordinated operational cooperation is exercised and developed gradually and is always targeted at a sustainable partnership where each partner country is considered individually. A good example of this gradual development and sustainable partnership can be seen in the establishment of a Western Balkans Risk Analysis Network where the analysts of FRONTEX and the six countries concerned are working together and using the same analytical methodology. Progress has also been made towards the establishment of a similar network involving neighboring eastern countries. In addition to an increasing involvement of third country partners in FRONTEX coordinated joint operations, the area of training has shown how these partner countries are taking EU training standards progressively on board.

A good example of this is the FRONTEX-developed Common Core Curriculum for basic border guard training (CCC). Should they choose, the relevant authorities of partner countries can then adopt into their own national strategies the FRONTEX training standards and/or make use of existing training tools. Such collaboration leads to increased harmony between EU and non-EU systems and structures and promotes interoperability, which is in the common interests of all the authorities concerned. Colleagues from partner countries are benefiting from specialized training for border guards following the expertise gathered by EU Member States specialists and also actively participating in the updating process and/or the joint development of new training tools.

The other main option for the establishment of operational cooperation with third countries, referred to in the relevant Article of the FRONTEX founding Regulation, is by the facilitation of existing operational cooperation between an EU Member State and a third country. This latter option has been employed to good effect in recent years, in particular in respect of the FRONTEX Joint Operation Hera which has focused on illegal migration flows emanating from West Africa to the Canary Islands. Even though FRONTEX has yet to conclude bilateral working arrangements with the competent authorities of Mauritania and Senegal, both countries have been involved in Joint Operation Hera as a result of bilateral agreements in place with Spain, and their contribution has yielded positive results in terms of reducing the numbers of migrants undertaking the extremely dangerous journeys in small unseaworthy boats heading towards the Canary Islands.

The cooperation with EU candidate and potential EU candidate countries will always deserve special attention, especially in order to facilitate the efforts of these countries in aligning their border management structures with EU standards. Establishing and maintaining operational/technical cooperation with neighboring third countries as well as third countries bordering the Mediterranean remains one of the highest priorities given the continuing pressures of the current migratory flows at the southern borders of the EU and in particular the humanitarian aspect associated with maritime illegal migration. Mainly based on risk analysis, FRONTEX will also gradually seek to engage with other third countries of origin or transit.

As at February 2011, FRONTEX had concluded working arrangements with the competent authorities of 14 third countries: the Russian Federation, Ukraine, Croatia, Moldova, Georgia, the Former Yugoslav Republic of Macedonia (FYROM), Serbia, Albania, Bosnia and Herzegovina, the United States, Montenegro, Belarus, Canada and Cape Verde as well as with the CIS Border Troop Commanders Council and the MARRI Regional Centre in the Western Balkans. In addition, following mandates to enter into negotiations from its Management Board, the Agency is in various stages of negotiations with the competent authorities of further 8 third countries: Turkey, Libya, Morocco, Senegal, Mauritania, Egypt, Brazil, and Nigeria. Based on a working arrangement, the cooperation may be further structured so that both sides commit resources to specific planned activities over a given timeframe. At the same time and complementing the direct cooperation with the third country partners, FRONTEX is providing its advice and actively participating in other EU-led initiatives involving cooperation on border related activities with third countries. Examples of this form of cooperation can be seen in EU initiatives stemming from the Global Approach to Migration, for example the Mobility Partnerships, the Eastern Partnership Initiative or the Building Migration Partnerships.

Finally the contacts and cooperation with EU missions and regional initiatives are also important elements in the external relations strategy of FRONTEX. Fluent regular contacts and cooperation are established with EUBAM in Moldova and Ukraine, or the EUSR Border Support Team in Georgia, as well as with the BSRBCC in the Baltic, the BSCGF in the Black Sea and others, in order to ensure coordination, develop synergies and improve the cooperation with the participating countries.

INTERNAL IMPACT

Social and Economic Vulnerabilities

The impact of organized crime activity on society channeled to the EU from these external sources is significant. There are now approximately 4 million cocaine users and up to 1.5 million problematic opioid users in the EU. Exposure to drugs-related problems in particular has been identified as a major source of fear of street crime, with about 30% of EU citizens feeling unsafe on the street after dark. Evidently organized crime activity has an impact on public perceptions of crime in the EU.

The profits derived from organized crime are substantial: EU sales of illicit drugs, for example, generate an estimated €100 billion per year, while a similar value is attached to the estimated value of organized VAT fraud in the EU. In the case of the latter, and in other associated frauds, this is revenue denied to governments and has a direct impact on the tax-payer. The ease with which organized crime and terrorist groups invest criminal proceeds enables them to fund further criminal activity and to infiltrate legitimate businesses. The financing of terrorist groups is also supplemented considerably by contributions from residents in the EU and funds misappropriated from NGOs, including those active in the EU.

Ultimately, criminal infiltration harms legitimate competition and distorts the economy. Moreover, the visible wealth of organized crime groups has a detrimental impact on traditional values in society, with the promise of an affluent lifestyle attracting younger generations to criminality. Rising unemployment rates as a result of the current economic crisis threaten to increase the number of individuals alienated from mainstream society and hinder efforts to integrate immigrants and marginal groups. In this event, a growing number of unemployed and frustrated youth will be vulnerable to recruitment by street gangs, organized crime groups or terrorist groups.

There is also a risk that the economic crisis has made legitimate businesses more vulnerable to compromise – in turn resulting in higher levels of infiltration by organized crime. In addition, the desire of private individuals to maintain their lifestyles despite reduced purchasing power is likely to have increased the demand for counterfeit, illicit or smuggled products. Given the observed tendency of criminal groups to seize opportunities to provide solutions, there is now a risk of greater organized crime control over communities in the EU.

Proceeds of Crime

Money laundering is an essential activity for concealing the proceeds of crime and funding terrorist and organized crime activity. Legitimate businesses in the EU are exploited for money laundering purposes. Some non-EU groups choose to invest in the EU not only to evade detection in their own countries, but also to benefit from the region's perceived greater economic stability and more favorable terms. These investments are often high value physical assets such as real estate and commercial property.

EU-based organized crime groups also make use of off-shore banking, exploiting regimes which offer greater levels of anonymity, and actively launder proceeds in key financial and business centers outside the EU, such as Dubai. When transferring funds, extensive use is made not only of traditional banking but also of less traceable alternative remittance systems such as “MoneyGram” and “Western

Union”, and “hawalah” banking. A key development in recent years has been the widespread availability of online banking, gambling and virtual payment systems, which enable organized crime and terrorist groups to place and transfer their funds instantly and internationally, significantly increasing the speed and mobility of their activity.

Use of Violence and Corruption

Organized crime groups increasingly use systematic violence and corruption to perpetrate crime and enforce their authority over territory. Intimidation and frequent conflict with rival groups aggravate the harm to communities and hinder both law enforcement and the judicial process. Italian mafia groups, for example, often work with criminal groups from other countries, and are still active in many areas and maintain a strong presence in many communities. They also remain very resourceful, with the annual revenue of Italian mafia groups in 2009 estimated to be €135 billion, more than the combined GDP of six EU Member States. The expansion of Outlaw Motorcycle Gangs (OMCGs) into South East Europe and escalating clashes between right-wing and left-wing extremist groups increase the likelihood of communities in the EU being exposed to systematic violence. Albanian-speaking organized crime groups, meanwhile, use violence to ensure the compliance of victims of THB for sexual exploitation. Within Member States, street gangs engage in public clashes and use firearms in violent offences such as car jacking and organized robbery.

Terrorist activity by Islamist, separatist, and other groups based within and outside the EU remains a serious threat to Member States. Islamist terrorists have legitimized attacks against EU nationals by reference to Western policies towards Muslims and military deployments in Afghanistan and, formerly, Iraq. Member States with military presence in these areas therefore face a greater risk of exposure to Islamist terrorist violence. Separatist violence, especially in Spain (ETA) and in Northern Ireland, and activity linked to extreme Left Wing, extreme Right Wing and Animal Rights extremism, is a persistent threat in some communities. Government officials and institutions in particular continue to be targeted by terrorist and extremist groups.

CYBER THREATS

Facilitating Organized Crime and Terrorism

As a communication tool, information source, marketplace, recruiting ground, and financial service the Internet facilitates all types of offline organized criminality, including illicit drug extraction, synthesis and trafficking, trafficking in human beings (THB) for sexual exploitation, illegal migration, Mass Marketing Fraud (MMF), MTIC (VAT) fraud, Euro counterfeiting and the trade in prohibited firearms. In particular, the perceived anonymity afforded by communications technologies such as email, instant messaging and Internet telephony (VoIP) has led to them being used increasingly by organized crime and terrorist groups as a countermeasure to law enforcement detection and surveillance.

Terrorist groups in particular use the Internet to research potential targets and distribute propaganda relating to their activities. Material on Islamist terrorist websites is increasingly translated into EU languages, indicating both native speaker collusion and that these groups are directing their propaganda at audiences in Member States. In addition, the Internet plays a key role in the recruitment and

radicalization in the EU, functions as a virtual training camp for terrorism, and has enabled previously localized activities by Right Wing and Animal Rights extremist groups to spread to other parts of the EU.

Digital Content Crimes

The widespread adoption of the Internet technology in the EU has prompted an unprecedented expansion in the markets for intellectual property theft, especially for copyrighted audio-visual material and software, and child abuse images. Victims of child abuse are exposed to greatly increased levels of harm as a result of the global and continued circulation on the Internet of visual records of their abuse. There are now an estimated 1,500 child abuse image websites available on the Internet.

The Digital Underground Economy

There is now a sophisticated and self-sufficient digital underground economy, in which data are the illicit commodity. Stolen personal and financial data – used, for example, to gain access to existing bank accounts and credit cards, or to fraudulently establish new lines of credit – has a monetary value. This drives a range of new criminal activities, such as phishing, pharming, malware distribution and the hacking of corporate databases, and is supported by a fully fledged infrastructure of malicious code writers, specialist web hosts and individuals able to lease networks of many thousands of compromised computers to carry out automated attacks. Whilst the value of the cybercriminal economy as a whole is not yet known, the most recent estimate of global corporate losses alone stands at approximately €750 billion per year.

The scale of the problem in itself is a threat to law enforcement response capability – with more than 150,000 viruses and other types of malicious code in circulation, and 148,000 computers compromised per day. Cyber crime increases in line with the Internet adoption: mobile Internet access therefore introduces new levels of vulnerability, with potential victims online for longer periods of time; the introduction of broadband Internet technology to developing countries poses a potential external threat to the EU; and the increasing trend for outsourcing data management to third parties presents imminent risks to information security and data protection. This presents an urgent need for authorities in the EU to optimize measures to counter cyber criminality in active partnership with the private sector.

CONCLUSIONS

The internal security of the EU faces a substantial threat from organized crime, terrorism, and illegal migration. Each of these carries unique challenges, with evidence of the threat growing in scale and complexity, particularly in regard to crimes committed via the Internet. But this Report also reveals significant common features: the transnational nature of modern crime and terrorism, the mobility of criminal and terrorist groups, the use of well established routes connecting external feeders with internal criminal hubs, and the exploitation both of poorly integrated communities and of key facilitators such as document forgery, the transport sector, and technology.

These threats demand a concerted EU response. National-only initiatives are thwarted by the ease with which criminal and terrorist groups exploit open borders and other aspects of a modern, global society. Frontiers act as valves to facilitate the illicit transfer of goods, people and money, whilst often hindering an effective law enforcement and judicial response. The scale of organized crime in the EU is considerable, its proceeds and assets enabling organized crime and terrorist groups to engage in diverse illegal activities in multiple locations. Moreover, the same key routes are used for multiple, interdependent criminal activities. This criminal coherence in turn requires a more coherent approach to security.

An effective EU response, under the terms of the new Internal Security Strategy, should address the problem in a holistic way, recognizing its transnational features and its growing complexity. A common integrated architecture is required, promoting joint operations between Member States and EU agencies against the highest priority threats, including terrorism, drugs trafficking, illegal migration, and trafficking in human beings. This architecture would also reinforce regional efforts to arrest the development of key criminal hubs in and around the EU, and offer a stronger basis with which to combat the transnational phenomena of cyber crime and financial crime.

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THE PRINCIPLES OF LEGAL STATE AND THE ROLE OF POLICE IN FIGHTING AGAINST ORGANIZED CRIME

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Abstract: When speaking of legal state, it would be incomplete and unfinished if the centre of our attention would not be put on the term “rule of law.” The essence of the rule of law is found in the term “government limited by law,” which was most remarkable in terms of protecting the individual from any kind of self-government.

Through the term legal certainty which is closely related to the term legalism, the legal state and rule of law are associated with the civil society, which needs a legal measure, predictability and accountability, which will guarantee a legal certainty of legal entities in relations. In this context, a legal state exists when the overall power in the state is organized according to principles of law and when there is sufficient guarantee that the government will perform in accordance with these principles, because the principle that allows everything, except what is prohibited by law, is not just necessary limitation of freedom, at the same time a guarantee of freedom, for a normal life and work of citizens or for the respect and promotion of the established rules of conduct. In that direction, human relations towards the state and the law, and the state relations and the right to mankind, create prerequisites for the successful functioning of social life, the rule of law, protection of YRM, providing suitable conditions for life and work, full implementation and effective protection of freedoms and rights of citizens, but also eliminate inequality, injustice the economic inferiority and others, or in other words a full guarantee of the right which will exclude the improper.

State Police as a legal institution in the country should take care to maintain order, peace and security, which includes responsibility for achieving the security of all citizens to live in peace and move freely wherever they like without fear of jeopardizing their persons, property and goods. Crime and other deviant occurrences mean breaking the principle of legality which is what the legal state is based on. In view that the basic functions of the police are to enforce laws and to establish order, peace and security within the social group and ensuring the functioning of the system of government, the police are expected to detect crimes and to prevent execution of other similar actions. This is the starting point from which the relationship is determined between the police and legal establishment, where the police is primarily tool for realization and establishment of state norms that determine the life of people in a society, as well as its action separately.

Police have right and duty, revealing crimes and other deviant behaviour, to detect and prevent their further activities of the perpetrators, and to assist (to a limited extent) in the process of determining the sanction, while maintaining order and security, as well as building an appropriate tactic to further their treatment.

New forms of criminality and deviant behaviours are more characterized by their sophisticated, contemporary forms of execution, using modern technical facilities, internationalization, etc., features that hinder the manner of

their discovery and proof. Classical methods of operation, that are applied by the police and other bodies of criminal prosecution are not sufficient for achieving efficient revealing policy, so new measures and modern powers are proposed, according to the new technical developments and new emergent modern forms of criminality, with one and only aim for the police to keep up with the modern technical facilities, which are available to the perpetrators of crimes, with current developments and modern methods that are current and attractive in the criminal environment, as well as modern methods of detecting and proving criminal acts and their performers who are used and produce results in modern criminal police in the world.

In that context it is necessary to highlight the problem of the police authorizations on the one hand and respect for human rights and liberties guaranteed by national and international documents on the other hand. Modern methods and procedures which are inevitable for modern police work in order to prevent and fight against modern forms of crime, impose the need for ongoing and constantly changing and amending the legislation, because the piece of evidence in the criminal procedure can be only the one which is obtained with respect to basic procedural forms and guarantees the rights of citizens by the competent authority.

On the one hand, the police are not and should not be expected to be autonomous mechanism, completely independent of politics and the public, but as a state mechanism it must act according to the principles of the profession to be legally justified as its activities. On the other hand, police activity is insufficient to reduce crime. The need to establish cooperation with other authorities and institutions of state government and nongovernmental sector including the public exceeds the limits that were set long ago, in order that the police are the only body responsible for fighting against crime and preserving peace and security.

Key words: legal state, rule of law, organized crime, democratic institutions.

INTRODUCTION

The first of the four principles is that government should be under law, that the law should apply to and be observed by government and its agencies, those given power in the community, just as it applies to the ordinary citizens; the second is that those who play their part in administering the law, judges and solicitors and barristers alike, should be independent and uninfluenced by government in their respective role so as to ensure that the rule of law is and remains a working reality and not a mere catch phrase; the third is closely associated with the second, it is that there should be ready access to the courts of law for those who seek legal remedy and relief; the fourth is that the law of the land, which rules us, should be certain, general and equal in its operation.

Still, the adoption and practice of basic principles of the rule of law are clear barometers for any democracy. Apparent contradictions in principle or practice do not negate the rule of law's overall importance. The awful consequences of the breakdown of the rule of law in dictatorships, as recounted above, make its importance self-evident. In democratic societies, deviations from the principles of the rule of law, such as slavery and systematic discrimination in the United States, or the unequal treatment of women historically, serve as powerful arguments for the fulfilment of those principles.

Absent any of these features, the rule of law may arguably break down. A constitution without legitimacy will not be respected by the people, and thus its principles cannot be upheld. If there is no constitutional check on the misuse of power, a corrupt judiciary or police force can manipulate the laws to their advantage, incompetent lawyers cannot adequately represent their clients, and so on.

LEGAL STATE AND RULE OF LAW

The first of the four principles is that government should be under law, that the law should apply to and be observed by the government and its agencies, those given power in the community, just as it applies to the ordinary citizen; the second is that those who play their part in administering the law, judges and solicitors and barristers alike, should be independent and uninfluenced by government in their respective role so as to ensure that the rule of law is and remains a working reality and not a mere catch phrase; the third is closely associated with the second, it is that there should be ready access to the courts of law for those who seek legal remedy and relief; the fourth is that the law of the land, which rules us, should be certain, general and equal in its operation.

How strong is the judicial system? Independence and effectiveness of the judiciary, equality of all citizens before the law, effective possibility to undertake legal action against state decisions, enforcement of legal decisions.

Does unlawful state violence exist? Participation of security forces in illegal activities¹, effective prosecution of human rights abuses by security forces, existence of a minimal human rights framework for their operation, prison conditions.

Does civilian power control security forces? Influence of security forces over political decision-making, role of the Parliament in debating/checking their use, existence of open debate and media/academic scrutiny on the security sector.

Does organized crime undermine the country's stability? Control of a significant part of the country/economy by criminal networks², existence of private armies or armed paramilitary groups acting with impunity, proper re-integration of former combatants into social life.

Strengthening the rule of law is also one of the four priority areas for civilian crisis management agreed by the European Council in June 2000³, although "the size, composition and precise functions of each EU civilian crisis management 'package' deployment will vary according to the specific needs"⁴. The target set is to have 200 EU experts in the rule of law available for missions, developing a common approach to training⁵. Operational activity has so far concentrated on police missions, including the EU Police Mission in Bosnia-Herzegovina⁶ and the EU Police Mission in Macedonia⁷ which started on 15 December 2003, following on from Operation Concordia. The Presidency Report on the ESDP prepared in December 2003, emphasizes the need for an increase in operational capability in civilian crisis

1 road blocks, extortion, others

2 Drugs, natural resources, human trafficking

3 European Council Conclusions, Feira, June 2000, Report on strengthening the ESDP, Annex I, Appendix 3.

4 Action Plan for Civilian Aspects of ESDP, adopted by the European Council 17-18 June 2004, p.3.

5 A training policy was approved by the Council on 17 November 2003. See "Training Civilian Experts for International Peace Missions – EC Project on Training for Civilian Aspects of Crisis Management", EC 2003. The training falls under the EIDHR budget head. Rule of law training includes the administration of justice, training of judges, prosecutors and lawyers, and monitoring of the legal system.

6 EUPM

7 EUPOL PROXIMA

management, including capacity to conduct monitoring missions⁸. The Action Plan for Civilian Aspects of ESDP, adopted by the European Council in June 2004, envisages the development of closer links between civilian crisis management activities and the Justice and Home Affairs pillar, especially in policing, and also in action against organized crime.

The rule of law refers to the regulation of the relationship between the state and individuals by pre-established and knowable laws. The state, no less than the individuals it governs, must be subject to and obey the law. The state's obligation to obey the law is central to the very existence of the rule of law. Without this obligation, there would be no enforceable limit on the state's power over individuals.

"The law in our society is supreme. No one - no politician - no government - no judge - no union - no citizen is above the law. We are all subject to the law. We do not get to pick and choose the laws we will observe and obey. Each of us must accept the rule of all laws, even if we have to hold our noses in complying with some of them."

"The rule of law requires that decisions⁹ be made by a court which is independent of any influence or pressure by the executive and legislative branches of government."

"First, that the rule of law provides that the law is supreme over the acts of both government and private persons. There is, in short, one law for all. Second, the rule of law requires the creation and maintenance of an actual order of positive laws which preserves and embodies the more general principle of normative order." A third aspect of the rule of law is that "the exercise of all public power must find its ultimate source in a legal rule. Put another way, the relationship between the state and the individual must be regulated by law."¹⁰

THE ESSENTIAL CHARACTERISTICS OF RULE OF LAW

As essential characteristics of the rule of law the following is mentioned: the supremacy of law, which means that all persons are subject to law; a concept of justice which emphasizes interpersonal adjudication, law based on standards and the importance of procedures; restrictions on the exercise of discretionary power; the doctrine of judicial precedent; the common law methodology; legislation should be prospective and not retrospective; an independent judiciary; the exercise by Parliament of the legislative power and restrictions on exercise of legislative power by the executive; an underlying moral basis for all law; adherence to the rule of law is what guides us in our everyday social and legal interactions, prevents anarchy, and hold us together as a people; all are equal in the eyes of the law¹¹; equality in the law as well as before the law¹²; that people should be ruled by the law and obey it; the law should be such that people will be able to be guided by it; constitutionalism and the rule of law are cornerstones of the Constitution and reflect our country's commitment to an orderly and civil society in which all are bound by the enduring rules, principles, and values of our Constitution as the supreme source of law and authority, etc.

Human rights cannot be guaranteed in letter and spirit if rule of law is nonexistent in any country. It is rule of law that ensures non-violability of human rights.

⁸ ESDP Presidency Report, 9 December 2003, 15814/03. See also Action Plan for Civilian Aspects of ESDP, adopted by the European Council 17-18 June 2004.

⁹ Judicial

¹⁰ Reference re Secession of Quebec, [1998] 2 S.C.R. 217

¹¹ References re French Language

¹² References re French Language

It has been widely experienced and acknowledged all around the world that death of rule of law has been resulting in human rights violation because such situations give free hands to violators. Therefore, in order to ensure provision and practice of human rights, a nexus of rule of human rights and rule law should be essentially established.

The rule of law is a cornerstone of contemporary constitutional democracy as was underscored by its role in cementing the recent transitions from authoritarian or totalitarian regimes to constitutional democracy in the world.

The proper role and scope of the rule of law within constitutionalism is itself ambiguous inasmuch as the rule of law may spill over to the other two essential features of constitutionalism, rather than figuring exclusively as one of the three. Indeed, a written constitution may have the force of law, and thus its provisions limiting the powers of government and those devoted to the protection of fundamental rights may become part and parcel of the rule of law regime instituted by the relevant constitutional regime. Moreover, the rule of law may encompass the entire field coming within the sweep of constitutionalism or it may only play a limited role in the maintenance of a prescribed constitutional order.

The rule of law in the narrow sense may be preferable to the rule of men, but it is insufficient for purposes of satisfying the minimum requirements of a legitimate constitutional democracy. Indeed, the rule of law in the narrow sense need not be just or even democratic as it is entirely compatible with legal regimes predicated on slavery, apartheid, or countless other oppressive and dehumanizing practices and policies grounded in law, shaped by law, and carried out through law.¹³ Accordingly, for the rule of law to measure up to the requirements of a legitimate constitutional democracy, it must be more than the rule of law in the narrow sense.

To become legitimate, the rule of law would seem to need democratic accountability, procedural fairness, and even perhaps substantive grounding. However, satisfying these requirements may be necessary without being sufficient to produce legitimacy. Democratic laws may be oppressive to minorities, procedural fairness may be consistent with a significant measure of substantive inequity, and the substantive values vindicated by any particular instantiation of the rule of law may be rejected by a sizeable portion of the policy, particularly in pluralist settings marked by clashing conceptions of the good.

Rule of law is a central focus and critical underpinning of post-conflict reconstruction. Though no two conflicts are identical, many situations share a number of common attributes with regard to the breakdown of the rule of law and the impact it has on society. Among the “public goods” that all nations are expected to provide are public security, justice and human rights, social services and economic well being, and processes for participation of the governed. The restoration of the rule of law addresses all of these key public goods and brings under a legal framework the structures of government that may have failed during the period of conflict and its immediate aftermath.¹⁴

At its most basic the rule of law refers to a State where power is exercised according to, and accountable to, the law. The equivalent French expression “*l’Etat de*

¹³ Dred Scott furnishes a particularly apt illustration of this point as the Supreme Court managed to enshrine a legally grounded property right of a slave owner in his slave as a constitutional right in the course of resolving a conflict between state law and federal law. *Dred Scott v. Sanford*, 60 U.S. 393, 452 (1857) (federal law providing for emancipation of slave brought by his master to federal territory held unconstitutional as deprivation of master’s state-created property right in his slave without the “due process of law” guaranteed by the Fifth Amendment).

¹⁴ In situations where rule of law did not exist prior to the conflict, or where the justice system was not functional, USAID’s goal would be to establish rule of law rather than to re-establish the status quo ante.

droit" or German "*Rechtsstaat*" emphasize the link between law and State¹⁵ within a constitutional system of government. According to Dicey the rule of law embodies three concepts: "the absolute predominance of regular law, so that the government has no arbitrary authority over the citizen; the equal subjection of all¹⁶ to the ordinary law administered by the ordinary courts; and the fact that the citizen's personal freedoms are formulated and protected by the ordinary law rather than by abstract constitutional declarations."¹⁷ A recent EU instrument reflects this approach: "the rule of law, which permits citizens to defend their rights and which implies a legislative and judicial power giving full effect to human rights and fundamental freedoms and a fair, accessible and independent judicial system."¹⁸ In this sense the rule of law is linked to the values of democratic government and human rights guarantees and indeed in EU policy "democracy and the rule of law" are often combined and not clearly differentiated. In its political dimension, the rule of law emphasizes due process and equality before the law, but it is not limited to the judiciary and court system. It signifies the possession by a State of independent constitutional and judicial authorities, properly functioning public administration at local and central government level, a well-qualified, functioning and independent judiciary, accountable law enforcement structure, an adequate, well-trained and disciplined police force and an independent media. In this sense the rule of law will underpin such goals as equality, executive accountability, good governance and anti-corruption measures. But the EU also sees the rule of law as a prerequisite for economic and social development. The existence of a transparent and effective legislative and regulatory framework, as well as of the necessary institutions, is regarded as a prerequisite for both domestic and foreign investment. A functioning legal system means more than an independent judiciary; it implies a legal system which can play its part in formulating and working out the regulatory choices that are at the heart of modern economies. In this sense, the rule of law means not only that these regulatory choices are accountable to legal procedures, but also that legal institutions are a necessary part of the legal foundation for economic transition and development. In its Common Strategy on Russia, for example, the Union states that "the rule of law is a prerequisite for the development of a market economy."

Without effective legal norms, economic reforms will not be able to take root; the development of a substantive legal infrastructure is necessary for a modern market economy. However, the enactment of legislation in such areas as corporate law, accountancy, taxation and anti-trust will not of itself encourage investment¹⁹ in the absence of such principles as the transparency and stability of laws and effective anti-corruption controls. The role played by the rule of law in encouraging foreign investment may be challenged: there is evidence that it is not a determining factor.²⁰ Nevertheless, the rule of law is still seen, by the EU and its Member States among others, as a pre-requisite for economic, social and political development, and as such has become a key element in EC technical and financial assistance and its development cooperation and association agreements.

Governance is a key component of policies and reforms for poverty reduction, democratization and global security. This is why institutional capacity-building,

¹⁵ and State institutions

¹⁶ including officials

¹⁷ Dicey, *An Introduction to the Study of the Law of the Constitution* (London 1885), cited by the Oxford University Press's *Dictionary of Law*.

¹⁸ Council Common Position 98/350/CFSP on human rights, democratic principles the rule of law and good governance in Africa OJ 1998 L 158/1. The Common Position seeks to provide a benchmark for the coordination of EU, EC and Member State policy.

¹⁹ domestic or foreign

²⁰ Corothers, *Promoting the Rule of Law Abroad: The Problem of Knowledge*, Carnegie Endowment for International Peace, Working Papers Rule of Law Series, No 34 January 2003.

particularly in the area of good governance and the rule of law is one of six priority areas for the EC development policy that is being addressed in the framework of the EC programmes in developing countries.²¹

Each of these aspects of the rule of law is bound up with institutional development, most especially the institutions of central and local government but also the institutions of a functioning civil society²². They are also essentially concerned with procedure, and the specific legal virtues of certainty, predictability, stability, clarity and transparency, consistency and coherence. The rule of law is thus closely connected to the objective of good governance as a prerequisite for both political and economic development.

Regulations 975 and 976/99²³ provide a legal base for rule of law promotion initiatives within as well as outside the framework of regional programmes such as TACIS. The initiative was launched in 1994 and falls under the budget heading European Initiative for Democracy and Human Rights.²⁴ The first of these two Regulations applies within the context of the EU's development policy,²⁵ the other to all other contexts (including Eastern Europe).²⁶ Article 3(2) of each Regulation defines the scope of EU operations in the field of democracy and rule of law widely, to include independence of the judiciary and separation of powers generally, a humane prison system, constitutional and legislative reform, promotion of good governance, particularly by supporting administrative accountability, the prevention and combating of corruption, and support for national efforts to separate civilian and military functions. Action includes capacity building support for NGOs and other civil society organizations, as well as election observation and assistance, public administration reform and training of judges and law enforcement agencies.²⁷ In addition to these two general Regulations establishing a legal basis for action, there are the specific regional financial assistance Regulations, such as TACIS,²⁸ MEDA²⁹ and CARDS.³⁰ This

21 Commission Communication on Governance and development, COM (2003)615 final, paragraph 3.

22 "The establishment of efficient, transparent public institutions is one of the prerequisites for confidence and wider adherence to democratic guidelines and the operation of the rule of law. It constitutes the necessary foundation for economic and social development." EU Common Strategy on Russia, 1999/414/CFSP, adopted 4 June 1999, paragraph 1.

23 Council Regulation 975/1999/EC of 29 April 1999 laying down the requirements for the implementation of development cooperation operations which contribute to the general objective of developing and consolidating democracy and the rule of law and to that of respecting human rights and fundamental freedoms OJ 1999 L120/1; Council Regulation 976/1999/EC of 29 April 1999 laying down the requirements for the implementation of Community operations, other than those of development cooperation, which, within the framework of Community cooperation policy, contribute to the general objective of developing and consolidating democracy and the rule of law and to that of respecting human rights and fundamental freedoms in third countries OJ 1999 L120/8.

24 EIDHR

25 Under Article 177(2) EC, development cooperation policy is to "contribute to the general objective of developing and consolidating democracy and the rule of law, and to that of respecting human rights and fundamental freedoms". In the development context, see also Council Common Position 98/350/CFSP on human rights, democratic principles the rule of law and good governance in Africa OJ 1998 L 158/1.

26 Under Article 181A EC, introduced by the Treaty of Nice, which provides for economic, financial and technical cooperation measures with third countries, "Community policy in this area shall contribute to the general objective of developing and consolidating democracy and the rule of law, and to the objective of respecting human rights and fundamental freedoms." See also Commission communication on the European Union's role in promoting human rights and democratisation in third countries, COM(2001)252 final, 8 May 2001.

27 For a recent report, see Annual Report 2003 from the Commission to the Council and the European Parliament on the EC development policy and the implementation of external assistance in 2002, COM(2003)527 final, sect 6.2 on Eastern Europe and Central Asia.

28 Regulation 99/2000 on the provision of assistance to the partner States in Eastern Europe and Central Asia (TACIS) 2000 - 2006, OJ 2000 L 12/1. On the rule of law within the TACIS programme, see further section IV below.

29 Council Regulation 1488/96/EC on financial and technical measures to support the reform of economic and social structures in Mediterranean non-member countries and territories (MEDA) in the framework of the Euro-Med Partnership OJ 1996 L 189/1, amended by Reg. 2698/2000/EC OJ 2000 L 311/1.

30 Council Regulation 2666/2000/EC on assistance for Albania, Bosnia and Herzegovina, Croatia, the Federal Republic of Yugoslavia and the Former Yugoslav Republic of Macedonia (CARDS: Community Assistance for Reconstruction, Democratisation and Stabilisation) OJ 2000 L 306/1. Among the purposes

is not the place for a detailed analysis of measures adopted within these frameworks which impact on rule of law promotion. Instead, we will briefly look at the approach to the rule of law, as evidenced in the EU statements, reports and actions.

In the EU policy towards the Western Balkans, we can see a development which, as we shall see below, can also be found in the rule of law promotion within the ENP. The Council Conclusions of 29 April 1997 includes democracy, human rights and the rule of law among the general conditionality requirements imposed on the Western Balkans. The specific content of the rule of law emphasizes administrative accountability, access to justice and equality before the law: democratic principles; representative government, accountable executive; government and public authorities to act in a manner consistent with the constitution and the law; separation of powers;³¹ free and fair elections at reasonable intervals by secret ballot; rule of law; human rights,³² etc.

This aspect of the rule of law has certainly not disappeared from policy towards the region. The Stabilization and Association Agreements³³ include the rule of law in the essential elements clause and this is supported by a provision³⁴ providing for cooperation to strengthen institutions and rule of law including “the reinforcement of institutions at all levels in the areas of administration in general, and law enforcement and the machinery of justice in particular, the independence of the judiciary, the improvement of its effectiveness and the training of the legal professions.”³⁵ In these instruments³⁶ then, the rule of law is seen as essentially concerned with administrative accountability in the broad sense, and the effectiveness and independence of the legal system and judiciary.

Alongside this more traditional approach, we can also see developing a particular association between the rule of law and anti-corruption measures, cross-border crime and border security issues. In its Third Annual Report on the SAP, for example, the Commission says that “the continuing prevalence of organized crime and corruption in the region delays political reform, holds back economic development and puts into question the rule of law.”³⁷ More specifically, the Commission links the liberalization of the visa regime to the rule of law and security issues; the perspective of the liberalization of the visa regime is a long-term issue and should be put in a broader context: any progress in this area is linked to the countries’ ability to implement major reforms in areas such as strengthening the rule of law, combating organized crime, corruption and illegal migration, improving their border management and document security, and generally improving their administrative and implementation capacity.³⁸

of assistance is “the creation of an institutional and legislative framework to underpin democracy, the rule of law ...” (Art 2(2)). In addition, assistance is made conditional upon respect for rule of law (Preamble, paragraph 7 and Art.5).

31 government, administration, judiciary

32 Freedom of expression, including independent media; Right of assembly and demonstration; Right of association; Right to privacy, family, home and correspondence; Right to property; Effective means of redress against administrative decisions; Access to courts and right to fair trial; Equality before the law and equal protection by the law; Freedom from inhuman or degrading treatment and arbitrary arrest

33 SAAs

34 new to Association Agreements

35 SAA with Croatia, Art.75. In addition, the European Partnership for Croatia includes, under the heading of democracy and the rule of law, strengthening the judicial system (an open, fair and transparent system for recruitment, enhanced professionalism and training, proper and full execution of court Rulings; improving court organisation, including IT, access to justice); improving the fight against corruption, and improving the functioning of the public administration (including improving accountability, openness and transparency).

36 unilateral and bilateral

37 EC Commission, Third SAP Report of 30 March 2004, COM(2004) 202/2 final, p. 6.

38 EC Commission, Third SAP Report of 30 March 2004, COM(2004) 202/2 final, p. 21.

HUMAN RIGHTS

Human rights are rights inherent to all human beings, whatever their nationality, place of residence, sex, national or ethnic origin, colour, religion, language, or any other status. We are all equally entitled to our human rights without discrimination. These rights are all interrelated, interdependent and indivisible.³⁹

Universal human rights are often expressed and guaranteed by law, in the forms of treaties, customary international law, general principles and other sources of international law. International human rights law lays down obligations of governments to act in certain ways or to refrain from certain acts, in order to promote and protect human rights and fundamental freedoms of individuals or groups.

The principle of universality of human rights is the cornerstone of international human rights law. This principle, as first emphasized in the Universal Declaration on Human Rights in 1948, has been reiterated in numerous international human rights conventions, declarations, and resolutions. The 1993 Vienna World Conference on Human Rights, for example, noted that it is the duty of states to promote and protect all human rights and fundamental freedoms, regardless of their political, economic and cultural systems.

All states have ratified at least one, and 80% of states have ratified four or more, of the core human rights treaties, reflecting consent of states which creates legal obligations for them and giving concrete expression to universality. Some fundamental human rights norms enjoy universal protection by customary international law across all boundaries and civilizations.

Human rights are inalienable. They should not be taken away, except in specific situations and according to due process. For example, the right to liberty may be restricted if a person is found guilty of a crime by a court of law.⁴⁰

INDEPENDENT AND IMPARTIAL JUDICIARY

Judicial independence is important for precisely the reasons that the judiciary itself is important. If a judiciary cannot be relied upon to decide cases impartially, according to the law, and not based on external pressures and influences, its role is distorted and public confidence in government is undermined.

In democratic, market-based societies, independent and impartial judiciaries contribute to the equitable and stable balance of power within the government. They protect individual rights and preserve the security of person and property. They resolve commercial disputes in a predictable and transparent fashion that encourages fair competition and economic growth. They are crucial to countering public and private corruption, reducing political manipulation, and increasing public confidence in the integrity of government⁴¹.

Even in stable democracies, the influence of the judiciary has increased enormously over the past several decades. Legislation protecting social and economic rights has expanded in many countries and with it the court's role in protecting those rights. The judiciary has growing responsibility for resolving increasingly complex national and international commercial disputes. As criminal activity has also become more complex and international and a critical problem for expanding urban populations, judges play a key role in protecting the security of citizens and nations.

39 Human rights, rule of law and democracy, training manual, centre for peace and civil society, 2010

40 Human rights, rule of law and democracy, training manual, centre for peace and civil society, 2010

41 Независност на судството-правна анализа, ОБСЕ-СКОПЈЕ 2009

Judiciaries in countries making the transition to democratic governance and market economies face an even greater burden. Many of these judiciaries must change fairly dramatically from being an extension of executive branch, elite, or military domination of the country to their new role as fair and independent institutions. At the same time, the demands on and expectations of these judiciaries are often high, as views about citizens' rights, the role of the executive branch, and market mechanisms are rapidly evolving. The judiciary often finds itself a focal point as political and economic forces struggle to define the shape of the society. These judiciaries also face the serious crime problems that frequently accompany transitions, as well as enormous issues of corruption, both those carried over from old regimes, as well as corruption newly minted under changing conditions. It would be unrealistic to think that the judiciaries can carry the full burden for resolving these complex problems. At their best, they have played a leadership role. At the very least, they need to complete their own evolutions and begin the task of confronting the multitude of problems before them⁴².

Opposition looms especially large to reforms intended to strengthen judicial independence and impartiality precisely because so much is at stake. An impartial judiciary will reduce the influence of government officials, legislators, political parties, and other powerful elites who are used to operating above or outside the law. The judicial hierarchy itself may stand to lose, particularly in many countries where higher court judges have the ability to exert undue and arbitrary control over lower court judges. Finally, those operating to advantage within the current system⁴³ are likely sources of opposition to reforms. To further complicate the situation, sometimes the sources of opposition will be overt and obvious, but many times they will not.

Judges are natural and essential allies in building support for judicial independence. Conversely, judges who are not brought into the process or who are made to feel personally attacked by reform campaigns can become effective opponents. Judges at all levels should be sought out and involved in the reform efforts. Their ownership and commitment will be essential to effective implementation. Suspicions they might have about the effects of changes need to be addressed at the outset. Once engaged, judges can improve the design of programs, since they are the ones who best understand how the challenges to impartiality can be addressed. The formation of judges associations can be an effective mechanism for involving judges in the process. While traditional judges associations have not tended to focus on promoting judicial independence, many of the newly formed groups, such as the Slovakian Judges Association, have a committed membership that has been at the forefront of reforms.

In many countries, judicial councils or commissions have been established to improve the process of judicial selection. Although judicial councils exist in both civil and common law countries, they are a particularly prominent feature of legal cultures with a civil law tradition. The specific role that judicial councils play varies from one country to the next. In many of them, it goes beyond the selection process; in others, it may not include it. Nevertheless, since judicial councils often are important participants in judicial selection and have been adopted as part of reforms of the selection process in many countries, we include a discussion of their role, development, and operations in this sub-section.

It is generally difficult to make a direct causal link between an adequate judicial budget and judicial independence, but there are substantial indirect linkages. Se-

42 GUIDANCE FOR PROMOTING JUDICIAL INDEPENDENCE AND IMPARTIALITY, office of democracy and governance bureau for democracy, conflict, and humanitarian assistance US agency for international development Washington, dc 20523-3100, January, 2002

43 i.e., judges and court personnel at all levels who benefit from petty corruption or who are too distrustful of new approaches, and lawyers who know how to win cases playing by the current rules

vere under-funding nearly always has an impact on the judiciary, which is seen to affect its independence. Judiciaries with inadequate resources usually cannot offer the salaries, benefits, and pensions needed to attract and retain qualified candidates, and in some cases, to diminish the likelihood of corruption.

Judges in such judiciaries often lack access to basic legal materials laws, judgments of higher courts, and commentaries needed for consistent and well-founded decision-making. They may lack adequate methods for correctly recording oral proceedings, undermining the appeal process and transparency and accountability. Limited budgets result in inadequate physical working conditions that undermine respect for the judiciary both in the judges own eyes and in the eyes of the public, and may inhibit a judiciary's ability to provide the security needed to stem intimidation. The capacity and attitude of judges, the security of judges, and the attitude of the general public toward the judiciary all of which are dependent to a high degree on an adequate budget are perceived to be essential elements in building judicial independence, as described more fully below. The linkage between the judiciary's budget and independence is more direct when entities outside the judiciary supplement an inadequate budget. In several countries, local governments and even businesses provide judges such necessities and benefits as office space, discounts on education for their children, transportation, and housing. In return, these benefactors expect, at the least, sympathetic consideration of their cases. Allocation of the budget within the judiciary can pose as much of a problem as the absolute size. Independence of lower court judges from their superiors is compromised when the distribution of resources within the judiciary is arbitrary, lacks transparency, or is used to punish lower courts that do not follow the instructions of their superiors. Presiding judges are often the ones to dispense the perks conferred by local authorities or businesses, thus increasing the dependence of judges on their court presidents.⁴⁴

A number of efforts have been made to minimize corruption among judges. By far the most often voiced suggestion has been to increase judicial salaries; indeed, fighting corruption has been a principal justification for substantial salary increases throughout the region, although Russia and Ukraine may be exceptions. As previously discussed, the salary increases have helped enhance the attractiveness of a judgeship, and they have perhaps reduced the plausibility of self-serving justifications for corrupt behaviour, although there is little solid evidence as to whether the raises have been effective in actually curbing corruption. The reform is based on the premise that many judges accept bribes because they cannot afford to maintain a decent standard of living; it may well be the case, however, that judges continue to accept bribes in order to improve their standard of living even once their basic needs are satisfied.

The official, formal justice system includes courts, prosecutors, police, prisons, and public defenders. The unofficial, informal justice system includes both modern processes, such as non-court mediation and arbitration, and customary justice, or traditional justice. Examples of customary justice mechanisms include tribal councils, village elder councils, or other local, time-honoured dispute resolution approaches. They are based on local traditions. Though outside the formal court system, informal justice approaches can include quite intricate processes and even court-type hearings.

Strengthening access to justice involves linking formal rule of law institutions with citizens. Improving access involves expanding the capacity of the formal sector to reach underserved populations and removing barriers to their use. It also

44 GUIDANCE FOR PROMOTING JUDICIAL INDEPENDENCE AND IMPARTIALITY, office of democracy and governance bureau for democracy, conflict, and humanitarian assistance US agency for international development Washington, dc 20523-3100, January, 2002

involves educating citizens to increase their capacity to use formal institutions. Strengthening access can also entail working with informal justice institutions to improve their reach, effectiveness, and adherence to human rights norms. These institutions can be as binding as the formal justice system, thanks to citizen involvement, investment, custom, and trust acquired over generations. These mechanisms can be faster, cheaper, and more accessible. However, it is important to clarify the relationship of these mechanisms to formal justice institutions, in particular the right of appeal.⁴⁵

ORGANIZED CRIME

Organized crime is defined by a number of characteristics whereas their international dimension takes the important place. Organized crime nowadays represents a serious threat to national security and democracy to any country. In this paper the author deals with the most notorious transnational incriminations-criminal activities which are growing bigger and taking new forms of manifestation.

Transnational organized crime is considered one of the major threats to human security, impeding the social, economic, political and cultural development of societies worldwide. It is a multi-faceted phenomenon and has manifested itself in different activities, among others, drug trafficking, trafficking in human beings; trafficking in firearms; smuggling of migrants; money laundering; etc. In particular drug trafficking is one of the main activities of organized crime groups, generating enormous profits. UNODC works closely with Governments, international organizations and civil society to strengthen cooperation to counter the pervasive influence of organized crime and drug trafficking.

Organized crime, among other essential key elements that characterize its transnational nature is the possibility that its activities cross national borders. Transnational organized crime manifests itself through various forms of criminal activity, constantly searching for favourable conditions for their existence, survival, expansion and greater global presence - planetary level. Moreover, transnational organized crime is in perpetual search for appropriate forms necessary for its protection, multiplication of its privileges and hugely increases their profits, which are equivalent to common profits of the ten largest multinational companies in the world with their tendency to further enormously increase.

Can the state authorities be perpetrators of crimes at the same time as their main function is to fight against the perpetrators of such acts?

At first glance, the question is quite contradictory, but if we look around, we can conclude that it represents one of the serious concerns of each country in the world, including the Republic of Macedonia. Organized crime is a relatively new phenomenon in Macedonia. The rise of transnational criminal organizations globally, security problems in the region, followed by embargoes, along with internal transition, are key factors that seriously affect the appearance of organized crime in the world with us.

Organized crime knows no borders. Criminal organizations seek to incorporate into the existing system. They affect people through their national authorities through licensing for large deals, and by corrupting important government officials, too. Because of the specificity of the nature of this phenomenon, accurate data is

⁴⁵ GUIDANCE FOR PROMOTING JUDICIAL INDEPENDENCE AND IMPARTIALITY, office of democracy and governance bureau for democracy, conflict, and humanitarian assistance US agency for international development Washington, dc 20523-3100, January, 2002

difficult to collect, but it is obvious that such occurrences have been present in all countries, including our, no matter which various means are used by those who are on the verge of legality, open to blackmail, cruelty, enraged, bribing, etc. Due to the international character and easy mobility they are difficult to detect by law enforcement authorities. Among the works that have such character usually include narcotics trafficking, weapons smuggling, extortion of money for protection that is not required (racketeering), procuring prostitution, human trafficking, corruption, exploitation of tax and customs benefits, trafficking gold, jewellery, cigarettes, alcohol, cars, money laundering, murder by order, terrorism, etc.

Their detection and suppression with classical police methods is simply not possible. It is necessary for the law enforcement authorities to be exempted from the restrictions that are set as standard for clarification of classic crime. Because the differences between classical and organized crime are so defined and essentially cannot do a successful comparison of measures and activities that the prosecution bodies shall apply in prevention of various forms of classical or organized crime and their effectiveness.⁴⁶

In most U.S. official reports it is indicated that the great and almost immense freedom of action of the police is required because of "hypercriminalization" by legislators, as well as limited funds which are available to the police which prevent the monitoring of all offenses.⁴⁷

In the fight against this type of crime, according to the experiences of the best organized police organizations, specialization and centralization of the organizational measures of judicial authorities, especially police are required.⁴⁸

In order to strengthen measures to fight against organized crime, special accent is put on strengthening the institutional support, particularly of specialized units for this function, which is specifically provided in the document adopted by the Government of the Republic of Macedonia. Measures aimed at concrete action against organized crime.

In our criminal justice system with compliance with regulations governing organization and bodies of state administration, as well as general and special laws governing this area, the institutions for detection are:

- Financial Police (under the Law on Financial Police of 2002, a body of the state government was formed that operates within the Ministry of Finance of the Republic of Macedonia and is available to all police powers and classical Police Service for criminal acts of financial criminality),⁴⁹
- Customs Administration (authority which operates within the Ministry of Finance. The work of the Customs Administration is supported by the Department of Investigation, which operates within the Customs Administration with special mobile Customs unit, which aims at preventing and combating economic crime in the area of organized crime),⁵⁰

⁴⁶ Comparison of expression of the form of crime and organized crime of twenty, or ten years ago, sees its expansion, the emergence of new forms, prudence, professionalism, perseverance and inhumanity, with more and more action in the international dimensions. Moreover, there occurs a higher level of organization and expertise of criminal organizations, skillfully using scientific and technical achievements in planning and conduct of criminal activities, effective protection of their own efforts and organized crime to establish a proper link with the state organs, economic, political and financial entities, the media and other relevant factors. In some cases the differences are so visible that cannot make a successful comparison, but may be considered as new contemporary forms of crime which need to impose also new and modern activities for successful prevention, detection, clearance and proving new emergent forms of modern crime, including here of course also organized crime.

⁴⁷ Stojanovski, T., *Police in a democratic society*, S 2 August Stip, Astor LLC, Skopje 1997, p. 348

⁴⁸ Increasing and expanding the framework of admissible powers of police

⁴⁹ Taseva, S. "Money laundering", *DataPons*, Skopje, 2003, p. 241

⁵⁰ Krstanoski, M., Smilevski D. "Customs operations", *Faculty of Tourism and Hospitality*, Ohrid, 2008, p. 91

- Public Revenue Office (an organ of state administration in the Ministry of Finance, whose scope of work is sublime in the Law on Public Revenue. Besides the dominant role in tax collection and improving the tax system of the Republic of Macedonia, it plays a key role in the prevention and detection of financial economic crime as one of the dominant emergent forms of organized crime),⁵¹
- Inspection Services⁵² (various inspection services in performing work within their scope of work contribute to the prevention and detection of crimes in the area of financial crime),
- The prevention of money laundering and terrorist financing (which since 2002 functions as a Directorate for money laundering prevention, and with expanding its scope of responsibilities in the prevention of terrorism financing in 2008 was renamed the Office for the Prevention of money laundering and terrorist financing)
- State Commission for Prevention of Corruption (State Commission is responsible for implementing the Law on Prevention of Corruption and the Law on Preventing Conflict of Interest, in the realization of the responsibilities provides its contribution in the fight against crime organization)⁵³
- Ministry of Interior.

Institutions in our country submit all the collected evidence for revealed illegal actions of these areas of criminal charges or special report on the collected evidence to the Public Prosecutor who is responsible only of processing to the judicial authorities where it represents in as a prosecutor. In our criminal justice system the physical and legal entities are allowed to submit private lawsuits for crimes committed on their damage and to offer evidence.

ROLE OD THE MINISTRY OF INTERIOR IN THE FIGHT AGAINST ORGANIZED CRIME

Changes in the legislation of our country in the period from 2004 to 2007 resulted in fundamental changes in the reform area of harmonization of national legislation with the EU and therefore specific laws were brought and some changes or amendments to existing laws were made. Within the reform of the police for the purpose of the successful fight against organized crime in the organizational structure of the Bureau of Public Security of the Republic of Macedonia, and on order of central police services a special department for organized crime was established under which several units operate that are responsible for successful prevention, detection, clarification and evidence of various forms of emergent phenomenon of organized crime:

- A unit to combat money laundering and economic crime organization
- A unit to fight corruption
- A unit to fight cybercrime
- A unit against drug trafficking
- A unit to combat illicit trafficking in weapons and dangerous substances
- A unit to combat human trafficking and migrant smuggling
- A unit to combat violent and serious crime

⁵¹ Nikolovska, S. Authorized lectures, money laundering, Faculty of safety, Skopje 2009, p. 46

⁵² State Foreign Exchange Inspectorate, State Labour Inspectorate, the State Market Inspectorate, State Audit Office and others.

⁵³ Annual report of the State Commission for Prevention of Corruption in 2010, Skopje 2011, http://www.dksk.org.mk/index.php?option=com_content&task=view&id=12&Itemid=27, taken on January 21, 2012

Within the Department for organized crime, the following sectors are systematized and have parallel function:

- Sector for Criminal Intelligence Analysis
- Sector for Special Investigative Techniques
- Sector for Criminal Intelligence

In addition there is a Department for organized crime and information technology department which are responsible for combating the phenomenal forms of organized crime that threaten information security and at the same time cannot be classified among computer crimes, and therefore are not included in the scope of work of the unit against cybercrime.

SPECIAL INVESTIGATIVE MEASURES

An important step forward for the successful functioning of the Ministry of Interior and its organizational units, and clearly defining their competencies in detecting and proving criminal acts has been made with amendments to the Law on Criminal Procedure of the Republic of Macedonia in which in 2004 special investigative measures were included.

The term special investigative measures means systematic gathering of information in a manner that does not disturb or touch the person, they are applied by the authorized state bodies that are determined by the Code of Criminal Procedure of the Republic of Macedonia, and their main goal is the detection of crime perpetrators. The special investigative measures are applied only when in any other way the necessary evidence on the offender cannot be successfully gathered, and hence derive a few basic elements that are a condition for their application:

- To be taken by law⁵⁴
- To be undertaken exclusively by the authorities that are authorized by law to implement them (According to positive law of the Republic of Macedonia authorities authorized to execute the order⁵⁵ for the application of special investigative measures are: the Ministry of Interior, the Financial Police and Customs Administration).
- To hide (though not affect the integrity and freedom of person, the special investigative measures and their application should be out of his knowledge)
- To aim at collecting, registering and processing information for committing criminal and/or suspect.

According to the Law on Criminal Procedure in the Republic of Macedonia the following special investigative measures can be applied:

- Monitoring of communications and entering the home and other premises or vehicles to create the conditions for monitoring and communicating condition and procedure established by law.
- Insight and searching of a computer system, taking away the computer system or part thereof or database for storing computer data.

⁵⁴ In order to provide information and evidence necessary for successful conduct of criminal proceedings that otherwise cannot be collected or their collection may be connected to major difficulties for crimes for which a sentence of at least four years and for crimes for which the sentence to five years for which there is reasonable doubt to have been committed by an organized group, gang or other criminal association, may be ordered to undertake special investigative measures, Article 146, paragraph 1 of the criminal procedure ("Official Gazette Macedonia" No. 15/97, 44/2002, 74/2004, 83/2008, 67/2009)

⁵⁵ The use of special investigative measures strictly applies only with a court order, which is a proposal by the prosecution., Velkovska, ext. "Efficacy of courts in dealing with the phenomenon of organized crime 2005, 2006, 2007," Coalition "All for Fair Trials", Skopje 2008, pp. 61-63

- Secret surveillance, visual monitoring and visual recording of persons and objects by technical means.
- Virtual (simulated), purchase of items such seemingly (simulated) and apparently giving bribes (simulated) receiving bribe.
- Controlled delivery and transportation of persons and objects.
- Use of people with hidden identity for monitoring and information gathering or gifts.
- Opening apparent (simulated) bank account to which you can invest funds derived from criminal action.
- Registration of apparent (simulated) entities or using existing entities, to collect the data.

In the discovery and proof of organized crime, they are widely used in particular crimes of corrupt elements, abuses of power, smuggling, customs fraud in particular the formation of the group breaking up criminal cases acquired at time, and money laundering. From the current practice as well as statistical data for their application and representation it can be concluded that any special investigative measure finds its application in detecting and proving criminal acts of organized crime in situations when the remaining mechanisms available to law enforcement authorities gave no results.

INTERNATIONAL POLICE COOPERATION TO COMBAT ORGANIZED CRIME

The international community has established and will probably form new bilateral, regional and international associations of police organizations, because it is not possible to control crime and to suppress the national framework. International police cooperation is an important area of prevention and repression of organized crime, which is inconceivable without the coordinated action of the police of various countries in detecting offenses and offenders, the provision of evidence and so on.

International police cooperation is a condition for the functioning of other forms of cooperation,⁵⁶ and in certain situations (when there is no legal basis for mutual legal assistance for criminal lack of agreement bilateral example) police cooperation appears as a substitute for a formal criminal legal aid in the capacity of police communication to exchange information in order to prevent the execution of criminal acts or detecting their perpetrators.

The information available to the criminal police of each state is far enough when it comes to detection and prosecution of international crimes. Their effective prevention leads to the necessity of developing methods of organizational, technical and other assumptions for the exchange of information and their centralization internationally. Very fruitful for the prevention of crime and police cooperation is to exchange experiences, vocational training and education of personnel, exchange information on technical resources and general improvement of the methods of police work. With the exception of certain areas as so-called political crime, there are no real reasons for resistance to a broad and intensive communication and collaborative approach in the prevention and repression of crime.

- Interpol (activities of Interpol are assembled across multiple forms or areas in the collection and exchange of information, meeting specific requirements in the police investigation, the criminal legal aid and assistance in the matter of criminalities. For effective crime prevention the search for people and the rapid

⁵⁶ International criminal legal assistance, extradition procedures, etc.

detection of offenders and offenses are especially important. The assistance in the field of forensics consists in using the laboratories of foreign police services, especially for the expertise and other specialist investigations, as well as professional exchanges of experts and publications. For the purposes of effective fight against transnational organized crime Interpol also has a branching system of collecting, processing and distribution of data and developed technical infrastructure that serves such a system);⁵⁷

- Europol (The main objective when establishing Europol is the fight against trafficking in narcotic drugs, which has repeatedly been expanded with additional signed agreements and conventions. Today the basic tasks that are set as priority for police involvement in the complex structure of Europol are: to improve cooperation and efficiency of police services of the Member States in combating terrorism, narcotics trafficking and other serious forms of transnational crime, indicating the existence of an organized criminal structure and affecting two or more Member States in a way that, according to the weight of these forms of crime and its consequences, the necessity of joint action is needed, it is defined broadly, almost boundless field of its action, if we take into account expressed dynamism and the emergence of new forms of serious crime, such as counterfeiting of money (the euro), human trafficking, trafficking in arms and radioactive substances, theft of motor vehicles from European countries, trafficking of human body parts, trafficking in cultural goods and so on. Interpol has a system containing a database that can be accessed by national police forces, Interpol and third countries for records of individual cases with the data on victims or witnesses to all who can contribute in a particular procedure);⁵⁸
- Bilateral Police Cooperation (in recent decades, the necessity of effective cooperation in combating transnational organized crime has led to concluding bilateral agreements providing for: mutual taking and relinquishing of police investigations, taking certain actions in the interest of the police investigation that leads to another state (interviews with suspects, witnesses, victims, etc.) official presence of the police authorities of another state during the investigation, as well as joint undertaking such actions, authorizing foreign police to monitor the offender and the territory of another state with a view of its capturing. More specific actions taken by the Ministry of Interior and the Customs Administration, which with its counterpart in neighbouring and other countries in the region have signed bilateral agreements on cooperation in combating organized crime.⁵⁹ Certain results in efforts to strengthen capacities to combat organized crime have been achieved through active cooperation with various international organizations and initiatives. The Republic of Macedonia actively participates in the initiatives of the Stability Pact against Organized crime, corruption, the Group of States against Corruption of the Council of Europe and the Committee to assess the measures against money laundering, and the concrete results in improving the capacities have been achieved in cooperation with the United Nations and the European Union units).
- International cooperation on customs and other agencies and services - collaboration refers to the prevention, detection, investigation and initiation of customs and administrative proceedings or filing an initiative to

57 Kambovski, ext., "Organized crime", 2nd August, Skopje 2005, pp. 331-337

58 *ibid*, pg. 337-342

59 In Ohrid in September 2003 the Adriatic Charter was signed (Macedonia, Croatia, Albania) to enhance cooperation in combating organized crime and trafficking in weapons, drugs and people. Bilateral agreements on cooperation in the field of organized crime have been concluded with the Republic of Albania, Serbia and Montenegro

criminal proceedings for illegal trade in goods, laundering proceeds of crime and protection of financial, cultural and interests of environmental protection, and health and safety of the citizens of the States Parties. In order to realize these tasks common standards were accepted for handling customs services and a common database created which enables the exchange of information and cooperation in the operational techniques of prevention and detection of perpetrators of customs violations and criminal acts in the area of organized crime.⁶⁰

CONCLUSIONS

Respect of the democratic principles, human rights and freedoms proclaimed in the universal declaration for human rights, European convention for human rights and freedoms and in all other international documents, which will strengthen the institution of the system at all levels, which will enable good cooperation between the different law departments and offices and the departments and offices of the ministry for internal affairs, which will enable enforcement of the law principle that, on the other hand, will be directed towards the anticipating of the independence of the court and towards improving of its efficiency.

To talk about legal state and rule of law, it means to have independent institution (courts, prosecutors, police and all institution), in order to fight all forms of violation of human rights and fighting organized crime and its forms in the society in general.

Respecting the principles of legal state, it is due to respect the rule of law, human rights, etc., on the one hand, and to have independent institution, applying this kind of principles, on the other hand.

Not only in Macedonia but also in the wider region, human freedoms and rights, independent judiciary, corruption in institutions, partisanship and politicized administration, unfair competition, fixed tenders, controlled, unfair and undemocratic elections, etc., represent an obstacle for the normal functioning of the legal state. The greatest challenge to the legal state is organized crime and its latest form.

In this direction, the Republic of Macedonia has marked progress; however, reports of international institutions, such as the Council of Europe, state department, etc., suggest many weaknesses in the functioning of the legal state and the rule of law. These weaknesses are found more in the areas of: 1. Human rights and freedoms, that we have drastic violations of human rights and freedoms, with special emphasis on the freedom of expression, press freedom, religious rights, exceeding the powers of the police investigation procedure, violating of the rights of detainees and prisoners; 2. Independent and cleared out of corruption judiciary and prosecution, abuse of judicial right making decisions on ethnic, religious, political, cultural and social basis, selection and dismissal of judges and prosecutors on partisan and political recommendation; 3. Establishing a monopoly in the operation of public and private companies, thus allowing growth of unfair competition, as were cases with Telecom, Makpetrol, etc.; 4. Election of members of boards and committees which decide on public procurement, prevailing party staff in these committees and boards; 5. Electoral law still does not meet international criteria for fair and democratic committees, party members in the electoral bodies, putting into question the realization of the right, etc.

⁶⁰ Customs Administration taken on: January 21, 2012

The Republic of Macedonia is already on the threshold to join the two largest families in which every modern democratic state strives, NATO and the EU. Macedonia has made a lot of changes and changes in legislation (criminal, civil, electoral, administrative, etc.), harmonizing it with that of the European Union.

As a result of the reforms in all areas mentioned above, the Republic of Macedonia gained the status of the candidate country for the European Union, but the biggest obstacle to Euro-Atlantic integration of Macedonia remains resolving the name issue, which arose a dispute with the southern neighbour Greece, which is a member of NATO and the EU, where decisions are taken unanimously.

The reforms have had quite an impact on how the fight against organized crime is proven by the Macedonian police, who as a result of regional and international cooperation managed to cut channels of smuggling drugs, weapons, migrants, putting into circulation counterfeit money, detection terrorist cells, etc. International organized crime requires international resources for its neutralization. For this, the Macedonian institutions are investing in this direction, especially through professionalism in upgrading and building of institutions and the staff who manages them.

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POLICE MEASURES AND ACTIONS IN CONFRONTING FOOTBALL HOOLIGANISM IN SOME EUROPEAN COUNTRIES

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Abstract: This paper considers the problem of hooliganism in football stadiums in some European countries. In the first part, an overview of the state of football hooliganism in the UK (especially England), Poland, Italy and Serbia is given, and in the second part, the measures, actions and tactics applied by police organizations in these countries in confronting this problem are discussed. Why are these countries taken into consideration in the first place? The United Kingdom – because it used to have big problems with the fans, which have been successfully resolved. Poland – because the police of this country are preparing for the reception of a large number of both fans and hooligans, during the upcoming European Football Championship (EURO 2012), which is jointly organized by Poland and Ukraine. There is also an overview of Italy, which had a big problem with the fans, but which has made the greatest progress in the fight against hooligans in the last three years. Finally, this paper provides an overview of measures and actions taken by the Serbian Ministry of Interior in order to reduce violence at football matches, because, based on recent events, especially the last “eternal derby” between FC “Red Star” and FC “Partizan”, it can be noted that Serbia still has a big problem with the extreme fans.

Key words: hooliganism, football, police.

INTRODUCTORY CONSIDERATIONS

Despite the efforts of European states to combat violence in football stadiums, it is still present, to greater or lesser extent, in almost all countries of the “Old Continent”. It manifests in various forms, depending on the state. It is shown in the latest Annual Report¹ of the Standing Committee² of the Council of Europe for implementation of the European convention on violence and improper behaviour of spectators on sports events, especially football matches. The report noted that different states are threatened by various forms of violence at football matches, but the most common are these three forms:

1. the use of pyrotechnics;
2. pre-arranged violence (primarily scheduled fights and clashes outside the stadium between different hooligan groups), and
3. violence related to alcohol use and violence committed by persons who are intoxicated by alcohol.

1 Standing Committee (T-RV) - European Convention on Spectator Violence, 2009-2010 Annual Report of the Standing Committee, Part II – questionnaire on recent trends, Strasbourg, 2011.

2 European Convention on Spectator Violence and Misbehaviour of spectators at sporting events in particular at football matches, voted in 1985, the foundation of authority within the Council of Europe, called the Standing Committee is confirmed, which is responsible for the implementation of the Convention, but also for making recommendations to guide the states that signed it to overcome the new problems arising.

Interesting are the data related to racism at European stadiums. Although it is indicated in the public, especially in the media, that racism at football matches is very widespread, the report stated that no European country has a problem with the violence that has arisen because of racist actions of hooligans. In addition, it is interesting to note that it is often remarked in public that excessive use of force by the police could lead to violence. In this regard, the report further states that no state has a problem with this kind of violence at football matches.

Bearing that in mind, the question is what measures, actions and procedures are undertaken by individual European Union countries in an effort to cope with the problem of football hooliganism, and whether the experience of these countries can be applied in Serbia. Given the scope of this paper, it is clear that all the experience of all European Union member states cannot be included, but only those that effectively deal with the problem of football hooliganism, or the ones in which, for some reason, this problem is very acute. Accordingly, this paper will first consider the experience of some European countries in implementing the measures, procedures and activities in confronting football hooliganism, and then it will describe the current capabilities of Serbia to confront football hooliganism and make suggestions for improvement of the Serbian police in dealing with the problem stemmed from the experiences of European countries.

HOOLIGANISM IN CERTAIN EUROPEAN COUNTRIES

It is interesting to observe the situation in some European countries, above all in the UK (primarily in England), which in the previous three decades had a problem with violence, then in Italy, mentioned in the report as the only European country with a decrease in violence at matches of national championships and international matches, Poland, which is in 2012, together with Ukraine, one of the co-organizers of the European Football Championship, and Serbia, where the level of violence is such that remains a major social problem.

In the UK, according to the report, violence at domestic national teams' matches, from the Premier League to the lowest level of football rank, has been drastically reduced in the last three years, which is included in the time line of the report. However, when it comes to international football matches, violence has slightly increased. In the UK 80% of matches pass without any form of violence. The report estimated that alcohol is a factor that greatly contributes to the emergence of violence, but the greatest cause of violence is a historical, often incomprehensible and irrational rivalry between the fan groups, which dates back several decades, sometimes even a century ago.

Italy is a country for which the report presents the most interesting data. They are special because Italy is the only European country with a reduction in violence, both at home football matches and at the international ones, as a result of comprehensive and coordinated efforts of various social factors – legislators, judiciary, police, and others. Reduction in the number of hooligan groups that cause violence has been observed. In Italy, the violence usually manifests in three ways: as a politically motivated violence, prearranged violence (primarily scheduled fights and clashes outside the stadium between different hooligan groups) and verbal violence. Italian most extreme supporters are organized in the so-called “Ultras” communities, within which there are “Ultras” groups. Unlike the English hooligans, which are poorly organized groups with unstable structure, the Italian ultras groups have a stable structure with different management levels, internal activities of the fans (like

creating choreographic arrangements, banners, flags, etc.), but also in external activities (distribution of membership cards and prepaid tickets, maintaining certain relationships with football clubs, etc.) where each group member has an assignment in accordance with the position fought for within the group. It is obvious that the Italian hooligan groups in the organization way imitated the Mafia criminal organizations operating in Italy.

When Poland is concerned, there has been a significant increase in violence at football matches of the domestic championship in that country. Interestingly, the number of incidents decreased at football matches, belonging to higher rank of championship, primarily due to technically well equipped stadiums, and good police work, and violence is transferred to the lower ranks of the competition, where the infrastructure is worse. As for the violence at football matches of the international character, there have been no significant changes, i.e. the situation is the same as in the previous period. In Poland, the violence is most often manifested in three ways: the use of pyrotechnic devices, prearranged violence (primarily scheduled fights and clashes outside the stadium between different hooligan groups), and verbal violence.

Violence in the stadiums in Serbia has remained almost at the same level as before. The number of incidents has decreased by 26%, but the acts of violence have become more violent and more serious. The report noted that Serbia and Bulgaria are the only countries without adequate security services in the stadiums, in charge of the security of the fans in addition to police. In Serbia, this problem arose because of the lack of laws governing the specified area, so there is no legal document that defines the role of security services. The most common forms of manifesting violence are the following: the use of pyrotechnic devices, prearranged violence (primarily scheduled fights and clashes outside the stadium between different hooligan groups), and the verbal violence that leads to incidents. An interesting observation was that there was a change in the form of manifestation of violence. There is an increased number of violent acts towards owners and management of teams, and violence between supporters of the same club or the supporters of different factions of the same club. Similar to the extreme Italian fan groups, the supporters in Serbia are also organized within groups, while larger groups of supporters (those of Red Star, Partizan and Vojvodina) have several factions, among which violent conflicts often arise because of the leadership in the stadiums, which are often transferred to the streets of major cities.

POLICE MEASURES OF CONFRONTING HOOLIGANISM

Opposition to hooliganism is a complex task that requires the inclusion of many subjects – legislators, courts, prosecution, non-governmental organizations, security services, police, and other institutions. Police organizations have a very important role in achieving this aim. Police of different countries apply various measures, activities, and actions in confronting hooliganism.

THE UNITED KINGDOM

Police units across the UK have developed a very good mechanism to confront violence at football matches. They do not react independently, but have established a system that addresses this problem. The Ministry of Interior of Great Britain is included at the highest level in the fight against hooliganism, and is responsible

for coordinating multi-agency work on creating a strategy to confront football violence within the country and abroad, and for coordination of activities in preparation for competitions in the country or abroad. In addition to representatives of the Ministry of Interior, the representatives of the Ministry of Foreign Affairs, Football Associations of England, Scotland, Wales and Northern Ireland, football associations, specialized Football police units, (**UK FOOTBALL POLICING UNIT**), the prosecution, the Olympic Committee, and if necessary other subjects³ are involved in the coordination group for fighting against football hooliganism. Football Policing Unit (**UK FOOTBALL POLICING UNIT**), established by the Ministry of Interior in 2005, has the central role in combating football hooliganism. The unit is responsible for:

- Developing a national policy on policing in opposition to football violence;
- National coordination in preparation for securing football matches and the implementation of actions in matches that take place abroad;
- Developing a national strategy for Police actions on monitoring the international representative and club matches abroad;
- Coordinating the exchange of intelligence at the national level;
- Conducting training and providing guidance for football intelligence officers;
- Exchange of police information, intelligence, and risk analysis for matches of international character, because the unit represents a national point of contact for information exchange with other countries.⁴

Another police unit in the UK has an important role in confronting hooliganism. It is the British Transport Police (BTP), the national police service in charge of passenger safety in railway transport in England, Scotland, and Wales, which employs 2835 police officers and 1455 support staff, and the work of which is divided into seven territorial areas.⁵The establishment of this police organization was necessary because the UK has an extensive and well-developed railway, dating from the 19th century and used by many citizens. This police unit is responsible for monitoring football fans that widely use the services of the railway in order to support their clubs when they play away. Police officers who have previous experience with football fans are involved in this task. When planning wider football operations on a larger territory, the British Transport Police is always included. Within it, there is a special Football Intelligence Unit, responsible for collecting data on all the fans, whose members are scattered throughout the country. Members of the British Transport Police are taking a series of activities so that all the travelers, including football fans, can travel safely by rail. Some of these activities are:

- Monitoring the number of fans, tracking their movements and their behavior during the whole route, so that police officers, who are at the ultimate travel destination, would know what to expect from the incoming fans and what measures are to be taken in order to accept them in an adequate way, or to have a prepared response to the behavior of fans;
- Following the fans in trains, which run throughout the UK and in London Underground, so they can immediately react to the disturbance of public order, vandalism and hooliganism, or to apprehend the perpetrators of these violent acts, if feasible and possible at the moment;⁶

³ Country Profile UK, http://www.coe.int/t/dg4/sport/Source/T-RV/Country_profiles/UK_EN.pdf, 14.12.2011, p. 4.

⁴ National Policing Improvement Agency, Guidance on Policing Football, London, 2010, p 21.

⁵ About us, http://www.btp.police.uk/about_us.aspx, 09.09.2011.

⁶ During performing the operation called „Midas“ of the British transport police, nine football hooligans of Charlton Athletic (England 3rd league) were detained, who expressed violent behaviour and sang racist

- Keeping in touch with the operators of railways in order to respond adequately to the need for additional trains and wagons, because of the large number of fans that travel by train. Sometimes this can be vital to prevent conflict between two rival groups of fans;
- Sustaining “dry trains”⁷. This slang term means that the role of police officers is to prevent carrying, selling or consuming alcohol in the trains used by football fans, due to the well-known fact that alcohol is the main cause of appearance of fan violence. Not all trains are proclaimed “dry trains”, but only those for which it is estimated to be necessary, because otherwise the rail operators would be in great financial loss if alcohol were banned on commercial lines that do not carry fans.⁸

The police force that secures matches is responsible for suppressing and preventing various forms of crime within the stadium (including disturbing public peace and order to a greater extent) and providing assistance to the club in their competence, relating to security and routing of mass at the stadium. In addition, their responsibility is for public safety and security of persons and property outside the football stadium. For safety at football matches taking place in the UK, local police commanders in whose territory they take place are responsible. To supervise the security of football matches, they have to possess previous experience in securing football matches and following fans, they must complete the appropriate training and need to be accredited for the specified job. They are required to attend and complete the course “National standards for major sporting events”⁹, but after completing the course they are not immediately allowed to independently perform managerial activities, but, for a certain period of time, they are trained with a more experienced colleague, who has successfully completed a course mentioned and has experience in securing football matches.

What measures will the police take for a football match and at what level depends on the previously made risk analysis. The police make a risk analysis based on previously gathered intelligence. In accordance with the previously completed risk analysis, the police in the UK are sorting football matches into several categories, depending on the degree of danger of violence, and these are the following:

- Category CS (Club Security Only) – those held without the presence of the police and are secured by monitorial service of football clubs only. In the UK 40% of football games are played without police present¹⁰, normally with the prior risk analysis of each game separately;
- Category A – low risk of the emergence of violence;
- Category B – average risk of the emergence of violence;
- Category C – high risk of the emergence of violence;
- Category D – represents a category C with the increased risks of the emergence of violence.¹¹

songs while returning from Fullham from the football match of FA Cup on 7 January 2012. Acting on the report of concerned passengers on the train, British Transport Police opened an investigation into the incident. Evidence gathered during the investigation were obtained from the successful cooperation with the football club Charlton Athletic, combined with very good photographs obtained from the surveillance video which covered the stadium, intelligence sources and eyewitnesses who were on the train. After a two-week investigation by members of BTP's in the early morning nine hooligans who had evidence that showed violent behavior were arrested. Read more: <http://www.btp.presscentre.com/Media-Releases/Early-morning-arrests-see-nine-football-fans-detained-following-investigation-into-racist-chants-south-London-18a8.aspx>, 27.01.2012.

⁷ Football policing, http://www.btp.police.uk/passengers/issues/football_policing.aspx, 09.09.2011.

⁸ Sporting Events (Control of Alcohol etc.) Act 1985, <http://www.legislation.gov.uk/ukpga/1985/57>, 09.09.2011.

⁹ Drew B., Stewarding: An Exchange of European Experiences-presentation, Rome, 2007.

¹⁰ Country Profile UK, http://www.coe.int/t/dg4/sport/Source/T-RV/Country_profiles/UK_EN.pdf, 14.12.2011, p. 4.

¹¹ National Policing Improvement Agency, *Guidance on Policing Football*, London, 2010, p. 32.

As noted, in order to do proper risk analysis relevant intelligence data are required. During the collection of these data, two kinds of police officers have the leading role, intelligence officers and "spotters". An intelligence officer collects, evaluates, analyzes, and distributes intelligence in order to reduce the risk of emergence of football violence. These intelligence data help in determining the strategy of action, concrete measures, activities, and procedures to be applied during securing football matches and the necessary level of resources (personnel and equipment) to implement security. "Spotters" are police officers whose job is to identify and monitor hooligans of a club, especially when traveling to away games. These officers make close relations with local clubs, with the leaders of fan groups, as well as with registered hooligans¹². Their main task is to provide updated and accurate information and intelligence on fan groups that are further analyzed and disseminated by an intelligence officer. In addition, their role is to establish links between the police and supporters.

A football liaison officer who is an authorized person for communication between police and football clubs and other interested parties plays an important role. He monitors what security measures are implemented by the club that organizes the match. He gives advice to clubs about measures, to what extent and how they should be implemented while organizing matches. When a stadium is adapted or reconstructed, he makes recommendations to the clubs about the security requirements that a stadium should meet. During a match, he is usually positioned in separate control rooms built in the stadiums where the games of the highest level of competition are played, from which a video surveillance monitors the situation inside and around the stadium¹³. In these rooms, a football liaison officer makes contact and cooperation with representatives of the ambulance, fire brigade and other forces, whose presence is necessary for the safe maintenance of football matches.

ITALY

The basic concept of the Italian police in securing football matches is based on the prominent partnership between all entities that are responsible for organizing and managing football matches. When securing football matches, the holder of these operations is a "Questore" – the local head of the police at the regional level, responsible for the situation of public order, and hence safety at sporting events¹⁴. He is the head of the office (Questura) responsible for coordinating the work of all police units operating in the territory of a province, State Police, Carabinieri, Finance Police and other police organizations. In preparing for a football match, he often requires the opinion of "Security Task Force" (GOS), regarding any problems that may arise during the organization of the game. The group consists of police officers appointed by the "Questore", representatives of the fire service, security commissioner of football clubs, representatives of health institutions, representatives of the municipal police, and other representatives if necessary.

For the actual football game, as noted, the holder of the work is the local police chief who heads the office (Questura). However, in order to secure a football match, it is necessary to possess the relevant information, starting from the number of fans, whether they are violent or not, what means of transport are used, the arrival routes

12 Milojević, S., Janković B., Proactive approach of police in combat against football hooliganism, International Scientific Conference „Arcibald reiss days“, Belgrade, 2011., p. 743.

13 Janković B., Prevention of violence at sporting events, Journal of Rights, No. 3/10, Kragujevac, 2010, p. 143.

14 Standing Committee (T-RV) - European Convention on Spectator Violence, Italy The Evaluation Team, Project on Compliance with Commitments Italy's compliance with the Convention, Strasbourg, 2008, p. 13.

and others. The Office has only a part of the information, mostly local. In order to gather and exchange information needed, the National Monitoring Centre was founded in Italy, located within the Ministry of Interior, specifically within the Department of Public Safety. Among other things, the role of the National Monitoring Centre is also maintaining a two-way connection between all actors responsible for the implementation of legal provisions and organizational measures aimed at preventing violence at football matches. The Center represents a technical, administrative, and advisory body of the Ministry of Interior, especially in expressing opinions about the proposal and adoption of protective measures to preserve public order and security. It estimates the level of severity and the degree of importance of a sporting event and the risks it entails, with special reference to football matches. The Centre expresses its opinion on any general matters relating to the organization of sporting events, especially football games, and the prevention and suppressing violence at sports events. In addition, the National Centre for Monitoring can express its opinions at the request of any governmental body or agency responsible for implementing measures at sports events. Within its weekly meetings, the Centre provides a security assessment (risk assessment) for football matches to be played in two weeks from the time when the meeting takes place. The assessment includes the following elements:

- The possibility of violent clashes between opposing fan groups;
- Potential tensions between fans and the sports associations and clubs, and
- Possible conflicts with members of the police and other authorities who enforce the law.

Based on risk assessment developed by the National Monitoring Center, the direct organizers of a football match take appropriate security measures. Each line of work, which is located in the Center, appeals to its own line of work, involved in the organization of specific football matches, to issue guidelines to enable the safe conduct of a sporting event.

Within Units for general investigation and special operations DIGOS¹⁵ (Ital. *Divisione Investigazioni Generali e Operazioni Speciali*)¹⁶, a special task force is formed to monitor the most extreme (ultras) fan groups, and prevent and combat violence in football stadiums, called the "Fan unit". The main task of the unit is to act proactively, to provide accurate and timely information before the match (of football clubs, fans, their movements, the use of means of transport, information on any planned mutual conflicts and other information) necessary for the safe occurrence of a football match, in order to reduce the possibility of violence. The unit distributes information collected to other police units involved in securing football matches. In situations where there is hooligans' violence, the objective of the unit is to investigate the incidents that have occurred. After the game, members of the unit examine video clips recorded by security cameras in football stadiums, in order to identify rioters.

On the day of the football match, the police units take long, medium, and short-range activity measures in order to optimize the verification, inspection, identification of violent fans and their isolation from other fans. A special task is to identify hooligans banned from entry to football matches because of previous hooligan

15 DIGOS - A unit of general investigations and special operations in charge of conducting investigations in particularly sensitive cases, such as terrorism, organized crime, serious crimes such as kidnapping and extortion. This is a special operative part of the State Police, which is territorially organized, and is located in the provincial offices responsible for the police forces (Questura- the office headed by the chief of police, Questore).

16 *Divisione Investigazioni Generali e Operazioni Speciali*, http://en.wikipedia.org/wiki/Divisione_Investigazioni_Generali_e_Operazioni_Speciali, 12.12.2011.

behaviour. To carry out all these tasks, special measures are taken inside and outside the stadium. Inside the stadium, police measures are taken very carefully and discreetly. Most often, the regular uniformed police officers deployed in sufficient number for a possible intervention take them, but in a manner, that does not endanger the safety of other fans. Outside the stadium and its immediate surroundings, the regular uniformed police and special riot units at predetermined areas carry out the strict control and supervision of the fans:

External area includes access roads area of the town where a football match is played. In this area, checkpoints to monitor the arrival of fans are set up. Checkpoints are set up on the roads, railway and bus stations, airports, tollbooths and other places where fans are expected to arrive. In these places, the first filtration of fans is done. Separating the various supporters' groups and special routes are carried out to the stadium in order to prevent possible conflicts. Police forces follow organized fan groups throughout the route, from the point of arrival to the stadium.

Reserved area (pre-checking phase) is an area intended for control and monitoring of fans that come to the stadium. This area is temporary enclosed by a fence that directs the arrival of fans, depending on which group they belong to. In this field, the fans are checked whether they have a right to enter the facility, or if they have tickets for a special part of the stadium and whether they are denied entry to the stadium due to the previous hooligan behaviour. This control is carried out under the supervision of club stewards of the police, sometimes in the presence of special units when necessary. In this phase, separation of fans that show visible alcohol and violent behavior is carried out.

Security area represents an area at the stadium or at entrances, where a thorough control of fans entering the stadium is done. A detailed check of fans is performed there, and the entry of illegal items and substances, as well as access to fans who own these items is forbidden. In this area, fans' control is most detailed.

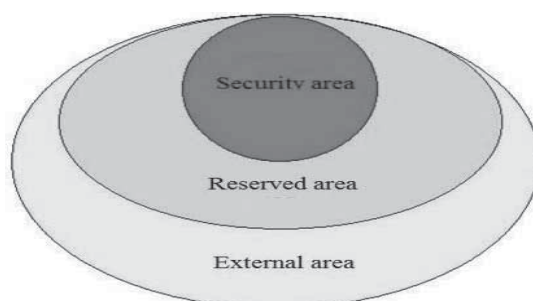


Figure 1. Areas of control of the Italian police at football matches

Security check of spectators, while holding football matches, fall within the exclusive jurisdiction of the Italian police, in order to reduce the possibility of violating the privacy of the audience and the possibility of any inconvenience that might occur if the check is conducted by private security guards. Checking is conducted at different levels:

- Audio – visual checks: all football stadiums, the first and second division, are equipped with closed-circuit television, which allows monitoring and recording during the football games, both inside the stadium, and in the immediate surroundings. The video surveillance system enables monitoring the audience inside the stadium, but also the external areas for separation of fans entering the stadium.

- Metal Detectors – control of entering the stadium is done through the metal detector in order to filter and prevent spectators entering the prohibited items in stadium.
- Checking tickets: When entering the stadium the ticket owners are checked because they contain personal information. The cards are protected against possible counterfeiting codes. Upon entering the stadium, tickets are checked using special electronic equipment located at the entrance gates. Tickets are color-coded depending on the sector of the stadium where the seat is located.¹⁷

POLAND

The law on security of mass events, which applies to football matches, passed in 2009, has brought a number of innovations in police procedures, but also in determining the responsibilities of the security of mass events.¹⁸ The law specifically applies to the organization of football matches and treats them as public meetings with an increased risk. Therefore, further action on the provision of such events need to be taken. The police role is to analyze threats and to anticipate all possible scenarios, including most pessimistic ones. These scenarios include travelling fans to a city where football matches are played, their stay in the city before the match and the football match itself. The security measures are determined based on the risk analysis, as well as the number of security officers and the type of equipment to be used, and the method of equipment application. Based on the assessment, the police determine the amount and degree of risk for a particular football match. A certain amount of risk obliges organizers to recruit a number of security personnel and to use advanced technical tools, including video surveillance and identification system for the spectators. The law on security of mass events has determined the number of security guards that clubs must employ proportionally to the number of seats in the stadium. In addition, all police officers involved in securing football matches need to have a completed specific training and be licensed for the security of such events, which also applies to the members of the security service.¹⁹

In accordance with the provisions of the law on security of mass events, the police are not directly involved in securing large events, such as football matches. Police units are located out of the place of the public meeting, and their task is to secure the approaches to the public meeting and routes of movement of participants. Only the commander of the police force is present at the place of public meeting, in order to monitor events at a public meeting and maintain contact and exchange information with the main manager of the security of the meeting. If an incident occurs, the first to intervene is the security personnel engaged by the organizers, and if their intervention is not successful, then the police forces act and all security personnel are subordinate to the police command. The police are involved in various activities to facilitate the safe travel of fan groups in away games. These activities include monitoring of organized fans that travel by train, bus, or private vehicles.

Like most European police, Polish Police have established a National point of contact for international exchange of intelligence information about hooligans and violence at football matches. Bearing in mind that Poland had a problem with

17 Standing Committee (T-RV) - European Convention on Spectator Violence, Italy The Evaluation Team, Project on Compliance with Commitments Italy's compliance with the Convention, Strasbourg, 2008, p. 15.

18 Standing Committee (T-RV) - European Convention on Spectator Violence, Poland The Advisory Team, Consultative visit to Poland on the implementation of the Convention (Stewarding in the context of sports events security), Strasbourg, 2011. p.3.

19 Ibid, p. 10.

the hooligans, and in accordance with Polish preparations for organizing the European Football Championship in 2012, they adopted the concept that was applied by some European police that is based on the special police officers – “Spotters”. Accordingly, they set up special courses for training of police officers for accomplishing tasks of “spotters”. Their main role is prevention and education activities in order to approach fan groups. Tasks of “spotters” are two-sided. On the one hand, their task is to promote desirable cheering behaviour among the fans and isolate individuals from fan groups whose behaviour is undesirable, and on the other hand, to provide protection for fan groups with which they cooperate. The plan of the Polish Police is that the “spotters” are placed in all football clubs the fans of which can cause problems.

In accordance with the preparations for the European Football Championship in 2012, the Polish police adopted a new strategy that minimizes the possibility of violence at football matches. This approach is called “T x 3” and is based on three actions:

Care (Polish *Troska*) – Police forces should first ensure the protection of all the fans, but also provide information on the organization of football matches, transport, routes, important buildings, possible problems, and especially to enable fans from abroad access to this information;

Tolerance (Polish *Tolerancja*) – Police must have an understanding for the fans who only have “fun”, even if they express their emotions loudly and in an unconventional way.

Suppression (Polish *Tłumienie*) – The last measure, which is applied when the police use coercive means, is to break up groups of supporters who disturb the public peace and order and arrest them, but in a professional way, intervening quickly, accurately and distinguishing between hooligans and the fans who make no incidents. After the rapid intervention, police withdraw and try to bring the situation to its previous state.

In addition to implementing new tactics, the Polish police have introduced innovations in education of their members in combating hooliganism at the upcoming football championship. The Polish police received a unique simulator that helps the police to acquire the skill of prevention and suppression of hooligan riots during football games. The simulator can be used for any violent demonstrations and threats of terrorist attacks. The simulator is similar to that used by pilots to practice a variety of critical situations during summer. A Higher Police School in Szczecin, together with “Aerospace Industries”, which deals with the development of simulators and training aids for air traffic, have developed the training aid for the Polish police.²⁰ In several rooms equipped with computers and monitors, the Polish police officers will train skills to “overcome the aggressive furious crowd of football hooligans” in virtual reality. The simulator has a detailed precise maps of cities in which matches of European championship 2012 shall be played in Ukraine and Poland. The training will allow, among other things, identification of mistakes and shortcomings in the action plans of the leaders of police operations, plans compiled in response to the crisis, the immediate response of the system to the mistakes made, as well as learning to work in teams.²¹ The system can simultaneously simulate behavior of even 15 000 people, real conditions, and it enables developing skills for police officers to find solutions and make very quick decisions in a creative way in stressful situations. Research and development of the police “anti-hooligan” simula-

20 How a simulator is functioning, see: <http://www.youtube.com/watch?v=YaXSGZPUqbo>, 20.02.2012.

21 Wyższa Szkoła Policji w Szczytnie na Konferencji SRC11, <http://www.wspol.edu.pl/d/start/1167-wysza-szkoła-policji-w-szczytnie-na-konferencji-src11>, 20.02.2012.

tors funded by the Polish Ministry of Science cost 1.8 million of euros. Training on the simulator should start in February 2012 in the Higher Police School in Szczecin, where the police units are also going to prepare for EURO 2012.²²

In addition to developing new strategies of suppressing hooliganism and new forms of educating their own forces, the Polish police actively participate and independently implement preventive programs aimed at educating fans, younger people, who attend high school.²³ For example, the programme "Hooligan" is implemented in high schools through a series of lectures conducted by police officers, accompanied by officials and players of different clubs whose fans were hostile towards each other. Another program implemented by the Polish police has been called "A Refined Fan", aimed at junior grades of secondary schools. Its main objectives are to reduce hooligan behavior in stadiums raising the awareness of students about the legal context of this problem, presenting sanctions for illegal behavior at football matches, as well as promoting non-violent, positive support for their clubs. The program designed for the junior grades of secondary schools, called "I can support EURO 2012", will have been implemented by the beginning of the European Football Championship and shall include, among other things, meetings of students, football players, and police officers. The players will share with students their feelings about violence in football stadiums and the sanctions imposed for hooliganism at matches.

SERBIA

The Ministry of Interior of the Republic of Serbia has been trying recently to confront the hooligan violence at football matches in a more serious way. So far, the main way of opposing football hooliganism were repressive measures when violence occurs, by using units of public order, particularly the gendarmerie, the police intervention units and the police unit of Police Directorate of the City of Belgrade. At securing football matches, the Serbian police apply one of the possible models in securing football matches, which can be called a "high profile" of maintaining order.²⁴ The main characteristic of this model is the involvement of large and visible police forces in the area in securing football matches.²⁵ The presence of police in securing football matches in the Republic of Serbia expressed in numbers has been testified by the data about the match between FC "Partizan" and FC "Red Star" in Belgrade, played at the Partizan stadium on 16 October 2004, attended by some 25 000 spectators, while the match was secured by 1 378 police officers, which means there was one police officer per 18 spectators. Five and a half years later, on 16 April 2010, at the "Red Star" stadium, there were about 38 000 spectators, while 2 843 police officers were engaged in securing the match, which means the presence of one police officer per 13 spec-

22 Simulator to train Polish police for Euro 2012, <http://www.kyivpost.com/news/world/detail/113173/>, 10.12.2011.

23 Standing Committee (T-RV) - European Convention on Spectator Violence, 2009-2010 Annual Report of the Standing Committee, Part II - questionnaire on recent trends, Strasbourg, 2011, p.13.

24 Milojević S., Janković B., Proactive approach of the police in combat against football hooliganism, in: International Scientific Conference „ArchibaldReiss days”, Belgrade, 2011, p. 738.

25 Another model might be called "low profile" and it means the maintenance of public order with small, poorly visible police force. The difference between these two models is, except for the numerical presence of police officers, the fact that it is easier for police officers in the "low profile" to make contact with the fans, they show more respect for different cultures and nationalities, have an important role in the prevention of violence and are more flexible and easier to adapt to different approaches to fans. However, it should be noted that the "low profile" does not include "soft" police response to violence and hooliganism. In this model it is reacted immediately in case of offences, applying the principle of zero tolerance towards violence.

tators²⁶. This means that it was not only the appearance of extensive involvement of police officers in securing the football matches of high risk, but year after year there is a notable and pronounced trend in their increasing number, particularly if compared to the number of supporters. While in Serbia, according to these data, there is a police officer engaged per 13 to 18 spectators, that number in some other European countries is lower. For example, in Portugal in 2004, during the European Football Championship, one police officer was engaged per 25 fans on average.²⁷ In any case, in future the police in Serbia, when planning events and proactive implementation of new tactics, will have to make a balance between the need for visible forces, uniformed police officers, who will act preventively to the spectator, and the fact that the excessive presence of uniformed officers may have a negative impact on the fans and encourage them to commit violence, primarily directed towards the police force.

Efforts of the police of Serbia to introduce modern European standards of police conduct in controlling violence at football matches started on 5 May 2011, when the Government of the Republic of Serbia adopted the conclusion²⁸ that within the Ministry of Interior of the Republic of Serbia, the Police, a special Department for monitoring and prevention of violence at sports events should be founded, which is a Serbian NFIP²⁹, called the National Football Information Center (NFIC). NFIC is responsible for coordinating and improving the exchange of information in connection with football matches with international character, and it functions as a central and single point of contact for the exchange of relevant information on football matches of international character and development of international police cooperation concerning football matches.³⁰ The exchange of information of a personal nature through the NFIC is carried out while respecting national and international regulations. If necessary, NFIC may extend the exchange of information with other agencies that contribute to the safety and security. It is not intelligence, but a part of the police organization, so in accordance with that, NFIC does not share confidential information. At the national level, NFIC acts as an information center. The Department for Monitoring and Preventing Violence at Sports Events consists of the Department of Planning and Monitoring of Security Measures at Sporting Events and the Department for Monitoring Fan Groups and Exchange of Information on Sports Events.³¹ The same structure was applied on the Police Directorate of the City of Belgrade, i.e., in the Police Directorate of the City of Belgrade there are the same two departments. The second department is responsible for collecting information about the fans on the field. In other police directorates there are officers engaged in

26 Otašević B., Vla S., Isaković G., Police tactics to combat violence at sports events, in: Proceedings of the "Fighting crime in the framework of international police cooperation", Tara, 2011, p. 433.

27 Adang, O., Brown, E., Policing Football in Europe, Politie academie Apeldoorn, 2008, p. 214.

28 Janković B., Milojević S., International police cooperation in the fight against violence at football matches, in: Proceedings of the "Suppressing crime in the framework of international police cooperation," Tara, 2011, p. 158.

29 By the Decision of the Council of the EU in 2002 each member was proposed to establish a National Office for the exchange of information on the safety of football competitions (NFIP), which will be responsible for cooperation in the organization of events involving more than one EU country: Council decision of 25 April 2002, concerning security in connection with football matches with an international dimension, Official Journal of the European Union (2002/348/JHA).

30 There are two types of information exchanged through the NFIC, and these are general and personal information. The first group of information would be related to those that define the event in all its dimensions, with particular attention to safety and security risks (strategic information), information that help police officers in making a risk analysis (operational information) and information that helps to adequately respond on all security issues that arise during the event (tactical information). Personal data relate to information about individuals who are presumed to be a potential risk to the safety of maintenance events. They may contain information about individuals who have previously caused riots or violence or participated in, and connected with football matches.

31 Ministry of the Interior of the Republic of Serbia, Bulletin of the Ministry of Interior, Belgrade, October 2011, p. 19.

the police departments who are responsible for collecting and disseminating information and coordinating the work related to fan violence. In addition, within the Ministry of Interior of the Republic of Serbia a database "Records of the Extreme Fans" was created in order to adequately monitor extremist supporters. Currently in the police of the Republic of Serbia, there are no police officers who would have the role of "spotters" or who would be connected to certain clubs. In addition, except in the Police Directorate of the City of Belgrade there are no specialized police units, which would collect information about the fans, especially extreme ones in the field. A large number of police officers³² are engaged in securing all football matches in Serbia, and the police are chief, and often the only carrier of security. Namely, the Law on Private Security has not been adopted in the Republic of Serbia yet, and therefore a number of outstanding issues related to hiring private security agencies as carriers of securing football matches have not been resolved.

CONCLUSION

Police of different countries apply various activities, practices, and procedures during the fight against football hooliganism. The police forces of all countries discussed in this paper tend to proactive and less repressive action, with the main aim that violence does not occur. The United Kingdom, Italy, and Poland have positive results in confronting violence at football matches. The question is why the police of Serbia are not on the same way. The answer may be found in the fact that these countries have started the application of modern policing, policies and procedures much earlier. Proactive actions of the police in confronting football hooliganism cannot give immediate results. Unfortunately, changes in the approach to the problem of violence at sporting events in Serbia began in 2011, with the formation of a special Department for Monitoring and Preventing Violence at Sporting Events. This caused that in Serbia, unlike many other European countries there is still:

- Lack of special police units, scattered throughout the territory of the Republic of Serbia, that collect intelligence and information about the fans, especially the hooligans in the field. In the police of the Republic of Serbia, there are no police officers who would have the role of "spotters", or who would be connected to certain clubs, respectively. Therefore, organizational changes in the Ministry of Interior are still necessary for the effective implementation of proactive police measures in confronting football hooliganism;
- There is no specialized training of police officers who would work on the problem of violence at sporting events. There is still the old practice in Serbia that everybody knows everything, and the specialization of staff and continuous professional development is missing. It is not enough that only managers visit foreign police organizations through study tours, but it is essential that all police officers who deal with this problem complete the specialized training and obtain the necessary licences³³. In all the countries mentioned in the text, all police officers who perform security tasks at football matches attend and finish special courses and must pass the licensing in order to be allowed to perform this activity;

32 Otašević B., Vla S., Isaković G., Police tactics to combat violence at sports events, in: Proceedings of the "Fighting crime in the framework of international police cooperation", Tara, 2011, p. 433.

33 Members of private security, as stipulated by the Draft Law on Private Security, which will soon be most likely adopted by the Parliament of the Republic of Serbia, in order to perform any work in the field of private security guards must successfully complete appropriate training and obtain a license as proof of competence. Among other things, if the private security agencies want to deal with matters of security and sporting events, the officers must be licensed for this purpose. Nonsense is that members of private security have special training and special licenses in securing sports events, and police officers do not.

- There are no sufficiently developed proactive measures, based on collected intelligence, to confront violence at football matches. The police still mainly apply repressive measures.

Further organizational changes in the police of Serbia and the establishment of the system of adequate training of police officers is the way that Serbian police have to go if they want to deal with the problem of violence at sporting events adequately, which in Serbia in recent years goes beyond the scope of sports facilities and becomes a general social problem. Since it has become a general social problem, impossible to be left to the police alone, it is necessary that other parts of society are involved in its solution and these are families, schools, and at this critical moment, especially the judiciary, with an effective resolution of legal proceedings taken against hooligans.

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PHYSICAL ABILITIES OF POLICE OFFICERS AS PREREQUISITE FOR SUPPRESSING VIOLENCE AT SPORTING EVENTS IN REPUBLIC OF SERBIA¹

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Abstract: Violence at sporting events is a particularly serious problem in the Republic of Serbia. In response to it, the police are entrusted with performing specific security tasks related to security of public assembly, focusing on maintaining public order or reinstating it in case of serious disturbances. In order to ensure that police officers are capable of performing these assignments lawfully and efficiently, they should be properly prepared, which is achieved by maximizing the compatibility of their training (what they should know) and their working profiles (what they should do). The preparation and implementation of specific security tasks can be represented as an equilateral triangle, each side representing one element of the educational and working profile. The sides would thus represent: 1) physical capabilities of police officers, 2) their equipment, and 3) the engagement tactics. The paper focuses on the problem of physical fitness of police officers as a prerequisite for the prevention of violence at sporting events in the Republic of Serbia, as can be inferred from the title. Also, in terms of psychological preparation for action in sporting events, stress is generally recognized as a contributing factor to many personal, family, collective and creative problems. Tactical conduct of police officers as part of the regular and special security tasks is very complex, because it involves the application of different techniques, processes and skills that will ensure the execution of the task and simultaneously serve to protect it from threats to personal safety.

Key words: violence, sporting events, police officers, physical fitness, applied physical activity.

INTRODUCTION

The complexity of tasks performed by police officers, especially the ones within the above mentioned specific purpose units, demand permanent physical fitness and the so-called special abilities. In order to ensure continuous preparation of police officers for performing security tasks, physical training has been incorporated in the daily working schedule, the aim of which is to continually develop and maintain physical fitness and special abilities, as well as to ensure proficiency in weapon handling (*The Professional Development Curriculum of the Ministry of the Interior*, 2009). The existing curricula of physical training and special development programmes for police have reached the level which ensures adequate reactions of police officers (*The Professional Development Curriculum of the Ministry of the Interior*, 2009).

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The violence of supporters at sporting events is, in a sense, a constant value that accompanies the development of sport as an important human activity. Namely, sport has a complex and ambivalent nature, which manifests in the simultaneous presence of its homogenizing (integrative) social potential and antagonistic (disintegrating) one (Armstrong & Giulianotti, 1999).

The contemporary society in Serbia faces serious violence-related issues. Violence at sports events is particularly severe and frequent, which makes it a topical security issue. The complexity of the problem lies in the fact that violence is part of the fan subculture, which is more often manifested in the desire to inflict physical or mental pain to the opponent, than to support one's own club (Otašević & Subošić, 2010).

All participants of the sports manifestations are exposed to violence. This includes all persons present at the sports event venue, as well as the persons in the vicinity of sports facilities, who have no contact with the sports event itself. On the other hand, violence at sporting events also affects police officers, spectators, referees, and other categories of people. The data available indicate that in the period of almost 14 years (01/01/1997 – 30/09/2009) as many as 1,572 people were injured or killed during sports manifestations (*Security Aspects of Sports Manifestations July 2003 – September 2009*, RS MI, Belgrade, 2009). The number of fatalities was 11 and none of them were police officers. The injured included 514 officers, 24 of whom with minor injuries, and 490 officers sustaining grave bodily injuries. Among the remaining 1,047, there were 138 people with minor injuries, and 909 sustaining grave bodily harm (Table 1).

Table 1 Consequences of violent behaviour at sporting events threatening lives and wellbeing of the participants in the period 01/01/1997 – 30/09/2009

| | Fatal outcome | | Bodily harm | | | | |
|-------|---------------|------------|--------------|-------|----------------|-------|--------------|
| | Policemen | Others | Policemen | | Others | | |
| | | | Minor | Grave | Minor | Grave | |
| | 0 | 11 | 24 | 490 | 138 | 909 | |
| Total | 0 (0%) | 11 (0.01%) | 514 (32.70%) | | 1,047 (66.60%) | | 1,572 (100%) |

During sports events, violence also results in substantial material damage, reflected in the damage to sports facilities (e.g. caused by breaking and burning seats and other inventory), public transportation means (caused by throwing stones at them or damaging their interior, etc.), police vehicles, private cars, etc. Some of these have been shown in the table below (*Security Aspects of Sports Manifestations July 2003 – September 2009*, RS MI, Belgrade, 2009). In the period between January 1, 1997, and September 30, 2009, the number of damaged vehicles totalled to 355, among which 82 were the property of the Ministry of the Interior and 273 the property of other persons (Table 2).

Table 2 The number of vehicles damaged as a result of violent behaviour at sporting events in the period 01/01/1997 – 30/09/2009

| | Vehicles of RS MI | Other vehicles | |
|-------|-------------------|----------------|------------|
| Total | 82 (23.1%) | 273 (76.9%) | 355 (100%) |

When the story of fan subculture is combined with the number of sports events in the Republic of Serbia held on the annual basis, it is not surprising that there are vast numbers of serious violations of public order directly or indirectly related to them, and the incidence of violent behaviour appear to be even comparatively small when compared to the overall number of events. However, the problem becomes complex when specific cases of public order disturbance are analyzed because, for instance, during only one football match held in Belgrade in April 2009 (as part of Football Championship 'Jelen' Super League of Serbia between FC 'Partizan'(Partisan) and FC 'Crvena zvezda'(Red Star)) as many as 18 police officer sustained injuries (*Information on criminal offences threatening the safety of police officers in the execution of their duty, focusing on the period of eight months in 2009*, RS MI, Belgrade, 2009).

Upon analyzing the data in Table 3, a conclusion can be drawn that within the observed two-year period, there were 88,440 sports events - 43,692 in 2009 and 44,748 in 2010. Large-scale disturbance of public order occurred in 232 cases among which 130 took place in 2009, and 102 in 2010 (*The most remarkable results of the Republic of Serbia MI in 2010*, RS MI, Belgrade, 2011). These incidents claimed the life of one person and 311 persons were injured - 192 of them in 2009 and 119 in 2010 (Table 3).

Table 3 - Main features of violent behaviour at sporting events and its consequences to life and health of participants in the 2009-2010 period

| Year | Number of sports events | Number of serious disturbances of public order | % of cases of serious disturbances of public order | Number of fatalities | Number of injured persons |
|-------|-------------------------|--|--|----------------------|---------------------------|
| 2009 | 43,692 | 130 | 0.30 | 1 ² | 192 |
| 2010 | 44,748 | 102 | 0.23 | 0 | 119 |
| Total | 88,440 | 232 | 0.26 | 1 | 311 |

In the course of the observation period (2009-2010), police intervened in the cases of public order disturbances related to sports manifestation and the number of officers injured in these interventions totalled at 61, with 45 officers having been injured in 2009, and 16 in 2010 (Table 3).

But violence on the occasion of sports manifestations does not affect only the supporters and the police. All participants of these events are threatened by violence, which is frequently directed against referees and delegates. The number of assaulted referees sets this category of participants aside as one of the most seriously threatened. As many as 185 attacks on referees occurred in the 2009-2010 period, 75 in the course of 2009 and 110 in 2010 (*The most remarkable results of the Republic of Serbia MI in 2010*, RS MI, Belgrade, 2011). Within the same period, 138 sports events were interrupted due to public order disturbance, 69 per each year (Table 4).

Based on the data presented in Table 4, it may be pointed out that inappropriate security-related circumstances surrounding sports events are to be regarded as another cause of violence against the referees and interrupting the sports manifestations. Namely, in the course of 2009 and 2010, a sports event was suspended every six days, on average, in the Republic of Serbia (*The most remarkable results of the Republic of Serbia MI in 2010*, RS MI, Belgrade, 2011).

² French citizen Taton Brice Sinclair Peter - Brutal beating up and murder of the French supporter that happened in Belgrade in September 2009, is indicative in that the attack itself was prepared in communication of several individuals but only two of them led the act itself (Savković & Đorđević, 2010).

Table 4 - *The number of attacks against sports referees and the number of sports events interrupted due to public order disturbance in the period 2009-2010*

| Year | Number of attacks against sports referees | Number of matches suspended due to disturbance of public order |
|-------|---|--|
| 2009 | 75 | 69 |
| 2010 | 110 | 69 |
| Total | 185 | 138 |

Police leaders cannot expect police officers to work more in a negative environment without stress. Therefore, it should establish a safety net to mitigate the problem of stress. Money spent on such programs will result in a more stable staff and increased productivity within the department. Physical attacks as well as the attacks on the police using firearms and cold weapons, and other resources are a threat to their personal safety. All these activities require the threat of police construction: their safety culture, self-protection measures, and enforcement of appropriate tactical actions that will protect them from various forms of threat or eliminate the appearance of new threats.

POLICE RESPONSE TO VIOLENCE IN SPORTS EVENTS

In the course of performing their official duty, as part of pursuing their social role, the police carry out regular and special security tasks. The latter include securing public gatherings, among which sporting events have a very prominent part, in terms of the very high level of risk of large-scale disorders, occurrence of violations and criminal offences. The Ministry of the Interior of the Republic of Serbia (RS MI) deploys a number of police units specifically formed to perform special tasks, including the security arrangements for sports events. These units include, most frequently, Gendarmerie, the Police Brigade of the Police Department for the City of Belgrade, Mobile Unit (*IJP*) and, depending on the security issues involved, they may include the Special Anti-Terrorist Unit (*SAJ*) and the Counter-Terrorist Unit (*PTJ*).

The affiliation to fan groups and supporting present a modern way of expression of individuals, and participation in and attendance of sporting events have been marginalized because supporting is a spectacle in itself. There are frequent reports of misconduct in the sporting facilities and violence outside them, targeting members of fan groups, as well as a large number of instances of violent behaviour and conflicts targeting police officers.

A particular problem in our country stems from the police practice of relying on traditional police measures taken in response to security threats at sports events, which are regarded to be outdated within the broader international context (Otašević, 2010). A prominent feature of this traditional approach, referred to as 'high profile' approach in the relevant literature, is conspicuous presence of uniformed police at the venue of a sports event and around it, made manifest through intensive official activities in relation to the participants of the public assembly and the number of deployed police officers, as well as the duration of their engagement. An analysis of the above mentioned elements of the deployment of police officers at sporting events follows.

When analyzing the deployment of police forces for securing the public order during sports events, it may be pointed out that the police are equipped with means for dispersing the crowd, special vehicles, as well as service dogs and horses. The officers are grouped into larger police units and engaged at the

order of the commanding officer, who accompanies the unit in the location of its deployment. This strategy is based on the classical concept of creating a buffer zone before the opposing groups of supporters, i.e. preventing the contact between them (by forming cordons or intervention lines), which prevents riots possibly originating from their clash, both on the sports facilities and outside them (but on the occasion of sporting events). Plans and decision-making regarding the number of deployed police officers and their actions frequently fails to take into consideration the specific traits of different groups of fans (their objectives, nationality, number of extremist fans, culture-specific details, etc.). However, when these differences are not taken into consideration and when the police approaches the task of securing the public order at such an event routinely, the risk of large-scale disturbance of the public order increases.

While performing the tasks related to protecting the public order during sports events the police take measures which include physical security measures, in-depth security, traffic safety, operative crime-investigative action, counter-sabotage and fire protection. The measures of physical and in-depth security are of utmost importance. Namely, the physical security measures on the location of the sports facility and in its vicinity are taken in three stages (prior to, during and after the event) with the deployment of strong and very conspicuous police force. In these circumstances, the officers are in charge of admitting the fans to the sports facility, exerting control over the monitors, preventing the physical contact between the opposing groups, maintaining the order at the venue, and overseeing the dispersal of fans following the event, as well as monitoring the developments in the immediate vicinity.

The number of police officers deployed during high-risk sporting events is best illustrated by the fact that 25,000 spectators attended the Serbian derby between the football clubs of 'Partizan' and 'Crvena zvezda' from Belgrade on October 16, 2004, whereas the police force was 1,378-men strong, which means that for the purpose of securing this football match a police officer was deployed per every 18 fans/spectators. Five and a half years later, more precisely, on April 16, 2010, when the semi-final match of the championship took place at the stadium of 'Crvena zvezda', there were around 38,000 spectators, whereas 2,843 police officers were deployed to secure the event, which meant the presence of one officer per 13 spectators. This implies that the already extensive involvement of police officers in performing security tasks during high-risk sporting events shows a tendency of increasing, especially with respect to fan groups.

The duration of the activity is of immediate importance for determining the duration of the police force deployment and the number of officers engaged. The law defines the duration of a high-risk sports gathering as the time of the actual event plus 120 minutes before and after it. This means that the minimal duration of police force deployment for the task of securing the public order at a high-risk sporting event is approximately 360 minutes (six hours). However, when the event is a high-risk football match, the gates sometimes open as many as four hours earlier, due to the large number of spectators who must be scanned upon entering the facility, so that two additional hours are added to the above mentioned time of deployment (at least 480 minutes or eight hours). Therefore, the engagement of police officers in charge of securing the public order at sports events lasts at least eight hours, provided that there are no riots, but, depending on the security assessment, the deployment may frequently extend to 12 hours, taking into account the postural status of officers (Bubanj et al. 2010).

In addition to the presence, constabulary and patrol activities, stand-by status, marching, regrouping, and other non-intervention measures, there are actions of police deployed at sporting events which are referred to as interventions.³

Intervention units can be said to possess individual and collective equipment for riot control. The individual gear weighs between 12 to 15 kilos. The purpose of this equipment is to protect a police officer by preventing possible injury and encouraging restraint in the use of coercive means, even when there are conditions for the use of force. In the situation of securing public order at sports events, this equipment provides protection, but at the same time presents an additional burden, because it limits the maximum or sub-maximum intensity of running upon arrival at the scene and restricts the anatomic flexibility of joints. An additional aggravating circumstance is the movement in an already formed line, because this implies that the troops are positioned diagonally with the outstretched non-dominant leg, allowing the movement in line. In addition to the duty belt and the equipment attached to it (handgun, baton, spare magazine, handcuffs, radio-station), police officers engaged in an intervention also carry shields, which prevents them from using the physical force, police baton or restraining means. When using police batons in such situations, it is obvious that the amplitude of strike is reduced because there is not enough space. The officers will therefore use the batons to strike directly forward in the described situation. However, these strikes allow the opposing party to grab a part of the baton (Vučković, 2005) and try to snatch it from the police officer, who must possess sufficient hand strength and be proficient in the baton holding techniques in order to resist such attempts (Vučković, 2005).

The use of physical force involves the use of different elements of martial arts or similar techniques on the body of another person, aimed at repelling an attack or subduing the individual offering resistance causing the least harmful consequences. An attack is defined as any action taken in order to cause injury to another person or to deprive a person of life, to forcefully enter a facility or the surrounding space wherein the entry is prohibited, or to prevent a law enforcement officer from executing his legal duty. On the other hand, resistance is defined as any opposition offered to lawful official measures and actions in the form of disregarding orders, kneeling, sitting, lying or taking a similar position by way of passive resistance; hiding or holding on to another person or an object; snatching, showing intention of an assault or taking any such actions as present active resistance. Physical force is used in accordance with the rules of self-defence and it stops as soon as the assault or the resistance of the person is overcome. The use of physical force can result in the cessation of resistance, whereupon the person is cuffed and searched, objects are seized temporarily, and the person is taken in. If the desired objective cannot be achieved by physical force, the police baton is used. So the use of the police baton is allowed if the more lenient action is ineffective or without promise of success.

The service baton is used by hitting a person in the areas of large groups of upper arm or leg muscles, primarily in the regions of upper arm, leg or the gluteus. Restrictions for the use of police baton involve the prohibition to use it in the areas of the head, neck, vertebral column, thorax, genitals and articulations, except as a last resort. The use of police baton is also limited in the case of children (persons 14 and younger), apparently ill, emaciated or disabled persons, and women whose pregnancy is obvious, against all of whom this means of coercion may be used only

³ The term 'intervention' originates from the Latin word *interventio* which means interfering or mediating, involvement of a third person in a conflict in the capacity as an arbiter or mediator. The verb 'to intervene' is of the same origin (*intervenire*) which means to interfere or become involved in something, such as a conflict, for instance, as a mediator, to mediate or ... exert pressure, influence someone, act on behalf of someone or advocate something (Vujaklija, 1996/97).

if any such person should threaten the life of another person by the use of firearms, tools or other dangerous objects. The use of police baton may result in the cessation of resistance, whereupon the person is cuffed and searched, items are temporarily seized and the person is apprehended. If the legitimate objective cannot be achieved using this measure, then more powerful means of coercion can be used, in keeping with the principle of the gradual use of force.

Finally, the means of restraint may be used in order to: 1) prevent resistance of a person or repel an attack against a law enforcement officer; 2) prevent the escape of persons; 3) prevent self-injury or inflicting injury on another person. The means of restraint include, as a rule, the cuffing of the person's hands in front of or behind his back. The restraint means include the handcuffs, zap straps, and other items designed for this purpose. The same restrictions apply to restrain as in the case of police baton.

The police duties related to interventions aimed at ensuring the security of sports events and preventing or suppressing violence take place in the circumstances of high emotional, intellectual and perception tension, as well as stress-inducing effects of being exposed to risks, such as threat to one's physical integrity and endangered lives (Milošević et al. 1995). These are the circumstances in which police troops are to perform various modalities of manifest movements, such as running with or without changing direction (short and long sections), an activity in which cardio-respiration potentials play a prominent role (Zemkova, 2010), then the actions of pulling or pushing, as the segments of the basic motor skills (BMS) and in some situations they use techniques of Special Physical Education (SPE), such as throws, levers, kicks and blocs, using the police baton or means of restraint (Blagojević et al. 2005), as well as firearms (Vučković et al. 2008). The intervening actions of police officers at sports manifestations are very frequent. For instance, the current data for years 2009 and 2010 point out to the fact that approximately the same number of police interventions was undertaken by the police at sporting events in the course of both years, so that the police intervened 110 times in 2009 and 111 times in 2010 (*The most remarkable results of the Republic of Serbia MI in 2010*, RS MI, Belgrade, 2011).

There has been some foreign research related to estimating the physical fitness of police officers and their preparedness. A study carried out in the U.S. proved that police officers were less capable than the persons they arrested (Copay & Charles, 1988). This was the reason why the country introduced a physical aptitude test comprising four elements: a deep seated forward bend to check flexibility, the number of bends per minute to check local muscular endurance, bench press to check the maximum strength of arm extensors, and a running test of 2000 m (1.5 miles) to test aerobic endurance. The police officers must be able to achieve results exceeding 40 percent relative to the age and gender based on the sample nationwide population (Copay & Charles, 1988).

Another study in the U.S. focused on analyzing the police officers' movement tasks. The sample comprised 267 subjects whose physical activities were monitored. The observation period lasted one month or 14 shifts. The observation included the situations in which the police officers had to intervene. The situations in which a police officer had to approach the scene by running occurred in 50 % cases and the average distance they had to run was 87 m, the shortest distance being 5 m, and the longest 350 m. The police officers had to run either changing the intensity of this activity or maximizing it in 43% situations. Upon direct intervention, actions that prevailed were that of pushing and pulling, occurring in as many as 93 % situations, and these were followed by rotating and turning

the persons, as well as exerting control over them in 86 % situations (Anderson et al., 2001). The same study concluded that most activities involved in the intervention demanded sub maximal or maximal exertion, which implies that a police officer must undergo adequate physical preparations that would allow for his successful performance of police tasks. The sample consisting of 34 experienced officers working in urban settings with high crime rates was observed in a study exploring the relations between the aerobic capability levels (VO_{2max}) and the response of the cardiovascular system, focusing on the heart rate and blood pressure values in systole and diastole (HR, SBP, DBP), in the situations of deciding on the use firearms during an interactive video simulation involving two different stress-generating scenarios. Using the multiple regression analysis, a statistically significant positive relation was established between VO_{2max} and the intensity of the monitored reaction variables of the cardiovascular system. The strongest partial relation was established in terms of systolic and diastolic blood pressure variables (ΔSBP i ΔDBP). Thus it proved that the police officers with higher levels of aerobic preparedness were able to compensate faster in stressful situations, using more flexible mechanisms of cardiovascular adaptation (Clayton et al., 1993).

The analysis of individual measures from the aspect of applied physical activity can be reduced to analyzing the elements of offender apprehension because the two other measures (detention and deprivation of liberty) are not possible without it. Besides, the use of coercive means most often takes place in the circumstances preceding or executing this measure, whereas in the cases of detaining individuals or depriving them of their liberty this measure is less likely to occur, and when it does so, it does not depart from the pattern of the apprehension.

Table 6 shows the basic characteristics of police interventions at sporting events in the analyzed six-year period (July 2003 – September 2009), based on which a conclusion can be drawn that there were 5,310 instances of the use of police powers in the observed time span (*Security Aspects of Sports Manifestations July 2003 – September 2009*, RS MI, Belgrade, 2009). Prior to exercising police powers in the cases of violence during sports events, it is most frequently necessary to gather the police units, organize marches aimed at their regrouping, deploying cordons and engaging in intervention. As a result of the intervention, all persons who are identified as perpetrators of crimes and violations should be apprehended.

However, if the person refuses to follow or resists the arrest despite the issued warning, the police officer shall use coercion. This means that in such circumstances the police officer has the right and duty to use coercive means (most frequently open-hand techniques, police baton, firearms, restraining means) in a legally justified and appropriate way, in order to overcome resistance or repel an attack and to bring the said person before the competent authority.

The police officer shall also restrain the persons who resist the apprehension, try to escape, assault the police officer or another person, or attempt to incur self-inflicted injury. In order to subdue the person, it is usually necessary to use coercive means, most often physical force and/or police baton, followed by using the means of restraint.

When using the means of restraint, a physical contact between the police officer and the restrained person is inevitable, which affects the safety of the officer to a great extent and therefore causes tension and stress (Vučković, 2003, 2005^b), which are more easily eliminated by the officers who are more physically apt (Milovanović, 2003).

Table 6 - Basic characteristics of police interventions at sporting events in the period July 2003 – September 2009

| Total | Police actions taken | | | 5,310(100%) |
|-------|----------------------|-------------|---------------------|-------------|
| | Apprehended | Detained | Deprived of liberty | |
| | 4,750 (86.06%) | 352 (6.63%) | 208(3.92%) | |

Having successfully overcome resistance or repelled the attack, a police officer shall search the person he has apprehended in order to find and seize objects convenient for the purpose of attacking other persons or inflicting self-injury. The search is physically demanding because it implies exerting control over a person in the upright position by placing the person against a surface and establishing a body contact between the officer and person searched, whereupon a large portion of the offender's body weight is transferred onto the officer (Dujković et al. 2009). If the searched person is restrained on the ground, the requested level of physical ability is marked by the rotation of the body onto one side (left or right) as well as the techniques for bringing the person in the upright position (Dujković et al. 2009).

PSYCHOLOGICAL AND TACTICAL ABILITIES OF POLICE OFFICERS

There is no official theory on which one could rely for reliable prediction of the response of police officers in the special conditions of stress while performing action at sporting events. Therefore, it is not surprising as psychiatrists, psychologists, social workers and other social services staffs are constantly searching for information on ways and means to help improve the mental health of police officers, especially those who have succumbed to personal accident. These are the reasons why the occupational stress was the subject of much debate, especially in mid-seventies, and this is one of the hottest topics today not only in the police but also in various teams, organizations and people's homes. Thus, in the police literature, there are many speculations and significant research about the job as a stress factor for a police officer, his family and police organization. Generally, there is agreement that stress is negative destabilizing force that is out of control if there are adverse effects on the personality of the individual police officers and through them the whole team.

Stress has both biological and psychological effects on the victim and is associated with numerous health problems and diseases: cardiovascular, ulcerous and high blood pressure. For example, Jacobi (Jacobi, 1975) found that the police sought medical care six times more than members of other professions, for example, 50% were those who went to the doctor's for high blood pressure. Upon reviewing health-related data, Fell, Richard and Wallace (Fell, Richard, and Wallace, 1980) established that there was a significantly higher percentage of premature death in the officers and that they were admitted to hospital more often. The findings of this kind can cause a number of psychological or personal problems: anxiety, depression, alienation, and motivational problems.

Such claims are supported by the findings of Maslach (Maslach, 1976) who showed that only in one year 1,500 members of New York City police sought psychiatric care for stress problems. This is the first professional approach to consideration of this phenomenon on a representative sample (5,700 men of different profiles among whom 2/3 were under 40 years of age) in order to highlight the problems of absence from work, which is justified by medical reasons.

The most common reasons for absence from work in addition to respiratory diseases and diseases of the digestive tract are heart and vascular disease and mental disorders, that is, those which are most often a consequence of stress, especially prolonged stress. These are the reasons why the job as a stress-inducing factor is considered very important problem, and that management should take appropriate measures to reduce its incidence, effects and consequences.

Selye (Selye, 1981), a leading expert on stress, defines this phenomenon as a nonspecific response of the body to any demand for adaptation to changed environmental conditions. This definition allows the stress to be perceived as either positive or negative. The positive influence of stress is called "eustress" and the one with the negative influence "distress". In fact, every job must include an appropriate level of stress in order for those who perform it to be efficient and productive. That is why in every business there must be certain requirements and objectives, expectations and control of individuals. If this is lacking and there is not productive stress either, it is inevitable that the organization suffers. For example, a general grumbling among police officers who work in shifts in the early morning is that it is such a tedious job. In such cases, the lack of activity leads to stress, which results in the decline of moral and productivity. Allen, Hitt and Greer (Allen, Hitt and Greer, 1982) noted that the stress can be expressed as a reverse U-curve. Such a set curve indicates that the ability declines with the rise of stress to the point where it is unusable. At that point, the increase in stress is the result of a proportional reduction in capacity.

Eustress is a tense event that does not endanger or damage an individual, but is friendly, challenging and exciting. Take, for example, stress caused by some new and exciting job or unusually difficult task. This type of stress experienced by, for example, police officers who have just entered into service and for the first time participate in the patrol. However, experienced officers may experience this type of stress, especially when changing jobs and going to the new tougher tasks, such as, for example, a criminal investigation. This form of stress is positive and creative, and it is expressed by high levels of motivation.

Distress is a form of stress that can be defined as a harmful stimulus that threatens normal functioning of individuals, such as overload of capacity in overcoming stimuli acting from the environment. Distress can occur when working in special conditions, such as areas with high crime rates, inadequate equipment for the execution of life-threatening tasks or when adequate support was not provided while carrying out specific tasks. In any organization, particularly the police, there are tasks or situations that are dangerous for individuals and require special attention.

In order to describe the process by which stress incapacitates the individual for a successful fight with it, Selye precisely determined what is meant by general adaptation syndrome. The syndrome has three distinct phases: the alarm phase, the phase of resistance and the phase of exhaustion. The alarm phase starts at the moment of action of a stimulus to which the body is not adapted so the person faces a threat or an extremely tense situation. Physiological responses in such situations are expressed as increased adrenaline levels and increasing cardiovascular activity. In this way one becomes psychologically and physiologically prepared for danger and after the risk disappears, it returns to normal. However, if the threat continues, the optimal human resources are mobilized and enter the phase of resistance in which the body adapts to new conditions. Finally, if an individual is unable to overcome or manage risk, he/she may resist until they reach a stage of exhaustion in which a man has no resources with which to overcome the danger which makes him unable to function normally and can result in the development of disease and even death.

Stress is basically a problem of incompatibility between a person and the environment in which they live and work. It occurs when an individual is overburdened with negative environmental factors or when the environment fails to provide or to affect the individual's needs. Each person has their own set of skills, abilities, experiences, events, mental and moral qualities, and each job, within the environmental context, requires from the employees to have an appropriate set of skills, abilities, experience and mental traits. Stress occurs when personality traits and abilities are in conflict with the requirements of the job they perform.

Violanti (Violanti, 1983) pointed out that stress is a matter of perception: the stress can be said to arise only if a person cannot adequately process the perceived social demands; otherwise, if the person is not afraid to anticipated shortcomings he/she will not experience stress. From this point of view, stress is in "the eye of the beholder" personal experience that depends on social and psychological attributes of each person (Kasl, 1978). Effective stress management requires recognition of the symptoms of stress. Within the police organization, there should not be any part of it which would constitute a burden of responsibility to recognize these symptoms. It is of vital interest that all people working in the police, especially those in responsible positions are able to detect signs of stress and know proper methods to minimize its effects. The symptoms must be recognized and their effects mitigated or eliminated before they lead to excessive problems with both the stressed person and those who are work-related with him/her.

Stress is an individual problem, but it cannot be isolated to just one person. All forms of stress ruin the relationship of a stressed person with other people, whether between the individuals or within a group. Extremely critical issue for both the organization and the individual is low-intensity stress that can accumulate and grow into high-intensity stress, which as a rule, leads to major physical or other breakdowns (social, psychological). Prolonged emotional stress can wear a person and if the appropriate measures are not quickly taken it can be unbearable. Levels of stress tolerance are different for each individual; however, it is an undisputed fact that everyone is sensitive to stress (Миловановић, 2003).

Adaptive abilities of each individual are limited and vary. They are specific, that is, different for different types of stressful situations. In other words, there is not only the general and specific resistance but also the general and specific vulnerability. Direct testing and measurement of these dimensions, which depend on many variable factors is not possible. It can be indirectly inferred on them, only with a certain degree of confidence, based on emotional and other reactions of a person in stressful situations. Because stress and emotions associated with it are concepts that in some way overlap each other. Emotion is a psychological dimension of stress and the stress reaction is even more intense if the emotion is stronger. Emotions indicate which events are of central and which of peripheral importance for a person.

General and specific resistance, i.e. vulnerability to stressful situations, and the success in overcoming them, depends on many individual characteristics such as, for example, age, gender, education, occupation, family and social situation and adaptation, economic and health status, cognitive and affective characteristics, psychological and personality organization. The success of coping with stressful situations depends on the degree of confidence and a range of abilities, such as the ability to quickly assess the real situation and one's own capabilities, ability to predict the development of a stressful event, control of one's own affective response and behaviour, rapid and appropriate confrontation with the stressor or its avoidance, the ability to make and consistently implement an action plan and the ability to change the plan if required by the chain of events. Of great importance is also the skill of providing and using social support and help.

Psychosocial support and assistance may also be of paramount importance to prevent and mitigate harmful effects of stress. In this sense, warm acceptance and understanding act positively, as well as expressing sympathy, providing opportunities for expressing problems, expressing solidarity and support in the form of information and advice, and financial aid. All other psychosocial interventions can prevent or mitigate the effects of stress. These include the specific forms of treatment, especially psychotherapy and social therapy. These skills can develop through education and in some other ways, and they are given more attention in recent years. Finally, the successful opposition to stressful situations depends on the maintenance of good physical and mental condition.

There is no dispute that stress makes social, psychological and physical functioning of individuals worse. In general, the stressed individuals experience more job dissatisfaction, they are less productive, make a higher percentage of errors and accidents, their judgments is poorer and their reactions slow. Psychological changes such as increased irritability, anxiety, tension, feeling of "nervousness: or feeling of "anger" can disrupt relationships with colleagues at work. In addition, stress can also impair the immune system so that people under stress are more susceptible to diseases and are more frequently absent from work.

Prolonged stress can cause unwanted changes in behaviour: addiction to drugs, alcohol, and sometimes the divorce or suicide. Long-term effects of stress causes chronic diseases such as: high blood pressure, heart disease, diabetes and asthma attacks. There are five categories in which the symptoms of stress can occur. These are: physical, intellectual, emotional, social and spiritual. The police, because of their work, are exposed to environmental stimuli that can cause stress reactions in these categories (Миловановић, 2003).

Physical symptoms: Physical symptoms of stress are usually first recognized. Ulcers, headaches, low back pain, frequent fevers, sexual problems and general reduction of energy are typical symptoms, and the first symptoms are fatigue and malaise. Police officers showing physical symptoms of stress rarely participate in the performance of duties or exercise.

Intellectual symptoms: The intellectual symptoms are manifested in a general loss of clarity of thought and in problem-solving. Creativity can also be reduced, and there is often expressed cynicism towards those who express new ideas or strategies for the tasks. Claims such as "It will never be done" or "We have already tried something similar to do" reflect the cynicism that is an indication of stress. A policeman who shows intellectual symptoms of stress rarely has a hobby or any other means of intellectual relaxation (reading, playing chess or music).

Emotional symptoms: Emotional symptoms are recognized by reviewing the general positive and negative aspects of emotional life of person. Is the police officer's basic attitude optimistic or pessimistic? Is he/she happy or unhappy? One of the general emotional symptoms is excessive investment of one's energy in the job with very little interest in what happens outside of work. However, when the dreams and expectations of the job do not materialize, the feeling of helplessness may occur and symptoms of depression may manifest. Police officers who have other interests in addition to their job seem to have built-in buffer for the factors that provoke a strong emotional state. That is, when problems arise at work, other aspects of life offer satisfaction.

Social symptoms: Social symptoms are associated with policeman's feelings of loneliness and isolation, as opposed to feelings of acceptance and participation. There are several questions that can be posed, and the answers to these questions can be useful to identify these symptoms and assist such a person. For

instance, can the feeling of fatigue, anger or disappointment be understood differently at police officers? Is a police officer capable of sharing these feelings with other people? What type of support is required in order for him to feel really useful? Is there anyone outside work who will listen to him? Police officers who suffer from severe social symptoms are constantly in a situation where their problems burden someone close or not so close to them. In addition, they can have a sense of appreciation or rejection, and the end result is only the imposed isolation.

Spiritual symptoms: Spiritual symptoms are related to the meaning of some feelings or perceptions present in life. Many police officers have noble intentions and expectations when entering the chosen profession. However, if they get disappointed and realize that these expectations will never be fulfilled they can be useless. Much of what they have and what they have dreamed of is now lacking. The challenge to resist the spiritual symptoms of stress is to create a new meaning to their lives. This process begins by developing interest in people, things and events outside of work. Police officers must seek the answer, but they should also try on their own to answer the question: what can be changed in my job to make it more important? If the meaning of life is lost, a police officer is in critical state of stress which is considered worrying.

Worrying condition is progressive loss of idealism, energy, sense of life and interest in the results of the work. Frustration and stress are very suitable for creating this situation. An officer in this state is a man who shows symptoms of extreme stress. So one of the very important tasks of police managers is to recognize early symptoms and take action to assist police personnel in coping with frustration and stress in order to avoid this situation. Police managers should seek these symptoms in themselves as well since they are not immune to the problems either. The appearance of such a state at administrative and managerial levels of the police organization can lead to organizational stagnation, and an unhealthy atmosphere within the department.

Threats to personal safety of police officers in general, and in performance of police duties is the reality of our country. Given that such occurrences are more and more frequent, it is important that police officers are adequately provided organizationally as well as tactically, technically, materially and educationally for possible attacks and protection of personal safety when carrying out police duties. Of course, it must be noted that the intensity and frequency of hazards that could endanger the personal safety of police officers largely depend on the conditions in which the security tasks and activities are performed. This include various conditions that may more or less, positively or negatively affect the threats to personal security of police officers.

The nature of policing and security tasks, security, space and weather conditions should be particularly pointed out among them. Certainly, the threat to personal safety of the police as a negative side effect of police activity can hardly be avoided, but it can be predicted and accordingly adequate measures taken for their prevention or mitigation. This must be understood as an obligation and must include a set of measures, actions and preventive actions of tactical training in the police for their involvement in the preparation, planning, organization and implementation of police tasks (Brković, Milojević, 2003).

The developed countries consider this problem particularly important, which resulted in finding optimal solutions for each of its segment. However, it should be noted that regardless of the tactical actions, measures and actions that are applied by the police to protect the personal safety it must always take into account the human rights of persons who threaten the personal safety of police officers, in accordance with applicable international standards.

Tactical conduct of police officers in the performance of tasks related to sporting events must be measured, but clearly and precisely in order to achieve the desired effect of the intervention and to protect their safety. Police officers must follow the official procedure without improvisation in order not to reported failures that can compromise personal safety.

Police work in addition to its specific nature\great social significance carries also a high risk and danger to police officers during the implementation of a wide variety of security tasks. Hazards are constant company of regular police activities are even more frequent and more frequent when it comes to carrying out specific security tasks. Threats to personal safety of the police are expressed in different forms and contents, depending on circumstances, how and by what means or objects they are attacked. Regardless of that the nature of the attack and thereby endangering personal safety is focused on the physical incapacitation and injury of police officers with a view to resist them and prevent their performing of official duties.

The treatment of management is also very important in the implementation tactics of police intervention at sporting events. If they get a signal for help, police manager must quickly assess the situation and decide to make the appropriate assistance, which means they must have access to available and specifically identified riot police. Likewise, it is important that all the time during the action they liaise with all stakeholders and collect relevant information or data.

The action of helping an injured police officer is the most important role in the immediate rescue by individuals or teams who are referred for assistance. Since their actual performance depends on whether the action will be successfully implemented. Such relatively short duration of action and because of their tactical training and of practice it must be top notch. They should perfectly know and apply the rescue techniques.

CONCLUSION

The police work and security threats to law enforcement officers raise numerous questions that cannot be answered without exploring the effects of determinants exerting influence on the observed phenomenon. The engagement of police officers during sporting events in the Republic of Serbia is characterized by the following specific conditions: the officers are obliged to expose themselves to danger and work long hours at any location and at any time, to work overtime and on orders of their superior officer, they are exposed to unfavourable weather conditions, resolve a large number of conflicts under the burden of stress and other factors which may affect their health. In addition to these, the problems have been identified regarding the continuous likelihood of being wounded or sustaining injuries resulting in permanent disability, as well as stress relating to difficulties in making decisions on the use of force and firearms (where there is a possibility of wounding or killing another person).

In order for police officers to be successful in their activities of providing public safety at sporting events, in the circumstances characterized by the above mentioned problems, the officers involves should, among other things, possess a certain level of *specific professional skills and capabilities*. Basic motor capabilities have been identifies as a significant factor in the sphere of physical actions of police related to violence at sports events in the Republic of Serbia (as a prerequisite of lawful and efficient engagement). They are to be combined with the skills of self-defence and attack techniques as part of the use of coercive means, especially open-hand

techniques, use of the police baton and binding means. There are the prerequisites for both non-intervening activities (stand-by, formation - from inspection line to marching and regrouping, beat and patrol duties, communications, etc.) and interventions (cordons restricting the movement of the crowd, the use of police powers and the use of force) in the given circumstances.

The listed activities of law enforcement officers constitute distinctive features of their working profile. The scope of these activities is not of significance for their working profile with respect to the overall number of criminal offences and violations, criminal reports, injuries of the participants, material damage, and other indices of serious violence at sports events. However, analyses of consequences of criminal offences and violations taking place on the occasion of sports events (the murder of Bruce Taton in 2009) and the study of security threats involved therein, make the problem of violence at sporting events and its marked hooliganism one of the most important national security issues in the Republic of Serbia, closely following terrorism and organized crime.

Efficient performance of tasks and assignments relevant for the intervention of RS MI employees in the situations of suppressing violence at sports events depends on the physical fitness of police officers who should timely perform adequate movements of certain amplitudes, speed, synchronization, precision and strength, whether *in situ* or jumping and moving in different directions and with different intensity, covering shorter or longer distances in various weather, spatial and other conditions. These physical activities are inevitably situational physical activities aimed at preventing violence occurring during sports events.

Bearing this in mind, some questions can be raised regarding the existing educational curricula and the need for continuous redesigning and implementation of new syllabuses focusing on the execution of police duties and the use of police powers. Besides, the permanent development of personal and professional integrity is very important, as well as cherishing the notion of accountability of police officers, which contributes to personal mental and physical development. At the same time, we should bear in mind that successful interventions aimed at reinstating public order at sports events frequently depends both on the officers' mental and physical preparedness for such tasks and on certain educational aspects of his personality, such as neatness, decency, personal and professional respectability. Further research in the sphere of violence at sports events in the Republic of Serbia as a factor bearing impact on the physical actions of the police officers should focus on exploring its mental and educational aspect.

The process of action of stress and its implications should be equally known by the executives and officers. Knowledge is one of the safest ways for combating stress. If police officers understand themselves and what is happening around them, they will be better able to cope with all the hardships they face, and also to manage stress.

Conduct of police tactics in situations where their personal safety is at risk includes the application of tactical actions necessary and appropriate equipment to enable them good performance within the powers granted by law. To solve such complex problems of particular importance is the quality of the educational process and training of police officers to protect themselves from threats to personal safety.

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ECONOMIC SECURITY OF THE STATE: ESSENCE, STRUCTURE AND MAINTENANCE

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Abstract: Scientific approaches to the notion “economical safety of the state” are shown. The meaning of financial safety of the state in the system of ensuring the state’s economical safety is revealed and such components as budget safety, debt safety, monetary-credit safety, currency safety, insurance market safety and stock market safety are analyzed. Steps to strengthen the state’s financial safety are suggested.

The nature of different approaches to the notion of “Economic Security of the State” is revealed, the structure of state’s financial security is analyzed, and the ways of maintaining the economic security are outlined.

Key words: Economic security, financial security, budget security, debt security, money-loan security, currency security, stock market security, Insurance market security, the mechanism of maintaining the state’s financial security.

PROBLEM SETTING

Transparency of national economy, as a rule, facilitates the development and extension of international, economic, social, financial, and cultural and other relations between countries, however it makes the country’s economy more vulnerable to destabilizing factors of external environment, threats of political and social character, and change in conjuncture of financial markets, etc. Though the world’s economically advanced countries have a strong growth potential, in modern conditions of technical globalization their national economies are characterized by significant inconstancy, unpredictability and riskiness.

Since Ukraine was proclaimed an independent state the society has got the task of defending country’s economic interests, thus guaranteeing the national economic security. Maintaining national interests and economic security are the major functions of the state and their implementation will reinforce positions of Ukraine in the international community. National economic security of Ukraine as a state with the protected major interests of the individual, community and the country from internal and external threats is the necessary condition of saving and increasing spiritual, cultural and material values. The major national interests are constant growth of national economy and welfare of its citizens.

The innovation model of development and European integration strategy which have been declared by Ukrainian government, unfortunately, haven’t been acknowledged by systematic measures of long-term character. Economic growth, which was observed from 2001 up till financial and economic recession, was taking place on the basis of low-tech branches of national economy and highly-profitable trade, building, financial, banking spheres, operations with real estate, etc. Consequently, the positions of dynamic competitiveness of the economy became weaker in the global economy and the threats to economic security of the state became stronger.

Today the most urgent problems in the issue of maintaining economic security are: decrease of investment and innovation activity, inefficient use of scientific and

technical potential, decrease of researches in strategically important directions of innovation development; critical condition of the main industrial funds in leading branches of industry and agricultural complex; insufficient pace of reproducing processes and overcoming of structural deformation in economy; huge debt of the country, critical size of external and internal debts; growth of the part of foreign capital in strategic branches of economy; **“shadow” character of the national economy**; critical dependence of national economy on external markets' conjuncture, low pace of extension of internal market, etc¹.

The majority of scientists are convinced that the main threat to the economic security of Ukraine is the absence of targeted policy of state regulation of economic processes related to the implementation of declared strategies for social and economic development of the country.

In strategic planning the economic security can be guaranteed only by competitive economy and creating of such economy should be accompanied by a number of measures. The most actual measures are:

- Defining of branch competitiveness, creating of conditions for entering the world economic system;
- Choosing priority areas, branches, complexes which are able to ensure the penetration to the world markets;
- Development of programs and mechanisms of their implementation according to selected priorities;
- The active participation in the implementation of the programs initiated by state and other subjects of economic activity².

Today the following aspects are vitally important: activating processes of technologies transfer, development of scientific and technological co-operation, creating of innovation infrastructure, formation of institutional environment, etc.

STAGE OF RESEARCH The problems of economic security, its structure, indicators, threats are studied in the works of such well-known Ukrainian scientists as I. Bin'ko, Z. Varnaliy, O. Vlasiuk, B.Hubskyy, Y. Zhailo, V. Kuzmenko, V. Muntiyanyan, H. Pasternak-Taranushenko, A. Sukhorukov, V. Shlemko, etc.

AIM OF THE ARTICLE – to analyze the nature, structure and the problems of maintaining financial security of the state as the main element of state's economic security.

THE MAIN STATEMENTS The analysis of works of leading scientists in this field enables to figure out the following ways of interpreting the nature of economic security:

1. the condition when the national interests are maintained and the economic development is possible:

“Economic security – a state of economy and the institutes of authority which ensure the protection of national interests, socially oriented development of the country on the whole, sufficient defensive potential even in the least favourable conditions for development of internal and external processes”³;

“Economic security – a state of economy and the institutes of authority, which guarantee the defense of national interests, social orientation of the policy, sufficient defensive power even when conditions for development of internal and external processes are not favourable.”⁴

1 Zakon Ukrainy “Pro osnovy natsionalnoyi bezpeky Ukrainy” vid 19 chervnya 2003 roku # 964-IV [Elektronnyy resurs]. – Rezhym dostupu: <http://zakon2.rada.gov.ua/cgi-bin/laws/main.cgi?nreg=964-15>

2 Varnaliy Z. Problemy ta shlyakhy zabezpechennya ekonomichnoyi bezpeky Ukrainy [Elektronnyy resurs]. – Rezhym dostupu: <http://www.rainbow.gov.ua/news/25.html>

3 Ekonomicheskaya bezopasnost: Proizvodstvo-Finansy-Banki / pod. red. V.K.Senchagova. – M: ZAO “Finstatinform”, 1998. – 621 s.

4 Predborskyy V.A. Ekonomichna bezpeka derzhavy. / V.A. Predborskyy. – K:Kondor, 2005 – 392 s.

In other words

“The condition when the country has the opportunity to create and develop conditions for prosperous life of its citizens and the perspective growth of its economy in future”⁵

2. The framework of actions:

“Economic security – the national framework of actions aimed at constant and stable development of the country’s economy which includes the mechanism of resistance to internal and external threats”⁶

3. The ability of national economy to extended reproduction:

“Economic security – the power of national economy for extended reproduction aimed at satisfaction on determined level the needs of its citizens and state, resistance to destabilizing action of factors which create threats to the normal development of country, competitiveness of national economy in the world economy system”⁷

4. Rigidity to threats:

“Economic security – the state of national economy which enables to preserve the rigidity to internal and external threats and is able to satisfy the needs of an individual, society, country”⁸

5. The condition of balance with subsequent development:

“Economic security of the state – the condition of balance and socially – oriented development of national economic system which is achieved by implementation of certain framework of ways and methods of economic policy”.

Changes in social and economic relations can cause social and economic crisis of continued character, in particular the crisis of financial – credit area. The crisis condition of economy endangers the national interests of the country and respectively actualizes the problem of national economic security. The main task of economic security is establishing acceptable margins of deviations of the indicators and defining the marginal indexes. If they are not respected it creates threats to economic security.

The marginal indexes of the indicators of economic security are quantitative parameters, which define the limits of acceptable indicators in different areas of economy. In order to evaluate the condition of national economy the corresponding criteria of economic security are used, for example: the size of investments (in percents to GDP), the annual level of inflation, the deficit of state budget; the size of the internal debt (in percents to GDP), the size of the external debt (in percents to GDP), the volume of cash (in percents to GDP), etc.

National economy is defined by the following criteria:

- The state of the legislation for the functioning of national economy;
- The character of social - economic and financial-credit policy conducted by the state;
- The level of financial independence, i.e. the level of dependence from external sources of funding and the size of foreign investments;
- Political climate in the country, etc.

5 Pasternak-Taranushenko H. Ekonomichna bezpeka derzhavy. Statystyka protsesu zabezpechennya / H. Pasternak-Taranushenko; za red. B.Kravchenka. – K:Kondor, 2002. – 302 s.

6 Muntiyani V.I. Ekonomichna bezpeka Ukrainy / V.I. Muntiyani. – K: KVITS, 1999. – p. 462.

7 Zhalilo Ya. A. Do formuvannay katehoriialnoho aparatu nauky pro ekonomichnu bezpeku / Ya.A. Zhalilo // Stratehichna panorama. – 2004. – #3. – pgs 12-16.

8 Shlemko V.I. Ekonomichna bezpeka Ukrainy: sutnist ta napryamky zabezpechennya / V.I. Shlemko, I.F. Binko. – K:NISD, 1997. – p.120.

Inconsistency of approaches to interpreting of economic security as a notion has its continuation also in the definition of the structure of economic security.

Structure – is a philosophical category which reflects the internal set-up of the system, combination of subsystems, elements (together with their connections, interactions) which are part of the system and define its content and the intensity of its functional processes.⁹

Due to the fact that economic security is a complicated system which has its own structure it should be studied from view point of separate components.

The components of economic security according to the Method of estimating the level of economic security of Ukraine are: macroeconomic, financial, foreign-economic, investment, scientific-technological, energetic, industrial, demographic, social, provision security.¹⁰ The structure of economic security is illustrated on picture 1.

Taking into account the fact that the most essential component of economic security of Ukraine is financial security, we shall try to substantiate theoretic basis of the mechanism of its maintenance. In general financial security reflects the system of relations between subjects of management in financial area and is aimed at the implementation of general national idea, defending national values and national interests by supporting financial stability. In functional – structural aspect the category “financial security” is to be considered as the framework of interconnected subsystems of security which reflect the functioning of separate fields of financial system of the state.¹¹ Our opinion is that financial security of the state is a certain dynamic condition of financial relations which is characterized by favourable environment and necessary resources for extended reproduction, economic growth and the upscale of people’s level of living, improvement of national financial system for successful resistance to internal and external factors which are destabilizing financial environment of the state.¹²

Financial relations and interconnections are defining factors as far as formation of priorities of economic policy and implementation of declared programs are concerned. Application of contemporary methods of strategic management aims at changing the existing financial – economic mechanism, developing and implementing financial strategy which would guarantee financial security of the state.

The process of maintaining financial security of the state includes:

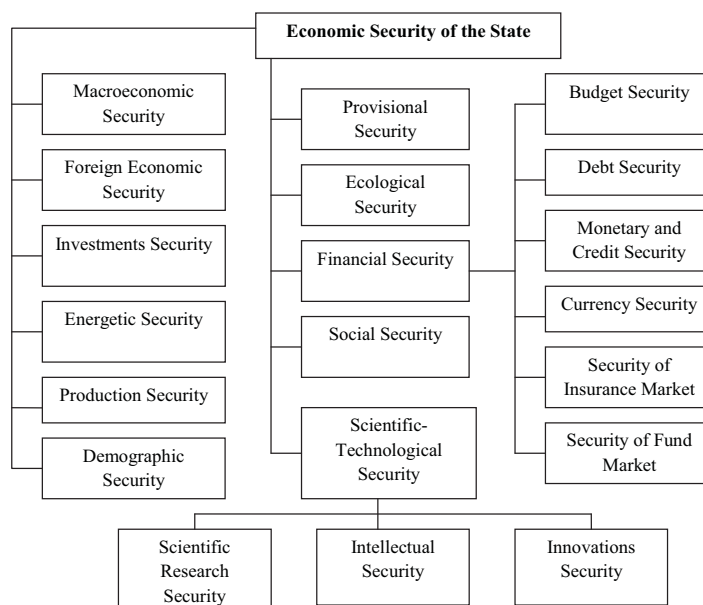
- The evaluation of threats to financial security of the state of and possible losses in case when the threat takes place;
- Analysis and evaluation of the current condition of financial system;
- Development and regular review of marginal indexes (every two years);
- The calculation of indexes, which characterize all subtypes of financial security;
- Analysis and estimation of deviations of the actual indexes of financial security from marginal indexes;
- The calculation of the integral index of the level of financial security (annual, once in six months)
- Development of action plan for maintaining financial security;
- Action of the mechanism of maintaining financial security.

9 Kikel P.V. Kratkiy entsyklopedicheskiy slovar / P. Kikel, E. Soroko. – Minsk: BGPU, 2006. – p. 266.

10 Metodyka rozrakhunku rivnya ekonomichnoyi bezpeky Ukrainy. Nakaz Ministerstva ekonomiky Ukrainy vid 02.03.2007 # 60 [Elektronnyy resurs]. – Rezhym dostupu: <http://zakon.nau.ua/doc/?uid=1022.4251.0>

11 Medvedkina Ye.O. Teoretyko-metodolohichni zasady zabezpechennya finansovoyi natsionalnykh ekonomik. Problemy razvitiya vnyeshnyekonomicheskyykh svyazey i privlyechyeniya inostrannykh investitsiy: regionalnyy aspect. Sbornik nauchnykh trudov. – #1,2011. – s.249-254.

12 Revak I.O. Mekhanizm zabezpechennya finansovoyi bezpeky Ukrainy: teoretychnyy aspect / Naukovyy visnyk Lvivskoho DUUV. Ekonomichna seriya. – Lviv, 2009. – Vypusk 2. – s. 238-247.



Picture 1. The Structure of the State's Economic Security

The efficient functioning of the system is implemented through the mechanism of maintaining financial security which signifies the framework of economic methods, tools which are used by the subjects of security to influence certain objects for maintaining financial security of the state, adhering to certain principles. The main elements of the mechanism for maintaining financial security of Ukraine are: objects of security, subjects of security, financial methods, tools and instruments, informational, legal and regulatory support. *The objects of financial security are:*

- Financial interests of the state – the framework of objective needs of a certain state. Complying with these needs ensures efficient functioning and stable development of state's financial system (implementation of the declared budget for the current year; guaranteeing the monetary and currency rate stability; the strengthening of banking system and national investment potential; the increase of innovation activity of domestic enterprises; decline of “shadow economy”; minimization of the influence of world financial crises on the financial system of the state;
- Financial resources of the state – taxes, earnings from efficient activity, state services, assets, lending funds;
- Financial system of the state namely all its fields and links. The fields of financial system include the finance of subjects of entrepreneurial activity, state finance, international finance, financial market. The links include the finance of enterprises, finance of home enterprises, state budget, target state funds, state loan, the finance of state sector, the market of securities, the market of lending capitals, the finance of international organizations, international payments, insurance (personal, property, responsibility, entrepreneurial risks).

Subjects of financial security of the state are: the President of Ukraine, the Parliament of Ukraine (Verkhovna Rada), the Cabinet of Ministers of Ukraine, the Council of National Security and Defense of Ukraine, The Ministry of Finance of Ukraine, the State Treasury, the State Agency for Control and Auditing, the National Bank

of Ukraine, commercial banks, Insurance companies, the State Tax Administration, the Accounting Chamber of the Parliament of Ukraine, Investment funds, the State Commission for Securities and Stock Market, the State Commission for Regulation of Financial Markets, etc.

One of the most important elements of the mechanism for maintaining the state's financial security involves *financial methods* or organizational and economic ways of maintaining financial activity. They are:

- Financial planning – activities related to formation and usage of centralized and decentralized financial resources;
- Efficient management – the interference of corresponding authorities in distribution processes for eliminating disproportions aroused by inefficient redistribution of monetary funds;
- Financial control – the check-up of the correct price distribution and redistribution of GDP and the National income in accordance with corresponding monetary funds and their target usage;
- Financial supply and its main forms such as budget financing, self-financing and crediting;
- Financial regulation, which is implemented by withdrawal of part of the entrepreneurial monetary revenues via taxations and compulsory payments with their further forwarding to the budgets of different levels and state's target funds;
- Financial motivation – is implemented with the help of financial levers and incentives (taxes, grants, taxation benefits, accelerated depreciation, etc.).

Among the elements which are maintaining financial security the most active are *financial levers*, which are brought into effect by corresponding financial methods. The latter are: taxes, obligatory fees, investments, depreciation norms, the norms of spending funds in budget authorities, loan interests, renting fees, subventions.

The inseparable elements of the financial mechanism are informational, regulatory and legal kinds of support. Informational support is formed by different financial and economic information, especially by the data about finances of the subjects of entrepreneurship, financial processes on internal and external markets, etc. Regulatory support is made up by instructions, regulations, norms, tariff rates, methodological directions and explanation. The legal support includes legal acts, orders, decrees and other legal documents.

Financial security is achieved by conducting constrained financial policy according to administered strategies, doctrines, programs, recommendations, etc.

Today Ukraine has developed and adopted (accepted as the basis) the Method of evaluating the level of state's economic security which determines the main indicators of economic security, their optimal and threshold values and also methods of evaluation of integral index of economic security.¹³

This method envisages the complex analysis of the indicators and possible threats of Ukraine's economic security. It can be used for monitoring single components of economic security with the purpose of making management's decisions, preventing and neutralizing real and potential threats to national interests of Ukraine. Since the issues of supporting stable economics are getting extremely topical today, especially in financial area, we shall analyze the essence and the problems of maintaining the major subtypes of financial security of Ukraine during the last few years. The main indexes of financial security, their threshold and actual values during the years 2007-2010 are indicated in Table 1.

¹³ Metodyka rozrakhunku rivnya ekonomichnoyi bezpeky Ukrainy. Nakaz Ministerstva ekonomiky Ukrainy vid 02.03.2007 # 60 [Elektronnyy resurs]. – Rezhym dostupu: <http://zakon.nau.ua/doc/?uid=1022.4251.0>

Table 1 The Major Indexes of Financial Security of Ukraine, their threshold and actual values (2007-2010)¹⁴

| N | Indexes, measurement | Threshold value | 2007 | 2008 | 2009 | 2010 |
|-----|---|-----------------|-------|-------|-------|-------|
| 1. | Ratio of deficit, profit of state budget to GDP, % | below 3 | -1.1 | -1.3 | -2.7 | -5.9 |
| 2. | Ratio of monetary unit's value M3 to GDP (monetarisation level), % | below 50 | 54.9 | 54.4 | 53.3 | 54.6 |
| 3. | The ratio of GDP to the volume of monetary unit M2 (turnover period), number of turnovers | below 2 | 1.8 | 1.9 | 1.9 | 1.8 |
| 4. | Cash volume, % to GDP | below 4 | 15.4 | 16.3 | 17.2 | 16.7 |
| 5. | Level of inflation (till December of the previous year), % | below 107 | 112.8 | 125.2 | 115.9 | 109.4 |
| 6. | Volume of bank crediting of the actual sector of economy, % to GDP | above 30 | 36.1 | 46.8 | 50.6 | 45.8 |
| 7. | Relative density of long-term loans in the overall volume of commercial banks' crediting, % | above 30 | 69.2 | 69.8 | 68.1 | 66.9 |
| 8. | Part of the foreign banking capital in the overall volume of the banking capital, % | below 30 | 27.6 | 35.0 | 36.7 | 40.6 |
| 9. | Deposits' volume in foreign currency to the overall volumes of deposits ratio (level of dollarization), % | below 25 | 22.7 | 30.6 | 31.7 | 29.1 |
| 10. | State debt to GDP ratio, % | below 55 | 12.0 | 19.9 | 34.7 | 41.7 |
| 11. | External debt to GDP ratio, % | below 25 | 7.4 | 9.1 | 13.2 | 16.6 |
| 12. | State's external debt to the annual export of goods and services ratio, % | below 70 | 16.6 | 19.3 | 28.5 | 33.1 |
| 13. | Internal debt to GDP ratio, % | below 30 | 2.3 | 4.7 | 10.0 | 12.9 |
| 14. | Nominal capitalization of the share market to GDP, % | 60-90 | 78.4 | 19.1 | 19.0 | 14.6 |
| 15. | Bonds' Profitability of State's Internal Debt, % | 3-4 | 6.9 | 11.9 | 12.2 | 10.4 |
| 16. | Part of State's Securities in State's Internal Debt, % | below 30 | 43.6 | 21.7 | 55.6 | 38.6 |
| 17. | Index of Insurance Penetration (the insurance premium to GDP), % | over 8 | 2.5 | 2.5 | 2.2 | 2.1 |
| 18. | Part of long-term insurance in the overall volume of collected insurance premiums, % | over 30 | 4.4 | 4.6 | 4.1 | 4.0 |
| 19. | Level of Insurance compensations, % | over 30 | 23.4 | 29.4 | 33.0 | 26.4 |
| 20. | Part of premiums of reinsured non-residents, % | below 25 | 4.3 | 4.3 | 5.4 | 4.3 |

We shall analyze state financial security in the context of its components and review the main ways of its maintenance.

Budget security shows state's solvency situation taking into account the balance of income and expenditure of state and local budgets and effectiveness of budget costs usage. The state budget of Ukraine is an important instrument to regulate financial flows but its misbalance is a real threat to state's financial security. Deficit of state budget was 5.9% of GDP in 2010 being the highest for the last seven years¹⁵. The main sources of its financing were internal and external loans. Accomplishment of income part of state budget was 98.4% and it was characterized by income stabilization of main taxes, especially excise duties, profit tax, value added tax, natural person income tax. Besides, in 2010 one could see the

¹⁴ Listed on the basis of Richnyy zvit Natsionalnoho banku Ukrainy za 2007- 2010rr. [Electronic source]. – Available at: <http://www.bank.gov.ua/doccatalog/document?id=77106>; Monetarnyy ohlyad za 2007-2010 r.r. [Electronic source]. – Available at: <http://www.bank.gov.ua/doccatalog/document;jsessionid=308ACC15D3AE1CFBDC6D166A4C6C6137?id=60898>; Pidsumky diyalnosti strakhovoykh kompaniy za 2010 rik [Electronic source]. – Available at: <http://forinsurer.com/files/file00365.pdf>

¹⁵ Byudzhetnyy monitorynh: analiz vykonannya byudzhetu za 2010 rik [Elektronnyy resurs]. – Rezhym dostupu: [http://www.ibser.org.ua/UserFiles/File/Budget-Monitor/KV_IV_2010_Monitoring_ukr\(1\).pdf](http://www.ibser.org.ua/UserFiles/File/Budget-Monitor/KV_IV_2010_Monitoring_ukr(1).pdf)

growth of excise duties due to the rise of excise rates on tobacco and tobacco goods and decrease of VAT compensation.

We agree with some authors that influence of budget on social-economical development should take place in accordance with the scheme¹⁶:

budget → budget policy → budget mechanism → social-economical processes.

The most important factor here is that all participants of budget process must reach their aims using the minimum of budget costs. Basic directions of budget policy of Ukraine include reforming of tax system in the context of entrepreneur activity stimulation and tax burden decrease; optimization of budget deficit level, search for alternative sources of its decrease; finding additional sources for budget income; rational distribution of expenditures between the branches of budget system etc.

The most significant criteria for state and local budget forming and accomplishment according to the financial security standards are: maintaining national interests and economical sovereignty when adopting state budget; maintaining independence of state budget and stability of income part as a guarantee for fulfillment state's social-economical functions; meaning innovational budget but not consumer's budget; maintaining completeness and unity of budget process etc.

Internal and external debts nowadays make an important component of state financial system functioning and they are an instrument for macroeconomic regulation. *Debt security* is the level of internal and external indebtedness including value of its service and effectiveness of internal and external debt usage with optimal correlation between them; the level being sufficient for urgent social-economic demands solving and safe for sovereignty and country's financial system.

The process of state debt forming during the Ukraine's independence was of a rather chaotic character and under the conditions of urgent financial demands and current budget demands thus influencing its structure and volume. Debt method to cover the deficit of state budget in Ukraine was first used in 1995 when the state was actively involving financial resources on internal and external capital markets using mechanism of government securities emission (both internal and external government securities).

Aggregate state debt (direct and guaranteed) in 2010 increased by 36.4 % in comparison with the previous year or by \$14.476 billion up to \$54.289 billion (or UAH 432.3 billion) according to the Ministry of Finance of Ukraine, and the share of aggregate state debt at the end of 2010 was 41.7% of GDP¹⁷. In accordance with *The Economist Intelligence* Ukraine holds 71 place in the world and every Ukrainian has a state debt of \$1.11 thousand¹⁸.

The analysis of state's debt policy and evaluation of debt security level show that debt burden for Ukraine is not crucial for Ukraine's economical security according to the international standards. Ukraine nowadays is not dependent of foreign financing and is capable opportunely and fully of covering its indebtedness by currency income from export and has the potential for covering expenditures of state loans from state budget. However, rapid growth of foreign state debt especially the one guaranteed by the state makes the pressure upon the state budget and whole financial system of the country.

16 Blahun I.H., Soroka R.S., Yeleyko I.V. *Finansy: Navch. posibnyk*. – Lviv: "Mahnoliya-2006,2007. – s. 120.
17 Ofitsijnyy veb-sajt Ministerstva finansiv Ukrayiny [Elektronnyy resurs]. – Rezhym dostupu: <http://www.minfin.gov.ua>.

18 Davydenko B. *Kakiye strany yavlyayutsya krupneishymi dolzhnikami v mire* [Elektronnyy resurs]. – Rezhym dostupu: <http://delo.ua/ekonomika/mirovaya-ekonomika/kakie-strany-javlyajutsja-krupnejshimi-dolzhnikami-v-mire-146532/>.

Monetary and credit security of the monetary and credit system is characterized by monetary unit stability, credit resources accessibility and that inflation level which ensures economical growth and rise of population income. A special place in the financial security ensuring in our opinion must be given to the working out of development strategy of monetary and credit and bank system of Ukraine with the principles of financial contradictions overcoming and macro financial stability ensuring. Main spheres of its realization should include measures aimed at non-admission of potential threats realization: realization of anti crisis steps concerning national monetary unit stability, overcoming monetary mass lack in money circulation and its reduction in hidden sector; active attraction of bank capital into structural reformation of national economy; rise of level of bank assets and liabilities management by insurance risks system creation; decrease national economy dollarization level etc.

According to the table 1, crediting volume of real economy sector for the last several years fluctuated between 36.1% and 50.6% of GDP and it can be considered a positive tendency. In general, process of monthly balance debts increment on given credits started in the second half of 2010. Enlargement of resource basis and as a result decrease in credit value contributed to this process. But there is anxiety about the growth of foreign bank capital share from 27.6% in 2007 to 40.6% in 2010. According to National Bank of Ukraine data there are 55 banks with foreign capital (2011.01.01), 20 out of them are with 100% foreign capital whereas state owns 100% capital in only 2 banks – open-end company “State Oshchadnyy Bank” and public joint stock company “State Export-Import Bank”¹⁹. Growth of specific weight of long-term credits in general volume of given credits indicates about the recovery of investment processes in Ukraine and the tendency towards financial stability.

Issues of monetary and credit security ensuring influence the dynamics of monetary mass especially cash beyond the banks. Thus, the specific weight of cash in general volume of M3 was 30.6%, and cash circulation beyond deposit corporation (M0) increased by 16.5% and reached UAH 183 billion²⁰.

Dollarization problem is of great interest nowadays because it is one of substantial threats to financial security of the country. Mistrust to the national currency results in savings in foreign currency. A considerable share of foreign currency in bank assets and liabilities is placed in bank system. In particular, the share of credits and deposits in foreign currency in 2010 was 51.1% and 42.0% respectively and dollarization level as shown in table 1 for the analyzed period exceeds threshold value. The growth of foreign currency beyond bank system for the period 2000-2011 reached \$ 66 billion and especially high it was in 2010 – \$ 7.3 billion²¹. Without doubt such a high dollarization level of Ukraine's economy stipulates for considerable currency risks in case of national currency devaluation, reduces the mechanism effectiveness of monetary and credit and currency regulation of National Bank of Ukraine (NBU) increases financial system vulnerability and creates the threat of debt crisis. Decrease of dollarization level in Ukraine is possible under the conditions of stable (fixed) rate dynamics support, change of credit bank policy priorities, decrease of foreign loans volumes, reduction of NBU participation on currency market etc.

Conducting more flexible interest policy aimed at attraction of national currency costs stipulated for monetary and credit security ensuring in 2010. There was

19 Zvit Natsionalnoho banku Ukrainy za 2010 rik. [Elektronnyy resurs]. – Rezhym dostupu: <http://www.bank.gov.ua/doccatalog/document?id=77106>

20 Zvit Natsionalnoho banku Ukrainy za 2010 rik. [Elektronnyy resurs]. – Rezhym dostupu: <http://www.bank.gov.ua/doccatalog/document?id=77106>

21 NBU information for 8 months of 2011. [Elektronnyy resurs]. – Rezhym dostupu: <http://www.bank.gov.ua/>

a rise in volume of deposits in 2010 especially in national currency which had a positive effect on the dynamics of monetary mass. Its volume increased by 22.7% in 2010 whereas in 2009 there was a decrease by 5.5%²².

Currency security shows the provision of the state with currency costs sufficient for national monetary unit stability support, accumulating necessary currency reserves volume, holding positive balance of payments, fulfilling international obligations. Currency rate influencing trade and payment balances, degree of foreign indebtedness and inflation processes is a considerable component of such a kind of security. In Ukraine the exchange rate considerably depends on the foreign currency volume supply coming onto internal market and thus NBU uses financial repression instruments in the form of direct currency limitations to ensure stability of rate dynamics. So currency limitations for current account are used to regulate payments for export-import operations, to control the mission foreign currency bought at the interbank market, to regulate operation of currency buying-selling on the inner market. Currency limitations are generally used to limit capital movement and are stipulated by: a) aims of NBU monetary policy; b) necessity to protect monetary and financial sphere from external shocks connected with inflation results of capital coming; c) creating favorable conditions for policy of artificial support of interest rates on the level which allows preferential budget and priority economy branches crediting²³.

Main threats to currency security today are exceeding filling of inner currency market with foreign currency, reduction of NBU currency resources, considerable capital outflow, non-returning of currency values being abroad illegally, growth of hidden sector of currency market etc. According to the data of some researchers the capital out flow from Ukraine during 2004-2010 exceeded \$ 22 billion²⁴. The issue of national currency outflow limitation is of great significance excluding projects promoting domestic goods and services abroad.

Researches confirm that nowadays NBU can substantially influence exchange rate volatility but NBU is unable to stop devaluation rate of *hryvnya* only using interventions during financial crisis. It is only possible on the condition of calculated currency policy, working out effective exchange rate regulation system, effective currency reserves management, optimization of currency regulation instruments etc.

Process of currency security ensuring must be based on the effective acting of currency regulating mechanism which aim is to reduce devaluation expectations, overcome high dollarization level and solving many issues of economical and social character. Forming new effective currency regulation mechanism must take place on the basis of a new paradigm which embodies world tendencies of capital flows liberalization movement. It must be an effective instrument for monetary policy conduction on the basis of gradual transformation to the controlled regime and later to floating Ukrainian *hryvnya* rate. With the aim it is necessary to differentiate power of NBU and government concerning currency regulation and currency control issues on the legislative level.

Security of fund market is an optimal volume of market capitalization (taking into account securities, their structure and liquidity level), able to ensure durable

22 Monetarnyy ohlyad za 2007-2010 r.r. [Elektronnyy resurs]. – Rezhym dostupu: <http://www.bank.gov.ua/doccatalog/document?id=76207>

23 Bereslavskaya O.I. Mekhanizm valyutnoho rehulyuvannya v Ukraini [Tekst]; avtor. dys. ... doktora ekon. nauk:08.00.08 / Bereslavskaya O.I.; Natsionalnyy universytet derzhavnoyi podatkovoyi cluzhby Ukrainy. – K., 2011 – p. 16.

24 Bereslavskaya O.I. Mekhanizm valyutnoho rehulyuvannya v Ukraini [Tekst]; avtor. dys. ... doktora ekon. nauk:08.00.08 / Bereslavskaya O.I.; Natsionalnyy universytet derzhavnoyi podatkovoyi cluzhby Ukrainy. – K., 2011 – p. 16.

financial state of emitters, owners, buyers, trade organizers, traders, institutes of common investment, brokers, consultants, registering clerks, depositaries, keepers and state in general.

Considerable rates of financial resources attraction through the fund market of Ukraine are connected to some extent with increase of investment attractive emitter's amount, rise in volume of securities emission, rise in price for securities of bank sector enterprises, electric power engineering, metallurgy and oil-gas sector.

Many researchers consider the national fund market to be in the process of settling and it has specific features distinguishing it among developed markets. The negative factors which hinder its development to our mind include:

- imperfection of legislative base concerning securities market regulation issues;
- low level of information transparency market;
- insufficient liquidity of available financial instruments and low level of market capitalization;
- high riskiness of vast majority of financial operations;
- low participation level of private investors on securities market;
- violation of investors rights and passive role of fund market regulators;
- lack of necessary state support;
- lack of qualified personnel etc.

It is known that dimensions of joint-stock capital as well as market of capital in general are characterized by capitalization index which defines aggregate market value of joint-stock company shares. Capitalization is one of the most important indexes of company's activity and the result of its investment attractiveness evaluation by the market participants. It is known that capitalization rise can take place due to the shares rise in prices or due to the rise of general amount of companies emitting shares and placing them onto the securities market. In spite of all this the growth of this index on the developed markets depends on the first factor whereas the growth of this index on the developing markets depends on the latter. The higher the capitalization level, the steadier the position of the company on the fund market and it is able to stand against the negative factors that can lead to destabilization or negative financial result. Economic nature of fictitious capital and degree of development or liquidity securities market form the basis of market capitalization.

Under the market conditions capitalization of companies concerns to organized market but organized trade in Ukraine includes only 1/10 of the whole fund market. Thus the analysis of fund market functioning of First Trade Fund System (FTFS) where approximately 90% of all operations with shares take place seems to be incomplete or fragmentary to evaluate the capitalization level of shares market in Ukraine.

Some Ukrainian scientists (M.A. Kozoriz, S.S. Shumska, O.M. Sharnopolska and others) notice that capitalization level in Ukraine can not be seen as indicator of fund market development degree since it is not connected with the functioning effectiveness of real economy sector, but it reflects peculiarities of property redistribution processes²⁵. Unfortunately, nowadays market capitalization of companies is only an abstract index which does not show real value of shares being in quotation lists of Ukrainian stock markets.

²⁵ Sharnopolska O.M. Mechanizm intehratsiyi Ukrainy u svitovyy fondovyy rynek [Tekst]: avtoref. dys. ...kand. ekon. nauk: 08.05.01 / O.M. Sharnopolska; Donetsk, 2005 – p. 13

At the same time world practice convincingly shows that the bigger is the volume of money in circulation the bigger is the fund share in economy circulation and the higher is the market capitalization in comparison with GDP. Since the existence of fund market in Ukraine the biggest volumes of securities trade have been fixed at FTFS. Let us analyze main indexes of the stock market shares capitalization during 2004-2009 (table 2).

Table 2 Capitalization of fund market shares of Ukraine and main indexes of stock market FTFS²⁶

| N | Indexes | 2004 | 2005 | Change dynamics | 2006 | Change dynamics | 2007 | Change dynamics | 2008 | Change dynamics | 2009 | Change dynamics |
|----|--|-------|-------|-----------------|-------|-----------------|-------|-----------------|-------|-----------------|-------|-----------------|
| 1. | Shares market capitalization, bln UAH. | 71.1 | 147.3 | 107.2 | 223.6 | 51.8 | 564.7 | 152.5 | 181.3 | -67.9 | 145.6 | -19.7 |
| 2. | GDP, bln UAH. | 345.1 | 441.5 | 96.4 | 544.2 | 102.7 | 720.7 | 176.5 | 948.1 | 227.4 | 913.3 | -34.8 |
| 3. | Shares market capitalization, and GDP, % | 20.6 | 33.4 | | 41.1 | | 78.4 | | 19.1 | | 15.9 | |
| 4. | Index FTFS, points | 260.1 | 352.9 | 35.7 | 498.9 | 41.4 | 1174 | 135.4 | 301.4 | -74.3 | 587.9 | 95.1 |
| 5. | Securities trade volumes, bln UAH. | 7.0 | 14.5 | 106.9 | 27.63 | 90.8 | 31.5 | 14.0 | 45.6 | 44.7 | 15.8 | -65.3 |

One can see substantial capitalization growth in 2007 – by 152.5% in comparison with the previous year and decrease of this index in 2008 almost by 70% and in 2009 by 29% as a result of world finance crisis influence on the national financial sector. GDP was slowly growing at that period and in 2009 declined by 15.1% compared to the previous year. Thus, during 2004-2007 there was rise in ratio between market capitalization and GDP from 20.6% to 78.4% that is by 4 times and the next two years the index was rapidly falling and reached 19.1% and 15.9% in 2008 and 2009 respectively.

Insurance market and the level of its development have a great influence on country's financial safety. *Safety of insurance market* is the level of insurance companies' financial resources which would enable them to compensate agreed by the insurance treaties losses and ensure effective functioning in case of necessity. It is known that redistribution of insurance risks of economic subjects is done by insurance market key factors guaranteeing non-stop process of social reproduction ensuring. Insurance plays the role of some economic mechanism which neutralizes negative influence of destabilization factors and ensures national economy stability concerning inner and outer influences. Inner threats to insurance market financial safety are caused by insufficient solvency and inadequate economical policy of insurance companies decreasing their financial reliability. Outer threats are caused by exceeded dependence of national insurance branches on foreign capital; conflict growth and unfair competition in the insurance sphere; high degree of financial resources concentration on international insurance markets and integration in the reinsurance sphere etc²⁷.

In our opinion mechanism to ensure national economy insurance sector financial stability is a set of necessary legal, economical, organizational and management key factors directed to achieve determined aims. To guarantee financial stability of

26 * end of period Source: dates of Derzhkomstat of Ukraine and FTFS

27 Baranovskyy O.I. Finansova bezpeka v Ukrayini (motodolohiya otsinky ta mekhanizmy zabezpechenya): monohrafiya / O.I. Baranovskyy. – K.: Kyiv. nats. torh.-ekon. un-t, 2004. – p. 759.

native insurance companies and strengthening financial basis for national insurance system it is necessary: to improve normative legal ensuring of control and supervising systems of insurance companies activity; to take steps aimed at rising protection level of insurance services consumers; to strengthen the effectiveness of steps concerning rise in competition of national insurance market.

It is known that investment potential of insurance market is defined by the level of insurance companies' capitalization. Besides, insurance companies are the representatives of the biggest investment institutions in the world and their financial resources accumulated as insurance reserves are a considerable source for investments into the economy. The volumes of investments of insurance companies in the developed countries exceed the volumes of investments of generally known institutional investors such as banks and investment funds.

According to the dates in table 1 the insurance penetration index (ratio of insurance premium and GDP) in Ukraine in 2007-2008 was steady 2.5% showing some stability of insurance market development. But after the financial economic crisis the index declined by 0.3% in 2009 and by 0.4% in 2010 affirming the negative state insurance market financial safety in Ukraine which means moving into danger zone. The index of insurance payments level according to concluded insurance agreements showed positive rising dynamics from 23.4% in 2007 to 33.0% in 2009 overcoming threshold barrier not less than 30%. But in 2010 the index declined by 6.6% indicating negative tendencies in insurance market development and financial safety ensuring as a whole. In 2009 compared to 2007 there was rise in premium shares that belonged to re-actuaries non-residents from 4.3% to 5.4%²⁸. Although in 2019 this index fell to 4.3% but it is in danger zone and it indicates that market of insurance services is the most capitalized among other non-banking financial markets.

In general, in 2010 the financial firmness of insurance companies, revival and macro economic renewal of insurance market had a tendency to growing, but main indicators still have not reached before crisis level.

CONCLUSIONS

To sum up we must admit that in order to ensure economical safety of the state in general and its financial component in particular it is suggested:

1. to adopt the Strategy of financial safety of the state by Verkhovna Rada of Ukraine. The Strategy must define the political and economical course of activity of state's financial bodies, investment, financial-credit and bank institutions aimed at financial stability and economic growth ensuring.
2. to work out and adopt Banking Code in order to improve current banking legislation in accordance with the norms, rules and requirements of the EU including articles on monetary-credit market safety.
3. to promote the implementation of Tax Code of Ukraine (adopted by Verkhovna Rada of Ukraine on December 2, 2010 # 2755-VI) and adopt the Law "On state (financial) control on income declaring of persons authorized to fulfill state's functions and their expenses" (project on May 14, 2002) to exterminate the corruption in state bodies.

²⁸ Pidsumky diyalnosti strakhovoykh kompaniy za 2010 rik [Elektronnyy resurs]. – Rezhym dostupu: <http://forinsurer.com/files/file00365.pdf>

4. to fix the deficit level of State budget on such a limiting level in order not to allow the Government to overcome planned rates of loans and increase the volume of state debt of Ukraine without control and to promulgate the information on state and local budgets costs usage.
5. to work out effective police of state debt of Ukraine management to minimize the risks of state and corporative loans by structure balancing of state and corporative debts according to the currency, interest rates and terms of debt pay off.
6. to introduce steps for competitiveness growth of national stock and insurance markets, to promote the growth of protection level of insurance services consumers and other participants of securities market.
7. to delimit power of NBU and the Government on currency regulation and currency control on the legislation level; to introduce currency policy to balance real foreign currency demand with its supply supporting stability and liquidity of national currency; to ensure effective state control of currency operations.
8. for national banks to conduct more flexible interest policy in order to attract costs in national currency and for National Bank of Ukraine to promote accumulation of foreign currency costs.
9. to conduct diagnostics of national economy branches to select priority spheres, branches and sectors which might join the world markets and be competitive; to promote necessary conditions for competition development.
10. to work out and introduce effective financial control system which should function to forestall and ensure financial stability of the state.

Thus, the analysis of Ukrainian financial safety indicators showed that the financial safety level in the context of its components is rather low and as a result it is vulnerable to inner and foreign threats. We think that working out and realization efficient state policy in the financial sphere; change of valid legislation in conformity to the norms and rules of the EU; creating conditions for competition development and conditions for improvement of state control over financial activity are the main tasks to ensure forming of effective financial market in our country and rising its financial security level.

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THE ROLE OF THE POLICE IN THE PROTECTION OF PERSONAL SECURITY OF THE CITIZENS OF THE REPUBLIC OF MACEDONIA

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Abstract: The police are the most visible part of the structure of every government which is responsible for the public security of a country. As a constituent of State Authority, the police secure the state and its citizens. The organization, activity and control of the police, because of their specific characteristic are the subject of special judicial treatment. Personal security or the security of citizens is defined as the legal, uninterrupted right of any person to enjoy in his life, body, health and reputation.

The imperfect nature of the human being justifies the need of special service called police, which protects people themselves from the human behaviour which is harmful and endangers human life, property and wellbeing of society.

In this paper I will try to analyze the normative framework in the Republic of Macedonia from the aspect of the ability of the police to take appropriate measures and actions with a purpose of providing personal security of citizens, as well as the confidence of citizens as a key segment of the way of the police functioning in the Republic of Macedonia.

Key words: police, personal security, confidence, legislative, framework, implementation.

INTRODUCTION

- There are norms which regulate human behavior from the earliest period of human civilization, as well as services which secured the functioning of these norms. Those services evolved over time; developed according to the circumstances and upgraded to respond to new challenges. In the process of separation of certain organs with a permanent determined jurisdiction the police was among the first. In earlier times the police "blindly" executed orders and realized megalomaniac desires of the rulers. Fundamental changes of the role of the police happened with the adoption of the Declaration of the Human and Citizens Rights from 1789, forming the face of the police as we know it today. Today the definition of the police states that: "The police are a constituent body of individuals authorized from the state to implement law, protect property and to prevent disorder."¹ In the Law on Police in the Republic of Macedonia, the definition for the police goes as follows: "The police are part of the Ministry of Internal Affairs where the police affairs are executed through police officers."² Further down in the text of the Law on Police the basic function of the police, which includes protection and respect of the basic freedoms and rights of citizens guaranteed with the Constitution of the Republic of Macedonia, is explained; laws and ratified international contracts, protection of the legal order, prevention and clearing up of crimes, taking measures for pursuing of perpetrators of those deeds (offences), as well as sustenance

¹ The Role of Responsibilities of the Police, Policy Studies Institute, London, 2009

² Article 2, paragraph 1 from the Law on Police of the Republic of Macedonia

of the public order and peace. In order to better understand the definition for police from the Law on Police of the Republic of Macedonia we need to explain what police affairs mean. According to the Law on police of the Republic of Macedonia the police affairs are explained as follows:

- Protection of life, personal security and the property of the citizens;
- Protection of the freedom and the human rights and the citizens guaranteed with the Constitution of the Republic of Macedonia, the laws and the ratified international contracts;

Prevention of execution of crimes and offences, detection and capturing of perpetrators and undertaking other, with the law provided measures for pursuing the perpetrators of those deeds;

- Sustenance of the public order and peace;
- Regulation and control of the traffic on the roads;
- Control of the movement and stay of foreigners;
- Protection of the state borders and control of the state border trespassing;
- Providing help and protection to citizens whenever necessary;
- Protection of particular persons and objects and
- Other affairs determined with the law.

The definition of the term “police” can also be defined by taking into account different hierarchies, organizations and ways in which their (police) activities are controlled. The implementation of the law is only part of the police activity.³

Under the term police officer, according to the Law on Police, we understand an authorized official person according to the provisions of the Law on Internal Affairs of the Republic of Macedonia. According to the Law on Internal Affairs there are three categories of employees in the Ministry of Internal Affairs:

- Authorized person according to the Law on Internal Affairs;
- Civil servant according to the Law on Civil Servants;
- Worker in the Ministry of Internal Affairs according to the Labor Law.⁴

According to the Law on Internal Affairs authorized official persons in the Ministry of Internal Affairs are:

- Authorized official persons sustaining the performance of professional or civil affairs;
- Authorized official persons for security and counter intelligence and
- Police officers.⁵

Authorized official persons are professional members of the police or officers or employees in the Ministry of Internal Affairs, who during the performance of the internal affairs have special duties and powers, provided for by the Law on Criminal and Infringement Procedure, Law on Internal affairs, Law on Police and the other legal regulations.⁶

The Law on Police and the Law on International Affairs provide for general and special conditions according to which a person can become a police officer in the Ministry of Internal Affairs.

³ Walker, Samuel, *A Critical History of Police Reform: The Emergence of Professionalism*, Lexington, 1977

⁴ Article 3 of the Law on Internal Affairs of Republic of Macedonia

⁵ Article 29 of the Law on Internal Affairs of the Republic of Macedonia

⁶ Miletich C, “Policisko pravo”, Policiska akademija, Beograd, 2003, p.134

The general conditions are:

- Citizen of the Republic of Macedonia;
- Adult citizen of the Republic of Macedonia, not over 25 years old, if employed for the first time on a position requiring high school, or not over 30 years, if employed for the first time on a position requiring a bachelor degree;
- Graduated from a four year high school;
- Psychologically and physically capable;
- With a legally valid verdict that he has no sentence, ban on profession, activity or duty.⁷

In the present Law on Police the article on the previous law which stated: "A police officer can be a person who is not sentenced for committing a criminal act against the constitutional arrangement and security of the Republic of Macedonia against the freedoms and rights of its citizens, against the armed forces of the Republic of Macedonia, against official duty, who has not committed serious offences against the life and body, property or criminal acts executed out of cupidity or dishonest motives"⁸ is deleted.

This deletion causes big differences in experts' opinion. In this area, because with this act of deletion of this article a dilemma was opened whether the trust in the police is lost and how a person convicted of a criminal act which is conducted out of cupidity or dishonest motives can be a police officer.

The Constitution of the Republic of Macedonia provides for special chapter on protection of human rights and freedoms. According to the Constitution, the human life and his physical and moral integrity are irrevocable. Therefore, in the Republic of Macedonia there is no death penalty.⁹ In the Republic of Macedonia any kind of torture, inhuman or humiliating behavior or punishment and forced labor is forbidden.¹⁰ In the Republic of Macedonia the human freedom is irrevocable; the freedom cannot be limited to everybody, except for cases and procedures established by law. Every person has the right to a counsel in a police or judicial procedure.¹¹

The length of the detention, which is established under strictly determined conditions, because of provision of evidence in the procedure, prevention of eventual danger of escape of the suspect and prevention of repetition of the crime of the suspect, in the Republic of Macedonia is changeable or there is a tendency of its extension because of cases of suspects escaping out of the state borders.

Now the detention with a decision and explanation of the Criminal Council can last no longer than one year from the preferring of the indictment. Experts on human rights and criminal law, often point out the fact that the detention in the Republic of Macedonia is abused and lasts too long. In some cases the court accepts level of guarantee and sets the detainee free so he can defend himself from freedom; in the other similar cases the detainee is still in detention even though the guarantee level is the same. Experts indicate that detention should be a measure of prevention, not a punishment for the suspect.

The reports on human rights in the Republic of Macedonia point out the fact that justice should not be selective, but equal for all and that detention should not be abused, and most of all it should not be used as a political revenge.

⁷ Article 2, paragraph 2 from the Law on police

⁸ Article 95 from the Law on police and Article 46 from the Law on internal affairs

⁹ Article 10 from the Constitution of Republic of Macedonia

¹⁰ Article 11 from the Constitution of Republic of Macedonia

¹¹ Article 12 from the Constitution of Republic of Macedonia

THE POLICE AND THE PERSONAL SECURITY OF THE CITIZENS IN THE REPUBLIC OF MACEDONIA

The police are an organ of the public administration which has the security of the state and its citizens, the organization activity and control within its scope. Because of their characteristics they are the subject of a special judicial treatment which is not applicable to other public institutions.¹² The basic obligation of a police officer is to effectively execute the police affairs, professionally and legally. When beginning its employment a police officer signs a ceremonial statement: "I undertake the responsibility that during my official duty I will respect the Constitution, the Laws of the Republic of Macedonia and the standards of the police ethics, consciously and I will duly execute the police affairs and I will respect the basic freedoms and rights of the citizens guaranteed with the Constitution, the Laws and the ratified international agreements"¹³ Police officers are often during the execution of their duty forced to use means of coercion, but they must take caution not to use excessive amount of force, because under the Constitution of the Republic of Macedonia, the human life and body are protected. The police officer must neither endanger life of a human nor hurt it. The citizens must have confidence in the police because they should guarantee him his security. A policeman must not represent danger or inflict injuries to the citizens of the Republic of Macedonia, even though they often have discretion powers to use force as a measure of caution. The past has proven that finding the most appropriate tactics is the hardest obligation of the police officers. Unfortunately, choosing the appropriate tactic is not often an easy job and police officers may underestimate or overestimate the situation and bring themselves in a situation of a psychic tension. The most controversial case concerning this topic of choosing the wrong tactic of using force (police brutality) is the case of Martin Neskoski.¹⁴

The police must only work for the benefit of the citizens, to be professional and ethical, to protect the citizens and not to endanger their lives. The police **must** publicly recognize, criticize and condemn their own members that do not respect human freedoms and rights. In the case of Martin Neskoski the question of whether there was a command responsibility remains unanswered.

From the Ministry of Internal Affairs the arrest of the suspect is often abused, even though according to the Constitution and Criminal Code a person is innocent until the guilt is formally and officially announced. Members of the Ministry of Internal Affairs make up situations of theatrical brutal arrests with TV cameras and journalists, which they later show on the news of every media, using their powers to do so. This disrupts the right of presumption of innocence of the citizens, because often this "spectacular" arrests end up with a release, and nobody can restore the trauma costs to their families and the respect this person enjoyed in the society. This kind of action also disrupts the right of privacy and the protection of identity.

More often we see cases where citizens overcome their fears and go to the police and report cases of police brutality, inhuman behavior towards the detainees, inhuman conditions and unprofessional behavior of the prison guards. With the purpose of protection the Ombudsman of the Republic of Macedonia formed a Body for prevention of torture and other kind of cruelty, inhuman or humiliating

¹² Miletich S., "Policijsko pravo", Policiska akademija, Belgrad, 2003, p.11

¹³ Article 100 from the Law on police

¹⁴ Martin Neskoski is a 23 year old boy who was killed on the city square of Skopje on the 5th of June 2011, by an ex- Tiger (special police unit) member. Available on: <http://www.time.mk/read/3cd82e07c4/cd3cfe4c33/index.html>

behavior or punishment brought on by police officers. This body is doing its job by controlling the processes and the behavior of the police especially in prisons and during the apprehension.

The balance between the freedom and rights of citizens and police affairs are guaranteed with legal norms and sanctions, as well as with a control over the police. The essential phase of the police function is the internal control or self-control of the police.¹⁵

Above the Ministry of Internal Affairs is the external control, which is legally regulated outside the police laws. That external control is the Ombudsman and the appropriate commission in the Assembly of the Republic of Macedonia. Another kind of external control is the judicial control which is restricted in the crime, infringement and administrative procedures through lawsuit against a particular police officer or against the Ministry of Internal Affairs as a whole. Except by the initiative of citizens there is no other legal basis for execution of external control over the Ministry of Internal Affairs by the courts.

Another kind of external control of the police which is not legally regulated and is not binding is the control of the non-governmental organizations and the media. Even though the police are complaining that these two important segments mainly criticize them, according to the Law on Internal Affairs, the Sector of Internal Control and Professional Standards in the Ministry of Internal Affairs is obligated to check validity of the indication from the NGO-s or media.

“An efficient police organization is one that serves as the first defensive line in the protection of the human rights and the security of the citizens and the state. Their members are doing the job in a way which is not based on fear and rough force but on the search for justice, the honor and the professionalism.”¹⁶ On the one hand the police represent the biggest support for democracy; on the other hand, when they act against the laws they become the biggest threat to the democratic society. The respect of the human rights by the police officers in the Republic of Macedonia in the course of the last years is a center of attention of the NGO-s, experts on law and security. The opinions are segregated, but there is unity under one conclusion. There are frequent changes in the domestic legal regulative regarding those issues which lead to late training of the police officers, as well as insufficient real protection of the police officers that further on lead to certain inconsistencies in the implementation of the legal regulative and the respect of human rights.

A NORMATIVE FRAMEWORK FOR THE POLICE IN THE REPUBLIC OF MACEDONIA

In the Republic of Macedonia, contrary to other countries in the region, the legal status of the police officers is regulated not by one, but two laws. These are the Law on Police and the Law on Internal Affairs. According to experts, who had a wide reaching debate before passing these laws, it is against the basic principles of law and against the constitution to have double and overlapping norms for certain police areas. So both laws prescribe:

- General and specific conditions for establishing a working relation;
- The principle of rightful representation of citizens, members of different ethnicities and gender equality;

¹⁵ Miletich S., “Policijsko pravo”, Policijska akademija, Beograd, 2003, p.368

¹⁶ Kalajdziev G., “Police and human rights”, Helsinki comity of Republic of Macedonia, 2002, p.14-15

- The right to strike;
- The right to an unpaid leave;
- The provision stating that all employees in the Ministry should work longer than the working hours to shorten their vacation when ordered by the Minister.

According to some theoreticians, but also according to the executive authority that proposed the laws, there are two laws regulating this area because during the preparation phase of the laws it was not possible to find a solution about the standardisation of all activities of the Ministry of Internal Affairs, with all its authorities and employees, in a single law. It was also pointed out to the directions of the European Union, which demanded the establishing of a new Law on Police and a Law on Internal Affairs, so that the Republic of Macedonia can become a member of EU. The incompatibility and some unjustifiable legal solutions have contributed for the Constitutional Court to contest several provisions, and especially important was the declaration of the provision regarding the retirement of the employees in the Ministry, prescribed by the Law on Internal Affairs, as unconstitutional.

In addition to the Law on Internal Affairs and the Law on Police, the police officers should also consider several other normative acts while conducting their duty: The Constitution of the Republic of Macedonia, the Law on Criminal Procedure, the criminal law, the Law on Violations, the Law on General and Administrative Procedure, the Law on Public Peace and Order Violations, the Law on Road Traffic Safety, the Law on Identity Card, the Law on Citizenship, the Law on Public Gatherings and other laws and by-laws. It is very important to mention that these laws are first and foremost related to the repressive police behaviour and they result in restrictions of the human freedom and rights, and refer to the police powers and coercion. By passing new police laws the provisions of the Police Declaration from the European Council¹⁷ are taken into consideration. Because of this, even despite a few inconsistencies, the experts on police law and security think that these laws and by-laws meet the European norms and standards, which was confirmed by the EU institutions.

THE POLICE AND HUMAN RIGHTS

One of the most important functions of the police is the suppression of crime which, in most cases, implicit the use of force and deprivation of freedom that are sometimes necessary for proving somebody's guilt. Very often, during this procedure the human rights are endangered. Most frequently this breach of human rights is only indicated by the Nongovernmental organizations. In the Republic of Macedonia it is commonly known that the respect of the human rights in these cases is opposite to the legislation. Experts' opinions on these cases are clear. They point out that the respect of the human rights is necessary because only in the case when the police are respecting these rights, the outcome will be extremely positive. As I have mentioned many times before, the police officers are obligated during the performance of their duty to act not only according to the domestic law but also according to the ratified international acts. Special attention must be paid to the Universal Declaration of Human Rights and Freedom and European Convention of Human Rights, of course without exception of the rest of the documents on human rights. In these documents mentioned above a lot of rights are contained, but the police officers must focus on the most important ones:

¹⁷ Resolution No. 690 from 1979, from the European Council

- Everyone has the right to life, freedom and security of person;
- No one shall be subjected to torture or to cruel inhuman or degrading treatment or punishment;
- All people are equal before the law and are entitled without any discrimination to equal protection before the law;
- No one shall be subjected to arbitrary arrest and imprisonment;
- Everyone charged with a penal offense has the right to be considered innocent until proven guilty according to Law, and will be provided with all the guarantees necessary for defence;
- Everyone has the right to peaceful assembly and association and no one can force you to become a member of an association.¹⁸

Restriction of the human rights in the service of a higher goal is applied when the state is in emergency or state of war or there is a large scale disorder. This procedure is justified because in that way the citizens are protected from the danger against their lives. The respect of the human right on the behalf of the police officers in the Republic of Macedonia in these last years has intensified. Very often the human rights are extremely abused by many social factors for their own goals. The last example such as this is the operation of the Ministry of the internal affairs called "Snake eye" in which the members of the Ministry of the internal affairs arrested 87 persons from a criminal group which originally counted 92 persons all employed in "Macedonia Road". The first operation began in 2007, the second operation under the same pseudonym "Snake eye" continued in 2008. The trial for the second operation has not finished yet. The apprehended persons are employed on pay tolls on many roads in the Republic of Macedonia. They were apprehended under the suspicion for malpractice damaging the country by issuing false fiscal accounts worth 2 million Euros.¹⁹ Primary Court – Skopje I convicted 72 persons employed on the pay toll ramp to suspended sentences while supervisors were sentenced to two years' imprisonment. Court of Appeal remitted the case for repeated trial. Some of the accused appealed to the European Court for Human Rights. The European Court for Human Rights entered a judgement according to which all of the 38 accused employees, who appealed to the Court, should get 2000 Euros compensation from the institution of the country. This decision was based on article 5 paragraph 3 from the Law on Freedom and Security of the European Convention on Human Rights.²⁰ During the trial, all arrested employees were paid salaries although they did not go to work. The arrested in the first part of the operation (2007) received the full amount of the salary while the arrested in the second part of the operation (2008) received only half of the full salary. Under a recommendation of the Government of the Republic of Macedonia, the employees in "Macedonia Road" who were arrested in the operation "Snake eye" will be put back to work, but not in the same positions. This is a typical example of the breach of human rights by the police officers. Examples such as this one are not allowed in the developed democracies.

The police or the police officers during the performance of the police affairs must respect the basic principles that developed as a result of their everyday work.

¹⁸ These rights are containing in Universal Declaration of Human Rights and Freedom and European Convention of Human Rights.

¹⁹ <http://www.makdenes.org/content/article/24408694html>

²⁰ Everyone arrested or detained in accordance with the provisions of paragraph 1 (c) of this Article shall be brought promptly before a judge or other officer authorized by law to exercise judicial power and shall be entitled to trial within a reasonable time or to release pending trial. Release may be conditioned by guarantees to appear for trial.

Those principles are confirmed many times, they are:

- Principle of legality – the essence of this principle is the fact that the status of the police officers, as well as, their rights and duties during the performance of professional tasks, are regulated by the Law, and by-laws. The fact that every use of powers entrusted to the police officers must be according to the positive legal regulations point out to the necessity of highlighting of this principle. So, it is necessary to emphasize that police officers “during the performance of all of these functions” must obey these Laws. Not only this - they must be example of how these laws are respected whether they are on duty or not.
- Principle of responsibility- Not every man can be a police officer and the reasons are known very well. Namely, police function brings many benefits, but they are balanced with many responsibilities and obligations which often go to the extremes. Police officers must be extremely careful during the performance of their everyday police affairs and for every undertaken action according to the laws they must prepare a special report. If any kind of problem should occur during their actions, then the reports that must be submitted increase, thus increasing the responsibility of the police officers in relation to the objectivity of the report. This is directly related to the human rights, because human destinies depend on the content of the report. According to this principle, every police officer should be responsible and should carry the consequences if not.
- Principle of humanity and ethics – This is important for every human being, especially for police officers. For implementation of this principle a police code and rule book for interpersonal behaviour of the employees of the Ministry of Internal Affairs are adapted.
- Principle of political neutrality- In the Law on Internal Affairs and the Law on Police there are special articles which regulate this principle, but unfortunately, in the Republic of Macedonia this is the most frequently violated principle. The problem with the police in the Republic of Macedonia is that they are politically biased. It is a public secret that if a certain police officer is a member of the ruling political party, it is most probable that he will be promoted. It is most pitiful that there are cases where people with membership cards of the ruling political party are employed even though they are not competent. In this way the terms of Law on Internal Affairs are violated. As a consequence of this the moral and the quality of the police work is declining.
- Principle of expertise - For this principle the most important part is the appropriate education and psychological and physical capacity. Everyone should be employed according to his capabilities and during the years of work gained experience should be promoted eventually. The expertise of the police officers in the contemporary conditions implies the readiness for cooperation with the organs of internal affairs and the police agencies from other countries. For the Republic of Macedonia the greatest interest is to strengthen is the international police cooperation in Europe, while the final our goal is to become a member of the European family of police agencies called EUROPOL. Therefore, police officers are required to know not only the national law but also the international Law on police work and at least one foreign European language.
- Principle of following and grading of the police work - The police officers for their everyday work are evaluated and graded by their supervisors. The system of grading should be objective and according to the laws. Evaluation and grading of police officers is of vital importance for the police officers as well as for the police. Through this evaluation an overall picture about the police work and respect of the laws will be drawn. Although the grading of police officers is legally standardized in practise, there are a lot of shortcomings. Namely, grading is often subjective, while supervisors are frequently incompetent.

CONCLUSION

Even though it may sound like a “cliché” still we can freely state that in the Republic of Macedonia there is a legal and constitutional frame for the protection of human rights and freedoms and for a lawful functioning of the police forces, but the problem is that those legal norms are often breached and not fully applied.

The problem is that police representatives have more discretionary powers and there is a political influence on the choice and promotion or punishment of the staff in the Ministry of Internal Affairs. This means that the principle of expertise and competence is not respected. Obviously, it is necessary to return the old solution foreseen with article 48 from the Law on Internal Affairs, which prescribes additional requirements for employment in the Ministry of Internal Affairs.

It is necessary for the police officers to have continuous training and it is also necessary to re-evaluate the current police staff, especially those incompetent police officers, who are neither trained nor have the capacity to fulfil this responsible job.

It is a fact that a police officer has many responsibilities and duties which, according to a number of laws, by-laws and international agreements, he must fulfil, and on top of this, if he makes even the smallest error, he will be subjected to adequate preventive and repressive measures according to the laws. During the performance of the police duty he doesn't enjoy the same freedom and rights guaranteed with the Constitution and the international acts, as the rest of the citizens, which only complicates his position and everyday life. From the law perspective the status of the police officers in the Republic of Macedonia is not crystallized, but according to the terms of the Law on Internal Affairs and the Law on Police, the police officers are ready for everyday work if the Republic enters European Union tomorrow. Again we can see discrepancies between the legislation and its implementation.

Even though there have been several attempts, the question of the retirement of police officers still remains unsolved, because the law did not pass in the constitutional court, and afterwards a new law with the same contents was proposed.

Another trouble is the fact that the reputation and credibility of police officers and the Ministry are on a relatively low level and the citizens do not believe that the police exist solely for the protection of human rights and freedoms, the life and property of citizens and the safety of the Republic of Macedonia.

There is a need to talk openly about all inconsistencies. The Ministry of Internal Affairs and the executive authorities should pay attention to the experts' observations, and not ignore the critics coming from the ombudsman, from the non-governmental organisations, from the media and to listen to the complaints of the citizens. Only in this way, with an open debate and changes in the legislature, we can freely say that the police serve the citizens and that they see the police as their protector and protector of all their rights.

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IMPACT OF MONEY LAUNDERING ON ECONOMIC SECURITY

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Abstract: Through globalization, technological advances and greater mobility of people and resources across national borders, money occupies a key position or becomes a major player in global markets. The globalization and increase of the use of money in transactions cause difficulties in monitoring them and lead to the increased risk of committing crime. Money laundering is a criminal activity which is difficult to control both in national economy and globally. Money laundering has a corrosive effect on the economy of a country.

The purpose of this paper is to show the impact of money laundering as an economic phenomenon in the security of the economy.

Money laundering undermines national economies through the impact on micro and macroeconomics, as follows: private sector, the integrity of financial institutions and markets, adversely affecting the demand for money and increased volatility of international capital flows, exchange rates and interest rates and loss of tax revenue.

According to the world statistics assessment about 1.5 trillion dollars are laundered in the world annually. In the Republic of Macedonia, according to the Annual Report of the Office for Fight against Money Laundering and Financing Terrorism since 2009, the participation of suspicious transactions in GDP is 60% and it has to be an alarm to enhance measures to prevent money laundering.

This paper will offer future directions for strengthening the control and at the same time will indicate the need to implement a unified system for recording, collecting and displaying data that would function for international level in the national economy and will contribute to strengthening of the economic security from the money laundering phenomenon.

Key words: Economic security, money laundering, microeconomy, macroeconomy, system.

INTRODUCTION

The process of globalization, technological advances and greater mobility of people and resources across national borders, contributed for the transnational crime to emerge in new forms of the so-called non-traditional forms of security among which is the economic stability. Since 1940-ties, many scientists such as Earle, [1943], Hirschman, 1945, Viner, 1948, believe that there is an integrated relation between security and economy. "Economic security", as a link between the economy and security, has recently become more than an important dimension of

the sciences such as political economy and the science of security. The line between studying the security and the issue of economic order is very thin because several scientists emphasize the importance of studying both sciences together.

Non-traditional forms of security, such as social and economic security, are of great importance unlike the traditional security normatives (for example military security), as the threats of this type are not apparent. Some authors argue that globalization is one of the sources of this problem, because it enables the world integration of social, economic and political aspects which entail a significant change in the scope of economic security.

The conjunction of economics and security, or “economic security” has more recently become an increasingly important dimension of both international political economy and security studies, caused not only by academics’ discussions in the field but also by institutional shifts in global power. The line between the study of security and the question of economic order has become far less noticeable, as more and more scholars have highlighted the importance of studying the two together. And yet, the work in this field focuses on the state as a reference object. Only then does economic security figures. “If the state is taken as the reference object, *then* economic security becomes part of the national security agenda”, says Buzan, adding that “the idea of economic security becomes awkwardly entangled with a range of highly politicized debates about employment, income distribution and welfare.” For this reason, Buzan suggests, the conflation of social and national security can be electorally persuasive (Buzan, 1991: 232, 237, 241; emphasis added). I want to suggest that there is much more at stake here than the question of electoral gains. At stake are the far more substantive political gains to be gained by the state from the idea of security. If, as Mick Dillon (1996) suggests, we think of security not as a noun that names something but as a principle of formation, then we can consider security as the principle of formation behind the reordering of the social world. And so, building on arguments I have made elsewhere (Neocleous, 2000), I will argue that what is at stake in this principle of formation is the fabrication of economic order, at the heart of which has been the idea of “economic security” and which can be seen in both its internal/domestic dynamics (social security) and external/international dynamics (national security)¹.

Money as a driving force of any society is a basic possibility to survive, but also the basic reason, in conditions of lack of money, to make the people desperate and willing to do something that might enable them to survive or to get rich. Therefore, we believe that money have a big and crucial role in this matter. There are several threats to economic security:

1. Low earnings
2. No earnings
3. Significant decline in income
4. Significant loss of assets
5. Large unexpected cost

¹ Mark Neocleous, From Social to National Security: On the Fabrication of Economic Order Downloaded from sdi.sagepub.com by Snezana Mojsoska on October 23, 2011

NEGATIVE EFFECTS OF MONEY LAUNDERING ON ECONOMY

The negative economic effects of money laundering on economic development are difficult to quantify, yet it is clear that such activity damages the financial-sector institutions that are critical to economic growth, reduces productivity of the real sector in economy by diverting resources and encouraging crime and corruption, which slow economic growth, and can distort the external sector of economy - international trade and capital flows - to the detriment of long-term economic development. Developing countries' strategies to establish offshore financial centers (OFCs) as means for economic development are also impaired by significant money-laundering activity through OFC channels. Effective anti-money-laundering policies, on the other hand, reinforce a variety of other good-governance policies that help sustain economic development, particularly through the strengthening of the financial sector.

The financial sector A broad range of recent economic analyses indicate that strong developing-country financial institutions, such as banks, other non-bank financial institutions (NBFIs), and equity markets, are critical to economic growth. Such institutions allow for the concentration of capital resources from domestic savings - and perhaps even funds from abroad - and the efficient allocation of such resources to investment projects that generate sustained economic development.

Money laundering impairs the development of these important financial institutions for two reasons. First, money laundering erodes financial institutions. Within these institutions, there is often a correlation between money laundering and fraudulent activities undertaken by employees. At higher levels of money-laundering activities, entire financial institutions in developing countries are vulnerable to corruption by criminal elements seeking to gain further influence over their money-laundering channels. Second, particularly in developing countries, a customer's trust is fundamental to the growth of sound financial institutions, and the perceived risk to depositors and investors from institutional fraud and corruption is an obstacle to such trust.

By contrast, beyond protecting such institutions from the negative effects of money laundering, the adoption of anti-money-laundering policies by government financial supervisors and regulators, as well as by banks, NBFIs and equity markets reinforce the other good-governance practices that are important to the development of these economically critical institutions. Indeed, several of the basic anti-money-laundering policies - such as know-your-customer rules and strong internal controls - are also fundamental, longstanding principles of prudential banking operation, supervision, and regulation.

The real sector Aside from money laundering negative effect on economic growth through its erosion of developing countries' financial sectors, money laundering has a more direct negative effect on economic growth in the real sector by diverting resources to less productive activity, and by facilitating domestic corruption and crime, which in turn depress economic growth.

As we can see from the various money-laundering typologies reports, money laundered through channels other than financial institutions is often placed in what are known as "sterile" investments, or investments that generate little additional productivity for the broader economy, such as real estate, art, antiques, jewelry, and luxury automobiles. For developing countries, the diversion of such scarce re-

sources to less productive domestic assets or luxury imports is a serious detriment to economic growth. Moreover, criminal organizations can transform productive enterprises into sterile investments by operating them for the purposes of laundering illicit proceeds rather than as profit-maximizing enterprises responsive to consumer demand and worthy of legitimate investment capital.

Money laundering also facilitates crime and corruption within developing economies, which is antithetical to sustainable economic growth. Just as an efficient financial sector is a key “input” to other productive processes in a developing economy - such as manufacturing - an efficient money laundering channel is a key “input” to crime because the financial proceeds from crime are less valuable to a criminal (in a sense, an “unfinished product”) than are laundered funds. The less expensive money laundering “input” to crime is as a result of lax anti-money-laundering policies, the more “productive” (active) the criminal element will be, just as in any industry or business. As numerous studies have demonstrated from statistical and anecdotal evidence, substantial crime and corruption act as a brake on economic development, while other studies have shown that anti-money-laundering policies can deter such activity.

The external sector. Unabated money laundering can also impair a developing country’s economy through the country’s trade and international capital flows. The well-recognized problem of illicit capital flow from developing countries is typically facilitated by either domestic financial institutions or by foreign financial institutions ranging from offshore financial centers to major money-center institutions such as those in New York, London, or Tokyo. Given that illicit capital flow drains scarce resources from developing economies, transnational money-laundering activity helps impair developing-country growth. By contrast, there is little evidence that the imposition of anti-money-laundering policies in a given jurisdiction spurs a significant flow of capital to more lax jurisdictions. Moreover, just as the confidence that developing-country citizens have in their own domestic financial institutions is critical to economic growth, the confidence that foreign investors and foreign financial institutions have in a developing country’s financial institutions is also important for developing economies because of the role such confidence plays in investment decisions and capital flows.

Money laundering can also be associated with significant distortions relating to a country’s imports and exports. As far as a country’s import is considered, criminal elements often use illicit proceeds to purchase imported luxury goods, either with laundered funds or as part of the process of laundering such funds. Such imports do not generate domestic economic activity or employment, and in some cases can artificially depress domestic prices, thus reducing the profitability of domestic enterprises.

Offshore financial centers (OFCs) as a development strategy. Over the past decade dozens of OFCs have been created as part of developing countries’ (or territories’) efforts to develop their domestic economies through the provision of international financial services. These OFCs can be classified along a spectrum from “notional” OFCs (those that provide minimal financial services other than simply being a jurisdiction in which “name plate” operations may be established) to “functional” OFCs (those that provide a wide-range of value-added financial services).

Studies of the effectiveness of establishing an OFC as an economic-development strategy have shown that notional OFCs contribute little to the surrounding economy and do not form the basis for sustained economic growth. First, notional

OFCs are virtually costless to establish, and therefore competition among them for customers is severe. Second, because notional OFCs provide little value-added services, such OFCs generate almost no economic demand for the surrounding "real" economy in terms of employment, goods, or services.

On the other hand, truly functional OFCs require significant investments in infrastructure - such as communication facilities, and even a skilled labor force - thereby limiting the pool of competing OFCs and increasing the commercial returns to those OFCs that emerge as strong competitors. Moreover, functional OFCs benefit their surrounding "real" economies through their demand for goods, services, and educated workforce to support the OFCs' value-added activities.

This distinction between notional and functional OFCs becomes critical to assessing the economic effect of money laundering on OFCs as an economic development tool. Money laundering *per se* does not require more costly value-added services of a functional OFC, and therefore may gravitate to merely notional OFCs - the very type of OFC least able to contribute to the country's real economy. By contrast, legitimate international capital is more likely to require the services of a functional OFC *and* will be deterred from making extensive use of an OFC tainted by widespread allegations of money laundering and the associated activities of fraud and corruption. Thus, for a country to implement a successful economic-development strategy based on the establishment of an OFC, the strategy must adopt measures to control money-laundering activity through the OFC.

Moreover, the International Monetary Fund studies suggest that smaller countries can become favored by large-scale money launderers for short periods of time, causing a sharp surge in financial activity, followed by an equally sharp decline, resulting in severe macroeconomic instability as local authorities are unable to take offsetting monetary or exchange-rate measures.²

MONEY LAUNDERING AND THE ECONOMIC PHASES

Beyond the evasion of legal regulation, offshore markets in the post-Cold War period are more threatening because money laundering has played a significant role in (post-Cold War) the financial crises of nation states. The experience in Russia, recorded in abundant detail through a sequence of scandals closely tied to political back stabbing, suggests that there are intricate links among capital flow, embezzlement, racketeering, pillaging of public assets, corruption and organized crime. As I have demonstrated in a recent study, significant profits derived from organized crime and corruption, were deposited in Swiss banks and re-invested in Russia to finance the growing national debt. Corruption and criminal activities played a major part in creating public debt and diverting funds to speculative overseas financial markets: the Russian Central Bank estimated that \$ 74 billion was transferred from Russian banks to offshore accounts in 1998, the year of the devaluation. A predatory, kleptocratic, and, in the end, Mafiastyle pattern of abuse created substantial demand for money laundering on international capital markets, including the demand for Russian Treasury bonds, and was an important factor in the Russian financial crisis of 1998. There are other examples, as well, which are typically overlooked in neoclassical economic analyses that remain limited to empirical testing of limited models. Yet, such examples reveal the sometimes incestuous relations between the

² Brent L. Bartlett, International Economics Group, Dewey Ballantine LLP, Negative effects of money laundering on economic development, The Asian Development Bank, Regional Technical Assistance Project No.5967, Countering Money Laundering in The Asian and Pacific Region, May 2002, pg. 4

laundering of “funny money” and financial crisis.. The Mexican crisis of 1994-1995, and the “tequila effect”, or the repercussions which it triggered in Latin American countries through the regionalisation of exchanges, can only be understood if the “cocaine effect”. Starting in the 1990s, Mexican drug dealers took charge of one half of the Colombian drug trade to the United States, and thereby repatriated some 3 to 8 billion dollars per year, which exceeded the value of Mexico’s oil exports. Part of these funds went to the ostentatious consumption of luxury goods from the United States, thereby increasing the country’s dependence on imports. The rest was recycled in small businesses, luxury real estate, and the securities and grey currency markets, which levy some 10 to 15 percent for their money laundering services. The hasty privatization initiated by Carlos Salinas also provided opportunities for recycling narcoprofits, especially in the banking sector where the State sold a series of firms for \$12 billion. After the crisis, these banks were saddled with debts in excess of \$60 billion, which were subsequently assumed by the State.

In Mexico, money laundering was combined with international short-term capital flows to create excess liquidity and a stock market and real estate bubble. Though at the outset they corresponded to only 1 to 3 percent of GDP, the mass of narco-dollars managed to distort competition to the advantage of organized crime in small business and banking. The “laundering premium” which they earned made it possible for them to be more competitive and on occasion to absorb their competitors, while emphasizing short-term speculative investments. Moreover, their access to credit made it possible to recycle and expand capital of dubious origin. Far from improving the general competitiveness of the export economy, or helping to reduce external debt, laundering accentuated imports of consumer goods and emptied the productive sphere in favor of short-term investments.

The injection of narco-dollars thus contributed to the deterioration of foreign trade and precipitated payment(s) defaults, devaluation and the financial crisis of 1994-1995. As in Russia and Mexico, the Thai crisis, which triggered the Asian crisis of 1997, is no stranger to money laundering. According to a study published in 1997 by three researchers at Chulalongkorn University,¹⁰ the equivalent of 8 to 11% of the Thai GDP was controlled, at the onset of the crisis, by organized crime, which derived its profits mostly from gambling and prostitution, and also from drug traffic out of Burma. Accelerated democratization of the Thai political system during the 1990s gave a clear advantage to the provinces rather than the Bangkok region. Bangkok was the stronghold of the modernist democratic party and generated half the GDP. The peripheral regions were under the control of local “godfathers,” frequently of Sino-Thai origins, who combined certain legal monopolies with illegal activities such as gambling, prostitution, drug trafficking, and contraband in wood and precious stones. When the provinces acquired the decisive role in fragile government coalitions, political patronage encouraged money laundering. Once again, it focused on speculative real estate and stock market investments, in a context of insider trading scandals that occurred in the course of privatization. As in Mexico, the inflow of foreign short-term capital, most often transited through the Bangkok Offshore Banking Facility, accelerated local speculation by limiting investments at the expense of the productive and export sectors. The deterioration of the external accounts that ensued was aggravated by the rise of the dollar and the slowdown on the electronics export markets in 1996. This precipitated the exchange crisis and the devaluation of the baht. But the pressure created by short-term investments or by the results and figures in the formal economy does not explain the magnitude of the crisis. The local political and financial system also played a part, in that it strongly favored the laundering of profits from crime. By the end of 1999, two years after the crisis, whereas the Thai GDP had contracted by 10% in 1998 alone, and the surplus

on the real estate market was estimated at 300 000 units in the Bangkok region, real estate prices did not fall. This stability remains incomprehensible if one analyzes real estate prices according to traditional market criteria, but the puzzle disappears when one factors in the need for money launderers to funnel massive amounts of funds into real estate, as well as the delays which they caused in the reconstruction of the financial sector.³

Money laundering is one of the most famous derivatives of the crime, including money and an activity that is hard to control. Even in terms of well developed legislation that regulates this matter and institutions aimed at combatting money laundering, it is difficult to follow such an appearance. This process is unbeatable threat of social and economic security, because by threatening the efficient functioning of the financial system, monetary policy, the policy of sustainable growth and development, it destroys the economy as a base for social upgrading and actually becomes a national problem, or in other words becomes a threat for the stability and harmony of the whole nation.

Money laundering has a corrosive effect on a country's economy and social welfare.

Money laundering in economic terms violates business decisions, increases the risk of bank failures, undertakes control of the economic policy of the government, i.e. it damages the reputation of the country.

Money laundering typically involves a series of transactions to conceal the source of funds, so that those funds can be used without compromising the identity of the criminals who are trying to use those funds. These transactions are usually done in three phases:

1. Placement is the first phase in the process of money laundering in setting illegally acquired incomes into the financial institutions and as such it may use different techniques. Some of the techniques of placement are:
 - Smurfing and structuring
 - Alternative transmission
 - Electronic transfer
 - Conversion of funds
 - Movement of funds
 - Gambling houses
 - Insurance
2. Layering is the second phase of money laundering process, in which illegal funds are moved, dispersed and disguised to conceal their origin. Funds can be covered up in the financial system through a network of free transactions. There are different techniques of layering in this module:
 - Electronic funds transfer
 - Offshore banks
 - Shell corporations
 - Moving accounts
 - Intermediaries
3. Integration is the third stage of money laundering process, in which the illegal funds or the funds are successfully laundered and appear as legal in the financial system, making them available for investment, saving and spending.

³ Guilhem Fabre, *Prospering on Crime: Money Laundering and Financial Crisis*, Working Paper No 9, 2005 Centre for East and South-East Asian Studies, Lund University, Sweden, pg.2

We will examine various techniques of integration in this module as follows:

- Credit and debit cards
- Consultants
- Corporate financing
- Assets sales and purchases
- Business recycling
- Import / export transactions

Through these processes, attempts are made to transform monetary assets derived from illegal activities in legally regular assets⁴.

THE IMPACT OF MONEY LAUNDERING ON THE ECONOMIC SECURITY

Money laundering has potentially disastrous economic, security and social consequences.

Modernization of the financial systems, facilitates trade, and also allows criminals to transfer millions of dollars by electronic means at any time. Money is laundered through the exchange of currency, stock, brokerage houses, gold, dealers, casinos, insurance companies and trade companies, banking instruments, offshore banking, shell corporations, free trade zones, electronic payment. Uncontrolled, money laundering can erode the integrity of financial institutions. Due to the high integration of capital markets, money laundering may adversely affect currencies and interest rates. Money laundering in global financial systems can undermine national economies, i.e. it represents a serious problem and a threat to national and international security.

Money laundering leads to negative effects on economic and social trends such as:

Money laundering, represents a dangerous threat to the public confidence, the work of public institutions and government, which directly causes huge damage to national economy. Appearance of money laundering results in the increase of tax evasion, avoidance of the legislation, appearance of smuggling and funds taken abroad, which directly increase taxes which are to be paid by the taxpayers.

Money laundering directly undermines financial markets.

Money made from the crime is partly used for the corruption of the officials employed on the financial markets, causing irreparable damage to the financial institutions and market credibility. This money is used for eroding the banking system.

Money laundering systematically destroys the economic institutions of a market economy, undermines the democratic political structure as well as the political stability.

Legal instability and increased corruption reduce the interest of foreign investors.

This incriminating phenomenon is a problem not only for the emerging markets, but also for the world's major financial markets. The negative impacts of money laundering tend to grow especially in the emerging markets. A review of micro and macroeconomic framework helps to explain why money laundering is a complex threat, especially for the emerging markets.

However, to understand what happens in the economy and how money laundering affects economic development, assets (such as cash hoarding, savings in a bank account, or investments in the legitimate economy) must be separated from transfers (transfers within the national economy and across borders).⁵

⁴ Similar www.austract.com

⁵ Stuart Yikona, Brigitte Slot, Michael Geller, Bjarne Hansen, Fatima el Kadiri, Il-gotten Money and the

Negative effects on the private sector: One of the most serious microeconomic effects of money laundering is mostly shown in the private sector. Money launderers often use companies to achieve their goal by mixing revenues which are provided doing illegal activities and legally earned funds. The most common form of business organizations that are used for such purposes are privately owned organizations and partnerships and serve as a mask for entering revenue in the financial system. These business organizations can provide services at and below market interest rates, to offer products at prices lower than the costs of the manufacturer. Thus, they have a *competitive advantage* over the other business organizations that operate legally and can result in a reduction of the private sector and even lead to negative macroeconomic effects.

Undermining the integrity of financial markets Financial institutions that rely on the revenues provided by crime are additional challenges to properly management of their assets, liabilities, and operations. If large sums of money are integrated into a financial institution suddenly disappear without warning, it can result in problems with liquidity of the bank's operations. Apart from the above mentioned, it has an impact on the investments, and money laundering can lead to increased responsibility and awareness of risks for quality in the financial system. When that happens, it can create systemic risks for the financial service industry and, consequently, to the loss of confidence and credibility in the system.

Loss of control of the economic policy In some countries, illegal revenues affect the volume of money supply in circulation, i.e. the effectiveness of monetary and fiscal policy, resulting in the loss of control of economic policy by governments. Money laundering reduces tax revenues and thus indirectly harms honest taxpayers. It also complicates the collection of taxes by the Public Revenue Office and in such a way this loss of income generally means higher tax rates and/or lower public spending.

Money laundering can also adversely *affect currencies and interest rates* in countries where criminals reinvest their money through schemes less likely to be detected, and on the other hand where rates of return are higher. Money laundering can increase monetary instability, cause *misallocation of resources and create distortions in the competitiveness of the prices of goods*.

In short, money laundering and the financial crime can result in inexplicable *changes in money demand and increased volatility of international capital flows, interest rates and exchange rates*. The unpredictable nature of money laundering, along with the loss of political control can lead to *difficulties in achieving the economic policy*.

Money laundering has a direct *impact on the foreign exchange market* in any economy. Foreign exchange market is vulnerable due to the volume of money involved in the trade. The movement of assets with suspicious origin, from one jurisdiction to another, can cause volatility in the foreign exchange rates and cause a domino effect in regulation of the cash flows and increase of the inflation.

Other economic implications of money laundering is that it could affect the overall *distribution of the incomes*, and thereby create a distorted economic indices and, consequently, *inappropriate allocation of the limited resources*.

Economic disruption and instability Money launderers are not interested in the profits from their investments, but in protecting their revenues. They "invest" their funds in activities that have no economic benefit for the country where assets are located. Additionally, investments can be of low quality that will result in slower economic growth. In some countries, for example, the entire industry, such as con-

struction and hotels are funded not because of actual demand, but for short-term interests of money laundering. When these industries are no longer useful to money launderers, they leave the market by causing the collapse of these sectors and enormous damage to the economy.

Risks of Privatization Money laundering threatens the efforts of many countries, to create appropriate reforms in their economies through the privatization. Although privatization is often economically beneficial, it also can serve as a means for money laundering.

Reputation risk In the modern process of intensive international cooperation and liberalization of financial flows, no economy can afford insufficient respectability and credibility, as well as weak financial institutions, both in the domestic and the external surrounding. Confidence in the markets is constantly undermined by money laundering and financial crime, as well as by other revenues resulting from criminal deeds such as financial fraud, insider trading of securities, and embezzlement. This can result in reduced rates of growth, development of the country. If the financial reputation of the country becomes disturbed, its revival is very difficult and requires considerable resources to fix a problem that previously could be prevented by appropriate policy for prevention and control of money laundering.⁶

IMPACT OF MONEY LAUNDERING ON MACEDONIAN ECONOMY

On the basis of the American database of money laundering, Macedonia is not a regional financial center. Most financial transactions are made through the banking system, which is regulated and controlled, but some cash transactions of certain sums are realized outside the banking system. Money laundering in Macedonia is normally associated with financial crimes like tax evasion, smuggling money, privatization crime, insurance fraud, bribery, and corruption. Most of the proceeds that are laundered come from domestic criminal activity. Macedonia is not an offshore financial center since the Banking Law does not allow the existence of shell-banks in Macedonia. The banks are not allowed to open anonymous bank accounts. There is no evidence that the technique of alternative transferring money exists in Macedonia. There are several operating free trade zones in the country, and they function as industrial zones where foreign investors have legal benefits, incentives and benefits of free trade zone. Manufacturing capacities that enjoy these benefits are owned by foreign investors. Dealers of arts, antiques, and other high-value consumer goods, entities dealing with jewelry and precious metals, and travel agencies are excluded from the list of entities obliged to report suspicious and cash transactions to the Macedonian FIU. So far, there is no evidence that any of these entities engage in money laundering or terrorist financing activities. Non-bank financial institutions, including exchange offices and non-bank money transfer agents, as well as all other reporting entities, are poorly supervised and audited in regard to anti-money laundering/counter terrorist financing programs and practices. These institutions are to be supervised by the Public Revenue Office; in practice such inspections rarely occur as the Public Revenue Office is focused on investigating tax evasion. There is a need for improving supervision of the non-bank financial sector and providing necessary resources and training to ensure full implementation of laws. Although mandatory, reporting by lawyers,

⁶ John McDowel, THE CONSEQUENCES OF MONEY LAUNDERING AND FINANCIAL CRIME, Money Laundering - Economic Perspectives - State Department, May 2001, page 3

accountants, brokers, real estate agents, consultants, NGOs, casinos, and notaries is irregular, but improving. The FIU's competencies overlap in many areas with the Public Revenue Office, the Customs Administration, the Financial Police and the regular police. Although in the past two or more of these institutions would be working independently on the same cases, coordination between them has been effective, resulting in several coordinated large-scale investigations of cases concerning money laundering, tax evasion, fraud, corruption, and misuse of official position, involving numerous companies and individuals.

Terrorist financing is a crime under Macedonian laws, but to date, there have been no convictions for terrorist financing. There are no indications that financiers of terrorism use trade-based money laundering schemes or the free trade zones for their operations. A few smaller banks and all savings houses lack the ability to electronically identify account holders and transactions by named individuals and usually will cross-check their customer lists with distributed lists manually.

According to the Macedonian Law on Preventing Money Laundering and Other Proceeds of Crime and Terrorism Financing (LPMLTF), financial institutions can temporarily freeze assets of suspected money launderers and terrorist financiers prior to receiving a court order. Frozen assets are confiscated only by a court's final verdict. Although existing legislation regulates the management of seized and forfeited assets, more work is needed to bring it in line with good international practices. Macedonia has passed complex legislation pertaining to judicial reforms, including amendments to the Constitution and the Criminal Procedure Code that allow the use of specialized investigative methods in investigating money laundering cases. In 2010, the Parliament adopted a new Criminal Procedure Code, which after becoming effective in the second half of 2011 will strengthen a prosecutor's ability to more effectively prosecute serious and organized crime. Reforms in the judiciary should further enhance efforts to combat organized crime, corruption, terrorism, trafficking in human beings, money laundering, and narcotics, by increasing penalties, tightening definitions, and defining authorities responsible for taking the lead in combating these various crimes. However, real reforms are almost non-existent, the judiciary is highly politicized, and the rule of law is backsliding.⁷

Measuring the impact of money laundering on the Macedonian economy is a complex task due to lack of data. It is practically impossible to use the Walker method to measure the amount of money laundered through the financial system. But according to the data available from the competent institutions, we can perform the connection of the amount of money laundered detected by the major macroeconomic indicators, as to show the size, importance and impact of laundered money on the Macedonian economy. Within the annual report of the Office for Prevention of Money Laundering and Financing Terrorism, there are transactions summarized by values for the different currencies for which information is received from banks and which are available in their equivalent value in MKD according to their current rate for 2009 (Table 1). If you look at the report of the Ministry of Finance, there are available macroeconomic indicators for the Republic of Macedonia for 2009 (Table 2).

⁷ <http://info.publicintelligence.net/MoneyLaunderingDatabase2011.pdf>(аццесед 11.01.2012)

Table 1. Statistics of transactions summarized by values for different currencies for which is received as information from banks, their equivalent value in denars according to current exchange rate and percentage representation of different currencies from the information for transactions in 2009

| Ord.No. | Currency | Sum | Equivalent value of denars | % |
|---------|----------|--------------------|----------------------------|-------|
| 1 | MKD | 152.050.591.830,51 | 152.050.591.830,51 ден. | 61,29 |
| 2 | EUR | 1.139.995.256,55 | 70.098.308.325,26 ден. | 28,26 |
| 3 | CHF | 312.678.429,25 | 13.132.494.028,50 ден. | 5,29 |
| 4 | USD | 185.579.178,12 | 8.423.438.894,87 ден. | 3,40 |
| 5 | AUD | 73.247.605,77 | 2.965.063.081,57 ден. | 1,20 |
| 6 | NOK | 52.749.979,11 | 404.064.839,98 ден. | 0,16 |
| 7 | CAD | 8.242.785,67 | 354.439.783,81 ден. | 0,14 |
| 8 | GBP | 4.738.562,58 | 331.699.380,60 ден. | 0,13 |
| 9 | SEK | 30.184.103,48 | 189.556.169,85 ден. | 0,08 |
| 10 | DKK | 15.749.426,91 | 130.090.266,28 ден. | 0,05 |
| 11 | JPY | 2.721.000,00 | 1.368.663,00 ден. | 0,00 |
| Total: | | | 248.081.115.264,23 ден. | 100 |

Source: Annual Report 2009, Administration for Prevention of Money Laundering Financing of Terrorisam, 2009, page 20

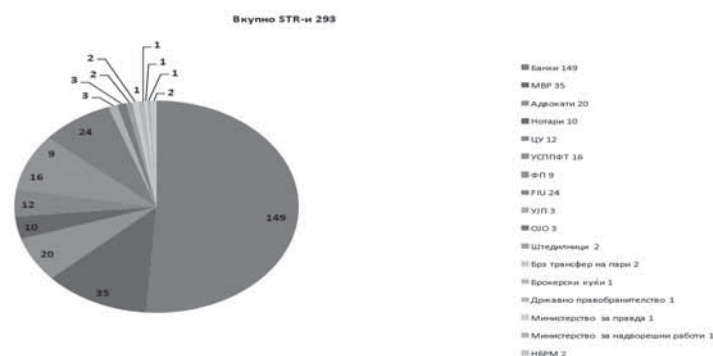
Table 2. Basic macroeconomic indicators for 2009

| Basic macroeconomic indicators for 2009 | 2009 |
|---|-----------|
| Real sector GDP at market prices | |
| Real growth rate | -0,9 |
| In million denars | 410.734 |
| External Sector in million euros | |
| Export of goods (G.o.b.) | 1 921 |
| Import of goods (G.o.b.) | 3472 |
| Import of goods (s.j.G.) | 361 6 |
| Import without lohn (s.j.G.) | 3236 |
| Foreign direct investments | 145 |
| Fiscal Sector in million denars | |
| Total revenues | 128.498 |
| Population | 2.052.722 |
| Unemployment rate | 32,2 |
| Employment, growth rate | 3,4 |
| Monetary Sector nominal growth, end of period | |
| Net – foreign currency assets | 4,2 |

Source: Ministry of Finance
From the total data available it can be concluded that:

Despite the fact that not all STR are really criminal transactions, striking is the fact that Macedonia, as a small and open economy with 2 052 722 inhabitants and with GDP valued at MKD 410 734 million for 2009 has registered an amount of STR which occupies a huge part about 60% of GDP, and the representation of the black economy in GDP is on the average about 38%. To illustrate the magnitude of this ratio, we will point out that the total assets of investment funds occupy only 0.3% of GDP. This small share of assets of investment funds in GDP (as one of the indicators for the development of the financial system in the country) indicates a small development of the financial institutions in spite of the data for the participation of a large percentage of suspicious transactions in GDP is only the confirmation for an alarming situation of this phenomenon and its strong influence on the development and implementation of the macroeconomic policies in Macedonia to correctly (incorrectly) allocate the available funds. And it also shows a high level of productivity and overall economic growth and social development.

Graph 1. Number of received reports for suspicious transactions (STC-s) by entities and institutions



Source: Annual Report 2009, Administration for Prevention of Money Laundering Financing of Terrorisam, 2009, page.31

According to the graph of the annual report, the highest percentage of STR are detected by the banking sector, or even 149 STR or 50.8% of the total number reported STR. Compared with the previous years, it must be noted that there is an improvement in the communication and collaboration between the stakeholders and Office as Financial Intelligence Unit.

Table 2. Macedonia core rating according Moneyval report

| | |
|--|----|
| R.1: Money laundering offence | PC |
| SR.II: Criminalisation of terrorist financing | PC |
| R.5: Customer due diligence | NC |
| R.10: Record Keeping | PC |
| R.13: Suspicious transaction reporting | PC |
| SR.IV: Suspicious transaction reporting related to terrorism | PC |

Sources: <http://www.knowyourcountry.com/macedonia1111.html> (accessed 23 October 2011)

CONCLUSION

Money laundering is a derivative crime, of a multi-dimensional and multi-disciplinary nature.

Money laundering, financial crime and terrorist financing have shattered the myth of capital neutrality. The negative economic effects of money laundering on economic development are hard to measure, same as the assessment of the extent of money laundering is difficult. Money laundering, undermining the efficiency, functionality and security of the financial institutions and financial system (which are of crucial importance for the economic growth and development and thus for the social prosperity), reduces the efficiency of the macroeconomic policies, reduces productivity in the real sector of the economy (through improper allocation and reallocation of the resources) and encourages criminal and corruptive activities in the country. The phenomenon of money laundering can also have distortive effects

on the international trade and on the capital flows, and by that it realizes inhibitory effect on the long-term economic development. Money laundering has an influence on economic security.

Macedonia has passed complex legislation pertaining to judicial reforms, including amendments to the Constitution and the Criminal Procedure Code that allow the use of specialized investigative methods in investigating money laundering cases. But there is still some deficiency that should our country do. An effective system of activity monitoring should be adopted for the informal banking sector.

Taking into consideration the destructive influences resulting from the occurrence of money laundering, it becomes clear why the efforts to reduce and prevent this occurrence are active on a world level. Global responses to the challenges concerning money laundering, come from the need to raise awareness and inform economic agents about this phenomenon (especially for the broad socio-economic impact), creating the necessary legal and institutional framework and infrastructure as to address this matter, efficient and consistent implementation of the legislation, improvement of the existing and creation of new instruments and mechanisms to combat this phenomenon, which through institutional network connection would function both regionally and internationally. Regarding this issue, there is a need for better coordinated and deepened inter-institutional social action aimed at prevention, early detection and legal channeling of the phenomenon of money laundering, and also with a purpose to create a unified system on the national level for updating and monitoring data for the researched phenomenon. On the international level it is particularly important to achieve cooperation and exchange experiences in the field of legal assistance, as well as for the extradition and exchange of information and intelligence between agencies as to prevent such an occurrence.

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INTEGRATED BORDER MANAGEMENT AS A CONTEMPORARY CONCEPT OF BORDER GUARD

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Abstract: Integrated Border Management is a contemporary concept of border guard which poses a number of challenges on the functioning of the Police and other security agencies. All countries in the region have accepted this new mode of securing the state border and they undertake measures to improve the cooperation between the authorities on the border line, as well as with the regional and European organizations and bodies.

The Republic of Macedonia has been implementing IBM since 2007, when the National Coordinative Centre for Border Management was established. In this short period of development, all agencies faced numerous changes within their functioning. Scientific support will be crucial for further development of this concept and that will be the main topic of this paper.

Implementing IBM implies that all the involved institutions are able to communicate within the system and participate in finding solutions and proposing measures to improve regional and international cooperation in the fight against cross border crime.

Key words: Integrated border management, cross border cooperation, Police, Customs.

INTRODUCTION

The expansion of global travelling and the dawning of the age of risk have contributed to substantial weaknesses in the border management systems.¹

Modern society poses numerous challenges in the field of border security and border management systems. The development of technique and innovation, the development of road and transport infrastructure, the need to intensify exchange of goods and services, are just some of the reasons that led to the need for new policies related to the border security.

EU Member States (MS), primarily the signatory countries of the Schengen Agreement, nearly three decades ago have lifted controls at internal borders, in order to allow free flow of goods, services, people and capital.² At the same time, all MS have pledged to strengthen the activities and if necessary, they assist to other countries in the control of external borders. The lack of control within the territory of the Union implied enhanced control on the first, i.e. the outer boundary that was the only filter for travel and residence throughout the territory of the Schengen Agreement MS. In the years that followed, the concept of integrated border management (IBM) was gradually developed, with the aim to simplify and speed up control at border crossings and to recognize and separate “honest” from “less honest” passengers in their intention to travel across the border of the respective

¹ Papadimitriou and Collett, 2011: 1;

² Article 5 of Convention on Implementation of Schengen Agreement;

country. At the same time, facilitation of travel had the task to improve manage risks associated with cross-border traffic.³ The development of objectives, methods and means of border control, involves an integrated approach to the treatment of all competent institutions, and on the other hand, using appropriate technology for monitoring of such flows. The paper that follows is intended to introduce new methods and techniques for controlling and monitoring the movement across borders, as well as to present some of the experiences of the Republic of Macedonia in this short period of effective implementation of the IBM.

IBM in the Republic of Macedonia

One of the primary benefits provided by the modern approach to IBM is facilitated flow of people and goods across national borders, meeting the European standards and best practices. The implementation and development of IBM in the Republic of Macedonia evolved gradually, with selected measures and activities that ensure quality and expediency of proceedings.

In continuation, the development of most important segments of IBM is presented:⁴

1. On 12.12.2005 with decision of the Government, it was established an inter-ministerial working group for IBM as a carrier of the activities for implementation of IBM. On 7.4.2006 it was renamed as the National Commission for IBM.
2. 28.8.2005 – fully taken control of the state border by the Ministry of Interior - Department of Border Police and Migration.⁵
3. 7.6.2007 – the Government adopted the categorization of border crossings (infrastructure, technical and spatial conditions).
4. 13.3.2007 – the Government brought a decision for establishing a National Coordination Center for Border Management (NCCBM).
5. 3.11.2008 – put in operation one-stop shop for permits for import, export and transit of goods and tariff quotas EXIM
6. 26.3.2009 – Information System for IBM became operational.
7. 7.4.2009 – The gateway - Integrated Border Management – was established to the website of the Government.
8. 2009 - Implemented the National Action Plan for IBM from October 2005 and Strategy for IBM from 2003.

At the moment, Republic of Macedonia is implementing IBM Strategy and Action Plan from December 2009. Republic of Macedonia is developing a concept for IBM, which is accepted and recognized in all EU MS and all Western Balkans countries. The IBM system includes numerous government agencies, which possess different powers but the same ultimate goal - efficient border management and border security. The main goal of the contemporary concept for IBM is to provide a balance between open but well controlled and secure borders. All relevant institutions have an obligation to work together in a single effective and efficient manner.

³ Most of the time, such risks are related with terrorism, organized crime, illegal migration etc.

⁴ National strategy for development of the established system of IBM, 2009: 5;

⁵ For this purpose, at the Police Academy in the period March 2004 - August 2005, were trained 1537 soldiers of the Army, which moved to the Ministry of Interior and were basic staff in the Department Border Police and Migration.

There are 14 different subjects involved in IBM in the Republic of Macedonia.

National commission for IBM is a subsidiary advisory body to the Government of the Republic of Macedonia, which:

1. Proposes measures and activities for the development and promotion of the IBM.
2. Carries out the Strategy and Action Plan for IBM.
3. Promotes coordination and cooperation between the national authorities involved in IBM.
4. Monitors situation of human resources in governmental agencies involved in IBM, which are related to their responsibilities for IBM.
5. Gives opinion on the annual report of NCCBM.
6. Conducts international cooperation regarding the activities of IBM.
7. Gives other proposals to the Government of importance for IBM.⁶

Especially important is the fact that in the work of NCIBM as external permanent representatives are involved representatives of the EC Delegation in the Republic of Macedonia. In addition, in the work of NCIBM professionals who implement projects significant for IBM are involved, as the representatives of EAR, IOM, and other international organizations.

The Ministry of Interior has broad powers related to border control, especially to traffic control on the border crossing points, green border control, control of entry and residence in the Republic of Macedonia for foreigners etc. In MOI functions the Department for Border Police and Migration which implements the best practices and common standards according to Schengen rules and regulations.

The Ministry of Finance – Customs is a crucial authority to facilitate international trade by providing a seamless flow of goods across borders and implementing effective control of the international supply chain.⁷ The objectives of IBM, in which the role of the Customs Administration is most directly recognized, are related to achievement of safety and security of the citizens, protection of the financial interests of the state, combating trafficking, protection of the market from unfair competition and support of legal business activities, combating terrorism and organized crime etc. Customs aims to provide a functional connection through electronic media with all state entities dealing with import and export and intends to provide the total communication in the future to be through internet. This means that all the customs documents, including licenses for import and export and transit of goods, will be formalized by email. This will be a major step forward for the Customs, in particular to the exchange of information in international and cross-border cooperation, as well as relevant state institutions, and all the other participants in the customs procedure. In November 2008 a Single Window system for import, export and transit of goods and tariff quotas, known as EXIM, was established. The Customs is a coordinator of this project, which involves representatives of NCIBM, Ministry of Information Society and Administration, USAID, representatives of 15 different institutions participating in a variety of procedures when conducting cross-border flow of goods, etc. The main objective of the Single Window system is to facilitate and accelerate the access and exchange of data and documents among competent authorities and among institutions and economic subjects.⁸

6 www.igu.gov.mk, accessed on 21.1.2012;

7 <http://www.customs.gov.mk/DesktopDefault.aspx?tabindex=0&tabid=26>, accessed on 21.1.2012;

8 <http://www.exim.gov.mk/EILWeb/startPageForExim.jsf>, accessed on 23.1.2012;

The Food and Veterinary Agency⁹ has the authority to control the import, export and transit of consignments of animal and vegetable origin. The main task is to provide quick and easy, and at the same time safe flow of such foods. To strengthen coordination between services and enable faster and quality information flow, the Food and Veterinary Agency are recommended to take the following actions:

1. To increase the number of official veterinarians at border crossings of the first category on Corridor 8 (Deve Bair - Cafasan) and Corridor 10 (Tabanovce - Bogorodica).
2. To provide 24 hour coverage with appropriate services.
3. Further strengthen the capacity of personnel through constant and continuous practical and theoretical training.
4. To strive to improve the infrastructure requirements for veterinary supervision and control of products of animal origin at border crossings.
5. To implement legal decisions and regulations adopted by the competent authorities, arising from the harmonization of legislation with the acquis communautaire of the EU.

The Ministry of Agriculture, Forestry and Water economy in the IBM system is represented by the State Inspectorate of Agriculture. Together with the Food and Veterinary Agency, it takes care for secure flow of food from animal and vegetable origin; according to the domestic laws and international regulations, control of plant health is also required. This implies phyto-sanitary control at the border crossings and places of loading, where the import, export, re-export and transit of consignments of plants, is provided by the Law on Plant Health.¹⁰ The place and the role of the State Inspectorate for Agriculture in the IBM system is of great importance,¹¹ especially in the application of legislation for plant protection on entry and transit of goods, prevention and detection of crime, organized crime and trafficking, control of transmission of infectious agents and diseases that threaten public health and plant health.

Representative of the **Ministry of Health** in the IBM system is the State Sanitary and Health Inspectorate.¹² The main activities of the MH are towards successful control of import and export of food and the products and materials coming into contact with food, control of medicines, drugs, precursors and chemicals, and prevention from occurrence, spread and eradication of diseases in international road traffic.¹³ SSHI is included into the Single Window System and One Stop Shop Control. According to the applicable regulations of the Republic of Macedonia¹⁴, SSHI is supervising passengers and goods in international traffic traveling to or coming from countries where according to World Health Organization there is a possibility of introducing infectious diseases such as cholera, typhoid, and viral hemorrhagic fevers, yellow fever and malaria.

The Ministry of Foreign Affairs conducts categorization of the current and the future cross-borders for international or frontier traffic. The categorization of the cross-borders is conducted according to the purpose, the intensity and the type of trafficking, as well as according to their location in respect of the corridors 8 and 10.

⁹ http://fva.gov.mk/index.php?option=com_content&view=frontpage&Itemid=1, accessed on 23.1.2012;

¹⁰ Chapter II, Article 24-36, Official Gazette of the Republic of Macedonia n°29/2005;

¹¹ <http://www.mzsv.gov.mk/node/21>, accessed on 23.1.2012.

¹² <http://moh.gov.mk/index.php?category=37>, accessed on 23.1.2012.

¹³ National strategy for development of the established system of IBM, 2009: 16.

¹⁴ Law on protection of the population from infectious diseases, Official Gazette of the Republic of Macedonia No. 66/2004, the bylaws of this regulation and the International Health Regulations;

The first category, **strategic cross-borders**, includes the biggest cross-borders equipped according to the highest European and world standards with material-technical means and equipment, with establishments permanently opened for international traffic and permanent coverage with services from every state organ involved in the control of cross-border traffic. According to the appropriate categorization, Republic of Macedonia has nine first-category strategic cross-borders.

In the second category, i.e. **regional cross-borders**, are included borders for international traffic of people, vehicles and goods, with a possibility for certain limitations or prohibitions. There are eleven second-category regional cross-borders in the Republic of Macedonia.

The third category, **local cross-borders**, includes borders opened for frontier traffic - movement of people, vehicles and goods with a possibility for certain limitations. There are eleven third-category local cross-borders in the Republic of Macedonia.

Besides categorization of the cross-borders, an activity conducted by the Ministry of Foreign Affairs in collaboration with its counterparts from the neighbouring countries, in the Ministry there is also a *national visa information centre* which collects and elaborates data significant for IBM. In the visa center and NVIS all the segments in the process of issuing visas for entrance and residence in the Republic of Macedonia are included. Up to December 2011, 47 Diplomatic Legations of RM in foreign countries are attached to NVIS, and within them, the entire process of visa-issuing (printing on the new visa-scanners with integrated scanned photography). Besides the Diplomatic Legations, in the NVIS are also integrated the Department for Foreigners and readmission within the DBPM in MOI, the Agency of Employment and the 8 most frequent cross-border.

The Ministry of Transport and Communications of IBM is authorized to plan the cross-borders, to plan, project and build the accessing roads towards the cross-borders, as well as to determine the regime and the conditions for trafficking in the surrounding of the cross-borders.¹⁵

This Ministry plays a significant role in the entire system of IBM, especially in the part of establishing and managing with the cross-borders. The planned and recommended activities for the following period are related to¹⁶:

- Mutual establishments for the border services with the neighbouring countries.
- Improvement of the access towards the border crossings and improvement of the accessing roads.
- Separation of the traffic (passenger vehicles and passenger vans; load and TIR vehicles).
- Parking spaces and other facilities (public objects, restaurants etc).

This policy will enable facilitated access toward the border crossings and achieving of appropriate information, as well as possibilities for faster respond to crisis states and urgent situations as well as their management.

The Ministry of Local Government in the system of IBM is involved as a coordinator of the activities of the IPA program - Component 2, which refers to the border collaboration with the neighbouring countries.

The Ministry of Environment and Physical Planning is not involved in the activities of the cross-borders, but is involved in the legal procedure for issuing of permissions for import/export of certain products and goods. Besides, representatives of the Ministry participate in the work of NCIBM, NCCBM and in ISIBM.

¹⁵ Ibid: 20;

¹⁶ Ibid: 21;

The Ministry of Defense is assigned by the Constitution with responsibilities related to defense of the borders of RM.¹⁷ The Ministry of Defense and the Army of RM participate in the planning and conduction operations for support of the Police for securing of the state border and in cases of asymmetrical threats. A representative of the Ministry of Defense is a member of NCCBM.

The Direction for radiation safety in the system of IBM controls import, export and transit of sources of ionizing radiation on the territory of RM, with the aim of prevention from illegal trade and protection of the population and the environment from the harmful impact of the ionizing radiation. Officers for communication of DRS are the members of NCIBM and of NCCBM and it is also part of EXIM – The Single Window system for issuing of permits for import, export and transit of the sources of ionizing radiation.¹⁸ At the Customs branch offices at the frontiers of RM, static panel detectors for discovering of sources of ionizing radiation have been established. Beside this, there are mobile dosimeter devices used by the customs officers and the border police. The static panel detectors are connected to the computer centre in DRS and in NCCBM, from where DRS conducts regular control; when a vehicle - source of IR approaches, the detectors transmit signal to the Customs branch office and in the computer centre. DRS also conduct control on the mode of using of the mobile dosimeters used by the Customs officers and the border police officers in their everyday activities at the border or on the territory of RM.

The State bureau for statistics receives data from all organs involved in the system of IBM, and through timely and appropriate elaboration and presentation of such data, the benefiter would be:¹⁹

- The exterior trade services, through inspection of the Customs declarations for entrance and exit of goods;
- Statistics of the transport which primarily refers to cargo transport, transport of dangerous materials, transport of passengers;
- Statistics of tourism which can provide a precise number of travelers who cross the border, their citizenship, type of vehicle, purpose of travelling;
- Statistics of foreign migrations especially important in the recent years to control the number of people - potential doers of the criminal act "Abuse of the non-visa system with²⁰ the MS of EU".

According to the regulations, SBS in the system of IBM appears only as consumer of information.

The Secretariat for European Affairs provides professional support and coordination of NCCBM in direction of filling the responsibilities from the Chapter 24. justice, freedom, security and from the Agreement for Stabilization and Association.²¹

The National Coordinative Center for Border Management is a coordinative body within the Government, whose main purpose is efficient coordination, facilitation of the exchange of data and information and a greater integration in the border management.²² In March 2007, the Government of RM brought a decision for forming of the Centre which became operative in 2008. For this short

17 Article 122-128 from the Constitution of Republic of Macedonia, Government Gazette No. 52 from 22.11.2002;

18 More in National Strategy for development of the established system of IBM, 2009: 23-26;

19 Ibid: 27;

20 Article 418 D from the Criminal Code of RM;

21 In Chapter 24. justice, freedom, security, it was anticipated a part for external borders and Schengen, in which are established the activities related to securing of the external borders of EU, whose security is partly provided for by the aspirant-countries and candidates for membership. Also, certain regulations related to IBM are included in the Agreement for stabilization and association in the Chapter 7.

22 National strategy for development of the established system of IBM, 2009: 29;

period NCCBM started its way for establishing in the core of the system of IBM. Permanently delegated officers for communication in NCCBM are representatives of MOI, Ministry of Finance, the Customs Direction, FVA. They attend every-day working meetings and coordinate the activities of their agencies at the border crossings. As temporary representatives-officers for communication in NCCBM are representatives of Ministry of Exterior, Ministry of Defense, Ministry of Health, Ministry of Environment, Ministry of Transport and Communications, the Direction for Radiation Safety. Communication with these representatives is conducted through electronic way. Both the permanent and the temporary representatives of NCCBM are obligated to submit monthly reports for their activities related to IBM.

In the framework of its regular activities, NCCBM carries out exchange of information with the countries from the region signatory of the "Memorandum for understanding for establishing a system of exchange of statistical information for illegal migration and participation in the regional system for timely warning", among which are Republic of Serbia, Republic of Croatia, Bosnia and Herzegovina, Montenegro and Albania.

| Submitted information according to the category of information | 2009 | 2010 |
|--|--------------|-------------|
| Illegal crossing of people over the state border in green zone | 1237 | 1062 |
| Illegal crossing of people over the state border at the cross-borders | 79 | 184 |
| Number of discovered people - assistants in illegal crossing of the state border | 13 | 27 |
| Denied entrance in RM to foreign citizens | 3224 | 3485 |
| Illegal residence of foreign citizens on the territory of RM | 589 | 612 |
| Foreign citizens seeking for asylum in RM | 78 | 150 |
| Users of falsified passports | 110 | 148 |
| Falsified passports | 115 | 119 |
| Total submitted information according to years | 5445 | 5787 |
| Total submitted information for the period 2009-2010 | 11242 | |

Table 1. Review of information submitted to the signatory countries of the Memorandum for understanding in the period 2009 – 2010²³

In table 1 it is evident that NCCBM collects and submits information of great importance for the police force in conducting of their responsibilities in border management and controlling. Although the period of functioning of the Centre is short, it is evident the continual strengthening of the place and the role of NCCBM in the system of national security of RM.

Apart from MOI, the Centre submits appropriate information to all the other agencies included in the system of IBM.

In direction of strengthening of the communication, the exchange of information, coordination and collaboration of the state organs, NCCBM intermediates in the exchange of information to the authorities of IBM. In table 2 a review is given for submitted information on submitted requests for checking of passengers and vehicles in the System for controlling of passengers and vehicles.

23 Report for the work of NCCBM for 2009 and 2010;

| Submitted answers for check of passengers and vehicles to the respective institutions | 2010 | 2009 |
|--|-------------|-------------|
| Ministry of Interior | 995 | 718 |
| - Department for organized crime | 448 | 310 |
| - Sector for International Police Collaboration | 157 | 104 |
| - Sector for Internal control and professional standards | 9 | 11 |
| - Regional Centers for Border Affairs | 345 | 271 |
| - Other organizational Units in MOI | 36 | 22 |
| Customs Direction | 919 | 626 |
| Elementary court Skopje I and Skopje II and Elementary Public Prosecutor's Office | 64 | 36 |
| Other legal persons - advocates, executives etc. | 44 | 15 |
| Physical persons | 19 | 5 |
| Ministry of Finance (Public Revenue Agency, Financial Police) | 17 | 22 |
| Ministry of Defense | 15 | 5 |
| Ministry of Foreign Affairs | 5 | 2 |
| Total according to years | 2078 | 1429 |
| Total for 2010 and 2009 | 3509 | |

Table 2. Submitted answers for check of passengers and vehicles.²⁴

From the Table 2 it is evident that NCCBM collaborates with numerous state organs and institutions involved in the system of IBM and for their needs it provides useful information. It is very positive that the interest for achieving information from NCCBM increases, which will lead to strengthening of the capacity of the Centre and at the same time, it will successfully coordinate in the system of IBM. The increasing of the number of submitted information at almost 45% is evident in 2010 with respect of 2009. This points to the fact that the institutions, as well as physical and legal persons are more and more familiar with the activities of NCCBM and use its services, i.e. are actively involved in the exchange of information related to the border security.

In order to facilitate the coordination among services, in 2007 the Government brought a decision for forming of NCCBM, which became operative in 2008.

CONTEMPORARY STATES IN BORDER MANAGEMENT

The Member States of EU and the countries in the region show greater awareness of the need for development of the border management with the main purpose of greater mobility of the passengers, with simultaneous strengthening of the control and recognizing of the "unwanted" travelers, vehicles and goods.

The contemporary concepts of border management are directed towards several aspects of the border security. According to Papademetriou and Collett, the new concept of IBM should definitely include the following four segments:²⁵

- Collecting and exchange of information

²⁴ Ibid;

²⁵ More in Papademetriou and Collett, 2011;

- Using of new technologies for confirmation of the identity of the passengers
- Securing of the physical borders with new technologies
- Building of partnership

Collecting and exchange of information

An important novelty is the establishment of informational system for integrated border management which enables access and exchange of information to the state organs which possess certain authorities in the framework of IBM.²⁶ The current connections provide for faster and simple collecting, elaboration and exchange of information related to passengers entering the territory of the country. All data which can be collected before the person appears at the controlling point of the border crossing are welcomed. The good old practice of collecting information through the applications for issuing visa for entrance on the territory of the country slowly extinguishes out of the simple reason that the number of countries requiring visa gradually decrease. In global aspect, collecting of information is conducted through the advanced information systems which give an easy and simple procedure for collecting of data (data of the identity, biometrical data, data of previous behavior etc), which are directed toward recognizing of potential threats on the security.

Governments are beginning to place greater emphasis on the need to collect data on people who wish to enter their country before their arrival on the border.

(Papademetriu and Collet, 2011: 5)

EU has established several systems for controlling of passengers as well as methods for collecting data. These systems are subjects of permanent development and upgrade, with the aim to respond to the security challenges with which the European countries face in the recent two decades. Here, we will only mention European Dactyloscopy – EURODAC, Schengen Information System – SIS with its permanent upgrades, Visa information System – VIS etc. All the mentioned systems are only a small segment of the developed world systems for collection of the necessary data for passengers, and they possess data of confidential and personal nature. These data are of sensitive purpose and treatment and as such, they can often be abused.

Often is posed the question: Who has these kinds of data and for which aims they are used. A partial answer to the fear related to the abuse of data is given with the development of stand-alone systems for each set of information, with strong protection of privacy.

Utilization of new technologies for confirmation of the identity of passengers

The utilization of new technologies for checking and confirming of the identity of the passengers is extremely significant because the value and the quality of data are closely related to their veracity. To establish higher degree of protection of data and to prevent from their abuse, the countries choose from different methods and means to protect passports and other IDs, as well as different degrees of protection

²⁶ On 26th March 2009 is introduced the Informational System of IBM. It represents a platform for exchange of information in controlling the cross-borders and it is to develop a base of information for management of the border, with the aim of coordinated access and exchange of information among the state organs included in IBM.

of the goods being transported. The MS of EU and the countries from the region use biometrical passports which include data very difficult to be falsified or abused. These data are usually fingerprints, certain physical features, photography etc.

The new technologies for checking enable electronic reading of such data at the cross-borders. Macedonian Police, in the recent years is entirely equipped with contemporary equipment, above all DOCUBOX technique for checking of the veracity of the passports and the identity of the passengers. Nevertheless, insecurity is still brought with passengers with passports which do not include biometrical data. They mostly come from the countries of the Arabian world, the Near East and North Africa.

The utilization of the new technologies enables services to recognize passengers who do not impose threat on security and to provide them with faster passing of the state border. On the other hand, the abundance of collected information in the control of the trafficking at the border may bring to certain mistakes, i.e. people who do not represent any threat to be recognized as a threat. In such cases, a repeated check of the data is necessary to confirm whether it came to system mistake or not.

Securing of the physical borders with new technologies

The era of physical securing of the border by the Police and the Army is almost at termination. The progressive and technologically developed countries use contemporary systems for monitoring and securing of the state border line more than 30 years. It mainly implies utilization of seismic and infrared sensors, cameras, unmanned aerial vehicles, and radar coverage. The EU has proposed a European Border Surveillance System (EUROSUR) "system of systems" to facilitate the use of border technology. Formal legislation should be adopted in a few months by the EC. Policymakers in the EU have been working toward an IBM system, including a Common Border Code for all EU border officials. FRONTEX – an EU agency to oversee external border cooperation between MS is a step forward to new system of IBM. FRONTEX has overseen a numerous joint operations in the Mediterranean, which means that EU has established mechanism to respond quickly in particular regions.²⁷

Building Partnerships

Not even one country is capable of isolated management of all the aspects for border controlling. The development of the mutual collaboration between two neighbouring countries as well as in broader framework is of crucial meaning for successful border security. If the border control is strong at some border or region, the international crime will spill over in the less secured zones. These types of partnerships are highly developed in EU, with the signing of the Schengen Agreement, and between USA and Canada which do not possess internal borders for controlling at all. Advancement in the facilitation of the border trafficking has been also noticed in the region, especially after the signing of the Agreement between the Republic of Serbia and the Republic of Macedonia for crossing the state border only with personal ID.

Building of partnerships of this kind with countries from which comes the biggest pressure is significant for further development of IBM, especially in the aspect of controlling of the migrations - of the labor migrants who in these times of global

²⁷ More at Papadimitriou and Collet, p. 8;

economic crisis are a big challenge for controlling of the border. For entire control of migrations, besides controlling of the borders, the partnership with the countries of origin is also necessary; these would work to advise the migrants against their intention to reside and work illegally on the territory of the respective country. After the liberalization of the visa regime for travelling toward EU for citizens of the countries from the Western Balkans, a real problem in the controlling of the illegal migration occurred; this refers to the illegal residence of citizens from these countries on the territory of EU.

Thus, the need for strengthened collaboration and partnership in the controlling and securing of the European borders is evident. Improvement is possible only through financial and other kind of support for these countries in the framework of border collaboration, such as Eastern Partnership Initiative, a 2008 repackaging of the European Neighboring Policy, in which “mobility and security” was bundled in with issues such as energy security and promotion of trade.²⁸

CONCLUSION

The development of IBM is a permanent challenge of the services dedicated to the security of the state border and to providing of freer and faster traffic at the border itself. It is evident that in the several recent decades, the countries became aware of the need for mutual collaboration, as well as for development of the collaboration among the services within the states.

Republic of Macedonia initiated collaboration among the numerous institutions as first country in the region; it has also formed NCCBM, with the aim of coordination of the activities and the collaboration within and among the related institutions. Nevertheless, the short period of functioning and the partly defined law framework, leaves space for weaknesses and insufficient utilization of the capacities of IBM.

For this reason, a fast conceptual defining and law establishment related to the functioning of NCIBM and NCCBM is necessary to take place; this would contribute significantly to the development of IBM. The implementation of the strategy of IBM and NAP will be further challenges of the authorized institutions. Not of less importance is the international collaboration which is further to be developed, especially in direction of strengthening of the capacities for fight against organized crime and terrorism, as well as the other key threats on the state security.

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28 <http://europa.eu/rapid/pressReleasesAction.do>, accessed on 22.1.2012;

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EUROPEAN ARREST WARRANT AND TRADITIONAL OBSTACLES FOR EXTRADITION OF A SOUGHT PERSON

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Abstract: This paper deals with the traditional obstacles in extradition law, or whether these obstacles have been eliminated with coming into force of the European arrest and surrender warrant. The application of the European arrest and surrender warrant arises from a desire to implement the principle of mutual trust and recognition in the field of criminal law. Therefore, the question arises about whether the application of the afore-mentioned principle is possible in the field of criminal law, knowing the varying degrees of protection of human rights and freedoms in the criminal procedures of EU member states.

However, some EU member states, such as United Kingdom and Germany, believe that European arrest and surrender warrant represents an ambitious attempt to rescind the centuries recognized sovereign right of the state to reject the extradition of its nationals. Moreover, this paper attempts to answer the question whether the extradition procedure has been depoliticized, due to the possibility of granting asylum, i.e. harbouring an asylum seeker or the person who escaped from his own state.

Key words: mutual trust and recognition principle, traditional obstacles in the extradition procedure, surrender and extradition.

INTRODUCTION

Crime, like any other activity, improves with the development of technology and border criminals expand their operations outside the country to which they belong as the realization of the idea of freedom of movement. Bearing in mind that the powers of a state are limited by its territory, there is a need of cooperation among states. The oldest form of cooperation among states is the extradition of offenders for trial or enforcement of the criminal sanction. In the last few decades, the development and strengthening of transnational interaction among countries, disseminating information and images through the mass media, the realization of ideas of freedom of movement of people, products and services, and expanded idea of a European citizen, have created a fertile/favourable ground for the manifestation of new forms of crime. Crime is increasingly organized and executed outside the national borders of the state using the freedom of movement within the Schengen Area.

Today we can speak about two forms/types of extradition, i.e. classic traditional extradition procedure which is characteristic for the members of the Council of Europe and the contemporary or modern form of extradition inherent to the EU countries. However, lately there is a tendency to simplify and speed up the traditional extradition procedure by the Third Additional Protocol to the European Convention on Extradition from 2010 and the draft of the Fourth Additional Protocol to the Eu-

European Convention on Extradition from the 2011.¹ Third additional protocol from 2010 provided a possibility for simplified extradition with the consent of the sought person and the asked (requested) state. In addition, the asked state is obligated to inform the requesting state whether there is consent of the sought person for extradition, within the period of 10 days from the provisional arrest. However, if the asked state does not consent to a simplified extradition, regardless of the sought person's consent, it should inform the requesting state to forward the extradition request in accordance with Article 16 of the European Convention on Extradition from 1957.

The goal of this Protocol is to simplify the extradition procedure, which may be concluded from Article 8 of the Third additional protocol which provides the possibility of electronic communication among the states or in any other manner that leaves written record on the mutual communication. According to the protocol, the signatory state has an obligation to incorporate certain measures in its legislatives that will ensure the voluntary consent of the sought person with the apprehension of all legal consequences that might arise from it. The consent and the statement to give up the right on principle of specialty are given in accordance with the law of the asked state. Nevertheless, the extradition of the sought person is to be executed within the period of 10 days after the asked state is informed about the rendered decision.²

According to the Draft of the Fourth additional protocol from 2011 the obsolescence is evaluated in accordance with the laws of the requesting state, and not the asked state. However, the traditional right of the asked state to evaluate the procedural obstacles for extradition in accordance with its own laws is denied. Furthermore, the periods of obsolescence are interrupted by undertaken of procedural actions from the requesting state. The application of the principle of specialty in extradition proceedings is limited under certain conditions. The goal of the principle of specialty is to protect claimed or an extradited person in the requesting State from further extradition or prosecution in respect of any other criminal offense. The requested State shall make a statement concerning the further extradition of the sought person within 90 days of receipt of the request for approval. Nonetheless, the requesting State has the authority to take actions or measures in accordance with its own legislation which will prevent the statute of limitation for criminal prosecution or punishment in relation to some other criminal offense. The requesting State may apply restrictive measures against the extradited person if that right is explicitly recognized by the requested State. As we may see, these additional protocols aim to restrict some of the traditional extradition rights of the requested State for the purpose of developing and strengthening cross-border cooperation in the combat against crime.³

Modern or contemporary extradition proceeding is conducted in accordance with the Framework Decision on European arrest warrant and surrender from 2002.⁴ The title of the Framework Decision itself shows that it is not a classic extradition procedure, i.e. the extradition of the sought person, but rather the surrender of the runaway offender. Therefore, the Framework Decision denied the discretion of the State to decide on extradition request, i.e. whether or not to extradite the sought person, which is a characteristic of the traditional extradition procedure, but there is an obligation surrender runaway offenders to a State in whose territory the criminal offense was committed.

1 Third Additional Protocol to the European Convention on Extradition, Council of Europe Strasbourg 2010, text available on the website: <http://conventions.coe.int/treaty/en/treaties/html/209.htm>, 15.01.2012.

2 Draft Fourth additional Protocol to the European Convention on Extradition, Council of Europe, Strasbourg, 2011, text available on the website: <http://assembly.coe.int/Documents/WorkingDocs/Doc12/EDOC12818.pdf>, 15. 01. 2012.

3 Idem.

4 Council Framework Decision of 12 June 2002 on the European arrest warrant and the surrender procedures between Member States, Official Journal of the European Communities, L 190/1.

PRINCIPLE OF MUTUAL TRUST AND RECOGNITION

The principle of mutual trust and recognition primarily means that national courts should recognize and accept and execute rendered decisions. The realization of this principle is possible if human rights and freedoms, rule of law principle and the principle of a fair trial are respected. The principle of mutual recognition of judicial decisions between Member States of the EU results from the *Dijon* decision of the European Court of Justice. In *Dijon* decision, the Court emphasizes that the national legislation of the member states must not create obstacles to the freedom of movement and that the freedom of movement should be ensured for the goods, i.e. for the product that meets the required quality standards. Thus, the same treatment should be applied in respect to court decisions and ensure the freedom of movements of courts decisions if they are based on the legal evidence, if the rights of the accused or the convicted person are respected and if the rights of the victims are respected as well.⁵ Nevertheless, at the meeting in Tampere in 1999 the European Council extended the application of the principle of mutual trust and recognition to judicial cooperation in criminal and civil matters, on the grounds that the development and strengthening of neighbour cooperation creates favourable soil and climate for better and more effective protection of human rights and the property, i.e. it provides greater guarantee in protection of individuals and their property.⁶

Strengthening of the principle of mutual trust and recognition in the criminal area is owed to: the Maastricht Treaty, Amsterdam Treaty, the Lisbon Treaty, and the decisions of European Court of Justice regarding the interpretation of the principle of *ne bis in idem* in accordance with Article 54 of the Convention on implementation of the Schengen Agreement.⁷ In interpreting the principle of *ne bis in idem* in accordance with Article 54 of the Convention on implementation of Schengen Agreement, the European Court of Justice endorsed the principle of mutual trust and recognition, and emphasized that states shall recognize and accept the court decisions rendered within the Schengen area, even if they would have acted differently in a given case, in accordance with the provisions of their national legislation.⁸ Therefore, the Framework Decision on the European arrest warrant and surrender represents an attempt to realize the idea of the European Union on the implementation and application of the principle of mutual trust and recognition in the field of criminal law. However, even the decision on Framework European arrest warrant and the surrender left the space to member states of the European Union to raise doubts in the democratic quality of another's state legal system, citing the provisions 12 and 13 of the preamble of the Framework Decision, as well as provisions 3, 4 and 5.

Lack of trust in the criminal justice system of other countries was expressed by both Germany and the United Kingdom by their laws on the application of the Eu-

⁵ ECJ, C-120/78, *Rewe-Zentral AG v Bundesmonopolverwaltung für Branntwein*, paragraph 14 and 8.

⁶ Programme of measures to implement the principle of mutual recognition of decisions in criminal matters, Official Journal of the European Communities, C 12/02, 2001.

⁷ Treaty on European Union, Maastricht Treaty, 1993, Official Journal, C 191 of 29.07.1992; Treaty of Amsterdam 1999, Official Journal, C 340 of 10.11.2007; Treaty of Lisbon, 2009, Official Journal, C 306 of 17.12.2007, text available on the website: <http://europa.eu>, 27. 07. 2011, Article 54, A person whose trial has been finally disposed of in one Contracting Party may not be prosecuted in another Contracting Party for the same acts provided that, if a penalty has been imposed, it has been enforced, is actually in the process of being enforced or can no longer be enforced under the laws of the sentencing Contracting Party. (Convention implementing the Schengen Agreement, Official Journal, L 239), text available on the website: [http://eurlex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:42000A0922\(02\):en:HTML](http://eurlex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:42000A0922(02):en:HTML), 9.12.2011; Babić, M., *Međunarodno krivično pravo*, Pravni fakultet Banja Luka, 2011, p. 229–230; Škulić, M., *Krivično procesno pravo*, Pravni fakultet Beograd, 2010, p. 54 - 57; Vervaele, J.A.E., *The transnational ne bis in idem principle in the EU*, Mutual recognition and equivalent protection of human rights, *Utrecht Law Review*, 2005, p. 116; Stojanović, Z., *Međunarodno krivično pravo*, Pravni fakultet Beograd, 2008, p. 193-197.

⁸ ECJ, C-187/01 and C 358/01 *Hüseyin Gözütok and Klaus Brügget*, paragraph 33.

European arrest and surrender warrant. These countries criticized Article 2, paragraph 2 of the Framework Decision relating to criminal offenses that does not require application of the principle of double guiltiness, and that some of these crimes are not known to their criminal legislation. Accordingly, the UK government has set a question of what is meant by xenophobia, because there is a possibility that persons (journalists in the UK) who speak and write the truth be prosecuted because their actions and words are qualified as acts of hostility towards foreigners. According to Articles 4 and 5 of the Framework Decision, optional obstacles to extradition of sought person in some EU member states have become the obligatory obstacles to extradition of sought person.⁹

In theory, the prevailing opinion states that the application of this principle in the criminal area requires providing the compatibility of the criminal provisions of the Member States of the European Union. However, it is difficult to ensure compatibility of the European Union Member States, given that the division of jurisdiction in criminal field between police and judicial bodies is not equal, not all Member States use the same evidence in criminal proceedings and the degree of protection of human rights and freedoms in the criminal proceedings is not equal, too. Also, compatibility or harmonization of criminal law is difficult to ensure because the laws are made in accordance with the culture, traditions or customs of the people.

On the other hand, there are scholars who believe that the harmonization of criminal law is necessary and essential, since it is the only possible way to fight against global crime. The need for harmonization of criminal law in order to have effective combat against global crime is derived from section 6 of the Treaty on the European Union relating to police and judicial cooperation in criminal field, as well as from Article 29 of the Treaty on the European Union. The issue of police and judicial cooperation in criminal field is also the subject of the Lisbon Treaty. However, the Lisbon Treaty does not apply to full harmonization or the convergence of regulations in the criminal field, as reflected in Article 69, paragraph 2. According to Article 69, paragraph 2 requires respect for diversity of legal systems (traditions) of the Member States. Therefore, in the process of recognition of foreign court decisions, the following have to be determined: which evidence was used in deciding, whether the rights of the accused or convicted and victims are respected in criminal proceedings, as any other specificity of the criminal proceedings will be recognized.¹⁰

RADITIONAL OBSTACLES AND EUROPEAN ARREST AND SURRENDER WARRANT

One of the major obstacles to extradition or surrender of a sought person is a risk of violation of human rights and fundamental freedoms. In this respect, through procession of citizenship as traditional barrier to extradite the sought person in the case of *Fujimori*, Düker stated that Germany and other EU member states can still refuse to extradite its own nationals by referring to the risk of violations of human

⁹ Sievers, J., Managing diversity: The European Arrest Warrant and potential of mutual recognition as mode of governance in EU Justice and Home Affairs, University of Bremen, Archive of European integration, 2007, p. 9 – 31; The European Arrest Warrant and the necessary balance between mutual recognition and fundamental rights in the EU, Institutul National al Magistratur, Romania, p. 1 – 7, text available on the website: <http://www.ejtn.net/Documents/Themis/THEMIS%20written%20paper%20-%20Romania%201.pdf>, 22.12.2011.

¹⁰ Fichera, M., The European Arrest Warrant and Sovereign State, A Marriage of Convenience? European Law Journal, Vol.15, No.1, 2009, p. 73–75; Apap, J., Carrera, S., Judicial Cooperation in Criminal matters, European Arrest Warrant, A Good Testing Ground for Mutual Recognition in the Enlarged EU?, Centre for European policy studies, CEPS, Policy Brief, No. 46, 2004, p. 10-15.

rights and freedom in the conduct of criminal proceedings, or to the risk of violations of the right to a fair trial, i.e. the absence of adequate protection (i.e., the same level of protection) of the accused in criminal proceedings in the requesting State such as Germany.¹¹ Therefore, discriminatory clause stands as one of the main obstacles in the traditional and the modern extradition processes.

Discriminatory clause, as an obstacle to extradition law, draws its roots from Article 33 paragraph 1 of the Convention on the Status of Refugees 1951. According to Article 33, paragraph 1, no State Party to this Convention shall in any way expel or return a refugee to the frontiers of territories of some countries where their lives or freedom would be threatened on account of race, religion, nationality, political opinion or membership of a particular social group. Helton believes that a discriminatory clause in extradition law also aims to protect persons who are in a country labelled as political opponents and that is to prevent their extradition or arbitrary imprisonment without proper trial. Discriminatory clause as an obstacle to the extradition law is enshrined in numerous international conventions, such as the European Convention on Extradition 1957 (Article 3, paragraph 2), Convention on Extradition between the European Union member states 1996 (Article 5, paragraph 3), Inter-American Convention on Extradition 1981 (Article 4, paragraph 4), London's scheme for extradition 1966 and 2002, (Article 13, paragraph 1, item a). Also, the discriminatory clause contained in the Framework Decision on European Arrest Warrant and the Surrender 2002 (paragraph 12 of the preamble). However, the discriminatory clause in Article 3 of paragraph B) of the UN model agreement on extradition 1990, mentions a discriminatory nature of the reasons that are not covered by Article 3, paragraph 2 of the European Convention on Extradition 1957, such as: ethnic origin, sexual orientation, gender and status of the sought person. Also, the discriminatory clause contained in the numerous regional and international anti-terrorist conventions, such as: European Convention for the Suppression of Terrorism 1977 (Article 5), the International Convention against the Taking of Hostages 1979 (Article 9, paragraph 1), International Convention for the Suppression of Terrorism by bombing 1997 (Article 12), International Convention for the Suppression of the Financing of Terrorism 1999 (Article 15), Inter-American Convention against Terrorism 2002 (Article 14).¹²

Citizenship, as one of the traditional obstacles to extradition proceedings, finds its roots in the sovereign right of states (ruler) to control and sanction the behaviour of its citizens, since the country, whose citizenship the accused one has, becomes the master and judge of its citizen, as it provides a certain level of rights and privileges in relation to others. This prohibition was created as a result of the mistrust in the foreign judicial system, the misunderstanding of language, difficulties in realizing the right to defence and evidence gathering, and the position of the accused or convicted person is additionally impeded by the separation from family and friends. The rule of law and the existence of the principle of a fair trial, do not justify the distrust in foreign justice system. Basing jurisdiction in line with the principle of active personality, to the criminal proceedings against its own citizens has resulted in huge costs for the State in collecting and securing evidence, which may result without issuing sentence to the liable offender of the criminal act.¹³ Many countries, particularly countries of Europe-continental tradition, prohibit the extradition of their citizens. The principle of prohibiting the extradition of its citizens represents a historical obligation of the state to protect its citizens.¹⁴

¹¹ Düker, A., The extradition of Nationals: Comments of Extradition Request for Alberto Fujimori, *European and International Law*, German Law Journal, 2003, p. 1166–1172.

¹² Racsmány, D. Z., Blekxtoon, R. J., The decline of the Nationality Exception in European Extradition, *European Journal of Crime, Criminal Law and Criminal Justice*, 2005, p. 1-5

¹³ *Idem*.

¹⁴ Cryer, R., at al., *International Criminal Law and Procedure*, Cambridge 2010, p. 97; Bantekas, I., Nash, S., *International Criminal Law*, London, 2003, p. 190–191.

The legislation of Bosnia and Herzegovina, the prohibition of extradition of nationals derives from Articles 31 and 34 of the Law on International Legal Assistance on Criminal Matters in Bosnia and Herzegovina, which provide for the possible extradition of foreign offenders or persons who have asylum in Bosnia and Herzegovina. According to Article 40 - Law on International Legal Assistance, the authorities of Bosnia and Herzegovina shall notify Interpol member states, about the inability of the state to extradite its nationals and issuance of warrant on the territory of Bosnia and Herzegovina, if inspection of the existing database of citizens or otherwise determined to find the person whose extradition is requested by a citizen of Bosnia and Herzegovina. Office for Cooperation with Interpol shall inform the foreign country that the competent judicial authorities of that state may assign the prosecution to the competent judicial authorities of Bosnia and Herzegovina.¹⁵

According to the European Convention on Extradition the ban on extradition of nationals was made as optional, not obligatory. When it comes to citizenship as one of the traditional obstacles to extradition law, remain the question whether to extradite their own nationals or not. We believe that the right to penalty of its own citizens need not to be abandoned, since we would give up our responsibilities and rights to take care of our own citizens and their behaviour and acts, since if we would give up our responsibilities and rights towards our own citizens who make the state, it would create a perception that we need a tutor.

Also, the non-extradition of one's own citizens is humane, since the legal system of the state which they belong to is familiar to them (where they were born, where they live, work, have families, relatives), it is easier to realize and exercise their rights arising from the right to defence, and not to lose their desire and willingness to re-socialization as the primary subject of criminal sanctions.

However, when it comes to political offenses, in some phases of human developments they have extradition character while in some phases they do not which depends on the goal of one particular community. Political criminal offenses had extradition character in the oldest extradition act, e.g. Agreement on peace and union between Egypt Pharaoh Ramses II and Hittites monarch Hattusilia. The war between Egypt and Hittites caused an extradition of state enemies who have migrated to another state.¹⁶ In mid-19th century, in bilateral agreements as well as in the national legislation of states, the idea of non-extradition for political criminal offenses strengthens. The first bilateral agreement that contains provision on waiver of extradition for political criminal offenses is the agreement between Belgium and France from 1934. The non-extradition principles for political criminal offenses do not aim to protect individual interest of the wanted person, but the protection of state sovereignty. Also, waiver of extradition for political criminal offenses includes the sovereign right of states to assign political asylum. The idea of non-extradition for political criminal offenses is rooted in political liberalism. This principle is contained in a number of multilateral conventions, such as the European Convention on Extradition in 1957 (Article 3, paragraph 1), Inter-American Convention on Extradition in 1981 (Article 4, paragraph 4), the London Scheme on Extradition in 1966 and 2002 (Article 12, paragraph 1, item a), as well as in two regional anti-terrorist Conventions in Arab Convention against terrorism in 1998, Convention of Islamic organization on combat against international terrorism in 1999 (given that any action at this particular convention are determined as non-political crimes).¹⁷

15 Zakon o međunarodnoj pravnoj pomoći Bosne i Hercegovine, Službeni glasnik BiH, broj 53/09.

16 Stanimirović, V., Hrestomatija za uporednu pravnu tradiciju, Pravni fakultet Beograd, 2010, p. 117-121

17 Bantekas, I., Nash, S., op.cit. p. 187 – 188; Kapferer, S., The Interface between Extradition and Asylum, UNHCR, 2003, p. 27-30.

Political criminal offenses are still non-extradition offenses under the European Convention on Extradition, but extraditing offenses under the Framework Decision on the European arrest warrant and surrender. Therefore, the Framework Decision wants to disable political opponents or opponents to find shelter in the territory of some European Union member state. But, given that the discriminatory clauses make obligatory obstacle for surrender of fugitive perpetrators of criminal offenses under the Framework Decision on the European arrest warrant and surrender, therefore there is still a possibility to extradite the perpetrators of political criminal offenses.

However, the question remains open whether the Framework Decision indeed eliminated the influence of political factors in the decision on surrender of fugitive offenders. Also, one of the traditional barriers to extradite the person sought and the application of the principle of double criminality in extradition proceedings. Most of the extradition agreements or conventions contain double criminality principles such as: European Convention on Extradition in 1957 (Article 2, paragraph 1), Inter-American Convention on Extradition in 1981 (Article 3, paragraph 1), London scheme on extradition in 2002 (Article 2), UN model of extradition agreement in 1990 (Article, paragraph 1). Applying the principle of double criminality in respect of each of the basic principle in criminal law, and *nulla poena sine lege* considering that the purpose of facilitating extradition to the requesting state to conduct criminal proceedings against the person sought in order to ensure accountability in relation to the offense that is incriminated as a criminal offense under the law of both states. Also, this principle provides the protection to party sought, given the impossibility of extradition and penalty of an offense that is not criminalized as a criminal offense under the law of the state.

The principle of double criminality is accepted also in Bosnia and Herzegovina legislation which is proved with Article 33, paragraph 2 and Article 34, paragraph 1, item d, according to which the extradition is possible in relation to the offense considered an offense under the law of states, the requesting states and Bosnia and Herzegovina. According to Article 2, paragraph 2, the applying principle of double penalty has been eliminated in relation to serious criminal offenses. Therefore, its mistrust towards the Framework Decision on the principles of the double criminality dispense was expressed by both Germany and the United Kingdom, considering that some offenses are not clearly and precisely defined upon which the threatening of abuse of mentioned solution of the Framework Decision in order to accelerate and simplify the extradition procedure not take into account the different perceptions in relation to the same offense (e.g., in Belgium they implement legislation on European warrant for detention and surrender, acts of abortion and euthanasia are not treated as murder in respect of which the application of the principle of double criminality is eliminated).¹⁸ Therefore, the question is whether the speed and simplicity should prevail over one of the basic legal principles, and that is principle of legal certainty.

In the UK, the government's proposals are noted on incorporation of the principle of proportionality within framework decision on the European warrant for detention and surrender, that the use of European arrest warrant and surrender is restricted to serious offenses. Therefore, in order to implement this principle it is recommended to raise the penalty framework related to the offenses for which it is possible to issue a European arrest warrant and surrender, since in this way it is

18 The Human Rights Implications of UK Extradition Policy, House of Lord, House of Commons, Joint Committee on Human Rights, Fifteenth Reports of Session 2011, p. 37-50, text available on the website: <http://www.statewatch.org/news/2011/jun/uk-jhrc-uk-usa-extradition.pdf>. 20.11.2011.

avoided that the costs of extradition proceedings be higher than the results achieved by the administration of justice. According to the afore-mentioned facts, it is not justified to issue the European arrest warrant and surrender to the decision to conduct an investigation, taking into account that in extradition proceedings limit the rights of the person sought.

In the end, we may ask a question whether bilateral recognition of judicial decisions in criminal matters will come and respect the interpretation of the principle of *ne bis in idem* by the European Court of Justice, KMA taking into account the statement of former German Interior Minister with regards to difficulties to provide inter-state cooperation in the fight against crime, given the heterogeneity of legal systems and cultural diversities among countries. According to former German Interior Minister, the Spanish legal system still suffers from the Franco dictatorship, Italian legal system is slow and corrupt, the requirements for serving the sentence of imprisonment or detention in Latvia are intolerable and the difference of legal systems of Great Britain in relation to the legal system of Germany, and the differences in the division of power between the police and judicial authorities.¹⁹

When it comes to traditional extradition obstacles, we believe that the European Union member states can hardly give up the traditional obstacles to extradition law and in the process of handing over against Framework decision, as the institute of handing over encroaches criminal law on the area of another state, which threatens the sovereignty of a state. If we consider that the criminal law is a reflection of the political and social organization of a state, we may conclude that the traditional extradition procedure retains the sovereignty of states to decide on a discretionary extradition request while use of handing over institute towards Framework decision reduces the discretionary powers of a state when deciding on extradition request. Therefore, we believe that it is difficult to give up pursuing their state sentencing policy, and that will put its destiny in the hands of others.

CONCLUSION

The aim of the European arrest and surrender warrant is the restoration of the principle of mutual trust and recognition in the criminal field among the member countries of the European Union. According to Article 1, paragraph 2 of the Framework Decision from 2002, the ground for the application of the European arrest and surrender warrant is the recognition of court decisions among the members' states of European Union. Moreover, the goal of the European arrest and surrender warrant is to foster the cooperation among states in fighting trans-boundary crime and to create the sense of freedom, security and justice within the area of European Union. However, a question of whether the European arrest and surrender warrant is the adequate mean to overcome the distrust in the foreign legal system, taking into account that states do not have equal level of human rights and freedoms protection, nor it is possible to ensure the same level of protection due to different states' capacities and available means against crime; and finally, due to different appreciation of the same values.

¹⁹ Doobay, A., *Challenging the European Arrest Warrant*, Criminal Law News, London, June 2010, p. 4 - 18; Broadbridge, *The Interdiction of the European Arrest Warrant*, House of Commons, February 2009, p. 3 - 10; Sinn, A., Wörner, L., *The European Arrest Warrant and Implementation in Germany – Its Constitutionality Law and Current Developments*, ZIS 5, 2007, p. 209 - 217; Sinn, A., *The European Arrest Warrant and Implementation in the Member States of the European Union*, p. 11-20, text available on the website: http://www.law.uj.edu.pl/~kpk/eaw/raports/Questionnaire_Germany.pdf.10.10.2011.

Terrorist attacks that become more frequent and the internationalization of crime have created a fear both on national and international level, which made a need for speed-up and simplification of international cooperation among states in the criminal field. In this respect, the need for overcoming the traditional extradition procedure has arisen and the European Union member states have a duty to cooperate in the combat against criminal through extradition of sought persons to a state on whose territory the crime has been committed. However, the European Union member states hardly give up the centuries old and traditionally accepted rules that represent some sort of expression of state's sovereignty. We believe that the traditional cooperation among states in criminal field should be fostered, shortening the deadlines for extradition of criminal offenders at the same time, and by developing and strengthening the direct communication among the judicial bodies of the EU member states. Therefore, the principle *aut dedere aut judicare* is being distinguished as acceptable principle in combat against international crime, because it ensures the preservation of traditional rules of the state and it has a goal to prevent criminal offenders from avoiding the sentence.

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THE MODERN CONCEPT OF PROBLEM-ORIENTED POLICING¹

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Abstract: In response to the weaknesses of traditional (classical) concept of policing in the world, there have been some incremental changes in policing. Contemporary approaches to the police went from redefining the role of police in society, setting new strategic goals, forms of organization and the introduction of new methods of action in order to eliminate the weaknesses of the concept which was dominant in the longest period of the twentieth century. Such a project is the concept of Problem-Oriented Policing (POP), which started to develop in the late seventies. Problem-oriented policing is a working method in which the police actions are based on the systematic use of various sources of information so as to result in the so-called intervention rather than to allow committing crime.

Key words: problem, prevention, crime, security sector, “community policing”.

INTRODUCTION

In response to the shortcomings of the professional (classical) concept of policing in the world, the introduction of incremental changes in police work has begun in our country. New approaches to policing have started to redefine the police role in society, setting new strategic goals, organizational forms and the introduction of new methods of action to remedy the weaknesses of the concept which was the most dominant one for most of the twentieth century. In the late nineteen seventies, researchers, law enforcement experts and politicians became interested in improving the efficiency of the police.² Research during this period revealed the limitations of random effects patrols, rapid response and use practices of criminal investigation that had for many year been the foundation of police work. What emerged from the research is the important fact that the police are faced with different environmental issues, many of which are not strictly criminal in nature.

New concepts of police organization and police work in the community required a tighter connection between police and citizens, emphasizing preventive actions and proactive approach to policing, which involves focusing not only on police detection of criminal offenses, but also (especially) the identification of problems within the community that can lead to crime, and action on these issues before they escalate. One of these new concepts is problem-oriented policing (Problem-Ori-

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² See: Nikač, Z. (2007), *Policija u zajednici, KPA, Beograd.*

ented Policing), which began developing at the end of the seventies in the research by Herman Goldstein. He then developed his theory, as a result of his extensive research on how police respond to various calls. In his article, *“Improving policing: a problem-oriented approach”*.³ This article successfully demonstrated that the police are focusing on how to deal with the assets of a situation, rather than the objective. According to the same author, there were many reasons to develop problem-oriented policing, but there were five key states which strongly influenced the creation of police work, including:

1. The police are overburdened by the management, internal procedures, and efficiency to the exclusion of proper concern for efficiency in dealing with problems.
2. Police devote most of their resources responding to the calls of citizens, reserving too little time and energy to act on their own initiative or attempting to reduce problems in the community.
3. Community support is the main tool with great potential, largely untapped to reduce the large number of problems that would otherwise become the job of the police.
4. As part of their agency, the police have another huge resource: police officers in plain clothes, whose time and talent are not effectively utilized.
5. Efforts to improve the police were often unsuccessful because they did not adequately treat the general dynamics and complexity of the police organization. The regulation of policing and organizational structures are needed to support the change.⁴

Early experiments with problem-oriented policing have started in Madison, Viskontsin, London, Baltimore County and Maryland in the early eighties. The first evaluation of a broad agency implementation of this approach was conducted in Newport News, Virginia Police Department by the Police Executive Research Forum in the early eighties of last century. Since then, many police agencies in the US, UK, Canada, Scandinavia, Australia and New Zealand have continued to experiment with this concept, applying it to a wide range of crime problems and problems of public order to change their organization to better support this approach.

What is indisputable is the fact that the concept of problem-oriented policing is designed with an initial aim to act on specific problems that exist in society.

TERM OF PROBLEM-ORIENTED POLICING

Problem-oriented policing in its broadest context presents a whole new way of thinking about police work and has implications for all aspects of police organization, its staff and its operations.⁵ Within this concept of connection that are established between the police and the community is the proper basis and which lasts as long as the problem exists. The primary idea underlying police work is aimed at highlighting the issues of police accountability to the community, through identifying problems and solving them with the help of the community. The concept emphasizes the full participation of communities in the process of resolving security concerns that citizens face.⁶ This is achieved primarily by the police and community working together to solve some problems that cannot be solved by traditional

3 Goldstein, H. (1979), “Improving policing: a problem-oriented approach”, *Crime & Delinquency*, Vol. 25, pgs.4-5

4 Goldstein, H. (1990), *Problem-Oriented Policing*, McGraw-Hill Publishing Company, New York, p. 14-15

5 Ibid, p. 3.

6 Palmiotto, M., *Community Policing, A Policing Strategy for the 21 st Century*, Maryland, 2000, p. 174-175.

police work, or if there is a need to pay special attention to their decisions by developing an appropriate response to a specific problem and situation.

Problem-oriented policing (POP) is a method of work in which the police, based on the systematic use of different sources of information, are allowed to perform interventions in the forms of crime. Police aim to reduce crime and increase a sense of security. The strategy for achieving this goal lies in the inclusion of all employees in the police in a comprehensive work on crime prevention.

Problem-oriented policing is a state of mind, not a program, technique or procedure. This operation involves police officers and the community by teaching them to observe the whole picture - a global problem, rather than specific (isolated) incident.⁷ Some theorists have argued that the inefficiency of the police reports because her work is mainly focused on the means rather than the end result. To overcome this it is necessary that the police are more concerned with the causes (the problems that lead to complaints of citizens), not just the means in resolving citizens' complaints (quick reaction, and the allocation of personnel).

The primary goal of policing within the concept of problem-oriented policing is to achieve a quality service for all citizens. This mode represents an improvement over the reactive police actions aimed at the incidents that had dominated for many years in the US and among police forces around the world.

Using a problem-oriented approach enables the police to tackle the problems that lie at the base of crime, rather than trying to focus on individual criminal offences or specific requests for assistance. To understand the problem, the police collect information from a wide range of sources from both the police and from non-police sources, which requires a degree of cooperation between the police and citizens. To develop and implement solutions, the police try to encourage community support. The police then identify, analyze and respond to current conditions that influence the creation of the incident (crime).⁸ Problem-oriented police work helps to consider and respond to a wide range of problems that threaten the quality of life, not just the crime. It gives police officers the chance to use their knowledge and experience to improve the conditions in the community they serve.

Problem-oriented policing represents a fundamental change in relation to police actions aimed at incidents. Police agencies that have adopted the Access to Public continue to deal with incidents and to respond to them, but they tend to go beyond the first step, becoming far more than crime control agencies and to act in case of emergency.⁹

PRINCIPLES AND CHARACTERISTICS OF PROBLEM ORIENTED POLICING

The National Institute of Justice in the US proposed that problem-oriented approach follows five basic principles:

- *officers of all ranks and from all units should be able to apply this system of work as part of their daily activities;*
- *problem-oriented work encourages the use of a wide range of information, and should not be limited to conventional police data;*

⁷ Riechers, L., Roberg., R, Community Policing: A Critical Review of Underlying Assumptions, U: Willard M. Oliver, Community Policing, Classical Readings, p. 344.

⁸ Eck, J., Spelman, W., Problem-Solving Problem-Oriented Policing in Newport News, U: Alpert- Pi- quero, Community Policing Conterporary Readings, p. 63.

⁹ Ibid, p. 77.

- *problem-oriented work encourages the application of a wide range of solutions, not just limiting the means that are offered by the criminal procedure;*
- *problem-oriented work should not require use of additional resources and special units;*
- *every major police agency must be qualified to apply.*¹⁰

The theory states that problem-oriented policing should possess the following characteristics:

- *be a standard operative method of police work, not the project for specific cases;*
- *to be practiced by the personnel of all ranks, not only by specialists or managers;*
- *to be empirical, the basis of decisions should be information that should be collected systematically;*
- *to include whenever possible the cooperation of police and other agencies and institutions;*
- *to incorporate wherever possible impact of the community and its participation, so that the community should share the responsibility for its protection (security).*¹¹

PROBLEM - THE CENTRAL NOTION OF POLICING

The problem is the basic unit of police work, not a crime, case, call or incident. The problem is something that concerns or causes harm to citizens, not just the police. These are things that the officers find important, but they are not problems in the sense of injustice. Finding (addressing) the problem is much more than a quick observation; it means to master the conditions that create a problem. Police officers must be directed and systematically analyze the problem before they solve it and only directional and systematic investigation of crime can lead to the arrest.

Police officers, as individuals and organizational units of the police, as a whole, must develop requirements and systems for the analysis of the problem. The problem analysis must be complete, but that does not mean it has to be complicated. The problem must be precisely and accurately defined and broken down to specific aspects of the problem. It should be understandable to all interested parties to the case. Individuals and groups are interested in the problem in different ways and have different ideas of what should be done to solve the problem. A common way to solve the problem must be understood and the limits of success must be publicly verified in order to come to better solutions. Initially, all possible solutions to the problem must be taken into account to avoid possible effects of the impaired decision. Proposed solutions must arise from learning during the analysis. They should not be restricted or outlawed.

The police must actively try to solve the problem, rather than reacting to the negative consequences of the problem. The police must be given greater freedom in decision-making or participation in making important decisions. At the same time, the police must answer for their decisions. The effectiveness of new responsibilities shall be described quantitatively and qualitatively so that these results can be displayed to other police officers, so that police can systematically learn what they should or should not do.

¹⁰ Ibidem, p. 69.

¹¹ Cordner, G.W. (1995), "Community policing: elements and effects", Police Forum, Vol. 5 No. 3, pp. 55.

SARA MODEL

Problem-oriented policing is built on an analysis of the problem. A common method used for troubleshooting is the SARA model:

- Scanning
- Analysis
- Response
- Assessment

SARA model implies the existence of four phases that follow one another, making a continuous process. The presence and involvement of the community is required in each phase.

1. Scanning - *identification problem (detection).*

The activity should be focused on specific problems, persons, groups or areas. This should identify the consequences of problems for the police and society and help them make their priorities, define the broader goals, confirm the existence of the problem, determine the incidence and duration of the problem.

2. Analysis - *The analysis of problems in the light of elements such as time, place and participants*

The purpose of review and analysis is the systematic collection of information on the identified problem, finding a pattern for all similar, related or repeated cases in a limited period. It examines the possible impact of natural and social conditions that promote the existence of problems, so they can initiate measures aimed at the causes and develop a working hypothesis. Problem-oriented policing requires good strategic intelligence. The function of this work is the basis for planning activities and strategic decision making.

3. Response - *Initiation and implementation of measures in response*

The following stages are included in preparing plans of action: first, brainstorming for new interventions. The goal is to find the real action in accordance with the scope of the problem, objectives and available resources. An action plan must include a time limit and a summary of relevant staff and the distribution of the total or partial responsibility in accordance with the measures to be taken. The time limit is important to measure the effects of the steps taken. A good action plan should include: *the problem area / problem identification; the goal - short and long term; priorities; specific measures; internal and external resources; the list of those responsible for implementation of each measure; the time of implementation; the time of evaluation.*

Action plans typically include proactive and reactive measures. Planned activities call for listing all the participants.

4. Assessment - *The evaluation of the measures (assessment of activities undertaken)*

The main objective of the evaluation is to ensure that the reduction in crime is achieved by methods or steps taken. The evaluation shows the extent to which measures that have been taken have given desired effects or shows that we should take other measures. So, we should gather qualitative and quantitative data related to the phase before and after the response, which helps us in these estimates. If there are weaknesses in the plan of activities, lack of insight into a particular approach or lack of contribution from associates - evaluation will show how to implement new, time-limited efforts to achieve the same goal. That would greatly assist in the setting of realistic goals in planning future activities.

The following requirements need to be met for the successful realization of this model:

- *Crime prevention is included in all plans and administrative processes;*
- *Good information;*
- *Measurable parameters and evaluation methods;*
- *Participation of all employees;*
- *Knowledge and skills (professional qualification);*
- *Optimal use of resources;*
- *Problem-solving must be rooted in good governance.*

Thus, the SARA model is used for police identification, analysis, response and evaluation of problems related to crime in the community. The purpose of this model is the preparation of documents after the initial success of interventions and their results, providing records to the participants, creating a database of problems defined by type, area of the city, date and other factors, the development of training mechanisms, and recording of information resources that are aimed at other police departments, and the like.

TRIANGLE ANALYSIS PROBLEM

While the SARA model is a useful way of organizing access to problems that are frequent, it is often very difficult to figure out who is really causing the problem. The problem analysis triangle (sometimes interpreted as the crime triangle) shows a way of thinking about the ongoing problems of crime and disorder.

This idea implies that the results of crime or disorder, when the potential offender, suitable targets, and they get together in time and space in the absence of capable guardians of these targets.

Offenders can sometimes be controlled by other people (these people are known as informants). Targets and victims can sometimes be protected by other people who are known as guardians. Therefore, effectively addressing these problems requires an understanding of how offenders and their targets / victims find themselves together at a certain place and understanding how these offenders, targets / victims, and places are or are not effectively controlled. Understanding the weakness of the problem analysis triangle will find a way to new interventions.

The problem can be understood and written in different ways. None of them is not exhaustive. They can be described in any manner that best leads to improved understanding of problems and effective interventions. Generally, incidents where the police are wearing can be classified into four groups:

1. Conduct

Certain behaviors are common to certain events. For example, making noise, robbing people or businesses, driving under the influence of alcohol, collisions, selling drugs, stealing cars, and so on. There are many different behaviors that can lead to problems.

2. Place

Certain places are suitable for the incidents. Incidents can include one or more problem behaviors that may occur, for example, on the corner, at home, at work, in the park, neighborhood or school. Some incidents occur in abstract areas, such as the Internet, phone or other interactive networks.

3. *Persons*

Particular person or group of people can be prone to incidents. These people can be criminals and victims. Incidents involving one or more behaviors, appearing in one or more of the characteristics such as gangs of youth, lonely persons, groups of prostitutes, a group of chronic alcoholics or owners of the property. Incidents can harm neighborhoods, senior citizens, children, or other persons.

4. *Time*

Some time may help to incidents. Incidents involving one or more of the demonstrated types of behavior in one or more places, which are caused or affected by one or more people and can happen in traffic, at the closing time of bars, sales season or during some festivals.

At this point, growing evidence of crimes and misdemeanors are classified in this way. They are not equally represented in terms of time, place or people. Accordingly, the police and investigators recognize some of these types as:

- Repeat offenders who attack different targets at different places;
- Repeat victims who are attacked again by different perpetrators at different places;
- Include a variety of repeat offenders and different targets that participate in the same place.

The triangle of problem analysis is derived from the routine activities related to establishing how and why crime occurs. This confirms the theory that when a crime occurs three things happen simultaneously in the same place:

- Appropriate target is available;
- Lack of suitable guards to prevent crime;
- There is a motivation for the perpetrator.

TRAINING FOR PROBLEM-ORIENTED POLICING

To make the concept of problem-oriented work successfully implemented the changes must be made in the process of training and training officers. Through the process of training police officers are taught to react to problems rather than incidents. Police officers need to recognize the problems of a large number of incidents and act on them. Within this concept is also carried out and police training courses in order to detect problems in the local community, to analyze the same and find adequate solutions. When analyzing the problem, officers should seek a solution by working with the community to engage in problem solving and the *Center for Social Work*, teaching in schools and others. This will reduce the need to take coercive police methods.

Creativity and freedom in finding the solutions are very important, because it does not always have simple solutions. Something that works in one case may not work in another.

Officers who participate in programs of “*community policing*” to act in different incidents in relation to other officers, they begin to find a solution complying with the law and acting as an impartial party mediation. Their success is that this way they establish contacts with them.

Police teach people to perceive their own problems, to avoid the criminal situation in order to reduce the need for police actions.

POLICE WORK IN THE COMMUNITY AND POLICE WORK DIRECTED TO THE PROBLEMS SIMILARITIES AND DIFFERENCES

We have different ideas about the relationship between community policing and policing that focuses on the problems. As regards the two concepts, perceptions are different. We have those who believe that these are separate concepts, but also those of the concepts identified. Yet the most accurate understanding of those who indicate an association between these two concepts, because the problem-oriented work relies on the community and establishing cooperative relationships with the community.

When the concept of community policing is the most basic idea of linking the police and the community and building partnerships. When the concept of problem-oriented relationship that arises between the police and the community is the proper basis and is as much a problem exists. The primary objective of this concept is the identification of problems and their solution with the help of the community.

Problem-oriented policing, although created separately from community policing, is the third and final component of the model of community policing. These two concepts are interwoven, because without the problem-oriented components, community policing cannot be fully implemented.

THE IMPLEMENTATION OF PROBLEM-ORIENTED POLICING IN SERBIA

The cooperation between the Norwegian and Serbian police in the JU-NO projects started during the process of comprehensive reform of the police service initiated by the Republic of Serbia, in early 2001.

From the outset, the reform process of the RS MUP was heavily influenced by the Organization for Security and Cooperation in Europe (OSCE), which was in July 2001. The presented results of his study of police in Serbia, giving clear recommendations for decriminalization, depoliticization, the fight against organized crime, creating public opinion and confidence-building measures in order to regain public trust in the police. Organization for Security and Cooperation in Europe (OSCE) in 2001. was officially given a coordinating role in the reform process in the RS MIA.

The idea that the Kingdom of Norway should support the reform process in Serbia was presented in June 2001, at a meeting between the representatives of the Norwegian Ministry of Foreign Affairs and the working bodies of the Serbian Ministry of Foreign Affairs, which deals with the Stability Pact. After claims were made by the Serbian representatives, it was decided to initiate the implementation of the JU-NO projects where Norwegian Police Directorate has provided expert assistance. These projects were pilot projects for their employees access to training and equipping the police headquarters in Novi Sad. At the same time, the implementation of pilot projects commenced in the police departments of Sremska Mitrovica, Pančevo, Subotica, Sombor, Zrenjanin and Kikinda, focusing on the following topics:

- Problem-oriented policing;
- A course for trainers in problem-oriented policing;
- Create derivative basis for operational and strategic analyzes and planning;
- Creating software for more efficient analysis of safety.

On the basis of comprehensive analysis, it was concluded that the previous projects, JU-JU-NO and NO 2, implemented with the expected results. It also concluded that there is a need of calling the Norwegian Police Directorate to coordinate and participate in the JU-NO 3 project.

The project in the JU-NO 3 was arranged between the RS MIA and the Kingdom of Norway (the National Police Directorate) on September 7, 2005. The project included building the capacity for problem-oriented policing, strategic analyses and planning of policing in the Province. The document describes the project introduction of problem-oriented project work and strategic analysis as a method of combating crime. The main activity under this project is the training of managers of the highest and intermediate levels, as well as experts in the field of project implementation and strategic analysis as a method. It is anticipated that over time, using this method, there are improvements in the structure of cooperation and decision interdepartmental measures that act against criminal activities. A further objective is to increase public confidence in the police and to achieve better cooperation between police, public and external collaborators.

Implementation of the project Crime Mapping was done in the AP with the status of infrastructure and how to perform the analysis. In Novi Sad, there was a brief exchange of strategic management, problem-oriented analytical work and the heads of PD and their associates, as well as the course for commanders of police stations.

Teams of experts from Norway visited the police department and determined the current status of the project:

- What project is selected;
- What is the identified problem;
- What is the analysis based on;
- What measures are selected;
- Staff who are involved;
- Evaluation method.

Example: The three projects were presented in the Police Department (PD) of Sombor, in November 2005

1. Kula - violence among fans during football games

Approach: Episodes of violence among fans during football games between major league teams. The challenge was to separate the fans of the opposing teams when leaving and entering the stadium. The stadium has only one entrance, and on the other side are the river and a village.

Objective: To eliminate violence and disturbing public order and peace among the fans at football matches.

Methods: Problem-oriented work

Determination and analysis of coordinates: Police statistics 2003-2005 identified focal sites.

Measurements: Based on the analysis, operational analysis was performed.

Local measures:

- contacted the management of clubs. They were ordered to make a safety plan and had to provide monitorial service;

- the local authority was contacted and it was required to better regulate the incoming roads to the stadium so it would renovate space in the parking lot in front of the kindergarten;
- contacted the residents of the village, and the idea was to defer to their parking spaces with the buses of fans;
- established contacts with the owners of the shops (near the stadium) where alcoholic drinks were served and reaching an agreement that they would not be served 90 minutes before and after the game;
- contacted the media. Leaderships of visiting football teams were contacted and contacts were also made with their fans to inform them about the measures;
- the stadium was equipped with more surveillance cameras. Partitions were made in order to be able to control the fans and separate their entry and exit from the stadium. A meeting was held with the court and an agreement was made on fast processing of such cases.

Situational measures:

- a unique approach to the stadium - the same reaction;
- better control of the focal points. The number of police officers;
- the service is extended for 15 minutes before and after the match to 90 minutes;
- safety meeting with those responsible for security is maintained at every game;
- appointing a responsible person in the prosecutor's office (with designated standardized fine as agreed and determined in order to speed up the processing of cases).

Measures oriented towards the individual:

- identified those who usually made the biggest riots and calling them in for questioning;
- a new law concerning sporting events, providing for a quicker arrest of troublemakers.

Evaluation: Mass brawls, which had previously represented a problem, happened no more. Fighting now occurs very rarely, and usually among fewer people.

2. Criminal offenses on and in connection with the Danube

Approach to the problem: The problem was the smuggling of cigarettes, alcohol, weapons and human trafficking in the areas for which the police have authority.

Objective: Preventing illegal traffic on the Danube, which is responsible for the PD.

Method: Problem-oriented work.

Determination and analysis of coordinates: A very detailed mapping of the geographical area was performed, followed by establishing contacts with possible sources of information on the Serbian side. A very detailed analysis was also performed to ensure the accuracy of the information.

Measures:

- Cooperation among the various lines of police;
- Cooperation with the Army;
- working with home owners in this area;
- working with fishermen;
- working with the residents along the focal points;

- working with neighboring police forces;
- sources of information.

3. New aspects of domestic violence cases

Approach: The main challenge was to “illuminate” dark number. Part of the problem involved the issue of the parties involved giving testimony against each other (this was a problem in 74% of cases).

Objective: To reduce domestic violence.

Method: Problem-oriented work

Determination of coordinates and analysis: There is an extensive statistical material and problem analysis. The analysis showed that the police in cases of this type completely dependent on staff. Previously only the police are working on these cases. The analysis showed that in 80% of cases the police were not solely responsible for solving this problem.

Dimensions: Model of zero tolerance was introduced 2003 in cases of domestic violence, as the number of cases is decreasing.

Local measures: As the number of cases is decreasing, contact has been established and started its cooperation with the Social Services, who founded a mobile unit that is immediately ready to respond. In cooperation with social services, they printed the brochure with information about the rules and obligations concerning domestic violence.

Evaluation: In the period since 2000 to 2004. The adjustments in respect of who owns the problem. In the period from 2003 to 2004 was significantly larger number of cases resolved by Social Services. The police were no longer the only carrier of the problem. The victims receive professional support, trust the system and feel that it is best to submit the attacker. Tolerating violence is reduced. Teams of social influence and reduce the number of police intervention in domestic violence cases.

Examples of the Serbian police drawn from the project JU-NO 3 were evaluated as very good and we serve as an indication that all problems can be solved using this method and how the problems can be solved in order to expand horizons of all those who wish to understand this method of policing, especially those who will apply it in their work.

CONCLUSION

Problem-oriented policing, although created separately from community policing, is the third and final component of the model of community policing. Problem-oriented policing can be implemented within the police department on its own merits and not be regarded as a synonym for community policing. However, it is important to remember that community policing is synonymous with problem-oriented policing. Without problem-oriented components, community policing cannot be fully implemented.

Creating the concept of problem-oriented policing has been attributed to Herman Goldstein who wrote in detail about the philosophy and concepts of this program. The SARA model is used as a clear and detailed method of problem-oriented policing in practice. The clarity and reproducibility of the SARA model (quick review, analysis, response and assessment) allows any police department to easily apply all the principles of problem-oriented policing, and the whole concept of community policing.

Problem-oriented policing is a comprehensive strategy with proactive and reactive measures directed against the identified problem areas, defined in the review and analysis, divided into four phases (SARA model) as a tool for planning and implementing time-bound activities.

Although very few police agencies in the developed world today accept a purely military model, there are still the ones that do so. The transition from the traditional, reactive style, to action-oriented style of police operations is the most important positive change in police philosophy related to problem-oriented policing. The introduction of this contemporary model ensued, as a result, overcoming of the limitations of the traditional policing model that was largely reactive in relation to crime control and unable to develop and maintain close working relationships with the community to control crime.

By replacing the traditional model of police repression and placing an emphasis on the preventive action, the demands of the community have been met. The concept of problem-oriented policing, despite some of its shortcomings, is the most appropriate form of action in today's democratic societies.

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CONTEMPORARY APPROACH IN ECOLOGICAL SECURITY BY ECOLOGICAL FOOTPRINT ANALYSIS

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Abstract: Environmental security as a core component of existential security deals with protection of the biosphere. The natural resources of the biosphere in contemporary daily life and work are reduced. An important indicator of the ecological safety is ecological footprint, which measures the consumption of natural resources over the current available capacity of the natural environment and is expressed in global hectares or number planet equivalents. Methodology for calculating the ecological footprint can be different depending on the application. It can be measured for individuals, state and nation, manufacturing processes, government organizations, various types of services as well as certain physical sites (continent, city, region, rural or urban area). The concept of ecological footprint is a starting point for the comparison of human needs and natural resources of the biosphere. Standards relating to calculation analysis and ecological footprint are under development. By establishing generally accepted consistent metrics the results could be compared and measures could be taken to improve environmental safety.

Key words: security, ecology, ecological security, ecological footprint, urban planning.

INTRODUCTION

“We all live under the same sky, but we have different horizons.”
Konrad Adenauer (1876-1967)
politician

One of the basic needs of modern man and society is the certainty of the fate of the most important assets and values which an individual, the state or the global international community possess, or strive to have, and there is no doubt that in modern conditions it is the safety of the biosphere (living environment). The main factor is to ensure the security content of basic living conditions (unrestricted access to drinking water, clean air, fertile soil, food), and this is the result of efficient storage of these values. That is why the security of the biosphere is the basis of all other security systems.

Discussions on the effects of modern living and working on ecological environment, create many different analytical approaches, and they are primarily based on concepts such as „ecological footprint” and „sustainable development”¹

¹ The concept of “sustainability” was created in Germany in the 19th century and it denotes the production consistency of almost the same amount of wood over time. Sustainability is a limiting condition for the use of a single renewable resource that cannot be greater than its natural growth. In the 20th century it became the basic principle of sustainability and survival of human communities, as well as a set of fundamental principles of the development of landscapes and settlements.” Tomic, Z.V.: Principles for sustainable spatial and settlement development, INFO no. 4/2009, the Institute of Urbanism Belgrade, pg. 9.

In the second half of the twentieth century, the research framework and the conditions under which the development of modern society can contribute to global security that it is connected to, there are two concepts -the concept of ecological footprint and the concept of sustainable development. "Sustainability as a concept becomes a major focus in contemporary social activities which significantly affected: immoderate consumption growth of non-renewable and renewable natural resources with the tendency of their exhaustion;

1. a permanent increase in surface area, which is extensively used for building roads and expanding settlements;
2. endangering the environment and ecosystems;
3. the degradation of natural resources and cultural assets;
4. the frequency of occurrence of natural disasters, from the standpoint of their destructive power and extent, due to global climate change;
5. the lack of improvement of living conditions.

According to the Report of the World Commission on Environment and Development² entitled "Our Common Future", the concept of sustainable development is based on the principles of:

- sustainable development means development of a society that meets the needs of present generations without compromising the ability of future generations to meet their own needs;
- sustainable development is a process of changes in which, the use of resources, investment management, the orientation of technological development and institutional changes are in harmony and as such they equally increase the present and future potentials for the benefit of human needs and desires.

Ecological security is achieved through the establishment of an ecological balance with sustainable development, by:

1. Sustainable development seeks civil rights and better conditions for all. The evidence is the "Declaration on Man's Environment and Development" in Rio de Janeiro, which includes the provision stating "Peace, development and environmental protection are interdependent and indivisible."

- The term resource covers in principle the sum of all natural resources. The absolute limiting factors are the absorptive capacity of the ecosystem in relation to environmental pollution and waste emissions, biodiversity, health of young people, nature's ability to tolerate change, especially those that have been accelerated.
- Keeping the ecosystem caused by the reduction of the use of renewable resources within the boundaries of their regeneration.
- The sustainable development ensures the functioning of nature, "life - support - system" (bearable system life). It is not enough to set only one condition which prescribes that for the functioning of the nature it is sufficient to have enough renewable energy resources within the limits of their regeneration. Environmental protection should be constituted as an integral part of the development process and cannot be viewed in isolation from sustainable development.
- The concept of "sustainable development" has characteristics of a fundamental right. Raising the quality of life is clearly worded and not hiding behind several earlier formulations, such as the "needs of the population and the economy" or "equal living conditions". According to the concept of "sustainable develop-

² It is also known as the Brundtland Commission as, the person who presided over the work of the Commission, was former Norwegian Prime Minister Gro Harlem Brundtland (Gro Harlem Brundtland).

ment”, when we talk about satisfying the needs of individuals, we do not consider fundamental individual rights, but basic social rights, which are to meet the needs of the whole group of people.

- The concept of “sustainable development” is the agreement and expressed solidarity with overall responsibility for “our common future.” It remains to be confirmed whether it is necessary to build a specific responsibility for their own living space according to the international standards.³

The rapid development of modern principles of sustainable development, are significantly affected by:

1. immoderate consumption growth of non-renewable and renewable natural resources with the tendency of their exhaustion;
2. a permanent increase in surface area, which is extensively used for building roads and expanding settlements;
3. endangering the environment and ecosystems;
4. the degradation of natural resources and cultural assets;
5. the frequency of occurrence of natural disasters, from the standpoint of their destructive power and extent, due to global climate change;
6. the lack of improvement of living conditions.⁴

The assessment and quantitative research of ecological security on local and global level can be done by using precisely defined and formed metrics and standard, which are not sustainable yet.

“At present, most assessing methods of ecological security are to choose biological and physical and chemic characteristics which are sensitive to the changes of ecological environment as indicators and monitor their reflection changes to ecological environment so as to judge whether ecology is security or not. As the systematic structure of ecological environment is comparatively complicated, the methods of realizing it are very limited at present, so, it is both feasible and essential to adopt a kind of method, which is easy to understand and easy to calculate on larger range and greater degree in actual research work.”⁵ The model of ecological footprint has become a kind of new method to assess regional ecological security and to measure sustainability. It was brought out in 1996 by Mathis Wackernagel and William Rees and has often been used in many studies of environmental security and sustainable development during the recent years.

Ecological footprint model assumes that all types of energy, material consumption and waste discharge require the productive or absorptive capacity of a finite area; six types of ecological biologically productive area (arable land, pasture, forest, sea space, built-up land and fossil energy land) are used to calculate ecological footprint and ecological capacity. In the calculation of ecological footprint and ecological capacity, the biologically productive areas were adjusted according to the ratio of regional and global productivity, hence expressing the regional productive area in global average units (global hectares; gha). Comparing the footprint and capacity, the ‘ecological deficit’ or the ‘ecological remainder’ (when capacity > footprint) is calculated, it is possible to draw conclusions about a regional sustainability challenges. The realized method describes the natural resources by introducing the con-

3 Tomic, Z V., *Principles of Sustainable Spatial and Settlement Development*, no INFO. 4/2009, the Public Company Urban Planning Institute of Belgrade, pg.11.

4 Ibid

5 Qing, H., Ranghai, W, Zhiyuan, R., Jing, L., Huizhi, Z: *Regional ecological security assessment based on long periods of ecological footprint analysis*, Resources, Conservation and Recycling 51 (2007), pg.25, available at www.sciencedirect.com (20.01.2012.)

cept of biologically productive area and further realizing comparability and adding all kinds of biologically productive area of all nations and regions by introducing the equivalent factor and productivity coefficient. The calculation of carrying capacity is based on the resource carrying capacity and environment carrying capacity. From the two respects of carrying capacity and pressure used to assess ecological security, an exploration and practice of using the theory and method of ecological footprint to assess regional ecological security is derived.⁶

For the further development of ecological footprint as a successful model of quantitative research of ecological security, it is necessary to form a set of precise standards that would be available and applicable in many different cases. By comparing the results of ecological footprint calculation and critically analysing the advantages and disadvantages, a new kind of concept in achieving ecological security can be proved as successful.

ECOLOGICAL SECURITY

“A growing number of people inhabit the planet, and the globalization unites them in one interdependent and overpopulated local society. The population growth causes tension capacity of the planet - its ability to sustain human and other life forms - the evidence suggests that unrestrained population growth lead to environmental degradation, and internal strife. It is certain that the world is so interdependent economically and in the eco-political sense to be determined by population growth – the problem that has made the issue of population and environmental policy a key political issue on the global agenda of the XXI century.”⁷

The world's population now exceeds seven billion people and may reach nine billion people by the year 2050. The growing number of human population and further development of social economy, tendency for better quality of life and improving the living standard are constantly present and all together are leading certainly to a greater energy and bio-capacity consumption. The fact that the human economy is completely dependent on the biosphere natural resources which are limited as well as on human demand to satisfy the needs by using the natural capital of the planet beyond its regenerative capacity, has caused many environmental changes. “Seven leading environmental changes of major concern are: (a) depletion and pollution of fresh water supplies; (b) depletion of fisheries; (c) degradation and loss of biodiversity, including forests; (d) degradation of agricultural lands; (e) food and health safety; (f) stratospheric ozone depletion; and (g) global climate change.”⁸

The planet's resources such as: atmosphere, water, soil fertility, habitats, biodiversity are the global commons and they belong to everyone and no one at the same time. They are also unevenly distributed amongst geographic regions and people. “Unclear ownership and property rights makes them particularly susceptible to what is often referred to as the ‘Tragedy of the Commons’ – the tendency for unmanaged public resources to be consumed until they become exceedingly scarce, or worse, cease to exist. Environmental scarcity and the wish to control remaining resource stocks can cause conflict, including violent conflict from the local to the global level as well as environmentally induced mass migrations. Environmental resources are becoming scarce due to (a) the environmen-

⁶ Ibid.

⁷ Kegli, Č., Vitkof, J.: Svetska politika – trend i transformacija, Centar za studije Jugoistočne Evrope, Fakultet političkih nauka, Diplomatska Akademija, Beograd, 2004. str. 517.

⁸ Lovink, J. S., Wackernagel, M., Goldfinger, S. H.: *Eco-insurance: Risk Management for the 21st Century*, The Hague Conference on Environment, Security and Sustainable Development, April 2004. Pg.5

tal impact of growing populations with their associated patterns of consumption, production, investment and trade; (b) uneven access to resources; and (c) unexpected environmental changes. The cumulative effect is decreased global environmental security.⁹ The key problem that has to be solved in increasing environmental security is to achieve the balance between human demand and natural regenerative capacity.

“Once human demand exceeds the regenerative capacity of the biosphere, further expansion impoverishes us. Such “development” beyond the planet’s ecological limits is not achieved by using the regenerative “interest” of nature, but by liquidating the “principal” (what ecological economists call “natural capital.”) This is why systematic resource accounting documenting humanity’s overall demand on the planet’s natural capital for both resource provision and waste absorption—is core to achieving sustainability.

Ecological footprint accounts provide a way of documenting the extent to which human economies stay within or exceed the regenerative capacity of the planet. Such biophysical resource accounting is possible because resources and waste flows can be tracked. Ecological footprint measures how much productive land and sea area, a population (an individual, a city, a country, or all of humanity) requires for the resources it consumes and for the absorption of its waste, given prevailing technology. Measured in “global hectares”, bio-productive hectares with world average capacity to produce biomass - it is calculated based on official government data and reflects annual changes in resource efficiency and technology.”¹⁰

ECOLOGICAL FOOTPRINT

Mathis Wackernagel and William Rees brought out ecological footprint as a new academic concept in 1996, and it was defined as “an accounting tool that enables us to estimate the resource consumption and waste assimilation requirements of a defined human population or economy in terms of a corresponding productive land area.”¹¹

“Ecological footprint is divided into ecological footprint in the narrow sense, the water footprint and carbon footprint. They form “footprint family”. The analysis of the existing capacity of natural resources, the analysis of required bio-capacity and the analysis of consumption of natural resources make the ecological footprint analysis. Ecological footprint can be measured for individuals, certain territorial units (continent, country, city, region, rural or urban area, etc.), manufacturing processes, government organizations, various types of services.

According to Newman and Jennings (2008), two models are applied for the ecological footprint calculation: the compound (from top to bottom) and component (bottom up). Ecological footprint of nations and states is calculated by a compound model, based on national data and is expressed per capita. This model was developed by Wackernagel and Rees in 1996, to calculate the ecological footprint of nations. It is used for calculating the ecological footprint of consumption because it takes into account all of the used energy and resources during the manufacturing process and service delivery. Ecological rucksack applies to all waste generated during the production process. The fundamental dif-

9 Ibid.

10 Ross, A.: Ecological footprint: the journey so far, Lesson sharing and case studies of local authorities in the UK, World Wide Fund for Nature, WWF-UK, May 2006. www.wwf.org.uk/localmatters pg. 7 (20.01.2012.)

11 Wackernagel, M., Rees, W. E.: *Fun with footprints*. In: Our ecological footprints: Reducing human impact on the Earth. Gabriola Island: New Society Publishers. (1996), pg.9

ference between these models is the use of different input data. A compound model uses national trade data and national data on energy consumption, while the component model uses local data and studies the life cycle.¹²

For the calculation of ecological footprint of cities or regions, the component model is usually applicable. The creators of these methods are Lewman and Simmons (2001). This approach includes the assessment and analysis of consumption of material components in the categories and analyzes the flow of their life cycle within the city or region. "The categories and components that are usually calculated:

1. energy
2. materials and waste
3. transport
4. food
5. water
6. built land.

This 'bottom-up' approach allows the impacts of these component activities to be related to the types of land required to support them. The land categories used are:

1. bioproductive land
2. bioproductive sea
3. energy land (forested land required for the absorption of carbon emissions)
4. built land (such as buildings and roads).

The fifth land type, biodiversity land, refers to the area of land that would need to be set aside to preserve biodiversity.¹³

By creating an ecological footprint for each of the individual energy and material 'flows' within a process or service, a total ecological footprint can be derived by adding together all the individual components.

The ecological footprint presents its results in hectares of 'biologically productive space with world average productivity'.¹⁴ These hectares are termed global hectares (gha) by Wackernagel et al. Because biological productivity varies all over the world, global hectares allow fair comparison between locations, as well as with the planet's biologically productive resources.

The model for calculating the ecological footprint and ecological capacity

The ecological footprint is a function of population and per capita material consumption. It can be calculated to following equation:

$$EF = Nef = \sum (aa_i) = N \sum \left(\frac{C_i}{P_i} \right)$$

EF is the total regional ecological footprint, N the population, ef the per capita ecological footprint, i the different consumption items ($i=1,2,\dots,n$), aa_i the ecologically productive lands converted by per capita consumption of i item, C_i the per capita average consumption of i item P_i is the average productivity (kg/gha) of producing i consumption item for corresponding biologically productive area.¹⁵ The model for calculating the ecological capacity is:

¹² Knežević-Lukić, N., Ljuština, A.: *Ekološki otisak urbanih ekosistema*, Međunarodni naučno-stručni simpozijum „Instalacije & Arhitektura“, Beograd, 27-28-oktobar 2011. str.229

¹³ Chambers, N., Simmons, C., Wackernagel, M.: *Sharing Nature's Interest: Ecological Footprints as an Indicator of Sustainability*. Earthscan, London, 2000

¹⁴ Loh, J. (ed.). Living Planet Report WWF International, Switzerland, 2000

¹⁵ Wackernagel, M., Rees, W. E.: Fun with footprints. In: Our ecological footprints: Reducing human impact on the Earth. Gabriola Island: New Society Publishers. (1996) pg.

$$EC = Nec = N \sum a_j \times r_j \times y_j \quad (j = 1,2,3,\dots,n)$$

Where *EC* is the total regional ecological capacity (gha), *ec* the per capita *EC* (gha per capita), *a_j* a kind of per capita biologically productive area, *r_j* the equivalent factor of different land types, *y_j* the productivity coefficient of some kind of biologically productive area and *N* is the population.

The model for calculating the ecological security

“In order to analyze the ecological sustainable development capacity and ecological security from two respects of pressure and carrying capacity, the concept of ecological footprint pressure index was put forward, which means the menace status of ecological capacity, the model is:

$$T = \frac{EF}{EC} \quad \text{or} \quad t = \frac{ef}{ec}$$

Where *T* or *t* is the regional ecological footprint pressure index, *EF* the total regional ecological footprint, *ef* the regional per capita ecological footprint, *EC* the total regional ecological capacity and *ec* is regional per capita ecological capacity. This model realizes the current situation analysis of regional ecological security assessment based on long periods of ecological footprint analysis.¹⁶

Ecological security status can be described according to the value of ecological footprint pressure index (<0.5, 0.5-0.8, 0.8-1.0, >1.0) by dividing into four levels: 1-ideal, 2-General, 3-poor, 4-worsening.¹⁷

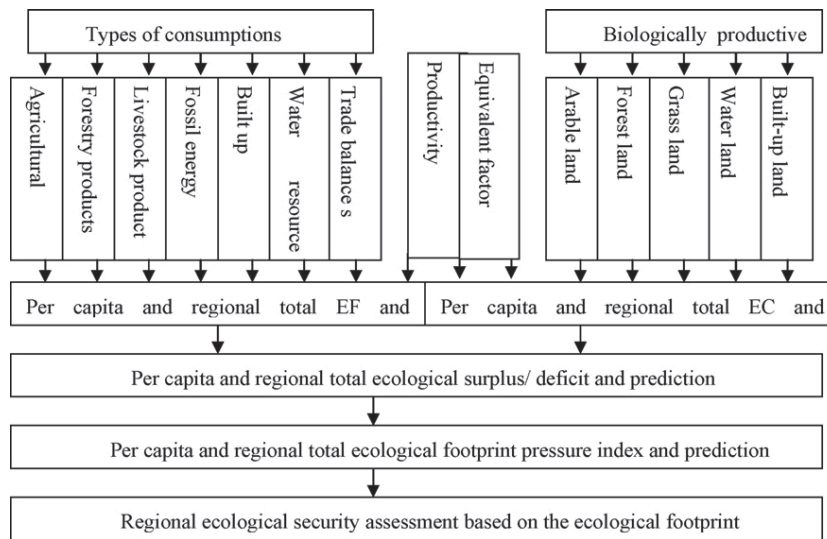


Fig. 1. Flowchart of regional ecological security assessment based on long periods of ecological footprint analysis¹⁸

16 Qing, H., Ranghui, W, Zhiyuan, R., Jing, L., Huizhi, Z.: *Regional ecological security assessment based on long periods of ecological footprint analysis*, Resources, Conservation and Recycling 51 (2007), pg.30, available at www.sciencedirect.com (21.01.2012.)

17 Ibid.

18 Qing, H., Ranghui, W, Zhiyuan, R., Jing, L., Huizhi, Z.: *Regional ecological security assessment based on long periods of ecological footprint analysis*, Resources, Conservation and Recycling 51 (2007), pg.31, available at www.sciencedirect.com (21.01.2012.)

The Advantages of Ecological Footprint Accounts

- *Comprehensive*: Ecological footprint accounts are based on comprehensive and well-established natural resource data sets. They analyze the compound effect of resource consumption pressures related to climate, ocean habitats, forests, farmland, and urban areas. They also compare consumption to the Earth's biological capacity.
- *Credible*: Ecological footprint accounts are computed annually using the best scientific data from official government sources and reflect advancements in resource efficiency. The accounts are transparent and can be tested.
- *Conservative*: Speculative data, even if well grounded, are eliminated from the ecological footprint accounts. The contribution of fossil fuel to the footprint is calculated using Intergovernmental Panel on Climate Change (IPCC) sequestration data. The alternative fossil fuel footprint based on replacement with biomass would lead to even larger ecological footprints.
- *Concise while Detailed*: Despite the comprehensive data inputs, the ecological footprint can be expressed in a single, readily understood number — the area required for supporting an individual, region or other entity. This single number is easily disaggregated into detailed supporting data.
- *Flexible and Scalable*: This analysis can be applied to products, households, cities, nations and the world. The results can guide physical design; policy development; sector and trade analysis; and investment screening.¹⁹

“Ecological footprint creates an evidence base that makes links between the environment and the economy, and demonstrates the scale of the shift that is required for ecological sustainability. While the methodology is subject to review and refinement, the broad messages to come out of the data are unlikely to change. This evidence base is persuasive and lends credibility to ecological footprint messages.”²⁰

“Ecological footprint reduction strategies should be connected with a number of other existing documents including: (sustainable) community strategies/community plans; climate change strategies; local area agreements/policy agreements/local outcome agreements; regional strategies.”²¹

According to the available data the results of ecological footprint calculation and analysis can be involved in the process of design and planning at early phase. It can help a lot in decision-making process in creating the facilities and services that can provide reduction of the ecological footprint.

Limitations of Scope: What the Footprint Does Not Measure²²

The ecological footprint is an indicator of human demand for ecological goods and services linked directly to ecological primary production. As such it addresses very specific aspects of the economy – environment relationship, and

19 Lovink, J. S., Wackernagel, M., Goldfinger, S. H.: *Eco-insurance: Risk Management for the 21st Century*, The Hague Conference on Environment, Security and Sustainable Development, April 2004. pg. 10-11.

20 Ibid. pg 12

21 Ross, A.: *Ecological footprint: the journey so far, Lesson sharing and case studies of local authorities in the UK*, World Wide Fund for Nature, WWF-UK, May 2006. www.wwf.org.uk/localmatters pg. 14 (19.01.2012.)

22 Ewing B., D. Moore, S. Goldfinger, A. Oursler, A. Reed, and M. Wackernagel. 2010. *The Ecological Footprint Atlas 2010*. Oakland: Global Footprint Network. Pg.92-93.

should not be taken as a stand-alone sustainability indicator. Rather, it should be used in the context of a broader set of indicators that provide a more complete picture of sustainability. The following are some specific aspects of sustainability that the ecological footprint does not address:

- availability or depletion of non-renewable resources
- inherently unsustainable activities
- environmental management and harvest practices
- land and ecosystem degradation
- ecosystem disturbance or resilience of ecosystems
- use or contamination of freshwater

Limitations of Current Methodology and Data: What the Footprint Does Not Measure Well:

- bio-capacity required for uptake of carbon dioxide emissions
- ecological trade-offs of land conversion.
- aquaculture production

Potential Errors in Implementation:

Five potential sources of error have been identified - conceptual and methodological errors:

- systematic errors in assessing the overall demand on nature
- allocation errors
- data errors in statistical sources for one particular year
- systematic misrepresentation of reported data in UN statistics
- systematic omission of data in UN statistics

The Growing Ecological Deficit

“Human consumption and waste production have been exceeding the earth’s capacity to create new resources and absorb waste since the 1980s. The world average ecological footprint is currently 2.3 global hectares per person, but there is only an average of 1.9 hectares of biologically productive land and sea area available for each person. Note that these 1.9 global hectares need to provide not only for humans but also for the millions of other species with which people share this planet. This growing global ecological deficit or “overshoot” now exceeds by 20% the Earth’s regenerative capacity and, by requiring the depletion of natural capital, reduces the Earth’s ability to support future life. This means that it now takes more than 14.5 months to regenerate the resources that the population consumes in one year. The world’s population is therefore liquidating natural capital in order to support the current level of resource use.”²³

²³ Ross, A.: *Ecological footprint: the journey so far, Lesson sharing and case studies of local authorities in the UK*, World Wide Fund for Nature, WWF-UK, May 2006. www.wwf.org.uk/localmatters pg. 8 (19.01.2012.)

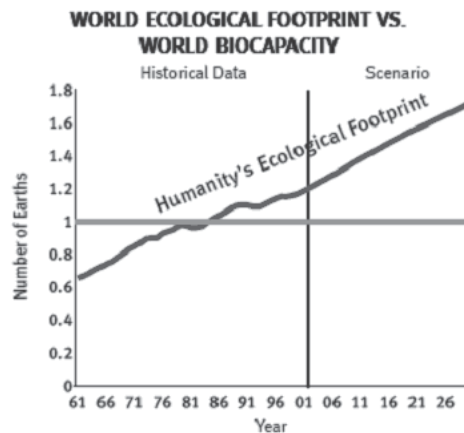


Fig. 2: World Ecological Footprint versus World Bio-capacity: Historical data and scenario based on moderate projections from FAO, UN Population Fund, and IPCC²⁴

“Using UN estimates of world population, natural resource consumption and CO₂ emissions over the next 30 years, we have translated this scenario into global ecological footprint equivalents through 2030. Even though these UN estimates assume slowed population growth and more resource-efficient technologies, this scenario still results in a world footprint that would grow from today’s level of 20 percent above the Earth’s biological capacity to a level 70 percent above it. This means the world’s population in 2030 would require 1.7-fold of the Earth’s regenerative capacity to meet its consumption requirements. This calculation assumes that the Earth can sustain this growth in resource use over the next 30 years. It does not account for the possibility that as the natural resource base is depleted, a decrease in bio-capacity could further hamper the biosphere’s ability to regenerate.²⁵

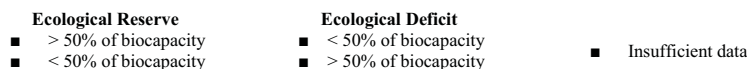


Fig. 3: Ecological Reserve / Deficit world map²⁶

²⁴ Ross, A.: *Ecological footprint: the journey so far*, Lesson sharing and case studies of local authorities in the UK, World Wide Fund for Nature, WWF-UK, May 2006. www.wwf.org.uk/localmatters pg. 8 (19.01.2012.)

²⁵ Lovink, J. S., Wackernagel, M., Goldfinger, S. H.: *Eco-insurance: Risk Management for the 21st Century*, The Hague Conference on Environment, Security and Sustainable Development, April 2004. Pg 9

²⁶ <http://www.footprintnetwork.org> (19.01.2012.)

Ecological footprint is a method to assess regional ecological security in order to measure sustainable development. Gauges of sustainable development at the global level, cannot be downloaded at the regional level, because of the observed differences between global space and global regions²⁷:

1. global system is closed, while the regions, economically and environmentally, more or less, are open systems, and interact with each other ;
2. measures in one region must not be at the expense of the developing capacity of neighbouring or even distant regions;
3. contrary to the global system, the region has legislative and legitimate institutions that represent the common good and common interests that need to harmonize conflicting requirements. Depending on the case, the boundary conditions are changing, and in determining the measures, the impacts of interregional influences must be taken into account. This is obviously the case for economic growth, resource consumption, labour, protection of landscape, transport and infrastructure systems;
4. regions are very specifically disposed of, as a rule, the various economic, environmental and social resources. Hence, they react differently to the development of over-regional, or to exogenous influences.

The advantages of district-level analysis of the ecological footprint in relation to the global ecological footprint are:²⁸

1. region as a rule, is the area that has the resources, and in the center of attention, the use of endogenous development potential and location of development factors
2. region is a spatial and economic unit, which is carried out by directing the planning processes
3. at the regional level there is a remarkable and easily acceptable orientation to the common good
4. a region represents the transparent space for participants from different social groups

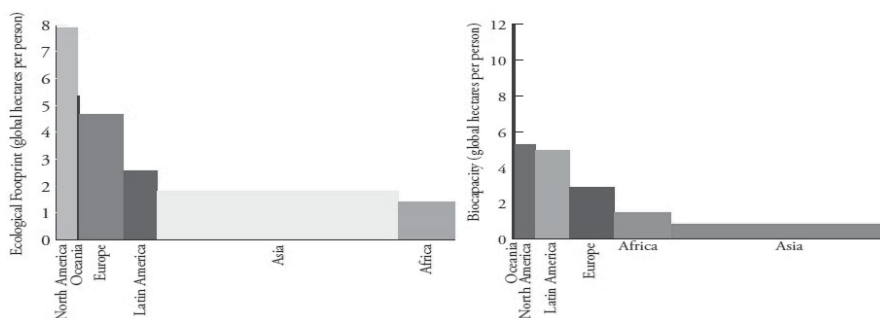


Fig. 4: Ecological footprint and bio-capacity by continent (expressed in gha / person)²⁹

27 Tomić, Ž. V.: *Principi održivog uređenja prostora i razvoja naselja*, INFO br. 4/2009, Javno urbanističko preduzeće Urbanistički zavod Beograda, str.10

28 Tomić, Ž. V. op.cit. str.

29 Ewing, B. et al.: *Ecological Footprint Atlas 2010*, Global Footprint Network, 13. October 2010, Oakland, CA, USA, pg.39. (19.01.2012.)

http://www.footprintnetwork.org/en/index.php/GFN/page/ecological_footprint_atlas_2010

According to Ecological Footprint Atlas 2010 edited by Global Footprint Network, Europe has a total land area of 2.220 million hectares of which 1.488 million hectares are counted as bio-productive in the National Footprint Accounts. The total bio-capacity of Europe is 2.113 million gha, and has 2.91 gha of bio-capacity per person, which means higher than the global average (1.8 gha per person).

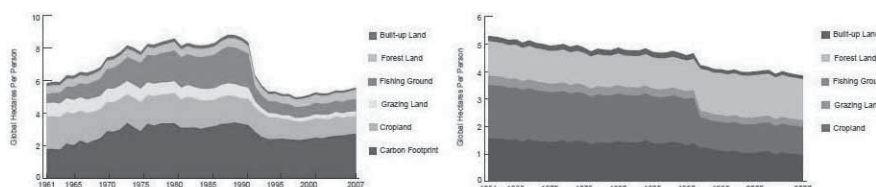


Fig. 5: Ecological footprint and biokapacitet in Europe (gha / person)³⁰

An average European resident has an EF of consumption of 4.7gha, much higher than the global average of 2.7 gha per person. The residents of Moldova have the lowest average footprint of consumption in Europe at 1 gha per person and Denmark has the highest of 8.3 gha per person.

The average footprint in Serbia is 2.4 gha per person, total bio-capacity of 1.2 gha per person and ecological deficit or reserve of 1.2 gha.³¹

Basic tenets of sustainable development are the fact that the modern world was “already faced with a common responsibility and the need to align its development with the needs of people and nature and with the awareness that the Earth must be saved for the current and future generations of people. The obligation of the present generation to leave descendants at least chances as likely to develop as it has derived from the fundamental principle of moral justice, which is that all people have equal rights and the broadest freedoms that do not violate the freedom of others. The present generation has the right on resources and a healthy environment, but may also jeopardize the rights of future generations.”³²

The Serbian government adopted a National Strategy for Sustainable Development in May 2008. The main objective of sustainable development is to balance three key factors, i.e., three pillars of sustainable development: sustainable development of economy, commerce and technology, sustainable development of society based on social balance and environmental protection with the rational management of natural resources. At the same time, the aim of the strategy is to bring together the three pillars of the whole, which will be supported by the relevant institutions. A long-term concept of sustainable development implies continuous economic growth with economic efficiency, technological progress, cleaner technologies, innovations across society and corporate social responsibility, reduces poverty, secures a better long-term use of resources, prevention of new pollution and biodiversity as well as the improvement of health conditions and quality of life and reduces pollution to levels that environmental factors can withstand.

In order to implement national sustainable development strategy, an Action Plan for strategy implementation has been adopted³³. This Action Plan identifies the measures and activities necessary to implement the National Strategy for Sustainable De-

30 Ewing, B. et al. pg.57.

31 Ewing B., Moore D., Goldfinger S., Oursler A., Reed A., Wackernagel M.: Ecological Footprint Atlas 2010, Global Footprint Network, 13. October 2010, Oakland, CA, USA, http://www.footprintnetwork.org/en/index.php/GFN/page/ecological_footprint_atlas_2010, pg.56.

32 Nacionalna strategija održivog razvoja, (Službeni glasnik RS broj 57/08)

33 Akcioni plan za sprovođenje Nacionalne strategije održivog razvoja za period od 2009. do 2017.godine (Službeni glasnik RS broj 22/09).

velopment of the Republic of Serbia. Through the action plan for the implementation of national sustainable development strategy from 2009 to 2017 it is necessary to reduce of ecological deficit in order to achieve sustainable development.

The sustainable development of a state cannot be successfully implemented if the implementation of all activities does not include all three sectors: public, private and civil, and individuals and citizens, as well. Therefore, it must be stressed that the Action Plan for the implementation of sustainable development strategies in most of the measures and activities of relevant institutions and partners in implementing institutions are held accountable for planning, coordinating and monitoring the implementation of specific measures and activities.

CONCLUSION

Today's living environment is certainly very different from the environment decades ago, not only in terms of the natural environment but also the social environment. It is obvious that the conditions on the planet as well as the planet itself have changed in the past decades in the way that only the most courageous visionaries could predict. One of the basic needs of modern man and modern society is the certainty of the fate of most goods and values which individual countries or the global international community have, or aspire to possess, and there is no doubt that in modern conditions the safety of the biosphere (living environment) will also be one. The main factor content of environmental security is to ensure basic living conditions (unrestricted access to drinking water, clean air, fertile soil, food), and this is the result of the efficient storage of these goods. The safety of the biosphere is the basis of all other security systems. There is no doubt that man is by nature a human being who always wants to achieve an enviable level of safety and maximum comfortable life, and that is the modern concept of environmental security which is based on maintaining the global biosphere as a basis of human existence. The most developed and most powerful species in the biosphere is a man, who with his various activities has the greatest impact on the biosphere. Today, all parts of the biosphere are close to human activity, and therefore, are under his direct influence. No doubt that the safety of the biosphere is the basis of environmental security and the concept of sustainable development seeks to achieve economic security and social justice taking into account the ecological balance. The realization of the ecological balance is achieved through the concept of ecological footprint, in a quantitative manner that indicates how much biologically productive area of the biosphere is used in the development of modern society.

Ecological footprint is a kind of new method which measures the impact of human pressure on global ecosystems, the biosphere, expressed in a global average units, global hectares (an area equivalent to a normal hectare but adjusted for average global productivity). It is a measure of biologically productive areas of land, water and air that the modern society needs to meet the daily needs for food, water and air. Ecological footprint expresses the area of land and sea that is required in modern life and work, the need for energy, transportation, modern living standards of the products. Based on the ecological footprint of the budget, the spending is determined by using the natural resources and providing for modern society activities aimed at reducing the ecological footprint and achieving security of the biosphere.

The interaction of social systems and systems of the biosphere, in which all individuals have equal and reasonable access to goods arising from the biosphere are a prerequisite for achieving environmental security. Based on ecological footprint

accounts that are comprehensive, concise, scalable, applicable and credible, the human activities can be managed in the way to reach the environmental security that is necessary.

At the same time ecological footprint is an indicator of sustainable development which has characteristics of a fundamental right. According to the concept of "sustainable development", when we talk about satisfying the needs of individuals, we do not consider fundamental individual rights, but basic social rights, which are to meet the needs of the whole group of people. Ecological footprint can be calculated for individuals, nations, states, producing processes. It is very important to notice that the result of ecological footprint calculation indicates the level of threats to environment resources and also the level of ecological security of the biosphere's components. According to the results, it is necessary to take appropriate measures in achieving necessary level of environmental security and sustainability. Bearing in mind the aforementioned, there is the right of every individual of human society to live in ecologically safe environment on the one hand, and at the same time, it is the obligation of each individual to take care of and to preserve the existing limited natural resources.

Ecological footprint as a new methodological approach to assess environmental security and sustainability should continue to develop and explore its advantages and disadvantages. Finding and adopting unique standards that would be broadly applicable to local and global level is the next step in its successful application in practice.

Modern man has taken upon himself the responsibility to respect the safety rules on the planet in order to preserve a constant energy balance of material flows. It is important that the needs of today's man are fulfilled, but in such a way as to preserve the nature, so that future generations would be able to have access to natural resources which should be one of the most important goals of modern society.

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EUROPEAN UNION CIVILIAN CAPABILITIES – POLICE MISSIONS IN THE BALKANS AND FUTURE DEVELOPMENTS

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Abstract: At the Cologne Summit in December 1999, the European Union committed itself in creating capabilities for future action through the European Security and Defence Policy. In this essay special emphasis is put on development of the European Union's civilian capabilities as part of the European Security and Defence Policy. The European Union so far conducted many military operations and civilian mission in different parts of the world, but the experience shows that its efforts more and more are reduced to civilian capabilities. Namely, the European Union has conducted or is still conducting more than 25 operations and missions, but most of them are civilian and related to police missions, rule of law missions, security sector reform missions or monitoring missions.

The essay presents the police missions conducted in the Balkans region, their influence on the ground and the experience that can contribute to the improvement of the civilian capabilities based on the lessons learned. The European Union conducted four civilian missions – The European Union Police Mission in Bosnia and Herzegovina, The Police Mission "Proxima" and EUPAT Police Advisory Team in the Republic of Macedonia, and the EULEX Mission in Kosovo which is in essence a Rule of Law Mission, but with police elements necessary for its realization.

At the end of the essay, a conclusion is given regarding the role of these police missions and some suggestions that could bring to future improvement of the European Union's civilian capabilities.

Key words: The European Union, civilian missions, police missions, the Balkans, the Republic of Macedonia.

INTRODUCTION – DEVELOPMENT OF EUROPEAN UNION CIVILIAN CAPABILITIES

The European Security and Defence Policy (ESDP) as an operational part of the Common Foreign and Security Policy (CFSP) was created at the European Council Summit in Cologne in June 1999, when the development of military and civilian capabilities for conflict prevention and crisis management and strengthening the EU's capacity for external actions started.¹ As far as the military capabilities for crisis management, member-states at the Helsinki Summit in December 1999, introduced the Headline Goal declaring that EU is capable of setting 60 000 troops, deployable for 60 days and sustainable for one year, known as Rapid Reaction Forces.² In 2004, the Headline Goal was further elaborated in Headline Goal 2010 introducing the concept of battle groups, European Security Agency and civilian-military

¹ Cologne European Council, 150/99 REV 1, Presidency Conclusions, Annex III, European Council Declaration on Strengthening the Common European Policy on Security and Defence, 3-4 June 1999.

² Helsinki European Council, Presidency Conclusions, December 10-11, 1999, Annex IV "Presidency Progress Report to the Helsinki European Council on Strengthening the Common European Policy on Security and Defence".

cells. At the Nice Summit in December 2000 new innovations were created such as the CFSP High Representative, the Political and Security Committee (PSC), the EU Military Committee (EUMC) and the EU Military Personnel (EUMP).³ When the European Council at the Laeken Summit in December 2001 adopted the ESDP Operational Capability Declaration, it officially confirmed that the Union is capable of undertaking wide range of military and civilian crisis management operations from peace missions and rule of law to protection of human rights.⁴

Civilian Headline Goal 2003 Following these initiatives, by the European Council Summit in Santa Maria de Feira in June 2000, EU made major steps in developing ESDP modalities, not only in the military area, but also in the civilian crisis management.⁵ First, with Council decision from 22 of May 2000, a Committee responsible for civilian aspect of the crisis management was established, acting as Council's working group; sending recommendations and advice to the PSC; developing concepts, instruments and capabilities for the civilian crisis management; planning and over viewing the progress of civilian operations and evaluating the strategic options identified by the Council.⁶ Second, the EU member-states, among the commitments for strengthening the civilian crisis management, agreed on creating an Action Plan for introducing four priority areas:

- **police**, enabling EU to conduct full range of missions, 5 000 police officers from whom 1 000, if necessary, can be deployed in period of 30 days;
- strengthening the **rule of law** with 300 experts (judges, prosecutors and others);
- strengthening the **civil administration** with experts that can act rapidly in situations where the local authorities are not prepared for the emerged crisis, and deployment teams in period of 3-7 hours; and
- **civil protection**, with evaluation teams for crisis situations and 2000 experts from different areas to be equipped and engaged.

Civilian headline goal 2008 Civilian Headline Goal 2008, adopted by the European Council in December 2004,⁷ is the first attempt to systematically identify which civilian capacities are necessary for the EU in order to be effective and operational. This process establishes numerous ambitions for ESDP progress and includes commitments to be capable of acting in civilian areas before the crises emerge. More specifically, Headline Goal 2008 calls for developing of capacities and enables the EU to:

- put in place integrated civilian crisis management packages;
- carry out competitive civilian missions in different level of engagement;
- be equipped for conducting several missions simultaneously, including at least one large civilian substitution mission at short notice in a non-benign environment;
- be set for a short period and capable for adopting a decision about the start of a mission in period of 5 days from the approval of the mission concept when certain capabilities need to be put in period of 30 days from the decision on launching the mission;
- cooperate with the army;
- promote coherence of EU actions through clear distribution of labour and close cooperation with international organizations.

3 Nice European Council, Presidency Conclusions, December 7-9, 2000, "Annex VI, On the European Security and Defence Policy, II. Establishment of Permanent Political and Military Structures."

4 Council of the European Union 15891/05, Presidency Report on ESDP, Brussels, 19 December 2005.

5 Santa Maria de Feira European Council, Presidency Conclusions, 19 and 20 June, paragraph C.6; "Annex I, Presidency Report on Strengthening the Common European Security and Defence Policy".

6 Council Decision 2000/354/CFSP of 22 May 2000 setting up a Committee for civilian aspects of crisis management, OJ L 127/1, 27 May 2000.

7 Civilian Headline Goal 2008, Council of the European Union 15863/04, Brussels, 7 December 2004.

Headline Goal 2008 combines the achievements of concrete targets in four priority areas with the introduction of the new areas:

Police. EU ambitions are focusing on capabilities development for conducting several police missions simultaneously. The Police Action Plan adopted by the European Council in June 2001 anticipates a framework for development of police capabilities so the ambitions could be operational, the development of planning concepts, the command and control, the rules of engagement, the support and sustainable interoperability, as well as specialists for organized crime and the rule of law.⁸

Rule of law. Support efforts for credible criminal and judicial system could act only if they back up the police forces.

Civil administration. EU missions concept has been adjusted in this area and joint experts capable for conducting administrative missions for securing or helping in securing basic services that cannot be offered by the national or local administration are created.

Civil protection. This area interweaves with the Commission's competences, because of the EU use of EC's mechanisms for intervention outside of the EU in the ESDP framework. Civil Protection Action Plan establishes measures for improvement of the EU response related with natural or human made disasters.⁹ The EC's Civil Protection Mechanism connects the national authorities with the Monitoring and Information Centre that can forward the request for assistance from one country through the network of national contact points. Communication and Information System – CESIS and Crisis Centre were created, bringing close the representatives of all Commission's departments at the time of catastrophes.

Monitoring. The EU concept for monitoring missions was approved by the PSC on 27th of May 2003. Potential monitoring tasks include observation and notification of the political situation, confidence building process between the war sides, reduction of the assistance to low level, monitoring the return of refugees, monitoring on human rights and monitoring on disarmament, demobilisation and reintegration.

Support for EU's special representatives. The EU started to identify areas of expertnesses that can be useful for the EU's Special representatives or in the future ESDP missions. These include experts in some priority areas capable to ensure advising on military, legal and gender issues, demobilisation and reintegration processes, security sector reforms, disarmament support, border control and others.

Civilian Response Teams. In June 2005 modalities were set up for the introduction of Civilian Response Teams (CRT). The exact structure and functions of these teams differ from the crisis situation. Potential tasks include execution of assessment and fact-finding missions, posing priority measures for beginning a full mission, or strengthening the existing EU crisis management mechanisms.¹⁰

The concept is developed according to the Civilian Headline Goal 2008 in order to strengthen the rapid deployment of the EU capabilities in the civilian crisis management. CRT will be drawn up from the joint experts nominated by member-states in several areas of expertise such as border police, administration, civil protection, logistics and operational support. The teams can be mobilized and deployed in a period of five days at the request of the HR, PSC or the Council and such deployment will not last longer than three months.

⁸ Police Action Plan, Annex to the Presidency Report to the Göteborg European Council on European Security and Defence Policy, 15-16 June 2001, Point III.9; Contributions of non-EU States to EU police missions in civilian crisis management, Annex to the Presidency Report to the Göteborg European Council on European Security and Defence Policy, point 7.

⁹ EU Action Plan, Council of the European Union, 5788/05, Brussels, 28 January 2005.

¹⁰ Multifunctional Civilian Crisis Management Resources in an Integrated Format – Civilian Response Teams, Council of the European Union, General Secretariat Document 10462/05, Brussels, 23 June 2005,

A decision to deploy a CRT for assessment and fact-finding purposes before a possible Joint Action was adopted by the Council on a Civilian ESDP operation taken by the PSC, the SG/HR or the Council in accordance with current guidelines on fact finding missions. A decision to deploy a CRT after a Joint Action was adopted by the Council, e.g. to establish a rapid initial presence and/or support the entry into operation of an incoming civilian ESDP operation as well as in reinforcement of existing EU mechanisms, and it was made in accordance with CRT procedures ensuring that CRTs can meet the objectives of the Civilian Headline Goal 2008 concerning rapid deployment.

European Gendarmerie Force. In September 2004, five EU member states (France, Italy, Spain, Portugal and Netherlands), that possess national gendarmerie forces with military status, agreed on creating multinational European Gendarmerie Force (EGF). The forces are not part of the ESDP, but are independent, special formation that can be designated under civilian or military command as an integrated police unit in the framework of ESDP missions. With such a police force, the EU should be capable to conduct operations between classic military intervention and civilian missions. EGF is operational from 20th of July 2006 and is firstly available for the EU, for conducting police missions in crises management operations. EGF is also available for ON, OSCE, NATO and other international organizations and *ad hoc* coalitions. In the command structure the highest body is CIMIN – Comité InterMinistériel de haut Niveau – composed of representatives of the responsible Ministries of each country, who ensure the political-military co-ordination, appoint the EGF Commander and provide him with directives.

EGF has permanent multinational operational headquarters directed by the EGF Commander and consists of a multinational core that can be reinforced as needed and by agreement of the Party States. The EGF HQ deals with the operational planning and, on request, contributes to the strategic decision-making process. In the event of an operation the Party States will designate a Force Commander for an EGF mission, while the units are designated based on defined chain of command that can be deployed under civilian or military command in order to guarantee public security and public order. The EGF HQ is based in Vicenza, Italy, and has an initial rapid reaction capability that is some 800 police officers deployable within 30 days. This includes members of the French Gendarmerie, the Italian *Carabinieri*, the Portuguese *Guardia Nacional Republicana*, the Dutch *Royal Marechaussee* and the Spanish Civil Guard. As the police units can reinforce the EGF missions, the total strength of the forces could reach to 2 300 police officers.

EGF has four component parts:

- multinational headquarters, responsible for operational planning and for the deployment and command;
- an operational component composed of mobile gendarmerie or equivalent units geared to general public security and public order missions;
- component specialized in judicial police operations, the fight against organized crime, intelligence, the protection of key individuals or witnesses, controlling population movements, combating terrorism and specialized interventions;
- logistic support component for the Force.

EGF can intervene during various phases of a crisis. First, during an initial phase, on arrival at the scene, the EGF could gain an access together with the military forces in order to execute its police missions. Second, during the transition or stabilisation phase, the EGF can continue its mission on its own or in cooperation with a military force, in order to facilitate the coordination and cooperation with

international or local police units. Third, during stabilized theatre phase the EGF could facilitate cooperative action under an international civilian authority, or be withdrawn. Fourth, for preventive engagement the EGF could be used in specific cases in the absence of other military force. Finally, during the final phase of withdrawal of the military component once the situation has been stabilized, the Force could facilitate the transfer of responsibilities to civilian authorities and the agencies participating in cooperation tasks, if required.

Civilian crisis management challenges. The first challenge is structural and relates to the internal rivalry among the European Council, HR and the European Commission which all have a significant impact on practical cooperation. The second challenge concerns the functional coordination of ESDP components across the EU institutions and the various directorates, secretariats and power-centres. Since some elements, such as counter-terrorism or civil protection, are equally relevant for internal and external security, this could complicate the coordination. Decision-making procedures and respective roles of member-states and the EU institutions differ among the institutions. Third, few member-states have interest in multinational civilian crisis management and often is not high-profile so its success is difficult to measure. There is little domestic support for sending scarce resources, such as police officers, judges, prosecutors and money. Fourth, there is a general reluctance to link military and civilian assets. Many European armed forces fear that their professionalism and war expertise are threatened by further civilian cooperation. Conversely, civilians are sometimes concerned that they will be “tainted” by involvement with uniformed personnel/combatants. Finally, there is no culture of the EU preventive engagement and the function will remain embryonic for some time.

THE EU POLICE MISSION IN THE BALKANS

Bosnia and Herzegovina (EUPM). Since the signing of the Dayton Peace Agreement in December 1995, the international police forces maintained the local stability in BiH. With its first crisis management operation, ESDP replaced the UN international police forces on 1st of January 2003 and maintained the local stability until 31st of December 2005 (EUPM 1).¹¹ When the initial period of three years ended, the EU agreed on a better focused mandate for reduction of EUPM (EUPM 2).

With 550 police officers, EUPM is smaller than the UN international police forces (table 1).¹² EUPM does not have an operative mandate, which means that monitors, authorized for establishment of law enforcement capabilities and for stability contributions, would not be present to observe police operations, but will ensure effective functioning of domestic police structures. EUPM HQ is located in Sarajevo; while more than 40 monitoring units are placed in the state-level police forces, entities, Brčko, cantons and public security centres. All EUPM activities are managed in close cooperation with EU's Special Representative for BiH. EUPM officers are placed at medium and senior level along with BiH police officers, acting as mentors and observers. The work of these officers is supported by two mobile inspection teams that can be shifted throughout the state if necessary. Specific EUPM goals are:

- development of police independence and accountability;
- fight against organized crime and corruption;

¹¹ Council Joint Action 2002/210/CFSP on 11 March 2002 on the European Union Police Mission, OJ L 70/1, 13 March 2002.

¹² UN International police forces had 1.600 personnel and annual budget of 121 million US dollars. Report of the Secretary General on the UN Mission in Bosnia and Herzegovina, S/2002/1314, 2 December 2002.

- securing finance viability and sustainability of local police;
- institution and capacity building.

For completing its goals, EUPM was included in seven programmes such as crime police, criminal justice, internal affairs, police administration, public order and security, State Border Service, State Information and Protection Agency.

Table 1: Personnel participating in the EUPM

| EU | Police | Civilians | Total | Third countries | Police | Civilians | Total |
|----------------|--------|-----------|-------|-----------------|--------|-----------|-------|
| Austria | 5 | 3 | 8 | Bulgaria | 3 | 2 | 5 |
| Belgium | 6 | 5 | 11 | Canada | 7 | 0 | 7 |
| Denmark | 13 | 0 | 13 | Cyprus | 6 | 0 | 6 |
| Finland | 13 | 5 | 18 | Czech Republic | 6 | 0 | 6 |
| France | 85 | 3 | 88 | Estonia | 2 | 0 | 2 |
| Germany | 76 | 6 | 82 | Hungary | 5 | 0 | 5 |
| Greece | 12 | 0 | 12 | Iceland | 1 | 1 | 2 |
| Ireland | 3 | 3 | 6 | Latvia | 4 | 0 | 4 |
| Italy | 51 | 6 | 57 | Lithuania | 2 | 0 | 2 |
| Luxembourg | 2 | 1 | 3 | Norway | 6 | 1 | 7 |
| Netherlands | 32 | 3 | 35 | Poland | 12 | 0 | 12 |
| Portugal | 8 | 2 | 10 | Romania | 9 | 0 | 9 |
| Spain | 20 | 6 | 26 | Russia | 3 | 0 | 3 |
| Sweden | 15 | 1 | 16 | Slovakia | 6 | 0 | 6 |
| United Kingdom | 55 | 9 | 64 | Slovenia | 4 | 0 | 4 |
| | | | | Switzerland | 4 | 0 | 4 |
| | | | | Turkey | 14 | 2 | 16 |
| | | | | Ukraine | 5 | 0 | 5 |
| Total | 396 | 53 | 449 | Total | 99 | 6 | 105 |

EUPM was criticized for the existence of weak and premature mandate and lack of effectiveness. Some police officers were sent without previous training, while others were sent without implementation directions or assessment protocols. A number of officers were unqualified lacking competence and with insufficient knowledge of English language, while at the same time they were not acquainted with the standard procedures for actions.¹³ Still, EUPM made important contributions for the establishment of credible criminal justice and crime prevention, as well as human trafficking prevention. The mission was included in the forums for the return of refugees and continued the development of state-levelled agencies. The importance of the mission's help in strengthening the State Investigation and Protection Agency as a police agency for fight against organized crime must be emphasized, too. Moreover, EUPM 1 experiences were taken into consideration in EUPM 2 which became operational in 2006 and focused on local police support in fight against organized crime, conducting inspection operations and monitoring of police, as well as the support of police restructuring implementation, with total number of 180 police officers.

EULEX Rule of Law mission (Kosovo). On 16th of February 2008, the EU Council decided on setting a Rule of Law mission in Kosovo. EULEX is the largest civilian ESDP mission with primary task to help and support Kosovo's authorities in the rule of law area, especially police, judiciary and customs.¹⁴ It is a matter of technical mission, working in the framework of the Security Council Resolution 1244 and it conducts mentoring, monitoring and advising, at the same time keeping certain limited executive competences. The EULEX mandate and the installation of around 1 400 officers began on 9th of December 2008. On 6th of April 2009, after the set up process, respectively the transition period of 120 days, a fully operational capability was declared, together with the rise of the personnel to 1 900 officers and 1 100 local personnel (table 2).

¹³ International Crisis Group, "Bosnia's Stalled Police Reform: 'No progress, no EU'", Report N° 164, 6 September 2005.

¹⁴ Council Joint Action 2008/124/CFSP of 4 February 2008 on the European Union Rule of Law Mission in Kosovo, EULEX KOSOVO, OJ L 42/92, 16 February 2008.

EULEX Police component, with total force of 1 400 police officers, is part of the full EULEX support to the Kosovo authorities in the rule of law area that will give assistance to the Kosovo police in creating multiethnic police free of political influence and will serve to the citizens of Kosovo. It is implemented through mentoring, monitoring and advising, with the designation of EULEX police officer in locations of the Kosovo police. Since the respect of local property principle is necessary, the EULEX police officers mainly operate as supporters, while the Kosovo police remain keystone in governing with the police on Kosovo.

Table 2: EULEX Staff as of April 2009

| EU | Seconded | Contracted | Total | Third countries | Seconded | Contracted | Total |
|---------------------|----------|------------|-------|-----------------|----------|------------|-------------|
| Austria | 26 | 4 | 30 | Croatia | 2 | 4 | 6 |
| Belgium | 39 | 5 | 44 | Norway | 8 | 0 | 8 |
| Bulgaria | 37 | 22 | 59 | Switzerland | 7 | 0 | 7 |
| Czech Republic | 23 | 1 | 24 | Turkey | 37 | 0 | 37 |
| Denmark | 54 | 5 | 59 | USA | 76 | 0 | 76 |
| Estonia | 6 | 2 | 8 | | | | |
| Finland | 58 | 18 | 76 | | | | |
| France | 181 | 13 | 194 | | | | |
| Germany | 132 | 9 | 141 | | | | |
| Greece | 30 | 7 | 37 | | | | |
| Hungary | 50 | 6 | 56 | | | | |
| Ireland | 9 | 7 | 16 | | | | |
| Italy | 176 | 25 | 201 | | | | |
| Latvia | 10 | 4 | 14 | | | | |
| Lithuania | 7 | 1 | 8 | | | | |
| Luxembourg | 2 | 0 | 2 | | | | |
| Malta | 0 | 1 | 1 | | | | |
| Netherlands | 30 | 4 | 34 | | | | |
| Poland | 120 | 12 | 132 | | | | |
| Portugal | 15 | 4 | 19 | | | | |
| Romania | 176 | 13 | 189 | | | | |
| Slovakia | 8 | 1 | 9 | | | | |
| Slovenia | 14 | 3 | 17 | | | | |
| Spain | 9 | 8 | 17 | | | | |
| Sweden | 82 | 6 | 88 | | | | |
| UK | 63 | 39 | 102 | | | | |
| Total | 1357 | 220 | 1577 | Total | 130 | 4 | 134 |
| Local Staff | | | 818 | | | | |
| Ground Total | | | | | | | 2529 |

The mandate anticipates the possibility of using correctional powers, which would mean intervention if Kosovo authorities fail to stop the violence against minority communities or in case of political influence which would undermine the rule of law. This refers to the execution of criminal investigations, arrests and enforcement performed by the international police officers who are not only advisers but also “executors” empowered to act on their own. Inheriting the UNMIK’s executive powers, EULEX team is oriented towards partnership that will gradually prepare authorities for the use of law when confronted with sensitive cases and reduce the international role only on monitoring the implementation of minority rights.

Both sides, Belgrade and Pristine, have completely different expectations regarding this EU mission. On Kosovo side there are opinions that the fundamentals of EULEX operations will be the Kosovo’s constitution, wherewith all possibilities for separation would be thrown away. On the other hand, the Serbian side has the standpoint that the mission’s success will depend on the Union’s readiness for solving numerous problems of Serbian population, establishing the rule of law, protection of property, safe and free movement, return of 200 000 refugees. Still, the EU’s mission will act in the frame of the Kosovo law and therefore, regarding the neutral status, most probably will strengthen the Kosovo’s statehood status. Therefrom arise possible difficulties in the realization of mission’s targets, as well as serious challenges, not least among them the contrary interest of Belgrade and Pristine. But, if things go wrong, EULEX could lose both sides.

EUPOL Proxima (The Republic of Macedonia). Proxima is a civilian mission for a gradual stabilization of the country and support of the police reform process, with special emphasis on the fight against organized crime. On 29th of September 2003, the EU Council adopted a Joint Action for Establishment of EUPOL Proxima from December 2003 after the termination of "Concordia", for an initial period of 12 months, respectively from 15th of December 2003 until 15th of December 2004,¹⁵ just lately to be continued for an additional year.

The operation did not have an executive mandate, it had extremely short planning period, thus not allowing the elaboration of well defined mandate. The aim was monitoring and advice, both on the central and local levels of Macedonian police forces and support of developing professional and efficient police service, capable of fighting against organized crime according to the international police standards. A general aim of Proxima was keeping an environment that will facilitate the implementation of the Ohrid Framework Agreement (OFA).

After the conclusion of the OFA, Macedonia made a significant progress towards stabilization. External military presence successfully contributed to the implementation of the OFA, giving opportunity to national authorities to focus on priority reforms and achieve progress towards the EU integration. While the extension of violent ethnic conflicts could not be repeated, the organized crime, corruption and the weak economy continued to be major threats for the security of Macedonia. Despite government efforts, Macedonian police forces remained incapable to confront these security threats and did not gain public confidence regarding its law enforcement competence. Consequently, such situation caused the failure of building multiethnic police, weak communication and coordination, and centralized control of the police sector.¹⁶

Proxima obligated to close cooperation with local authorities and active cooperation with OSCE activities. The mission was composed of approximately 200 unarmed police officers from the EU member-states (at that time 15 member-states and 10 other states that joined the EU on 1st of May 2004, along with Bulgaria and Romania which joined the EU on 1st of January 2007), third countries (Turkey, Norway and Iceland) and international and local civilian personnel recruited on a contractual basis by EUPOL Proxima.

In line with its mandate, law enforcement monitors were established for improvement of the cooperation between all criminal and judicial system bodies, on one hand, and monitoring on the internal control unit, on the other hand. So, in order to increase the public confidence in the police, one of the monitors' tasks cooperating with local police officers was to help the internal control unit in investigating police misconduct. Thereby, the task comprises of monitoring concrete procedures, such as cases of investigation against police officers. While, on one hand Proxima was included in the fight against human trafficking, on the other hand its basic task in confronting this issue was to raise awareness of the problem and improve the capabilities regarding the investigation of suspicious cases.

Proxima head command was stationed in Skopje and a central unit of 10 officials was designated in the Ministry of Interior for advising the local police in the fight against organized crime and transforming it into a multiethnic service. Around 30 police officers were set on borders with Albania, Kosovo and Serbia, while additional 150 officers were set in regions with possible ethnic confrontation. Mission

¹⁵ Council Joint Action 2003/681/CFSP of 29 September 2003 on the European Union Police Mission in the Former Yugoslav Republic of Macedonia, OJ L 249/66, 1 October 2003.

¹⁶ International Crisis Group, "Macedonia: No room for complacency", Europe Report N° 149, 23 October 2003.

budget was 15 million euros for the first year, partly financed from the Community budget and every contributing state bears the expenses for its designated police officers. On 26th of January 2004, EU's foreign affairs ministers adopted a Joint Action that complement the original Joint Action, establishing maximum amount of 6.5 million euro from the Community budget necessary for everyday's personnel expenses. EU officials stated two major challenges that had influence in the building process of Proxima and its capability for achievement of the tasks:

- the shortage of personnel - the force generation process for Proxima has shown that Member States still face difficulties in meeting needs and fulfilling vacant positions in the mission. Shortfalls are also due to financial considerations, and in this case were linked to the question of whether per diem costs should be covered by the Community budget or Member States – an issue which is still decided on a case by case basis for civilian ESDP operations.
- procurement procedures - two months after its formal launching, Proxima still lacked essential materials. Such materials should have been financed by the CFSP budget, but the lack of a start-up fund for crisis management operations and the cumbersome EC procurement procedures prevented a more rapid response.

In the field, Proxima had support and cooperation from the local authorities and the police, while the EU officials and Proxima personnel considered that there was a need for better information exchange and granted access to classified information between EU and Macedonia. Proxima's significance for ESDP is twofold. Firstly, Proxima confirms the EU continued commitment to the democratisation process in Macedonia and more specifically to specific rule of law criteria. Secondly, the mission is also a sign of the EU's ability to adapt the tools of ESDP to specific situations, with specific needs.

Although Proxima was confronted with major challenges from the beginning, because of the complex environment and the presence of numerous international participants, it was underlined that huge improvements were noticed in the work of the Macedonian police. But, there is still a lot of work, because more than two years were necessary to change police methodology. This was also confirmed by the International Crisis Group Reports, stressing that police reforms achieved a significant progress, that the mission produced noticeable results, concluding that the mission was more successful than the EUPM in BiH.¹⁷

Beginning from 1st of January 2006, Proxima mission was replaced with the EU's Police Advisory Team (EUPAT), enabling easy transition of ESDP instruments to Community projects. With the establishment of EUPAT, the EU continued with its efforts to support the police reforms. It began on 15th of December 2005 for an initial period of 6 months.¹⁸ A basic goal of the EUPAT was to assist Macedonian authorities in modernizing police structures as a priority area for further progress towards the EU. With 1.5 million euros budget, the team was created of 30 experts for monitoring and mentoring the Macedonian police in the fields of border management, public peace and order (particularly cooperation between the police and the judiciary, professional standardisation and internal control), and the fight against corruption and organised crime.

17 International Crisis Group, "Macedonia: Wobbling toward Europe, Europe Briefing No. 41, 12 January 2006, p. 1.

18 Council Joint Action 2005/826/CFSP on the establishment of an EU Police Advisory Team (EUPAT) in the Former Yugoslav Republic of Macedonia of 24 November 2005, OJ L 307/61, 25 November 2005.

LESSONS LEARNED

Bosnia and Herzegovina. Although the EUPM officially started on 1 January 2003 with a three-year mandate, the Planning Team had been preparing the transition from the UN's international police forces from 2002. It has to be noted that the EU did not have any manual for crisis management procedures at that time, thus it effectively had to learn by doing the tasks of how to launch an operation from scratch. The planning of the EUPM demonstrated the convoluted character of the decision-making process surrounding the launch of an EU operation, with several bodies involved in Brussels (from the working group level to the Council of General Affairs and External Relations).

EUPM was conceived as a mission of different nature. What was necessary in BiH was not an executive mission, but a mission for monitoring and advising the reform process of police forces. In order to achieve its goals, EUPM needed police officers with specialised skills and management experience. The reality is that most officers sent to EUPM lacked the skills and competence to effectively mentor, monitor and inspect Bosnia's police management. More importantly, the EU has so far failed to define the European standards of policing which indicates the lack of any serious definition of policing 'product' the EU should offer. An attempt was made to resolve the issue by assigning specific EUPM programmes to individual member states. While this *ad hoc* solution helped establish certain standards for the programmes, the question of what the EU can offer has not been answered yet. Not only did it create the impression that EUPM was not much more than a bilateral cooperation, but it also generated some mistrust and competition among the different national contingents involved. On the other hand, the weak internal coordination and communication influenced the mission, especially in the last 18 months of the mandate.

Regarding the coherence, the EU has deployed all its CFSP assets in Bosnia – the EU's Special Representative, the EU Monitoring Mission, EUPM and EUFOR Althea. This is a significant achievement, but not the end. The coherence among the different EU instruments in BiH is in dire need of improvement. With regard to policing and the fight against organised crime, the situation at the end of 2005 was confusing because EUPM had a mandate to strengthen Bosnia's police forces through monitoring, mentoring and inspecting with particular emphasis on the reform process of the local police. On the other hand, the coordination with the military operation Althea, was used in a badly manner. Although, in theory both mandates did not confront, during the first year of Althea there were mutual tensions. Althea mandate was to maintain a safe and secure environment in Bosnia by supporting the fight against organised crime. Based on this task, Althea conducted several high-profile anti-organised-crime operations, initially without even informing the local police. Meanwhile EUPM continued to concentrate on local ownership and on strengthening the local police's capacity to tackle organised crime. This glaring contradiction in the way the two operations assessed and worked with the local police is a painful example of the lack of coherence between the mandates and the *modus operandi* of the two ESDP missions. Not only did EUFOR's more robust approach to the fight against organised crime fail to cohere with EUPM's work, but it actually undermined its efforts to promote local ownership. At the end of 2005, efforts were made to close the gap, when EUPM, EUFOR Althea and the EU's Special Representative agreed on seven principles of coordination and cooperation:

1. The EUPM, EUFOR and the EUSR will strengthen their complementing and coordinating roles in the fight against organised crime.
2. The EUSR will take responsibility for this coordination.

3. The relevant EU participants will observe the general guidelines for increasing cooperation.
4. The EUPM will play a more proactive role and take the lead in coordinating the policing aspects.
5. The EUFOR will coordinate and align its future anti-organised crime operations with the EUPM.
6. A task force will be set up to develop a joint action plan delineating the tasks, goals and benchmarks for the relevant EU instruments.
7. This joint action plan will align with and support the efforts of the BiH authorities.

More has to be done at a strategic level in Brussels. In this regard, the current structure of the Council Secretariat is unsupportive. The various operations deployed in Bosnia respond to different Directorates-General (DG) in the Secretariat in Brussels. Whereas EUPM fell under the auspices of DG IX - concentrating on civilian crisis management, DG VIII deals with the politico-military aspects of EUFOR, and DG VI has responsibility for the EUMM and the EUSR. The problem is that each DG has its own dynamics, interests and objectives, which are reflected on the mandates and the way they are formulated, implemented and negotiated with other DGs. What the Secretariat is in dire need of is an Operations Department, where joint planning between military and civilian stakeholders is possible. The created Civil/Military Cell might turn out to be a solution of this much-needed structure, but a more comprehensive restructuring of the Secretariat will be needed as well.

The subsequent mission launched in January 2006 is more limited regarding its personnel and objectives - it focuses on assisting police reform, combating organised crime and supporting the capacity-building, which seems a more realistic mandate. The new EUPM mission has a stronger, more proactive role in the fight against organised crime, assisting the local authorities in planning and conducting organised crime investigations, arising from the seven principles agreed on among the EUPM, EUFOR and the EUSR. With this new mission, the EU has tried to overcome some of the pitfalls of the previous one. For example, it has strengthened the inspecting component. Hence, one of the new strategic priorities is to assess the accountability of the local police by monitoring the operations carried out by local police forces, as well as the conduct of individual police officers. Two mobile inspection teams have been created to carry out this task.

The lessons gathered from this mission helped to enhance the EU's crisis management procedures. First, the planning phase has improved, through developing of "framework participation agreements" and the "model participation agreements" for the inclusion of officers from non-EU member states. The former is an agreement with a five-year duration, which would be used in the instances of states that usually participate in ESDP operations, such as Norway, Iceland, Bulgaria, Romania, Turkey or Canada, to fix the terms of their contributions, the chain of command and financial aspects. The latter are meant to facilitate case-by-case negotiations with states that might join EU missions only occasionally. These agreements should help speed up the EU's response time in launching crisis management operations.

The lack of qualified and experienced personnel has also been identified as one of the main limitations during the implementation of the EUPM, along with the lack of commitments from member-states to secure the necessary resources for ESDP civilian crisis management operations. A roster at the EU level could enhance the quality of the personnel in ESDP operations, allowing experienced persons to participate in later missions. In this respect, the Council has approved a new standard

training concept that has the potential to increase interoperability among civilian officials from different member states. From this training concept, an EU Training Programme in the field of ESDP has recently been developed.

The EU should remember that at the time it took over responsibility from the UN and NATO, Bosnia had been stabilised and generally peaceful. As the EU proposes to deploy its assets further afield, it should bear in mind that not all theatres will be as relatively forgiving as Bosnia. While Bosnia was a good training ground for ESDP instruments, neither EUFOR nor EUPM were tested according to the purpose for which they were created - crisis management. EUFOR was deployed in a country largely stabilized and preparing for negotiations on a stabilization and association agreement with the EU. EUPM, in turn, ran a series of programmes and projects mostly undertaken by the Commission rather than crisis management. On the other hand, when it comes to the build-up of the EU's crisis management activities, ad hoc methods still prevail in the EU's practices. Unless the EU streamlines its crisis management procedures and structures in Brussels, defines what it has to offer more clearly, and improves its coherence on the ground, ESDP will not fulfil its true potential.

To a certain extent some of the pitfalls of the mission were due to the fact that it was the EU's first police mission, so the EU had to "learn by doing" the tasks of planning and implementing this kind of exercise. This also introduced a degree of pressure on the operational activities of the mission because from the planning to the implementation stage, "it had to be a success". In the case of the EUPM, there was a long lead-time to prepare the mission, but the EU will not always have so much time, and thus, will need to streamline its structures and speed up its crisis management procedures to be able to respond in an effective manner to international crises.

Other issues highlighted by EUPM officials were linked to the local context in which the mission had to operate. Challenges related to the fragmentation of the Bosnian police forces, ethnic tensions, corruption and a fragile economy affected the implementation of the mandate. Nevertheless, the EUPM operated in the same context as the International police forces and better consideration should have been given to these issues when designing the EUPM. On the other hand, the planning and implementation of the EUPM provided the EU with a number of lessons that can be used for the improvement of its crisis management capabilities.

Kosovo. Kosovo continues to be faced with major challenges, both on the inner and outer scene - the EU was not able to form a common position regarding the province's independence, fewer countries recognized Kosovo than it had been expected, and most importantly, Kosovo still faces economic, social and minority rights challenges. In December 2008, the EU Council praised the progress achieved in certain areas, especially adopting laws, but indicated that major challenges still exist and that progress should be made in strengthening the institutions and the rule of law, protection of Serbian and other minorities, fight against corruption and organized crime, budgetary and tax reforms and improvement of living conditions.

On 26th of December 2008, the UN Security Council gave permission for the EU's rule of law mission, under the umbrella of UNMIK. Thereby, EULEX acts as a technical mission with neutral status. But, what represents the neutral status for EULEX? Can the establishment of the rule of law mission be neutral and reject the fact of statehood? What meaning will the constitution of Kosovo have if there are two competences at the same time? The mission gain several impacts as a result of discussions about the legality of its actions, mandate width, and the time and place of operations. The credibility of so far the largest ESDP mission has already been questioned, putting the CFSP efficiency at stake.

EULEX rule of law mission in Kosovo was capable of realizing its first, but limited, success when it reached an agreement on the deployment of the mission in all parts of Kosovo. While Serbia remains unsatisfied with the mission deployment in Serbian parts of Kosovo, the desires of Serbian authorities for their EU membership ambitions enabled the deployment of the mission through the entire province. It should be noted that the EU unanimously adopted a decision for the EULEX mission in Kosovo. However, its interpretation reveals a conflict between both parties, because it is a matter of status question linked with the definition of its deployment and mandate. EU member-states that recognized Kosovo interprets the decision for EULEX deployment with the meaning that it will work along with the Kosovo authorities and institutions. The opposite opinion of such view is based on the fact that the joint action is accepted because EULEX does not prejudice the status question while it is according to the UN's Security Council Resolution 1244. On the other hand, the government of Kosovo wishes to see EULEX position clearly in favour of recognizing an independent Kosovo and it plays an important role in the implementation of the constitution; Serbia and the ethnic Serbs living in Kosovo want to see the mission remain neutral towards the status question. However, such neutrality will be difficult to maintain and unity among EU Member States might erode.

The slow and much delayed start of the mission, combined with EU Member States decision to negotiate directly with the Serbian authorities on the mission's deployment, has contributed to forming a negative image of EULEX among the entire Kosovo population. While its achievements will be a test case and will determine its success, it has not yet undertaken the promised dialogue with the population and with civil society. Moreover, technical complications continue as UNMIK retains a phantom presence and cannot depart the province as it must continue to operate under the UN Security Council Resolution 1244. However, despite the continued but limited presence of UNMIK, the vast majority of projects - notably in the field of justice, state-building and police training - will fall under the mandate of EULEX, while NATO is responsible for the training of the newly formed Kosovo Security Force.

While EULEX will play a central role in the future development of Kosovo, not only in the field of police and justice, but also in overall policies and actions, it will most importantly be confronted with the status question in the very near future and preserving neutrality on the matter will be increasingly difficult. Finally, ensuring and strengthening a unanimous position between the EU Member States will constitute a key instrument for the EU's credibility and for the future of Kosovo on the international scene. Most importantly, the mission will also be a crucial test case for the EU and for future EU missions in the field.

The Republic of Macedonia. In the case of Macedonia, the expression of the EU's continuing commitment to support the peace process in the country and to bring it closer to the Union is translated into the presence of both European Commission instruments and Council capabilities in reforming the Macedonian institutions. The Macedonian case is heralded by EU officials as its big success and as having provided a useful testing ground for future efforts in crisis management, with police reform in the country being a particular area from which the EU holds that it has learned important lessons.

EUPOL Proxima was the second police mission falling under the ESDP, but unlike the EUPM in BiH, which took over responsibility from the UN International Police Forces, it was the first EU police mission to start from scratch, that is, from a concept to a fully operational mission. The deployment of EUPOL Proxima was preceded by a joint European Commission–Council General Secretariat fact-finding mission to assess the Macedonian police structures and understand the needs of

the country. In an effort to learn from past missions, this approach was used again in 2004 when the EU planned its Rule of Law Mission in Georgia and when assessing the possibility of a monitoring mission to the Ukrainian–Moldovan border. The lesson was similarly applied in 2004 when the EU explored the possibilities of EU civilian crisis management activities for Iraq, or security sector reform in the Democratic Republic of Congo.

The short two-month planning period, however, did not allow the development of a well-defined mission. The short planning phase highlighted that force generation and procurement are not easier for the EU than for the UN or the OSCE - force generation for EU missions happens in an ad hoc manner across the member-states and often leads to delays and shortfalls. In addition, the EU has no mechanisms for the rapid delivery of ESDP police resources. The Commission's current rules for procurement are a particular problem, which apply to ESDP civilian crisis management missions.

First, Proxima had a stabilizing effect. But in some parts of crisis regions, local police were incapable of maintaining the public order. Macedonia was overwhelmed with weapons, at the same time suffering economic stagnation and high unemployment rate. The second important factor limiting the mission's success was the delay of adopting the Law on police, later adopted in 2006 when the mission was over. One of the main innovations of the law was the decentralization of the decision making and management of the police. Third, the international participants, especially UN and OSCE, were present in Macedonia since its independence, so the presence and mandate of Proxima was constantly questioned from other international participants, because the mission was the last one to arrive to an already very crowded scene of international participants with competing mandates. This was further aggravated by Proxima's weak exit strategy: the decision to terminate the mission was largely predetermined by political reasons, namely the Macedonian perception that the presence of a crisis management mission could jeopardise chances for positive avis from the Commission.

Regarding the improvement of EU capabilities, Proxima produced major success. First, its advice had a positive impact on the fight against organized crime. This was the result of the mission's work on establishment of departments for fight against organized crime in the Ministry of the Interior and in the Public prosecutor's office. Another successful area was the internal control, where Proxima could accept appeals for police misconduct and ask for official investigations and further monitoring. Besides these achievements, the EU could have achieved more if the mandate had been extended for another year. EUPT was too small and with a short mandate. The Macedonian government welcomed the Police Advisory Team "under certain conditions", insisting to be presented as a reform-oriented effort rather than a stabilization-oriented, not defined as "a mission".

Proxima generated a number of lessons relevant to the civilian ESDP. First, EU Council Secretariat and the European Commission started to improve resources and procedures related to general mission support. Second, it demonstrated that the deployment of police mission in only one part of the country is ineffective. Any serious policing or legal shortfalls are probably routed in the dysfunction of the state's police apparatus or judicial system, particularly if it is highly centralized. On a related note, Proxima could have had a greater impact if it had had a more intrusive mandate. The experience of the EUPM in BiH shows that an inspection mandate is an important tool in any strengthening mission, because it empowers the international police officers to have full and unimpeded access to all documents and information held by the host country police chain of command. In addition,

it gives them the right to initiate and lead independent investigations into possible cases of obstruction, manipulation, corruption and other cases of police mismanagement. The third lesson is that training is an important element in any reform of post-conflict policing. In the Macedonian context, the decision to exclude a training dimension from Proxima could be justified as other international participants were focusing on police education. Still, the lack of rapid response capability to address training shortfalls limits the impact of a strengthening mission.

A difficult start of Proxima suggests that ESDP fact-finding missions and planning teams should include a program department capable to undertake the necessary preliminary assessments, prepare start-up packages for incoming mission members and ensure that appropriate mechanisms are in place to coordinate mission activities with reform initiatives of the Commission, member-states and other relevant international participants. In this respect, the EU Council Secretariat needs to be strengthened. The point that the Council General Secretariat remains without necessary resources when it comes to ESDP support was also driven by its inability to transfer insights across missions. For instance, Proxima and ESDP simultaneously underwent reorganization, but the Council Secretariat proved incapable of managing these reforms in a coordinated manner, thus missing an opportunity to standardize working methods and approaches across civilian ESDP operations. Also, Proxima found out the hard way that there is no wider concept of defining the division of responsibilities, scripting the transition from ESDP co-location to institution building by the European Commission.

Useful lessons that arise from EUPOL Proxima's experience for future crisis management operations include the handing over of a mission (from Operation Concordia to Proxima), mission planning and set-up, the need for carrying out joint Commission–Council fact-finding initiatives and the use of benchmarking for evaluating progress and performance. Proxima has also highlighted the benefits of ESDP civilian operations: EU police advisers are in the field alongside local police and have a real sense of the situation. It has also become clear that missions can be set up faster by the Council than the Commission and that it is easier for the Council to find the necessary resources.

CONCLUSION

The EU's responsibilities regarding security issues do not mirror the principle of collective defence of NATO, where member states are required to assist one another when attacked by a third country. Other tasks, such as actions inside the EU under the umbrella of "homeland security", are currently not part of the ESDP project. Instead, ESDP is distinguished specifically by its focus on "out of area" missions. This particular structure and orientation distinguishes ESDP from other international security regimes, as well as from the security and defence policies of its own member states. Consequently, European integration is "sui generis" in terms of its security and defence policy. Yet, in which specific security cases must the EU intervene, in what way do intervention policies advance the strategic objectives of the Union and, most importantly, in which cases and under which conditions must the Union rely on hard military power?

Not only in former Yugoslavia, but also elsewhere (Sierra Leone, Rwanda and Somalia), diplomacy alone achieved nothing. Changes in strategic culture are slow to emerge, and Europe is still constructing a new strategic culture for the 21st century. Nevertheless, it is important to understand that strategic culture evolves, it is not

an unchanging condition. Change is often precipitated by crisis, Kosovo in 1999 is a key example, after which ESDP achieved its clearest expression yet at the Helsinki summit in December 1999. The key issue remains that Europe is still determining its role in security and defence, but it has undoubtedly progressed from a traditionally nationalist or state-bound prism.

The question of capability is as yet unresolved. ESDP may be emerging as a primarily civilian instrument. Most of the so far conducted missions are civilian, which potentially represents a moving of the goalposts from Helsinki. Without capability, ESDP is more of a concept, and lacks implementation, despite limited evidence from missions thus far. In order to punch its weight in the changing international environment, and in order to meet its security responsibilities, this would need to change – hence the development of ESDP having a solidly political character, and to all intents and purposes being a response to the weakness of CFSP.

Conflict prevention is clearly an EU interest and involves an emphasis on financial and technical assistance. This is embraced by ESDP, but centres on the role of the Commission, although involves other actors - PSC, HR, the Council, as well as representatives of some governments. The institutionalization of ESDP will depend on the extent to which policy making is subject to the Community method typical of the Commission, or instead is subject to intergovernmentalism. Four significant missions involving the deployment of troops – Macedonia, BiH and Congo – were all either in conjunction with NATO, or were extensions of NATO efforts under Berlin Plus or were in response to a UN request and led by a single member state. All the complexities of the infrastructural and institutional arrangements contribute to a lack of continuity in EU decisions on security matters. It is noticeable that the management and coordination at an institutional level of security matters shows an increasing role for the Commission, and needs to be understood in the context of the multidimensional and multilevel nature of EU and member state interventions in the field of security.

Since ESDP became operational, EU is a significant actor, both in security and defence. From 2003 to 2006 the EU engaged in 16 missions, while by March 2009 further 9 missions started and there are a total of 27 ESDP/EU missions to date, 13 of which have been completed, 14 are ongoing. Of the current 14, only Althea in BiH and EU NAVFOR in Somalia are categorised as military. All other missions are civil-military, security sector reform, border management and monitoring missions.

The scale of European troop deployment and progress towards the Headline Goal indicate that ESDP was quickly operational. The breaking of taboos regarding out-of-area deployment and the participation of troops is indicative of rapidly changing perspectives of EU governments on security issues. But the argument that this means the Headline Goal is practically met is naïve, as the majorities of these missions are under UN, NATO or national operations and have little to do with ESDP. ESDP Missions are based on multilateral consensus and legitimacy afforded by other institutions. Next is the lack of Parliamentary scrutiny of ESDP Missions. It is the EU Council which launches and ends missions and this power does not lie with parliaments. Missions are often under resourced and very small. Member states frequently lack sufficiently skilled and experienced personnel to contribute to operations. Related to this is the need for effective training, often the secret to the success of a mission. Civilian ESDP operations are a growing area and it is vital that the EU is able to contribute effectively in this area. The lack of a clear strategy of intervention and common priorities has negatively impacted on the coherences and effectiveness of ESDP. However, the integration of civilian and military elements has

enabled the EU to gain credibility and political weight as a security actor. EULEX mission could present significant tests of ESDP if the situation in the field was to deteriorate markedly.

Based on the operational experience, the EU military doctrine is mostly confined to crisis management, which involves policing and police-related activities such as training of local police forces or election monitoring and peacekeeping, which involves the deployment of military forces but not necessarily the use of force – except as a last resort. EU military doctrine, if such a thing exists, is rooted in an adherence to principles of multilateralism, which is not usually the case for a state military doctrine. There is no certainty that ESDP is currently equipped to manage a crisis of a similar proportion to that which engulfed Kosovo in 1999.

The issue of the political concept of European security policy can be boiled down to a single question: Is ESDP in the 21st century primarily just a project oriented towards European defence or towards international peace and order? In the European debate these two approaches tend to be presented as complementary parts of a comprehensive EU security policy, not as separate entities. However, if one considers closely the specific realm of ESDP, in particular its political mandate and its civilian and military capabilities, the two approaches are very different in actions and decision-making principles.

According to the defence-oriented approach, the primary task of ESDP is to protect the EU population from immediate threats and security challenges. However, in the 21st century such a task has little to do with the traditional, territorial defence concepts. In terms of defence, Europe is no longer primarily concerned with an invasion of its territory by enemy forces but with non-territorial and asymmetric threats. The safety of the EU population can accordingly no longer be guaranteed through traditional strategies. Instead, new defence thinking is offensive, focusing on action beyond one's own borders and before a hostile attack occurs. This concept is therefore defined as offensive self-defence.

If it is considered that ESDP is primarily oriented towards international peace and order, then the mandate and goals change accordingly. In this case, the primary focus is no longer the defence against immediate threats, but the implementation of stable and peaceful political structures in the EU's regional and global surroundings. With this approach, the security of the EU population still plays a significant role, but is only addressed indirectly, in the context of establishing international stability. This approach is defined as civil security and is predicted as the primary norm of the international order and relegates the traditional principles of state sovereignty and non-intervention. In contrast to the concept of offensive self-defence, the civilian security approach calls for a collective responsibility to intervene and protect. According to this concept, each state has the responsibility to safeguard the citizens living within its borders from threats to civil security. If a state does not comply with this responsibility – because it is not able or willing or because the threat emanates from it – this obligation is transferred to the international community. The use of hard military power is viewed as a legitimate tool to achieve civil security though its deployment and should be limited to cases of severe human rights violations, for example in the cases of genocide. Furthermore, the use of military power is bound by the rules of a respective UN mandate. Multilateralism is an important component of the civil security approach. During the times of new and dynamic global threats, the collective security concept of civil security remains the only viable security concept for Europe. So far this concept has not been adopted in any official ESDP documents.

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ROLE OF THE POLICE TO INCREASE THE TRAFFIC SAFETY IN TERMS OF SETTING TRAFFIC CALMING MEASURES

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Abstract: Traffic is an extremely important organized social and human activity. Life in the modern society is inconceivable without traffic. The organization, management and provision of order and safety in the modern road transport are complex sociable tasks and care of the whole world. Extremely increased traffic density and speed, demographic expansion of the population, creation of large urban conglomerations accompanied by larger migrations of the population, lead to serious difficulties to organize higher-than-average frequency traffic and fast transport. Traffic calming means reducing or slowing down the movement of motor vehicles in the traffic in order to improve the safety of pedestrians and cyclists, and also improve the environment for the inhabitants. The main purpose of this paper is to prove that the setting of traffic calming measures means safety for the pedestrians who in turn are the most underestimated group of participants in the traffic and to present the role of the police in increasing traffic safety. The main objectives of setting traffic calming measures include: reducing high speeds, creating conditions on the road to encourage drivers to drive carefully and calmly, removing irrelevant traffic and the heavy goods vehicles from the 'calm' road traffic arteries, improving and making the environment more beautiful, reducing the number and severity of traffic accidents. According to the Report of the National Council on Road Traffic Safety in the Republic of Macedonia, in 2006 the number of motor vehicles in Macedonia was 279,000 vehicles, in 2007 it was 287,000 vehicles, in 2008 it was 309,000 vehicles, in 2009 it was 332,000 vehicles, and in 2010 it was 380,000 vehicles. In 2006 the number of accidents was 219 accidents per 1000 km of road network, in 2007 it was 246 traffic accidents per 1000 km of road network, in 2008 was 299 accidents per 1000 km of road network, in 2009 was 326 accidents per 1000 km of road network, in 2010 it was 323 accidents per 1000 km of road network. It means that the number of traffic accidents in 2008 compared to 2007 increased by 21%, the number of traffic accidents in 2009 compared to 2008 increased by 9% and the number of traffic accidents in 2010 compared to 2009 decreased by 1.7%. In 2006 the number of victims was 10.5 deaths per 1000 km of road network, in 2007 it was 12.9 victims per 1000 km of road network, in 2008 was 12.0 deaths per 1000 km of road network, in 2009 was 11.9 deaths per 1000 km of road network, and in 2010 it was 11.92 deaths per 1000 km of road network. All the aforementioned data should represent an alarm to take measures to increase traffic safety and reduce the number of casualties.

Bearing in mind the importance of this issue and the fact that great attention is devoted to this topic in the world, this paper will offer future directions and guidelines for transfer of the best world experience in the field of road traffic safety that might be a starting point for their utilization in building a modern model for road traffic safety in the Republic of Macedonia and also in other countries facing this problem.

Keywords: police, safety, traffic, vehicle.

INTRODUCION

Traffic in general, and especially modern road transport is an important component in the overall social and economic development, but also a very serious source of continuous dangers and threats to human life and material goods. Its main feature is its strong dynamism and changeability in all its elements and components: development, operation, normative regulation and the whole social organization to ensure its proper, smooth and safe operation.

These features require adequate dynamism of the society in undertaking adequate measures and activities. The smaller the discrepancy between the dynamism in the development of transport and the dynamism of the social organization and reaction with adequate intervention is, the greater is the guarantee that a higher level of safety in its operation will be provided. To ensure this assumption it is necessary to do monitoring, verification, evaluation, research and perceive segments that determine safety in road traffic, in their practical application, in order to improve them and adapt to the needs of traffic and put its security into function.

Protection of life and physical integrity of the man as the greatest value to society, inviolability of the property as an economic base for development of the social relationships, as well as the provision of material and social security for the working people and citizens highlight the issue of perception and analysis of all factors which may endanger or harm these core values. In modern conditions of living achievement of traffic safety takes an important place and attracts the attention of social communities, competent authorities and organizations, as well as the organized social entities.

TRAFFIC SAFETY

Road traffic has grown significantly in the recent decades and continues to grow at a rapid pace, allowing the modern societies to use important economic and social goods. Road traffic (with the highest share in the traffic, most heterogeneous, and most unsafe) contributes a lot to more efficient development of the economic activities, develops individual mobility and opens peripheral and isolated regions and areas, and generally provides an area for wider scope of creative activities of a man. Moreover, the industry of motor vehicles in many countries is the driving force for the overall social development. On this positive trend, unfortunately, occur a number of negative effects of road traffic, including loss of human lives, injuries, and suffering, damage to property and huge loss of the economic and social opportunities as a result of traffic accidents.

Traffic is an extremely important organized social and human activity. Life without traffic is unimaginable in the contemporary society. Organization, management, and provision of orderliness and safety in the modern road traffic are a complex social task and care of the whole world.

Remarkably increased density and speed of traffic, demographic expansion of the population, creation of large urban conglomerations, accompanied at the same time by greater migration of the population, may lead to serious difficulties in the organization of above average and fast traffic.

An absolute safety in the traffic today is just an unattainable ideal. Modern transport bears in itself a high degree of risk and we are witnesses of a real expansion of traffic accidents with bigger material damages, casualties, temporarily and permanently disabled persons, and the like.

Traffic safety in the world and in our country is considered as one of more essential issues that require a permanent solution. Traffic and its safety are of common social relevance and in terms of an individual citizen - participant in the traffic, a growing problem becomes the way to reach a destination in the space and to stay alive.

For the purpose of an organized, thought up, adequate, rational and effective response to negative social phenomena in the road traffic accidents it is necessary to know, in particular, the etymological, phenomenological and other characteristics of these phenomena. The basis of each activity for prevention and suppression of traffic accidents should be an objective diagnosis of the situations and clearly defined conditions in which they appear.

Complex influence of the subjective and objective factors can only be explained on the grounds of science and scientific methodology. Otherwise, prevention is based on declarations and unstudied measures that can't overcome the limited, routine and ineffective way of solving the many complex situations¹.

CHARACTERISTICS AND IMPORTANCE OF CALMING AS IMPORTANT MEASURE FOR TRAFFIC SAFETY

Calming (slowing down) of the traffic is reducing or slowing down the movement of motor vehicles in traffic in order to improve the safety of pedestrians and cyclists and improve the environment for residents. There are several measures that professionals apply to calm the traffic. Calming the traffic is justified because it enhances the safety of pedestrian in the traffic, reduces noise and local air pollution, which are adverse effects of the existing traffic operations.²

An extremely important factor nowadays relating to mass use of means of transport is the safety of all participants in the traffic, especially the pedestrians who are the most jeopardized and threatened group in the traffic. There are three important elements when traffic calming is in questions: engineering, education (for participants in the traffic) and implementation of the legal regulations (police). Traffic studies show that very often people on the streets can make great contributions in absolving traffic problems in the neighborhood, but it should be pointed out that the most efficient planning of traffic calming includes the aforementioned three elements, and that an isolated, exclusively engineering approach does not give satisfactory results.³

The procedure for setting up traffic calming measures needs to be supported by appropriate study that will demonstrate the justification for setting up such calming measures. Monitoring of already established measures and their impact in improving the safety of pedestrians is also a key factor that will show their positive role in calming the traffic.

The main objective of setting traffic calming measures is the safety of the pedestrians who are the most threatened group of participants in the traffic. Financial structure for placing traffic calming measures shall be justified by improving the security and safety of the pedestrians and cyclists.

Traffic calming measures are all those procedures that are essentially related to traffic policy by themselves in terms of their impact on the behavior of vehicles. These include traffic calming on the road arteries and priorities for pedestrians and

1 See Murgovski, B. Police and safety in the road traffic (doctoral thesis), Faculty of Security, Skopje, 2003, page 5;

2 Traffic calming schemes (Opportunities and implementation strategies) - Ingrid van Schagen, for Swedish Road Administration (http://www.vv.se/PageFiles/14901/traffic_calming_schemes%5b1%5d.pdf?epslanguage=sv);

3 Kopevski, M. Functional elements for traffic calming at the secondary city network, page 3, 2011

cyclists. One of the measures for environmental traffic management is also traffic calming. It is a combination of many physical measures aiming to reduce negative effects caused by the use of motor vehicles, leading to a change in the behavior of drivers, to reduce the maximum speed of movement, which would contribute to better safety in the traffic.

Traffic calming is a generic term used in Great Britain to describe changes in horizontal and/or vertical profile of the existing arteries in residential zones, zones of trade (commercial ones) in order to reduce the speed of movement of motor vehicles.⁴

In a broader sense, traffic calming is defined as a concept of a traffic policy that includes a strong policy of promoting the movement of pedestrians, cyclists and of the public transport as well as reducing average speeds in the residential zones. Traffic calming is also applied to control speed of vehicles in recreational areas.

So far, the basis for traffic planning in towns has focused on providing the needs of vehicles, leaving the pedestrians to stay at home or move along the surrounding streets, or making them face high risk of crossing a street with fast traffic. There has been an assessment that the number of vehicles purchased by the citizens shall increase so that there will be a need to re-plan the cities. But, it is not possible for the cities to re-adapt in accordance with the traffic demand. Buchanan stressed, for the first time, the need for restrictions of vehicles, for different functions on different road arteries, and for improvement of the environment quality.

Planning of new residential zones was due to the need of splitting the motor vehicle traffic from pedestrian traffic for the first time in New Jersey in 1929. But the result may be unfavorable when access is given in densely populated areas. Providing parking areas is very important, but it might happen to be ignored if the desire of customers to park near the target place and at visible location is not recognized.

If one starts from the principle that the building land is frequently located close to the roads, then the intention will be to reduce the speed of movement on the roads of the lowest hierarchical level by designing dead ends, dividing areas of the opposite directions, introducing bends or by planting grass over surfaces.

The main feature of traffic calming is to design a settlement on the basis of people's needs, i.e. on the principle of equality among the purchase, business activities, and industry.⁵

Although sometimes they look like a single entity, the management of traffic and the traffic calming represent different tools and refer to various problems. Traffic management includes traditional means to control traffic in order to manage flows and paths (routes) of movement. Calming of traffic deals with the issue - what happens when traffic is already on the street. For example, limiting access to the street (entrance only from one end) can reduce the traffic on that street, but it will not affect the speed. Very often calming of traffic and traffic management are complementary.

The local community should consider the traffic in a wider sense. If there is intense traffic on any road, it could mean that there is intense traffic everywhere. In this case, comprehensive strategies are required to reduce traffic in terms of encouragement and provision of alternative modes to travel (development of pedestrian and bicycle networks, application of management on demand, improvement of the public transport, better planning of the purposes of the land).⁶ In any case, calming and management of traffic should be placed on a very broad perspective. The prob-

4 "Guidelines for urban safety management", (1990), Institution of Highways and Transportation, London

5 Proceedings from a professional conference: Means and methods for special purpose traffic calming (29.10.2009) - National Council for Road Traffic Safety (http://www.rsbp.org.mk/mk/sovetuvanje_oct_2009.asp)

6 http://publikationswebbutik.vv.se/upload/2221/2000_26E_buses_and_bumps_public_transport_and_traffic_calming_measures.pdf

lem must not be moved from one road artery to another. Although the introduction of measures is carried out in stages, still it is necessary to have a final plan, and a great number of citizens will also be involved.

RESEARCH ANALYSES AND RECOMMENDATION FOR ENHANCED TRAFFIC SAFETY

Focus of this research is on detecting the main sources and factors endangering the safety of road traffic in urban areas and selecting the right measures and actions to prevent the same, in order to include, organize and utilize the available resources for the purpose of creating and providing greater safety of road traffic in the urban areas or settlements, that is, to reduce traffic accidents and the number of casualties. According to statistics in R. Macedonia in 2006, the number of motor vehicles was 279,000 vehicles, in 2007 it was 287,000 vehicles, in 2008 it was 309,000 vehicles, and in 2009 it was 332,000 vehicles, whereas in 2010 it was 380,000 vehicles. In 2006, the number of accidents was 219 accidents per 1000 km of the road network, in 2007 it was 246 traffic accidents per 1000 km of the road network, in 2008 it was 299 accidents per 1000 km of the road network, in 2009 it was 326 accidents per 1000 km of the road network, in 2010 it was 323 accidents per 1000 km of the road network. It means that the number of traffic accidents in 2008 compared to 2007 increased by 21%, the number of traffic accidents in 2009 compared to 2008 increased by 9%, and the number of traffic accidents in 2010 compared to 2009 decreased by 1.7%. In 2006, the number of victims was 10.5 deaths per 1000 km of the road network, in 2007 it was 12.9 victims per 1000 km of the road network, in 2008 was 12.0 deaths per 1000 km of the road network, in 2009 it was 11.9 deaths per 1000 km of the road network, and in 2010 it was 11.92 deaths per 1000 km of the road network. So, the number of deaths in 2008 compared to 2007 decreased by 7%, the number of deaths in 2009 compared to 2008 decreased by 1% and the number of deaths in 2010 compared to 2009 decreased by 1%.⁷ On the basis of these data it can be found that in 2010, as compared to 2006, the number of accidents per 1000 km of the road network grew by 31%, but at the same time the number of vehicles increased by 38%, and the number of victims decreased by 7.3%.

Article 395 of the Law on Road Traffic Safety "Official Gazette of the Republic of Macedonia" no. 54/07, 86/08, 98/08, 64/09, 161/09, 36/11, and 51/11) provides for the places for setting a security fence to protect pedestrians, the special technical and other measures to slow traffic and safety of children on the approaches to schools, the safety measures when performing works on a road, time and location of facilities in the zone of intersections, as well as the installation, removal and replacement of traffic signs, if required by traffic and safety reasons in the settlements, to be determined or organized by the Ministry of Transport and Communications, after prior approval has been obtained from the Ministry of Interior.

Specific technical and other measures to slow down the traffic on the approaches to schools and other children's facilities may be placed on regional and local roads and streets in urban areas and the same are required to be marked with appropriate traffic signals.

A fine of 480 euros or its equivalent value in denars will be imposed on the officer who performs professional work in the field of road traffic in the municipality or the city.

In recent years there has been frequent occurrence of setting up traffic calming measures in several municipalities in Skopje, where the mayors are "competing"

⁷ Information of National Council for Road Traffic Safety 2007 - 2010

who will set up more measures, primarily at the request of citizens to increase their security and they forget that they can be placed only with a permission issued by the Ministry of Transport and Communications with prior consent obtained from the Ministry of Interior.

Also, the means for traffic calming should be in compliance with all standards and norms provided for by the Regulations for traffic signs and signaling equipment on the road, because, although they have a protective function, they should not hinder other important activities, as winter maintenance of streets and normal functioning of the public transport of passengers.

The role of police in increasing traffic safety in urban areas is extremely important. Police should carry out continuous control whether the traffic calming means have been set up according to the prescribed legal procedure. Inappropriate traffic calming means are those placed at an inappropriate place on the road that can significantly endanger the safety of drivers, pedestrians and cyclists. Therefore the police upon exercising their legal powers are to play a key role in preventing such occurrences. If the police determine that the placement of a traffic calming means is contrary to the legislation, it is necessary to immediately notify the City Communal Inspectorate and the State Inspectorate for Transport as the authorities competent for the removal of illegally placed calming means.

MODERN MEANS OF MARKING “AREA/ZONE OF CALM TRAFFIC”

With the vertical signals special marking is required to warn against danger on the road - especially where children are passers, warning boards for attention are to be placed. It is thought that in such a way they will be more notable to drivers which will contribute to greater safety of our children.



Figure 1. Attention Board (WATCH OUT!!! Your child is passing)

By installing a standard traffic sign which is used in all countries signatories to the Vienna Agreement on Traffic Signs and Rules (practically all countries in the world except the U.S.A. and Canada). This sign belongs to the group of informative signs and indicates an “area (zone) of calm traffic” (Figure 2).

”The calm traffic zone-area” sign marks a place within a settlement where drivers of motor vehicles should not move faster than human walk. They are usually placed in the vicinity of kindergartens and primary schools.

The same sign crossed out by a red line means “end of the calm traffic zone” Figure 3, i.e. it means a point of leaving the area of calm traffic. The use of intelligent traffic sign with feedback or OPS (Oggyeg Reedvack SJdp) is a new means in the system of vehicle speed control in the traffic.



Figure 2. Standard traffic sign



Figure 3. End of the area - calm traffic zone

This sign also notifies drivers of the maximum allowed driving speed on that section and warns drivers if their driving speed is within the limits allowed.

The basic idea is to highlight presentation of the allowed speed and the speed of the vehicle driven by the driver as he could correct the driving speed and realize that he is endangering traffic safety, which is bound to draw his attention to the importance of observing the allowed maximum speed without penalty measures.

Engineering elements

Some of the engineering elements involve physical restraint of road users, and other psychologically encourage them to behave in certain ways. Some elements act differently for different users. Very often the elements in patterns of traffic calming are mixed - for example, more stringent measures may be applied to roads which are unsuitable for transit traffic, and less strict to other arterial roads.

Bumps on the carriageway

These are the most effective measures to reduce speeds of vehicles. Variations in their construction are *panels (plates) and pads*.

There are different speed bump designs in different countries. In principle, they can be constructed as narrow and wide bumps. Narrower bumps can be passed in much shorter time, while wide bumps result in a reduced (more comfortable) effect of a "ramp".

In British practice, the height of a bump ranges from min. 50 mm to max. 100 mm (for a standard bump which has a circular cross section). The height varies depending on the scheme of traffic calming. Thus, a bump with the height of 50 to 75 mm can be placed on arterial roads where the vehicles of the Public City Transport (PCT) or emergency vehicles pass. Bump height of 100 mm results in better speed decrease than lower bumps for a given distance (in British practice the distance between successive bumps ranges from 20 to 150 m or to 40 m - if they are placed before an intersection or sharp curve). Distance of placing the bumps depends on the desired speeds. For example, where the distance of bumps is 40 m an average speed of 85% is achieved and it is 32 km/h.

Depending on hierarchy of the artery roads, the standard bumps apply in residential quarters (when vehicle speeds are high and strict decrease is required) and in distributive streets. Parking is allowed on the streets with bumps on the carriageway.

Disadvantages of these bumps are as follows:

- not accepted by the companies of PCT and emergency case services
- cyclists bypass them
- lead to increased traffic on the adjacent artery roads
- low vehicles or vehicles with large distance between the axles can touch the ground of the carriageway
- a large number of bumps are required on a long artery road.

What is the way to place dumps and what is the signaling system?

- Usually before the first dump of the series there is a warning sign or marking on the carriageway.
- Markings before a dump on the carriageway usually include zigzag marking; in the form of a shark's tooth; zebra;
- Some of them involve advisory speed for passing. Usually it ranges from 19 to 24 km / h.
- They are placed at a distance greater than:
 - 20 meters from a bus stop
 - 8 m from a junction or sharp curve
 - 30 m from a pedestrian crossing.

They are effective only if discomfort is achieved by increasing the speed of all vehicles.

In the Republic of Macedonia, the design of such elements is governed by the RULEBOOK ON TRAFFIC SIGNS, EQUIPMENT AND ROAD SIGNALIZATION. They are defined as physical devices that are placed before the traffic calming zone or in residential streets marked with the traffic sign 322 (zone with limited speed) or with the mark 326 (area of calm traffic).

According to the Rulebook, artificial protrusions are placed over the half or over the whole width of the traffic lane.

If placed in a series, the distance between the protrusions can range from 20 to 60 m, depending on the situation.

Depending on the speed limit, they are of the following dimensions:

- a) up to 50 km / h, their width must not be less than 60 cm, and the height must not exceed 3 cm;
- b) up to 40 km / h, their width must not be less than 90 cm, and the height must not exceed 5 cm;
- c) up to 30 km / h, their width must not be less than 120cm; the height must not exceed 7 cm.

Type a) and b) must be made of modular elements, rubber or plastic, while type c) may be moulded from asphalt mass.

Raised surfaces are built construction elements, intended to reduce the speed. They are constructed individually or in a series, in most cases at places where there is a pedestrian crossing.

Height of the surface is 7 to 12 cm. The inclination of the access ramps is between 1:10. Their minimum length is 1 m.⁸

Running into a zone of calm traffic is marked by the sign "area of calm traffic" which denotes a place in a settlement where an area is entered in which driving speed is not allowed to be faster than the speed of walking, because children's game is allowed anywhere;

Zone for rest and game is an area where traffic speed of vehicles is very small and where a safe environment for pedestrians, cyclists and children's game is needed. So, the goal is to achieve certain degree of calmness.

Boards (plates) in the form of trapezoids, known as raised flat plates or platforms for speed.

⁸ "Guidelines for urban safety management", (1990), Institution of Highways and Transportation

They can be used as a substitute for the humps having circular profile. From an environmental perspective, they are more acceptable for pedestrians, as they provide flat crossings from edge to edge. The height ranges from 50 mm to 100 mm (just like with the round humps). In British practice, this profile includes flat top with two side ramps, each with a length of at least 600 mm, where the length of the level of the carriageway is minimum 3.7 m.

They have a parabolic or linear shape, and a precise drainage design is required for them.

Alternatives to these raised plates are the raised junctions, which are designed as such because they are dangerous (unsafe) and where there is no other justified construction intervention.

Pads intended for speed limit are used in the continental Europe and are a product of flat dumps. They are friendly toward buses, cyclists and emergency vehicles.

Instead to place a pad from edge to edge, it can be built-in in a carriageway lane at a distance of 1 m from the edge so that the buses can easily pass over it with the front wheels. If higher than 7.5 cm, they can cause a problem for low sports cars. The recommended length is 2 to 3.7 m. If the side ramps are with greater inclination than 1:4, it would be dangerous for the motorcyclists. Cyclists can bypass the pads on the left side.

Narrowing (Choker)

These are sidewalk expansions or islands on one or on both sides of the street, which narrow down the street in the given area. The expansion can be a walkway or a green area with vegetation. An effective result is achieved by a combination of expanded walkway and a flat bump.

If expansions are one against another, their construction is very effective as a measure of enforced speed control, especially if combined with a bump on the carriageway.

On streets where traffic goes in two directions, narrowing is performed at 20 feet (6 m), generally the width between 13 and 17 feet (4 and 5 m) is avoided. Adequate drainage is of essential importance.

The effects of such narrowings are the following:

- Speeds will be reduced by 4% if the narrowing is on one side, or 14% if there are narrowings on both sides of the street.
- To reduce passing of pedestrians through the broad places of the streets and provide better visibility for them.
- To provide more aesthetic appearance of the street, by providing greenery on the islands at the ends of the streets.

Chicanes

Chicanes are a series of alternating road narrowings or deformations at the edge that extends from one to the other side of the street, forming S – bends.⁹

If the narrowings are made at 10 to 15m, they can be very effective in reducing the speed. However, they are not acceptable for the buses or heavy vehicles because of the complicated maneuver. Chicane is not a convenient place for the pedestrians to pass through.

⁹ Russell. R. John., "Traffic integration and environmental traffic management in Denmark", Transport Reviews, Vol. 8 No.1,39-58,1988

Chicanes are applied in places where there is an equivalent flow of vehicles in both directions. Usually a series of at least three curb extensions is provided.

Vibration devices (studs, disks, plates) are raised surfaces, spread across the carriageway with a role to attract the attention of the driver. Usually they are not higher than 15 mm and are made in contrasting color in relation to the carriageway surface (they are not white so as to avoid possible confusion of the driver who may mistake them for the horizontal signalization). They are usually placed in groups with a distance between each series (group).

The role of these devices is to warn drivers of the posted signs to reduce speed (to slow down). This is achieved by transmission of vibration to the vehicle when it passes over the devices, so that driving becomes uncomfortable. This measure is quite effective in reducing speeds, particularly in places where drivers drive at high speeds and road conditions change (e.g., end of a road with 4-lanes at a gyratory junction and / or entry in a rural settlement).

Main disadvantage of the vibration devices is the noise (an increase of 10 dB when switching to a zone with devices for each type of speeds). Hence, they are not applied to distances up to 200 m away from residential zones, hospitals, and alike. They are not popular with the cyclists and motorcyclists.

Treatment at the entry

It is used in environments where the driver should be informed that the character of the road changes (beginning of calming traffic zone or entry in a rural settlement). The method uses structures – sign posts on the sides or above the road, or granite sets with different texture of the carriageway surface in order to provide entry or exit image, thereby reducing the speed in combination with physical and psychological means.

Approaching a zone of limited speed is marked with the sign “zone of limited speed”, defined as an area, i.e. a zone where vehicles are not allowed to move at a speed (in km/h) higher than that indicated on the sign.

Traffic calming in rural areas (villages)

SUBJECT TO TRAFFIC CALMING

In situations where there is a lower level of development, there is still a need to limit the speed below the national limit (50, 60 km/h). Sometimes an inter speed limitation is set (60 km/h), and it is before posting speed limit signs of 50 km/h at the entry in a rural settlement. This is done in places where the first houses appear, in the outskirts of the village, so that the drivers could adapt to the next higher speed limitation.

Measures include central border stones or some form of narrowing.

If the distance to the neighboring village is less than 600 m, it is recommended to set a sign for a limit of 50 km/h along the entire length, so as to avoid frequent changes to the limitation. However, the framework of limitation should be adequate and convenient to the local conditions.

SIGNALIZATION

When the speed limit begins on the outskirts of the village, the vertical sign can be combined with discs to reduce the speed. (Fig. 4).



Fig. 4: Signalization in the outskirts of the village

There are the following interventions appropriate for different situations:

Measures to reduce speed

a) Discs in the carriageway (Carriageway Roundels)

These carriageway roundels are combined with a vertical sign for speed limit. They are not allowed in places with street lighting and speed limit of 50 km/h. Carriageway roundels are not fitted for themselves, because they are hardly visible in bad weather. One should get a special permission for their use in areas of scenic beauty.

b) Chicanes

Chicanes are applied to narrow down the carriageway and warn drivers to reduce their speed. So, their use is convenient in villages, especially when it is not possible to apply damps. (Fig. 5).



Fig. 5: Application of chicanes in rural settlement

c) Dragon Teeth Horizontal Markings

They are usually placed before speed limit signs. They are visible only when the driver approaches and therefore have little effect on reducing speed. They are not treated as horizontal signalization and permission is not required. Their application depends on the individual traffic authorities, which should take account of their visual impact on the road and the surrounding appearance. (Fig. 6).



Fig. 6: Application of markings in the form dragon teeth on the carriageway surface

d) Treatment at the entry (Gateway)

This measure is usually combined with another measure to calm traffic and serves to mark entry in the village. It can also act as a measure to reduce the speed if it is well designed. It usually includes vertical as well as horizontal elements along the sides of the road (extended curbs). (Fig.7).



Fig. 7: Treatment of entering the village (two side signs and narrowing)

d) Directing Fields (Hatch Markings)

Directing fields are used to visually narrow the carriageway width and in some situations they are used with the carriageway painted in different color. (Fig. 8).



Fig.8: Directing fields in the central part and surface of part of the carriageway painted in different color (on the left side)

f) Pedestrian Crossing Facilities

There are various types of pedestrian crossings, including the “zebra” and the crossings controlled by light signals. Pedestrian crossings, in themselves, can act as measures to reduce the speed, or additionally, can be raised (panels, boards).

g) Speed Recording Cameras (Speed Enforcement Cameras)

Cameras placed to record the speed are appropriate to the places where there is a history of accidents that occur due to high speeds. Cameras are used after a well conducted engineering analysis.

h) Traffic Islands

Traffic islands reduce the width of the road. Although they do not achieve the effect of chicanes, they change the nature and appearance of the road. They are usually combined with central fields.

i) Zonal speed limit to 20 miles per hour (36 km/h) - 20 mph Zones / Limits

Usually the authorities do not recommend introduction of zonal speed limit of 36 km/h or speed limits of 36 km/h (20 miles per hour) throughout the whole vil-

lage. To achieve this, strict measures are required to limit the speed, which would not be appropriate in most villages. Maybe some side streets in the village would be convenient for the zonal speed limit of 36 km/h. Scottish authorities promote such zonal speed limit around the schools in Scotland and in the vicinity of schools along transit road arteries. This also means applying signs with changeable messages and recommendable speed limits of 36 km/h.

Other speed-reducing measures include modification of the carriageway surface, application of sound tapes and introduction of mini gyratory junctions. Modification of the carriageway surface is subject to wear and therefore may be less visible in different weather conditions, which puts into question the effect of the application. Sound tapes can be effective but should not be placed near the homes because of the noise produced by the vehicles passing through.

It should be stressed that all measures indicated so far have visual impact on the appearance of the village. Hence, care should be taken of possible endangerment of the environment and of the ways of its improvement before introducing any measure.¹⁰



Fig.9: Zonal speed limits in a village

CONCLUSION

The main purpose of calming the traffic is achieving “areas for living”. It is manifested by the desire for free areas, improved environment, and for activities on the street that do not concern only traffic. In short, it is a requirement for “streets for living”.

Macedonia should follow experience of some foreign countries in this field, such as Denmark, which has adapted the Act on Road Traffic recommending two types of schemes including: 1. resting and playing area, and 2. peaceful streets. We should also consider the experience of the Netherlands which, in 1976, adopted a law which defines priority roads and gives permission to the concept *Vunerven* (“areas for living”). *Vunerven* example inspired activities and similar principles in many countries, and had great influence on planning new and also on re-designing of the existing residential zones.

Positive side of introduction of new traffic calming measures includes:

- increase of the safety of pedestrians
- reducing the traffic flow
- assisting in identifying settlements
- physical barriers remove transit traffic

¹⁰ Happ, Z., „Utjecaj upravljanja prometnim sustavom na okoliš – str. 212-217, Zbornik radova II dio, Opatija, 2002

- isles allow pedestrians to cross a street in a short time
- parked vehicles provide a kind of protection zone between traffic and pedestrians on the sidewalks. This provides a level of comfort for pedestrians, which is particularly important in the commercial centers of the cities.
- Improvement of the appearance of the surroundings by introducing greenery and areas with different texture.
- A different texture of the road highlights the surroundings - from an arterial (main) into a street where people live.
- Re-routing reduces the possibility of collision by eliminating conflicting traffic movements.

The role of police in increasing traffic safety in urban areas is extremely important. Police should carry out continuous control of whether the traffic calming means have been set up according to the prescribed legal procedure.

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CAUSES, CONSEQUENCES AND MEASURES AGAINST THE SOCIAL INSURANCE CONTRIBUTION EVASION IN SERBIA

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Abstract: This paper considers basic causes of social insurance contribution evasion. The key reasons for the failure in collection lie in the high involvement of the workforce in a grey economy, an inefficient collection and control system, high rates of contributions, a myopia of employees and a high distrust in the entire system of social insurance. Government measures available to mitigate the consequences of social insurance contribution evasion as well as the measures to combat contribution evasion have been analyzed, too. Finally, the author considers causes, consequences and measures against the social insurance contribution evasion in Serbia and points out possible directions for a reform.

Key words: social insurance contributions; contribution collection; contribution evasion; The Republic of Serbia.

INTRODUCTORY REMARKS

One of the basic assignments that a modern state has is to ensure social security. It can be secured in many ways: in the form of social insurance, in the form of income support and in the form of social assistance. The model of mandatory social insurance as a way of ensuring social security means financing through a special category of public revenue - contributions paid by the insured and other persons (usually by employers and other payers of income).¹ And the state may participate in the financing. An important determinant of this system is that the volume of rights of insured persons does not depend on their financial conditions. Social insurance is realized by special public bodies-organizations of mandatory social security insurance which are separated from the budget. Income support approach does not mean that users previously paid contributions or to fall into category that is in bad financial conditions (as, in some countries like Denmark and Australia, health care is available to everyone regardless of whether they have paid contributions or not). The model of social assistance means that social security is financed from the budget funds, but only for certain categories of population.² There is no uniform model of providing social security and its financing, although most states have chosen the model of mandatory social insurance. In most countries that have adopted that system, there are specific contributions for each aspect of social security, while in few of them there is an unique contribution used for financing all three segments of social insurance (Pension and Disability insurance, Health insurance and Unemployment insurance).

¹ For example, in Serbia contribution payers to the base for the employees, elected, nominated and appointed officials who achieve differences to salaries or wages, persons who perform temporary and occasional work under the contract concluded directly with the employer or through a cooperative excluding persons under the age of 26 years if they are on education, persons receiving earnings compensation under the law governing financial support for families with children and persons receiving earnings compensation under the law governing mandatory health insurance, are the employers and other payers of income at the same rate and on the same basis as those insured persons. Payers for contribution for the health insurance are the Pension and Disability Insurance Fund of the Republic of Serbia for pensioners and budget of the Republic of Serbia for the most vulnerable categories of population for whom the funds for contribution payments are provided in the budget of the Republic etc.

² D. Popović, *Poresko pravo*, Beograd, 2010, p.449-450.

Expansion of state functions to economic and social plans and their transfer to certain institutions, which could not be financed through the budget, has stipulated a constitution of a special category of public revenue – contributions. In order to conduct entrusted functions successfully, organizations of social insurance must have certain funds for specific purposes at their disposal – contributions for social insurance.³

Because of a great similarity to taxes, as well as fees, in financial theory there is no unique standpoint about how to categorize contributions. Some theorists treat them as a special kind of earmarked taxes, others as fiscal receipts, others as the so-called “para-fiscal receipts”. In Serbian financial literature the term “para-fiscal receipts” is not fully accepted. The authors who consider contributions as “para-fiscal receipts” emphasize that contributions are a special kind of revenues which are used for financing certain public bodies that carry out activities in the public interest. Because of the great similarity to the taxes (taxes and contributions are characterized by obligation, the same techniques of calculation and payment and the realization of broader social interests) some authors categorize them as the special kind of earmarked taxes. But usually contributions are treated as fiscal receipts together with taxes, fees and user charges.⁴

Social security organizations are mostly funded through contributions. When cash flow is stopped in social insurance organizations’ funds, the realization of rights of the insured persons as well as the credibility of the whole system of social security insurance is under question. This indicates that great attention must be paid to the issue of regular and orderly flow of funds into social insurance organizations’ funds and causes and measures against the social insurance contribution evasion.

Even though the social insurance contribution evasion is widespread, it seems that in financial theory, it is not given enough attention. That is because it is often thought that taxes are used to ensure public goods which benefit to everyone, while the benefit of contributions is more direct, so there is less interest in its non-payment. Individuals should be interested in paying contributions because in the case of old age, disability, death, physical damage caused by injury at work, professional illness, need for help and care by another person, sickness or unemployment they will achieve a certain financial compensation. Insufficient commitment to studying this phenomenon is not justified because the evasion of contribution ever more deepens the crisis of social insurance funds, which itself is a consequence of the demographic changes and a high level of unemployment. Namely, due to the demographic changes (low rate of fertility and aging population) and the high rate of unemployment, as the consequence of economic and financial crisis of modern states, expenses of social insurance organizations’ funds are getting larger. However, in order to cover a deficit of security insurance funds and thus maintain the social peace and minimum social insurance rights, states transfer money from the budget.⁵ That leads to an increase in public expenditure, which ultimately means that the state may be forced either to increase the existing taxes or to take a public loan. Eventually, the burden of contribution evasion falls on tax payers.

³ So, Serbian Law on mandatory social security contributions, in Article 4 prescribes that contribution funds are public revenue, under control and accessible for organizations of mandatory Social Security Insurance, for the purposes determined in accordance with laws.

⁴ D.Popović, *Poresko pravo*, p.7-9.

⁵ Similarly, for example, in Serbia, pension expenditures in gross budget expenditures were 29.1% in 2010.

CAUSES AND PRECONDITIONS OF CONTRIBUTION EVASION

Causes of contribution evasion can be of objective and subjective nature. Objective causes come from social environment, while causes of subjective nature are related to individuals of tax payers. Preconditions for contribution evasion are all those factors which represent efficient means of the suppression of this phenomenon, so the lack of them is convenient for the appearance of evasion (insufficient expertise and training of authorities, absence of public opinion on the suppression of evasion, frequent amendments in this field and to their ambiguities, inadequate fining, etc).⁶ Considering the causes and preconditions of contribution evasion, it can be noticed that some of them are general for all states, while others are specifically expressed in countries in transition. In the phenomenon of contribution evasion, the employers, employees, and the state itself have a very important role. In relation to this, there are three types of contribution evasion: evasion as a consequence of an employer's activities, evasion as a consequence of an employee's activities, and evasion caused by governmental acquiescence or ineffective enforcement.⁷ More often than not, contribution evasion is resulted by tacit or explicit agreement between the employers and the employees. "Contribution evasion must generally involve some forms of collusion between employers and employees. Exceptions to there being collusion occur for self-employed workers and in the case of employer embezzlement of contributions, when an employee would not consent to and may not be aware of the evasion. Because employers are legally obligated either to make payments on behalf of their employees or to collect contributions from their employees, or both, when evasion occurs and employees are aware of it, the employees could report this to the social security institution enforcement office."⁸ When workers also wish to avoid paying of contribution, situation is much easier for employers.

Evasion of contributions as a consequence of an employee's activity

Why do employees endeavor to evade paying contributions? The main causes are:

- Myopia
- Over-reliance on welfare state
- Low income
- Administrative costs
- High rates
- Attitude towards contribution evasion
- Non-binding benefits for contributions
- Social surrounding

One of the reasons is the fact that they are shortsighted. That means that individuals are not longsighted enough when estimating necessary resources for the period of life when they cannot actively support their lifestyle. Additionally, it seems that the over-reliance on contemporary state, qualified as social, is seen as an important cause of evasion of contributions. Namely, knowing that in the case when the insured event occurred, at least minimal inflow of funds will be provided, in order to protect the existential minimum, individuals, during their working life, are not

⁶ M.Kulić, G.Milošević, S. Milašinović, Fiskalni kriminalitet u Srbiji, Industrija, br.4/2011, p.294-296.

⁷ V.: W.R. McGillivray, Contribution Evasion: Implications for Social Security Pension Schemes (U: Reforming Public Pensions), OECD, Paris, 2003, p.316. Available at: http://wpp01.msss.gouv.qc.ca/appl/k30/Fich/_20040211095337.pdf, 3.12.2011.

⁸ Ibid. p.3.

motivated to set aside money in the form of contributions. Low income and financial difficulties, especially among young workers, high rates of contributions, high administrative costs, considering contributions as taxes and not as an instrument of saving, cause evasion. Namely, low-income employees may feel that their immediate needs are already under a big pressure as the consequence of low income, so they may seek to evade paying of contributions. Employees, especially those self-employed, bear certain costs in term of time, obtaining necessary forms and otherwise complying with contribution requirements. This may be additional incentive to contribution evasion. A weak relationship between social security contributions by insured persons and the benefit they ultimately receive is often considered as an important cause of evasion of contributions. Besides that, wholesome social surrounding, in which evasion of all public revenues, as well as the contributions, are considered legitimate without facing the public judgement, is a very important condition which induces the appearance of evasion. It is important to emphasize that evasion is greater where there is a large informal sector. We should not neglect the fact that employees frequently hesitate to report non-payment of contributions by their employers because of the fear that they could lose their jobs.

Evasion of contribution as consequence of an employer's activity

The main causes of contribution evasion by employers are:

- Cost saving
- Law reputational cost
- Fraud

A very important cause of contribution evasion is employer's tendency to reduce labor costs by non-paying contributions. In that way employers try to improve the market position. That cause is particularly evident in financially weak firms. Evasion may also occur because the cost in terms of the firm reputation may be low. Namely, where every kind of evasion is seen as some kind of a heroic act and where lax enforcement and low penalties are widespread, the detection of contribution evasion by competent authorities will not affect greatly the reputation of employers. Evasion may occur if employers collect social security contributions by keeping the contributions for themselves.

Evasion of contributions as a consequence of (in)activity of states

Why do states tolerate evasion or have inadequate enforcement to prevent it? The main causes are:

- Attitude towards contribution evasion
- Division of responsibility
- Inadequate resources

Additional causes for contribution evasion are the consequences of inadequate measures and policies conducted by the authorities. Frequently, a state tolerating evasion is seen as a very important cause of evasion. Namely, sometimes, the starting point is that contributions are determined to be in the favor of the insured persons, therefore, if they do not want to pay them, the state will not force them to. Besides that, inadequate division of responsibilities in terms of determining, collecting and controlling contributions, widespread corruption and absence of human

and material resources serve the appearance of contribution evasion.⁹ In some countries (Germany, France, Austria etc), all activities related to determining, collection and controlling are pursued by social insurance organizations, while in others (Great Britain) responsibilities are divided between social insurance organizations and tax administration. It is often argued that first approach is a better solution because that system enables more efficient use of human and material resources.¹⁰

Some of the causes of contribution evasion particularly become prominent in countries in transition. Namely, gray economy, insufficiently efficient and trained administration, high rates of contributions and general mistrust in the whole system of social security are just some of the most important causes of evasion in these countries.

CONSEQUENCES OF SOCIAL INSURANCE CONTRIBUTION EVASION

The level of contribution evasion is not easy to express. Namely, contribution evasion is commonly illegal activity, so consistent data is usually not available. Contribution evasion can be manifested as:

- Non-registration employees by employers, i.e. conducting business activities in the gray economy
- Paying contributions on the partly expressed basis
- Non-payment of contributions for registered social insurance users.

It is only logical that the only available precise data related to the scope of contribution evasion is for legally employed, i.e. registered users of social insurance. The difference between non-paid contributions and total amount of obligations based on contributions makes a contribution gap. The contribution gap is lower in developed countries (e.g. in Japan it is only 1.4%, in the USA 10.3%) while in countries in transition it is significantly higher (In Serbia it is 20%, in Croatia 18%).¹¹ Another, admittedly less useful indicator for measuring contribution evasion is the size of arrears. These actually record only social security contributions due. The size of arrears depends very much on the policy of write-offs, the penalty interest rate, the method of calculation, etc.¹²

Contribution evasion may result in dramatic consequences, which eventually reflect on complete or partial failure of the rights of social security users. Such a situation among many current and future users causes mistrust in the whole system of social insurance. Mistrust in the stability of this system further induces contribution evasion for social insurance. Namely, "destabilization of the social insurance system decreases trust in the system and leads to increased avoidance of contributions. The state, as a warranty for the system functioning, has to increase taxes or be in debt in order to secure its functioning."¹³ It seems that contribution evasion merely makes the already difficult situation of current social insurance system even worse. First

9 More on the causes of evasion: Ibid., p.317-320.

10 V. Golubović, Sistem naplate doprinosa za socijalno osiguranje u Sloveniji, Hrvatskoj i Srbiji, Industrija, br.4/2010, p.240.

11 V. Golubović, Evazija doprinosa i mere za njeno sprečavanje, Pravo i privreda, br.1-3/2010, p.61.

12 T. Stanowik, Contribution compliance in central and eastern European countries: Some relevant issues, International Social Security Review, Vol.57, br.4/2004, p.57-58. Available at: <http://web.ebscohost.com.proxy.kobson.nb.rs:2048/ehost/pdfviewer/pdfviewer?vid=3&hid=106&sid=d806fae6-5a88-4bb4-ab49-f4da85af65fd%40sessionmgr111,21.2.2012>.

13 V. Golubović, Evazija doprinosa i mere za njeno sprečavanje, p.65.

of all, the pension system, which is based on the pay-as-you-go system is already in deep crisis due to demographic changes.¹⁴ Evasion of contributions brings into question the viability of the entire social insurance system and it induces more budget transfers in order to cover the deficit.

Apart from that, evasion of contributions creates a disbalance between employers and employees who fulfill their obligations and those who do not, which violates the principle of horizontal equity, which claims that equals should be treated equally. It is highlighted that the consequences of evasion of contributions differ in system-defined contributions and system-defined benefits. Namely, in system-defined benefits, contribution evasion causes a smaller volume of rights, but in spite of that, neither social insurance organizations nor the state are responsible.¹⁵

MEASURES AGAINST SOCIAL INSURANCE CONTRIBUTION EVASION

Consequences of contribution evasion have resulted in the special attention that is now paid to measures against contribution evasion because sustainability of the whole system of social security is based on the efficiency of these measures. Literature suggest following measures:

1. Changes in the attitude towards its paying
2. Changes of the structure of the social security system
3. Changes of specific components of macroeconomic policy
4. Changes in the administrative procedure¹⁶

Voluntary paying of contributions should be supported by appropriate campaigns. In that way it would be useful to educate high schoolers about the importance of paying contributions and the consequences of the non-payment. Individuals have to be aware that it is necessary to set aside one part of their income and in that way subordinate current consumption to the future one, in order to secure material safety in the case of cessation of active economic activity due to aging, sickness, death and disability. It is necessary to establish the public perception that noncompliance is unacceptable. Besides the above mentioned, the cooperation with trade unions and public announcement of the names of defaulters could be efficient measures against evasion of contributions. Namely, the employees, not only because of fear, but also because they do not know their rights, frequently do not report their employers in the case of evasion. Public announcement (in newspapers or on web page on the Internet) of the names of defaulters could damage business reputations of employers and in that way it could be a strong incentive to make regular payments. Therefore, it is important that the public is aware of the significance of regular contributions paying and the efforts invested by the state to reduce contribution evasion. Publishing the names of subjects who evade contributions and levied penalties for them may discourage potential evaders if the reputational costs are high.

¹⁴ Pay-as-you-go system means that pensions paid to current pensioners are financed from contributions paid by current workers

¹⁵ W.R. McGillivray, Contribution Evasion: Implications for Social Security Pension Schemes, International Social Security Review, Vol.54, br.4/2001, str.318. Available at: <http://web.ebscohost.com.proxy.kobson.nb.rs:2048/ehost/pdfviewer/pdfviewer?vid=3&hid=107&sid=357e668d-9954-4be0-8736-91945be1ebd0%40sessionmgr104>, 12.12.2011.

¹⁶ C. Bailey, J. Turner, Strategies to Reduce Contribution Evasion in Social Security Financing, International Labour Office, Geneva, 2001. Available at: <http://elmu.umm.ac.id/file.php/1/jurnal/UVW/World%20Development/Vol29.Issue2.2001/11051.pdf>, 3.12.2011

Changes in the system of social security are seen as efficient measures in the combat against contribution evasion, because the existing systems have a line of flaws that induce evasion. More often than not, high rates of contributions cause evasion, in particular when people do not earn a lot, so reducing the rates is seen as a very important step towards the reduction of evasion. The high mandatory contribution rate is both a cause and a result of high non-compliance. Contribution compliance may increase if high rates of contributions are reduced. It is not easy to answer whether contributions rates in some countries are high. "Ultimately, the question of whether social contributions rates are "too" high may depend on the extent that those contribution rates distort the labour supply and saving decisions of workers".¹⁷ Changes related to binding rights from social insurance to the height of paid contributions, ensuring broad coverage, creating a social security system while taking care of the social assistance program so that the insured persons were encouraged to pay contributions instead relying on the social assistance program, are warmly welcomed incentives by the state trying to reduce evasion. Subsidies granted to workers, especially low-income workers, may be used as useful instrument for encouraging regular payments in the future.

Improving, i.e. changing macroeconomic surrounding, induces reduced evasion because of a high inflation rate, high unemployment rate and financial difficulties of employers are powerful motives for the appearance of evasion. There is no aspect of social insurance that is immune to the state of the economy. Taking everything into consideration, it seems that solving numerous macroeconomic problems they are faced with, primarily countries in transition, is the core of the fight against contribution evasion.

The change of the administrative procedure, as a measure against social insurance contribution evasion consists of improvement of administrative efficiency, in the sense of keeping records of the insured persons, taxpayers, calculation and payment of contributions, as well as paid contributions, improving the system of charge and control, conducting an adequate fining policy and ensuring certain incentives, in order to secure a higher level of the flow of money to the funds of social insurance organizations. Namely, an important reason why employers and employees evade social security contributions is that there are not effective administrative instruments for identification of non-payment and collecting social security contributions. Therefore, it is necessary to make appropriate steps to eliminate the mentioned disadvantages. Creating of the Central register of obligatory social security, which would be authorized for the control of accuracy of calculation and payment of contributions and improving administrative capacities by providing further training for staff, improving the timelines of enforcement action, adequate system of reporting, changes in enforcement and penalties, but a positive inducement can also contribute to less extent of contribution evasion.¹⁸

It seems that a mixed strategy is the most efficient in reducing contribution evasion. The change of the administrative procedure as a measure against contribution evasion also consists of simplification of relevant laws and elimination of corruption.

Some authors state that the most effective way to increase contribution compliance is sustainable long-term growth, tightening of the contribution-benefit link and reducing possibilities for tax arbitrage in order to demotivate employees and employers to collude and arrange payments in the form of lower taxed income.¹⁹

¹⁷ Ibid., p.388.

¹⁸ Positive inducement means that instead focusing on punishing, positive encouragement of compliance may be effective. So, for example, contribution amnesty may be designed to encourage payment of current contributions in certain period.

¹⁹ T. Stanowik, Contribution compliance in central and eastern European countries: Some relevant issues, p.62-63.

SOCIAL INSURANCE CONTRIBUTION EVASION IN SERBIA

Causes and preconditions of contribution evasion in Serbia

Just like in other countries in transition, in Serbia, contribution evasion is a widely spread phenomenon, although exact data are not available. Non-payment of contributions for the unregistered employees, non-payment of contributions for registered employees or paying contributions on partially expressed, most frequently on the lowest monthly contribution basis, are the basic manifestations of evasion.²⁰

One of the key causes of contribution evasion in Serbia is a high engagement of the workforce in the gray economy. There are numerous definitions of the gray economy, and what they all have in common is that the gray economy is an illegal activity aimed at gaining for the one conducting it, and at damaging state budget or the ones who work legally. During the 90s, the gray economy in Serbia became unusually widely spread which was a consequence of specific conditions, which were a reflection of hyperinflation, economic blockade, war conditions, etc. However, it seems that even after all these conditions were cancelled, the gray economy did not shrink. According to some estimates, the involvement of the gray economy in gross domestic product reaches 33.3%.²¹ Such a high involvement is not specific only to Serbia, but all countries in transition have a vast informal sector, which is beyond the taxation system.²² The problem in Serbia is that the state itself tolerated activities in the gray economy as well as non-paying for registered insured persons in order to maintain social peace. There is no doubt that such practices had to be stopped at some point because the sustainability of the whole social insurance system is in question.

The macroeconomic state in Serbia is a breeding ground for contribution evasion. Evasion of a fiscal receipts, including compulsory social insurance contributions, is related to the economic situation in a respective country. "If the state in economy is more stable, there are less reasons for fiscal payers to avoid paying their obligations. Considering that in Serbia, there has been an economic crisis for a years, good conditions are created for avoiding paying taxes and other fiscal obligations."²³ Therefore, the flourishing of the gray economy, limited possibilities for employment in the formal sector, a high pressure of labor as a factor of production with taxes and contributions, economic crisis and unstability additionally support evasion of contributions. Therefore, creating a better macroeconomic environment will definitely contribute to reduction of evasion of contributions.

High rates of contributions for social insurance and low incomes cause evasion, too. Often, it is emphasized that the additional burden labor as a production factor produces distorting effects in the employment market and decreases competition of the national economy. These factors largely contribute to the evasion. In Serbia, the rate of contributions for mandatory pension and disability insurance is 22%, for mandatory health insurance is 12.3% and for the unemployment insurance is 1.5%.²⁴

20 Paying contributions on the minimum monthly basis is particularly frequent with the self-employed. A minimum monthly contribution base shall be the amount of 35% of the average monthly salary paid in the preceding quarter for which the data are published by the republic authorities responsible for the statistics, unless otherwise is provided by the law.

21 Strategija razvoja malih i srednjih preduzeća i preduzetništva u Republici Srbiji 2003-2008, Republika Srbija, Ministarstvo za privredu i privatizaciju, Beograd, 2003. Available at: <http://www.prsp.gov.rs/download/strategija%20za%20razvoj%20malih%20i%20srednjih%20preduzeća.pdf>, 21.2.2012.

22 About evasion and grey economy in countries in transition: G.Milošević, *Javne i monetarne finansije*, Beograd, 2010, p.227-230.

23 M.Kulić, G.Milošević, S. Milašinović, *Fiskalni kriminalitet u Srbiji*, p.295.

24 Article 44 Zakona o doprinosima za obavezno socijalno osiguranje, „Službeni glasnik RS“, br.84/2004, 61/2005, 62/2006, 5/2009, 52/2011, 101/2011, 7/2012.

Therefore, the rate of contributions for all three segments of social insurance is 35.8% , which, with 12% tax on salary, makes the fiscal pressure of labor quite high.²⁵ We should not forget that specifying rates of contributions for social insurance is an extremely sensitive issue, considering that on the one hand, there is a tendency to increase rates of contributions in conditions of crisis of social insurance system, in order to secure enough resources for its financing. On the other hand, raising rates results in suffocation of business activities and avoidance of payments.²⁶ Also, low incomes contribute to evasion. Namely, current financial difficulties result in the fact that the young and low-qualified employees work unregistered and in that way subordinate their current consumption to the future. Then, evasion is usually a consequence of tacit and explicit agreement between employers and the employed.

Social environment is also an important cause of evasion of fiscal receipts, and the same case is in Serbia. "Crisis of morale and rooted habits pressurize and lead to deviations, which cause that tax payers avoid paying fiscal obligations in various ways."²⁷ Therefore, considering contributions as taxes, a low taxation morale, and a low culture of paying fiscal receipts are ideal conditions for evasion.

It is often highlighted that an inadequate system of collection and control of contributions in Serbia create space for a financial lack of discipline and evasion. It is also emphasized that collecting contributions by the authorities for taxes is not the best solution, considering the insufficient organization and training of tax administration to do a new task, so that evasion cannot be avoided. The control of calculation and payment of contributions in Serbia was more efficient while social insurance organizations were authorized for that job.²⁸

Insufficiently efficient and trained bodies authorized to determine, collect and control contributions contribute to a higher level of evasion because the insured persons and contribution payers are aware of higher possibility of being discovered and fined. An inadequate fining policy helps the growth of contribution evasion as well.

Measures against contribution evasion in Serbia

Considering that the level of contribution evasion in Serbia is high, over the course of the last few years a lot of attention has been paid to measures to decrease it. Confronting contribution evasion should not be based only on voluntary payment of contributions, but appropriate fining policy is a necessity. However, it is often emphasized that stricter fining policy and equalization of tax evasion and contribution evasion are inappropriate, considering the nature of contributions, so that the efforts should be directed towards the control and enforced collection.²⁹

25 It should not be forgotten that in some situations there is an obligation for paying additional contributions for pension and disability insurance which are calculated at an accelerated rates and contribution for occurrence of disability and physical injury from occupational injury and occupational disease, or in case of injury and occupational diseases. Rates of additional contributions for pension and disability insurance for insurance period that to the employee and an entrepreneur shall be calculated at an accelerated rate in accordance with the law shall be as follows:

- 1) when effective 12 months of work counts as 14 months of insurance - 3.70%;
- 2) when the effective 12 months of work counts as 15 months of insurance - 5.50%;
- 3) when the effective 12 months of work counts as 16 months of insurance - 7.30%;
- 4) when the effective 12 months of work counts as 18 months of insurance - 11.00%.

Contribution rates for occurrence of disability and physical injury from occupational injury and occupational disease, or in case of injury and occupational diseases, in cases determined by law, shall be:

- 1) for pension and disability insurance - 4.00%;
- 2) for health Insurance - 2.00%.

26 Introducing environment taxes in modern taxation system is frequently seen as a good opportunity to reduce rates of contributions for social insurance, in the context of respect of principle of fiscal neutrality. In that way, fiscal pressure of labor will be lower with respect to the principle of fiscal neutrality

27 Ibid., p.296.

28 V.Golubović, Sistem naplate doprinosa za socijalno osiguranje u Sloveniji, Hrvatskoj i Srbiji, p.231-242.

29 V.Golubović, Evazija doprinosa i mere za njeno sprečavanje, p.67-68.

Therefore, efficient control of calculation and payment of contribution is one of the measures that can be used to decrease contribution evasion. Currently, the control of the calculation and payment of contributions is performed by the Tax Administration, in accordance with the regulations governing the tax procedure and tax administration. Contribution payers are obliged to notify the Tax Administration on payment of contributions and the relevant mandatory social security insurance organizations. The Tax Administration and mandatory social security insurance organizations are obliged to mutually exchange information about the contribution payer, payer who calculate and pay contributions, contribution base, the amounts of charged and collected contributions, and other official records related to contributions. The Tax Administration is also obliged to submit to relevant organizations for Social Security Insurance the data or processed data on determined and collected contributions for the insured persons, for entrepreneurs and farmers, quarterly, and no later than 30 days from the closing of quarter.³⁰

For a long time, in this field, there were some inconsistencies related to overlapping and unclear authorizations of institutions included in the controlling procedure. Because of that, in financial theory, it was often mentioned that the introduction of the Central register of obligatory social security, which would be authorized for the control of accuracy of calculation and payment of contributions, would be an adequate solution to the problem.³¹ Serbian legislator aiming to improve the record of contribution payers, the insured persons and as well as paying revenues, passed Law on the Central Registry of Compulsory Social Security (further in the text:LCRCSS), which is supposed to overcome flaws of the existing system of records, calculation and payment of contributions.³² Unlike the current state, which is characterized by a separate data basis for the same users, through functioning of the Central register, a unique data base would be secured, which would not only reduce evasion through an easy identification of employers who avoid paying contributions, but it would also decrease administrative costs and save time to contribution payers. Law at issue came into force although in the coming period, should be adopted by-laws that would finally provide all the technical conditions for the formation and functioning of the Central register for social insurance at its full extent.³³

Also, improving the system of collection of contributions is one of the measures that would help decrease contribution evasion. It seems that tax administration is not motivated enough to collect contributions as earmarked revenues, so this procedure needs to include other institutions as well – first and foremost, social insurance organizations. Besides that, an important assumption of efficient payment of contributions is timely record-keeping of the amount of payment and possible latency so that not only authorities, but employees as well, are informed of collected revenues. That way, the employed in Serbia can electronically check if the employers pay their obligations in respect to contributions and how much they pay. This right the employed exercised by accessing the web site of of Pension and Disability Insurance Fund of the Republic of Serbia, and after entering personal identity number and pin code assigned by the competent branch of the Fund. Apart from that, for efficient collection, it is important to harmonize the data about contribution payers and the insured persons, and other important information that are held by Tax administration, Organizations for mandatory social security and other institutions

30 Articles 69-71 Zakona o doprinosima za obavezno socijalno osiguranje.

31 M. Vranješ, Osvrt na instrument doprinosa za obavezno socijalno osiguranje, Zbornik radova Pravnog fakulteta u Novom Sadu, Vol. 41, br. 3/2007, p. 53-54.

32 Zakon o centralnom registru obaveznog socijalnog osiguranja, „Službeni glasnik RS“ br.30/10.

33 Articles 33-40 Zakona o centralnom registru obaveznog socijalnog osiguranja

and organizations and that there is mutual electronic connection of registers, which are significant for contribution payers and the insured persons. LCRCSS prescribes that Central Registrar is authorized for all these functions.

Some other measures conducted by Serbian authorities show the tendency towards minimizing contribution evasion. Serbian legislator gives the opportunity of unconditional inclusion in the system of compulsory social security and the possibility that for certain categories of insured persons, in order to connect pension period, revenues come from the budget. Also, in order to motivate to pay arrear ages based on certain tax and contributions for mandatory social insurance, Serbian legislator passed the Law on write-off of interest accrued from obligations under certain taxes and contributions for mandatory social insurance. The Law at issue prescribes write-off calculated, but unpaid interest due for payment by December, 31, 2007, upon the fulfillment of statutory requirements.³⁴ Besides this law, in order to stimulate the regular collection of contributions, the Law on the standstill and writing off debt in respect of contributions for mandatory health insurance was passed. This Law prescribes the writing off debt in respect of compulsory health insurance, which was due to be paid by December, 31, 2008, under the condition that the payer – in the period between January, 1, 2009, and December 31, 2011 – pay for any current liabilities.³⁵ After the model of some neighboring countries, the latest version of the Law of Tax Procedure and Tax Administration prescribes that banks will allow payment of salaries only with simultaneous payment of obligations related to taxes and compulsory social insurance.³⁶ Serbian legislators made efforts to improve the payment of contributions by prescribing certain duties for banks, although the responsibility of bank, in the sense of informing tax administration about unpaid contributions, was not successful in Slovenia and Croatia, so it is not likely that it will produce satisfying results in Serbia.³⁷

As an incentive to secure regular inflow of money into the social insurance organization funds, Serbian legislator prescribes that employers who do not pay salaries by the 30th in the current month for previous month, shall be liable to calculate and pay contributions for the previous month to the lowest monthly contribution base.³⁸

How serious Serbian legislator is in the fight against non-realisation of revenues of social insurance organizations is shown also by a novelty in the Law of Tax Procedure and Tax Administration. Namely, an earlier version of this Law provision on the statute of limitations was not applied to contributions for pensions and disability insurance. However, the latest amendments of this Law prescribes that provisions on the statute of limitations of rights on determination, collection and refunds cannot be applied to contributions for mandatory social insurance, therefore to health insurance contributions, as well as unemployment contributions insurance.³⁹

It is believed that the transfer from a pay-as-you-go system to a funded system would reduce evasion of contribution for pension and disability insurance in Serbia. Most public pension systems operate on a pay-as-you-go basis. This means that pensions paid to current pensioners are financed from contributions paid by current work-

34 Zakon o otpisu kamate na dospele obaveze na osnovu određenih poreza i doprinosa za obavezno socijalno osiguranje, „Službeni glasnik RS“, br.102/08.

35 Zakon o mirovanju i otpisu duga po osnovu doprinosa za obavezno socijalno osiguranje, „Službeni glasnik RS“, br.102/08.

36 Article.11 Zakona o izmenama i dopunama Zakona o poreskom postupku i poreskoj administraciji, „Službeni glasnik RS“, br.101/11.

37 V. Golubović, Sistem naplate doprinosa za socijalno osiguranje u Sloveniji, Hrvatskoj i Srbiji, p.241

38 Article 51 Zakona o doprinosima za obavezno socijalno osiguranje.

39 Article 37 Zakona o izmenama i dopunama Zakona o poreskom postupku i poreskoj administraciji, „Službeni glasnik RS“, br.101/11.

ers. A pay-as-you-go system worked well in the early stages of its development when there was a large number of workers and a small number of pensioners, i.e. when dependency ratio was favorable.⁴⁰ Even if we neglect problems invoked by implementation of funded systems, its implementation would not guarantee the evasion reduction because of the myopia of the insured persons and their belief that the state will take care of them when they cannot actively participate in business activities.

Additionally, for efficient combat against contribution evasion, it is mandatory to improve statistical records of all three segments of social insurance in the sense of improving quality, volume and accuracy of statistics to be able to conduct measures most adequate for a given situation.⁴¹

CONCLUDING REMARKS

Contribution evasion causes consequences both in fiscal and social area. Namely, by contribution evasion, social insurance organizations are deprived of a part of their revenues, which eventually reflect on complete or partial failure of the rights of social security users. Ultimately, evasion means that the minimum amount of social security must be secured through taxes, which means that the burden of that financing will be transferred to all tax payers in one country.

When considering the causes of contribution evasion in Serbia, it is primarily the gray economy. Therefore, our efforts must be directed towards the stimulation of doing business activities with the legal limitations. At the same time, there should be campaigns that could develop awareness that contributions are not taxes but a type of insurance for the future. Apart from that, low incomes and high fiscal pressure of labor in Serbia only additionally induce evasion.

Advocates of funded systems claim that the transfer to this system would reduce evasion. Considering that the volume of evasion also depends on the factors of a subjective nature, and that in Serbia there is a high mistrust in the whole system of social insurance, the implementation of this system would not necessarily mean the reduction of evasion.

Just like in other countries in transition, in Serbia, contribution evasion is widespread, although there are no exact data or estimates on the extent of contribution evasion, so that the issue in the future should be studied. When estimating measures conducted by Serbian legislator in the fight against contribution evasion, it can be concluded that some of them, in spite of good intentions, are unfair. It is the case with the measure that enables a writing-off or standstill of obligations based on compulsory social insurance, which rewards irregular payers, while those who regularly settle their obligations related to contributions are fined because, firstly they pay contributions for their "own" social security and then taxes, which finance budget transfers aimed at covering deficits by social insurance funds.

Considering that improved system of collection and records of contributions is one of more important measures to stop contribution evasion, a significant progress was made by passing LCRCSS, which establishes a new system of control and collection, thanks to establishing and keeping a unique centralized basis of the in-

⁴⁰ Dependency ratio is defined as the ratio of number of contributors to number of pensioners. It is considered that dependency ratio is favorable if the number of contributors is at least three times higher than the number of pensioners. According to the data of Statistical Office of the Republic of Serbia from April 2011 Serbia has 2281909 employed workers, while the number of pensioners is 1630063, according to the data of Pension and Disability Insurance Fund of the Republic of Serbia, during the same period which means that dependency ratio is 1.4, which is extremely unfavorable.

⁴¹ P.Bejaković, *Evazija doprinosna za mirovinsko osiguranje*, *Financijska teorija i praksa*, br.26/2002, str.340.

sured persons and contribution payers. Having data about the basis of contributions and paid contributions, as well as other data of importance to the assessment and payment of contributions will, after a comprehensive analysis of input, enable easy spotting of irregularities and taking appropriate measures to eliminate them.

Finally, considering the consequences of contribution evasion and specific causes of contribution evasion, we can conclude that despite the measures conducted by Serbian legislator, contribution evasion will not be significantly reduced until the establishment of favorable macroeconomic environment and until the attitude towards its payment does not change.

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FIREARMS CONTROL IN FUNCTION OF CRIME PREVENTION¹

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Abstract: The subject of this paper is the current requirements for obtaining and possessing firearms and their importance for the prevention of crime. This paper shows that in the last decade research regarding the possession of firearms by citizens was intensified, like surveys of consequences of their use and the related control policies which exist in certain countries. In connection with it ranking is made among the states in order to identify those countries that have the least harmful consequences from the use of firearms and those countries whose policies of prevention in the field of firearms control give the best results. Special attention will be paid to the analysis of current prevention programs aimed at preventing violence involving firearms, in order to identify strengths and weaknesses of these programs, and thus to avoid errors in design and implementation of similar prevention programs in the Republic of Serbia, and use positive experiences for further improvement of existing activities or start new prevention activities.

Key words: firearms, crime, prevention, programs.

INTRODUCTION

The availability of firearms is a significant risk factor for the manifestation of criminal behavior. The possibility of using a firearm in the commission of criminal acts is directly conditioned by the possibilities of its acquisition on legal and illegal market. On the legal market possibility of acquisition of the firearm by citizens depends on the legislative framework that defines what constitutes the term firearm and which regulates the conditions for acquisition, possession, carrying, sale, transport, repair and modification of weapons, their parts and ammunition. In the Republic of Serbia those questions are regulated by the Law on Weapons and Ammunition. In prevention of illegal firearm acquisition the legal norms which regulate conditions for production, import, export and transit of firearms are important. It is a fact that the legislation which regulates all these questions in one of its parts prevents the possibilities of the firearms abuse. Effective monitoring of compliance with statutory provisions relating to these activities should contribute to reducing the possibility of illegal acquisition of firearms, thus reducing the possibility of committing criminal acts. This is one of the techniques of situational crime prevention, which is classified in the first group of five groups of techniques that are singled out by Derek Cornish and Ronald V. Clarke (2003: 90), which is directed towards increasing the effort to commit a criminal offence. Therefore, the risk factor which presents the availability of firearms, as well as the possibilities of firearms control will be discussed in the paper.

¹ This paper is the result of the realisation of the Scientific Research Project entitled "Development of Institutional Capacities, Standards and Procedures for Fighting Organized Crime and Terrorism in Climate of International Integrations". The Project is financed by the Ministry of Science and Technological Development of the Republic of Serbia (No 179045), and carried out by the Academy of Criminalistic and Police Studies in Belgrade (2011–2014). The leader of the Project is Associate Professor Saša Mijalković, PhD.

AVAILABILITY OF FIREARMS AND POTENTIAL RISK FOR COMMITTING CRIMES

The firearm, according to the Law on Weapons and Ammunition of the Republic of Serbia, which is in effect, is a kind of arms which throws a projectile by means of thrust produced by gun powder or other gases resulting from combustion of the propellant material (article 2. paragraph 2, point 1), while the same Law defines weapons as “any device manufactured, adapted or intended for throwing projectiles, gas, liquid or other substances by thrust of the gunpowder gases, air pressure, gas under pressure or otherwise other means of pressure as well as other items whose main purpose is to launch an attack”.² This law defines conditions for acquisition, possession, carrying, trade, transportation, repairing and modification of weapons, weapon components and ammunition, and the provisions of this Law also apply to the foreigners who have approved permanent residence or temporary residence longer than one year if not otherwise defined by the international agreement (article 1). According to the purpose and particular types of weapons by this Law weapons have been classified as: arms for personal safety, hunting arms, sporting weapons, trophy arms, ancient and combined arms (article 3). Similar to given definition of firearms from the article 2 paragraph 2 point 1 of the Law on Weapons and Ammunition, in the article 3 of the Protocol against the Illicit Manufacturing of and Trafficking in Firearms, Their Parts and Components and Ammunition, supplementing the United Nations Convention against Transnational Organized Crime, for the purposes of this Protocol a firearm is defined as any portable barrelled weapon that expels, is designed to expel or may be readily converted to expel a shot, bullet or projectile by the action of an explosive, excluding antique firearms or their replicas. Antique firearms and their replicas must be defined in accordance with domestic law, and in no case, however, antique firearms include firearms manufactured after 1899.

Beside the definition of a firearm from the cited Serbian Act, for effective control of firearms there are significant definitions of terms shooting and light arms, which can be found in the Strategy for the control of shooting and light arms in the Republic of Serbia for the period 2010-2015 year which was adopted by the Government of the Republic of Serbia in 2010. In this strategy, the shooting and light arms are defined as each hand-portable lethal weapon that throws, launches, is designed to throw or launch, or can be modified to throw or launch a projectile under pressure of explosive, except the old weapons. In broad sense, the shooting arms were intended for personal using and include, among other things, pistols, revolvers, rifles, automates, and light machine guns. A light weapon is one that, as a rule, is used by teams of 2-3 persons, and include, among other things, heavy machine guns, a hand-held rocket launcher, anti-aircraft systems, and mortars to 100 mm.³

In some countries similar terms are used in strategic documents. The Government of the Republic of Croatia adopted the National Strategy and Action Plan for the Control of Small and Light Arms. The term small arms include revolvers, pistols, rifles, carbines, short machine guns, automatic rifles and rifle-machine guns, while light weapons include machine guns (including heavy machine guns), grenade launchers, portable anti-aircraft arms, portable antitank arms, portable anti-tank missile systems, portable anti-aircraft missile systems (MANPADS) and mortars to 100 mm. The category of small arms includes a weapon which is used by one

² The Law on Weapons and Ammunition, Official Journal of the Republic of Serbia, no. 9/92, 53/93, 67/93, 48/94, 44/98, 39/2003, 101/2005 – other law and 85/2005 – other law.

³ Government of the Republic of Serbia (2010). The Strategy for control of shooting and light arms in the Republic of Serbia for the period 2010-2015

person, while the category of light arms, as a rule, includes a weapon which is used by two or more persons who function as service of the weapon.⁴ For the purposes of this strategy small and light weapons include their components, accessories, proper ammunition and explosives. On the other hand, the Government of Montenegro adopted the Strategy for the Control and Reduction of Light and Small Caliber Weapons 2005, but it do not give definition of such weapons.

From these definitions it is obvious that different firearms are included under the terms shooting and light arms. While in connection to larger number of shooting arms The Law on Weapons and Ammunition of the Republic of Serbia defines conditions for legal trade and possession by citizens, it cannot be said for given examples of light arms, because they are completely prohibited for traffic, acquisition, possession, carrying, repair and modification by the same Law. However, the fact is that some may illegally acquire such types of light arms and that then they could be misused for criminal purposes and commission of the crimes with serious consequences, as is the case with terrorism. Therefore, it is necessary to point out that in the planning of preventive measures, firearms control should include not only those provisions of the law (and their implementation) relating to the regulation of trade, acquisition, possession, carrying, repairs and modifications of shooting firearms, but also production, import, export and transit of light arms.

In the last decade the research concerning the possession of firearms by citizens have intensified, as the research of consequences of their use and in relation with that the research of control policies which exist in certain countries. In connection with this, ranking among the states is made in order to identify those countries that have the least harmful consequences from the use of firearms and those countries whose policies of prevention in the field of firearms control give the best results. However, it is obvious that there is insufficient exchange of information in that field, that data which could enable the implementation of comprehensive research regarding firearms have not been published sufficiently and regularly. In the absence of such information some parameters may be given and based on the rough estimates of the availability of firearms.

According to official data from the Strategy for control shooting and light arms of the Government of the Republic of Serbia in the Republic at the end of 2008 there were 1 172 468 registered firearms in legal possession of the citizens (Government of Serbia, 2010).⁵ In the period 2005-2009, 6191 crimes using firearms were committed in the Republic of Serbia. In the same period firearms in the illegal possession were seized from 6284 citizens, and 50 541 weapons that were owned by the state were destroyed, of which 8018 are portable anti-aircraft systems (MANPADs).

4 The Government of the Republic of Croatia (2009). The National Strategy and Action Plan for the Control of Small and Light Arms.

5 According to the Strategy for the Control and Reduction of Light and Small Caliber Weapons of the Government of the Montenegro, 01.Jun 2005, in the legal possession of the citizens there were about 100 367 firearms, of which in regime of holding and carrying 97 937 pieces, and in regime of holding (trophy and other weapons) 2 430 pieces. The same strategy also stated that the number of weapons held and carried include the following types: 60 377 pistols, 22 744 hunting shotguns, 7 729 hunting carbines, 4 439 revolvers, 2 155 rifles, 416 small caliber rifles, 29 automatic and 48 combined hunting weapons. The number of weapons held (approval to hold the trophy and other weapons) are as follows: 1225 hunting shotguns, 643 pistols, 238 rifles, 156 hunting carbines, 113 revolvers, 43 automats, 11 small caliber rifles and one combined hunting weapon. With this information, the same Strategy of the Government of Montenegro indicates that the person in possession of legal firearms 1533, of which: 1179 guns, 120 rifles, 124 hunting carbines, 47 shotguns, 32 revolvers, 18 automates and 13 small caliber rifles. The National Strategy and Action Plan for the Control of Small Arms and Light Weapons in Croatia indicates that, at the end of 2007, 339 202 weapons were registered with 196099 people, at the end of 2008, 353 929 pieces of weapons with 191 071 persons, while in late 2009 there were 357 343 registered firearms with 184 264 people. The increase of the number of registered weapons with small number of persons in the same document is associated with better control through the implementation of the new gun law.

The same strategy indicates that a disturbing number of firearms are in possession of citizens as the result of post-war instability and increased crime rates, combined with the traditional culture of possession of weapons and a large availability of weapons. In addition, the Strategy indicates that despite earlier positive measures of collection and registration of illegal weapons that were carried out by competent authorities in 1999, 2003 and 2007, the existence of large quantities of illegal weapons can still have a significant impact on the development of negative consequences.⁶

Unfortunately, these data do not reveal, although it would be very interesting to determine how many of those crimes were committed with firearms in legal possession as well as crimes committed with firearms in illegal possession. If the data showed that the majority of crimes involving the use of firearms carried out by firearms in legal possession than we can speak about the need for changes in the legislation and in particular the need for more stringent conditions for the acquisition, possession and carrying of firearms. On the other hand, if it is determined that the offences were committed with a firearm which is in illegal possession, then the prevention policy should be based on improving the control and monitoring of compliance with legal provisions, which should prevent that someone comes into illegal possession of firearms. In principle it could be said that such an approach is correct, under the condition that additional analysis is performed to determine in the first case, whether the offences were committed with firearms in legal possession for which a perpetrator has a licence to hold or carry, while in the second case it should be determined which the dominant forms of coming to an illegal firearm possession are (whether the problem is unprotected manufacture, sale, storage, etc.).

Partly, it is possible to estimate how many crimes have been committed with firearms in the illegal possession, under the condition that for each crime that has been committed with firearms in illegal possession, a docket for a criminal offence under Article 33 of the Law on Firearms and Ammunition from 2005 is performed against the offender, as well as a docket for a criminal offence from Article 348 of the Criminal Code of the Republic of Serbia (illegal manufacture, possession, carrying and transport of weapons and explosive materials) for the period 2006-2009, as the Criminal Code came into force on 1 January 2006. According to the data of the Statistical Office of Serbia for the period 2006-2009, a total number of persons against whom dockets for criminal offences from Article 348 were performed, was 4580, while in the same period 3843 persons were convicted. In this analysis, the data for 2005 are missing, but it can be assumed that the same year there were over 1000 persons with performed dockets and at least 700 convicted persons, given that in the period 2006-2009, the least number of reported persons was in the 2006 - 1068 (789 convicted), and most were reported in 2008 - 1234 (convicted 1048). If the number of persons convicted for the crime compared to the above total number of criminal offences involving firearms is 6191, then such a comparison suggests that the majority of crimes are committed with firearms in illegal possession. This means that a more detailed analysis should identify the ways in which the perpetrator from Article 348, come into the illegal possession of firearms, in order to improve the

⁶ The National Strategy and Action Plan for the Control of Small Arms and Light Weapons of the Government of the Republic of Croatia points out the importance of the actions of voluntary surrender of illegal firearms when in the period 2007-2009, 1420 pieces of long and short of prohibited automatic weapons and 29 934 mines and explosive devices (category A), 2384 pieces allowed long and short arms (category B), and 1 045 806 pieces of ammunition for long and short weapons were collected. The same document indicates that in order to raise awareness of the harmfulness of unlawful possession of weapons on the basis of the Law on Arms, the Croatian Ministry of Internal Affairs conducted an action "Fewer Arms - Fewer Tragedies" and opened a free telephone line 0800 88 92 where citizens can obtain the necessary information on the voluntary surrender of illegal weapons, or to request its legalization. In the similar strategy of the Government of Montenegro it is pointed out that the Ministry of Internal Affairs during the year 2003 organized a campaign for voluntary return of weapons and mines called "Respect life - back concealed weapons."

control of access to firearms through the protection of legal and removal of illegal markets. Certainly a large number of firearms in legal possession of the citizens is an important factor of risk, not only as to the possibility of its abuse by the owners and persons close to him who may carry out criminal acts and self-injure, but also the possibility of theft of such weapons. Therefore, in the assessment of ways of coming into illegal possession of firearms, we should collect data on the number of reported cases of disappeared firearms, while the victimisation studies should determine the extent of a dark figure in respect of that offence.

The Small Arms Survey serves as international source of public information on all aspects of small arms and armed violence. It is an annual review of global small arms issues as production, brokering, arms transfers, the effects of small arms, and measures to deal with the problems associated with small arms⁷. The Swiss government, in conjunction with other interested governments, established the Small Arms Survey project in 1999, an independent research project located at the Graduate Institute of International and Development Studies in Geneva. The project is supported by the Swiss Federal Department of Foreign Affairs, and by sustained contributions from the Governments of Canada, Finland, Germany, the Netherlands, Norway, Sweden, and the United Kingdom, the Governments of Australia, Belgium, Denmark, France, New Zealand, Spain, and the United States, as well as from different United Nations agencies, programmes, and institutes.⁸

Table 1 Countries ranked by average rate of civilian ownership, guns per 100 people⁹

| Country | Rank by rate of ownership | Average firearms per 100 people | Low firearms per 100 people | High firearms per 100 people |
|--------------------------|---------------------------|---------------------------------|-----------------------------|------------------------------|
| United States of America | 1 | 88.8 | 82.2 | 95.3 |
| Yemen | 2 | 54.8 | 28.6 | 81.1 |
| Switzerland | 3 | 45.7 | 30.9 | 60.5 |
| Finland | 4 | 45.3 | 31.5 | 59.1 |
| Serbia | 5 | 37.8 | 26.0 | 49.6 |
| Sweden | 10 | 31.6 | 23.3 | 39.9 |
| France | 12 | 31.2 | 29.6 | 32.9 |
| Germany | 15 | 30.3 | 24.3 | 36.4 |
| Croatia | 26 | 21.7 | 17.6 | 25.9 |
| Slovenia | 47 | 13.5 | 13.5 | 13.5 |
| Italy | 55 | 11.9 | 6.8 | 17.1 |
| Spain | 61 | 10.4 | 10.4 | 10.4 |
| Russia | 68 | 8.9 | 4.5 | 13.3 |
| Bulgaria | 88 | 6.2 | 5.2 | 7.2 |
| England & Wales | 88 | 6.2 | 3.7 | 8.7 |
| Hungary | 93 | 5.5 | 5.5 | 5.5 |
| Scotland | 93 | 5.5 | 3.0 | 8.0 |
| Netherlands | 112 | 3.9 | 3.5 | 4.4 |
| Romania | 160 | 0.7 | 0.7 | 0.7 |

In 2007, according to the Small Arms Survey, Serbia ranked fifth in comparison to the rate of private gun ownership in 178 countries.¹⁰ In Annex 4 of that Survey, 178 countries were ranked by their average rate of civilian gun ownership per 100 people, both lawfully and unlawfully possessed. For each ranked State, the lower and upper estimates of the number of firearms per 100 people are shown. However, according to the estimates of the number of firearms in private possession of citi-

⁷ <http://www.smallarmssurvey.org/about-us/mission.html> (Accessed 28 January 2012)

⁸ <http://www.smallarmssurvey.org/about-us/mission.html> (Accessed 28 January 2012)

⁹ Source: Small Arms Survey 2007: Guns and the City. Retrieved from: <http://www.smallarmssurvey.org/fileadmin/docs/A-Yearbook/2007/en/Small-Arms-Survey-2007-Chapter-02-annexe-4-EN.pdf> (Accessed 28 January 2012). This table contains data for 19 countries, while original table from cited site includes data for 178 countries.

¹⁰ *Small Arms Survey 2007: Guns and the City*. <http://www.smallarmssurvey.org/fileadmin/docs/A-Yearbook/2007/en/Small-Arms-Survey-2007-Chapter-02-annexe-4-EN.pdf> (Accessed 28 January 2012)

zens given in the the Small Arms Survey, the lower bound for Serbia is estimated at 26 (2.1 million firearms owned by citizens), and the upper limit of 49.6 (4 million firearms), which means that the environment is 37.8, although the foregoing that, according to official data in the Republic of Serbia at the end of 2008 there were 1 172 468 registered firearms in legal possession of the citizens (15.8 per 100 inhabitants). According to this value (37.8), Serbia ranked fifth, while the United States ranked first with an average 88.8 per 100 inhabitants, followed by Yemen with 54.8, Switzerland with 45.7 and Finland with 45.3. The huge difference between the estimated lower limit which is not small (2.1 million firearms, therefore it is estimated that more than 900 000 pieces found in illegal possession) and the upper limit, it would mean that according to the lower limit Serbia ranked sixteenth. The fact is that these are estimates, but there is no doubt that the figure of over one million pieces of registered firearms in the hands of citizens is not negligible. Concerning the ranking of some other countries, we see that Sweden is on 10th place with 31.6, France is on 12th place with 31.2, Germany is on 15th place with 30.3, Croatia is on 26th place with 21.7, Slovenia is on 47th place with 13.5, Italy is on 55th place with 11.9, Spain is on 61st place with 10.4, Russia is on 68th place with 8.9, Bulgaria is on 88th place with 6.2 as well as England and Wales, Hungary is on 93th place with 5.5 as well as Scotland, the Netherlands on 112th place with 3.9, and Romania is on 160th place with 0.7 (See Table 1).

Table 2 Homicide by firearm rate per 100 000 population for 2007-2009 years¹¹

| Country | 2007 | 2008 | 2009 |
|--------------------------|------|------|------|
| United States of America | 3.4 | 3.1 | 3.0 |
| Finland | 0.5 | 0.6 | 0.4 |
| Serbia | 0.4 | 0.5 | 0.5 |
| France | 0.1 | - | - |
| Germany | 0.2 | 0.2 | 0.2 |
| Croatia | 0.7 | 0.6 | 0.4 |
| Slovenia | 0.4 | 0.1 | 0.1 |
| Spain | 0.1 | 0.2 | 0.2 |
| Bulgaria | 0.7 | 0.7 | - |
| England & Wales | 0.1 | 0.1 | 0.1 |
| Hungary | 0.1 | 0.1 | 0.1 |
| Netherlands | 0.3 | 0.3 | 0.3 |
| Romania | 0.0 | 0.0 | 0.0 |

Although the widespread availability of firearms in legal possession represents a significant risk factor for carrying out murders with its use, statistical data on the number of such crimes shows that many factors contribute to committing murders. These data were released by the United Nations Office on Drugs and Crime for 2007, 2008 and 2009. In the Republic of Serbia, which in 2007 ranked fifth according to the number of firearms owned by citizens in the Small Arms Survey, the rate of homicides by firearms (the number of such homicides per 100,000 population) ranged from 0.4 in 2007, to 0.5 in 2008 and 2009. At the same time several states which, according to the estimates from the same Small Arms Survey had fewer firearms in the hands of citizens did not have significantly better results in terms of the rate of such murders. Croatia, which was on the 26th place, had the rate of firearm homicides 0.7 in 2007, 0.6 in 2008, and 0.4 in 2009. Slovenia, which was on the 47th place, had rate 0.4 in 2007, while in 2008 and 2009 had a lower rate of homicides with firearms than Serbia - 0.1. Even better examples are Bulgaria and the Netherlands. Bulgaria, which was on the 88th place, had the rate of murders by

¹¹ Source: United Nations Office on Drugs and Crime. *Percentage of homicides by firearm, number of homicides by firearm and homicide by firearm rate per 100,000 population*. Retrieved 28 January 2012 from: <http://www.unodc.org/unodc/en/data-and-analysis/homicide.html>. Note: Data for some other countries can be viewed at this cited site.

firearms 0.7 in 2007 and 2008, while the Netherlands, which was on 112th place had a rate of 0.3 during all three years. However, in order to accurately comprehend the relationship between the availability of firearms in the hands of citizens and crime, along with the above data it is necessary to consider the other crimes committed using a firearm (eg. aggravated assaults, rape, kidnapping, robbery, etc.) and not just murders, although, undoubtedly, the information about the murder have primary importance (See Table 2).

On the other hand, the United States ranked first place by the number of firearms in the possession of citizens, have a higher rate of firearm homicides than other countries, and that rate was 3.4 in 2007, 3.1 in 2008, and 3.0 in 2009. An estimated 1 382 012 violent crimes occurred in the United States during 2008, and murders accounted for 1.2 percent of estimated violent crimes in 2008. (16.584). 67% of these murders were committed with firearms.¹² Based on the survey data from the U.S. Department of Justice, roughly 5 340 000 violent crimes were committed in the United States during 2008 (these include simple/aggravated assaults, robberies, sexual assaults, rapes, and murders), of which, about 436 000 or 8% were committed by offenders visibly armed with a gun.¹³

FORMS OF CONTROL OVER FIREARMS POSSESSION

Government measures to prevent violence involving firearms often focus on strengthening legislation to control the sale, purchase and use of these weapons, and such legislative measures usually include: 1) bans on certain types of firearms; 2) licensing and registration schemes for owners and suppliers; 3) minimum age for the purchase of firearms; 4) background checks and/or psychological testing of purchasers; 5) minimum waiting periods between licensing and purchasing; 6) limits on quantities purchased; 7) controls on the carrying of firearms; and 8) safe storage requirements (World Health Organization, 2010: 64-65). In general, jurisdictions with more restrictive firearms policies and lower firearms ownership tend to experience lower levels of firearms violence, and to be successful, such legislation must be effectively implemented, publicized and enforced (World Health Organization, 2010: 64). There are two basic approaches to firearms control: defining conditions for its acquisition, possession and carrying according to the law, on the one hand, and ensuring effective monitoring of compliance with those conditions, on the other hand. In addition to prescribing the conditions for the acquisition, possession and carrying of firearms in applicable law or several laws, the first approach involves editing a number of activities that precede and are in connection with the possession of firearms (manufacturing, labeling, recordkeeping, import, export, transit, sale, transport, repair, modifying and other significant activities). But the greatest attention draws the defining of the conditions for the acquisition, possession and carrying of firearms. Therefore, most of the following discussion is dedicated to them. In this regard, one of the main goals of researchers is to determine the nature of links between the statutory requirements for the acquisition, possession and carrying of firearms and crime situation in a state.

According to the article 7 of the Law on Weapons and Ammunition of the Republic Serbia, firearms may only be purchased by the adult person (person 18

¹² http://www2.fbi.gov/ucr/cius2008/offenses/violent_crime/index.html (Accessed 28 January 2012)

¹³ Bulletin: "National Crime Victimization Survey: Criminal Victimization, 2008." By Michael R. Rand. Bureau of Justice Statistics, U.S. Department of Justice, September 2009. <http://bjs.ojp.usdoj.gov/content/pub/pdf/cv08.pdf> – According to: "Gun Control Facts." By James D. Agresti and Reid K. Smith. Just Facts, September 13, 2010. Revised 1/22/12. <http://justfacts.com/guncontrol.asp>

years old and over who fulfill prescribed legal requirements) with the approval of the Ministry of Interior - the organizational unit in the municipality in whose territory is the residence or seat of the person making the request for authorization. Article 11 prescribes that weapons for personal safety can be carried by the person holding the weapon paper and permitted to carry such weapons, while article 11 b prescribes that the police shall issue an individual a permit to carry weapons for personal safety. The permit to carry weapons is valid for five years from the date of issuing and that period may be extended to the same period if the competent authority determines that there are still reasons for carrying the weapon. The Law also prescribes which types of weapons cannot be in possession of citizens.

According to the article 8 of the Law on Weapons and Ammunition of the Republic of Serbia, a permit to acquire firearms shall not be issued in the following cases:

1. to a juvenile or a disabled individual, incapable to work
2. to a person convicted of criminal offences against constitutional order, endangering territorial integrity, undermining military or defence strength, violence against representative of the highest state authorities, armed rebellion, terrorism, sabotage, violation of territorial sovereignty, hijacking, threatening flight safety, murder, heavy body injury, light body injury, for participating in fights, endangering safety, endangering one with dangerous weapons in fight or dispute, kidnapping, raping, unnatural fornicate, heavy theft, robbery, heavy cases of robbery, extortion, provoking general danger, illegal hunt, preventing an official person in performing his/her duty, obstructing an authorized person in performing security duties or maintaining public peace and order, preventing an official person in conducting security duties or maintaining public peace and order, violent behaviour, manufacturing and acquisition of arms and means aimed at committing criminal offence, participating in a group which have committed violence and for the criminal offence defined by this Law;
3. to a person against whom criminal procedure is undertaken for criminal offences which are prosecuted officially while the procedure is conducted;
4. to a person who in three years prior to the day of submitting the application for issuing a permit for weapons acquisition has been sentenced for violence against public peace and order for which has been proscribed imprisonment or who has been sentenced for violence defined by this Law;
5. to a person against whom a proceeding is instituted for violating public peace and order for which imprisonment is proscribed or for the offence defined by this Law while the proceeding is conducted;
6. to a person not trained for handling firearms.

A permit for weapons acquisition shall not be issued in case it is necessary for personal protection and property safety of other individuals, public peace and order or for the security and defence of the Republic. If during the process of a permit issuing, there is a reasonable doubt that the applicant is not medically capable of handling firearms, the relevant authorities shall send him/her to undergo a medical check up. An applicant shall also provide a certificate that no investigation is conducted against him/her or that no charge is preferred against him/her as well as a certificate issued by the authorized organization that he/she has been trained in handling firearms. An organization authorized for training in handling firearms may be a shooter or other organization and institution which possesses necessary premises, shooting range, professional personnel and which meets other proscribed conditions for conducting training and having license for that purpose issued by the

relevant authorities. The training consists of theory, practice and knowledge testing and includes the following topics: legal aspect of possessing, carrying and use of weapons; safe handling of the weapons; basic of ballistic and shooting techniques as well as practical shooting with firearms. Authorized personnel of the Ministry of Interior, personnel retired in this capacity, active and retired military personnel and reserve officers are not obliged to attend training for handling firearms.

The laws governing the conditions for the acquisition, possession and carrying of firearms vary to a greater or lesser extent from country to country. In terms of establishing unique political, cultural, economic, financial and security areas in the territory of Europe, the European Union has set certain minimum standards in this area, aimed at reducing opportunities for potential abuse of firearms for criminal purposes. Thus, the Council of the European Economic Community adopted Directive 91/477/EEC of 18 June 1991 on control of the acquisition and possession of weapons. This Directive is without prejudice to the application of national provisions concerning the carrying of weapons, hunting or target shooting, and it does not apply to the acquisition or possession of weapons and ammunition, in accordance with national law, by the armed forces, the police, the public authorities or by collectors and bodies concerned with the cultural and historical aspects of weapons, nor is it applied to commercial transfers of weapons and ammunition of war. According to the article 5, Member States were obliged to allow the acquisition and possession of firearms classified in category B only by persons who have good cause and who: (a) are 18 years old or more, except for hunting or target shooting; (b) are not likely to be a danger to themselves, to public order or to public safety. According to the article 6, Member States were obliged to take all appropriate steps to prohibit the acquisition and the possession of the firearms and ammunition classified in category A. In special cases, the competent authorities may grant authorizations for such firearms and ammunition where this is not contrary to public security or public order.¹⁴

The European Parliament and the Council of the European Union amended Council Directive 91/477/EEC by Directive 2008/51/EC of 21 May 2008. The main reason for the amendment was the access of the Community to the United Nations Protocol on the illicit manufacturing and trafficking in firearms, their parts, components and ammunition. Because police intelligence evidence has showed an increase in the use of converted weapons within the Community, this revision was an opportunity to ensure that such convertible weapons are brought within the definition of a firearm for the purposes of Directive 91/477/EEC. Under the new definition the firearm is any portable barrelled weapon that expels, is designed to expel or may be converted to expel a shot, bullet or projectile by the action of a combustible propellant, unless it is excluded for one of the reasons listed in Part III of Annex I. Firearms are classified in part II of Annex I. For the purposes of this Directive, an object shall be considered as capable of being converted to expel a shot, bullet or projectile by the action of a combustible propellant if it looks like a firearm, and as a result of its construction or the material from which it is made, it can be converted.¹⁵ In this way, convertible weapons may be prohibited or approval for the acquisition and marking may be required for it, as well as the registration of the owner. Mainly, these are starting pistols which expel the signal ammunition or pistols with tear gas.

A research in the Western Balkans has shown that many of the Western Balkan countries are affected by trafficking, possession and use of the convertible weapons,

¹⁴ Council Directive 91/477/EEC of 18 June 1991 on control of the acquisition and possession of weapons Official Journal L 256 , 13/09/1991 P. 0051 – 0058.

¹⁵ Directive 2008/51/EC of the European parliament and of the Council of 21 May 2008 amending Council Directive 91/477/EEC on control of the acquisition and possession of weapons. Official Journal of the European Union 8.7.2008.

and that in most cases there are strict regulations about the civilian possession of firearms, and that the legislation related to certain types of weapons of the convertible weapons is currently inadequate in a number of countries (Persi, 2009). In the same research it is suggested that the countries should improve the accuracy of the definition of firearms to include convertible weapons and, should require that convertible weapons have identification marks as firearms do, that their owners are registered and that sanctions for modifying weapons in this regard are effective. For example, the Law on Firearms in Albania from 1992, does not mention the convertible weapons and the possibility of its modifying. According to the law of West Herzegovina Canton in Bosnia and Herzegovina, signal arms and arms for alert are exempted from the requirement of registration and obtaining the license if it is properly marked according to the law, while the entity or cantonal laws do not mention convertible weapons in definitions of firearms. The Croatian law does not mention the convertible weapons in the definition of "firearm", as well as the laws on arms in Macedonia and Montenegro (Persi, 2009).

It is also interesting that according to the article 4 of the Directive 2008/51/EC Member States have obligation to ensure, by 31 December 2014, the establishment and maintenance of a computerised data filing system, either a centralised system or a decentralised system which guarantees to authorised personnel an access to the data-filing systems in which each firearm subject to this Directive shall be recorded. This filing system shall record and maintain for not less than 20 years each firearm's type, make, model, calibre and serial number, as well as the names and addresses of the supplier and the person acquiring or possessing the firearm. Member States also must ensure that all firearms may be linked to their owner at any moment. However, regarding firearms classified in category D, Member States must, as from 28 July 2010, put into place appropriate tracing measures, including, as from 31 December 2014, measures enabling linking at any moment to the owner of firearms placed on the market after 28 July 2010.

Article 5 of the Directive 91/477/EEC was replaced by the following text in the Directive 2008/51/EC: "Without prejudice to Article 3, Member States shall permit the acquisition and possession of firearms only by persons who have good cause and who: (a) are at least 18 years of age, except in relation to the acquisition, other than through purchase, and possession of firearms for hunting and target shooting, provided that in that case persons of less than 18 years of age have parental permission, or are under parental guidance or the guidance of an adult with a valid firearms or hunting licence, or are within a licensed or otherwise approved training centre; (b) are not likely to be a danger to themselves, to public order or to public safety. Having been convicted of a violent intentional crime shall be considered as indicative of such danger." As we can see, the change is mainly related to more stringent conditions for minors who possess firearms for hunting and target shooting. Member States may withdraw authorisation for possession of a firearm if any of the conditions on the basis of which it was granted are no longer satisfied. Member States may not prohibit persons residing within their territory from possessing a weapon acquired in another Member State unless they prohibit the acquisition of the same weapon within their own territory. It is also important to say that some countries can have more stringent firearms law according to acquisition and possession of the same kinds of firearms, while at the same time some countries can have more liberal firearms law.

In England and Wales conditions for issuing guns are not too strict, and they are regulated by the handgun ban imposed under the 1997 Firearms Act Amendment, while at the same time weapon laws in many other countries can allow pos-

session of the same firearm. The Parliament of the United Kingdom amended the Firearms Act 1968 through the Firearms Act adopted in 1997. The prohibition of weapons and ammunition and control of small-calibre pistols has been regulated by the part I of the Firearms Act 1997, especially general prohibition of small firearms. In the same place it is proscribed extension of s.5 of the M1 Firearms Act 1968 to prohibit certain small firearms. In subsection (1) (which describes weapons which are prohibited by section 5), after paragraph (a b) has been inserted the following paragraph—“(a b a) any firearm which either has a barrel less than 30 centimetres in length or is less than 60 centimetres in length overall, other than an air weapon, a small-calibre pistol, a muzzle-loading gun or a firearm designed as signalling apparatus”¹⁶. In 1997, Austria introduced new laws requiring that purchasers of firearms should be at least 21 years old, have a valid reason to purchase a firearm and undergo background checks and psychological testing (World Health Organization, 2010: 65). The legislation requires a three-day waiting period between licensing and purchasing, together with safer firearm storage. The proportion of firearms suicides began to fall, without an accompanied increase in suicides by other means, and Austria's new laws have also been associated with falling demand for firearms licences and a drop in the number of homicides involving guns¹⁷.

In Canada according to the section 5, subsection 1 of the Firearms Act (S.C. 1995, c. 39) “a person is not eligible to hold a licence if it is desirable, in the interests of the safety of that or any other person, that the person not possess a firearm, a cross-bow, a prohibited weapon, a restricted weapon, a prohibited device, ammunition or prohibited ammunition”. In determining whether a person is eligible to hold a licence under subsection (1) the Firearms Act in Canada proscribes, in section 5 subsection 2, that “a chief firearms officer or, on a reference under section 74, a provincial court judge shall consider whether the person, within the previous five years,

(a) has been convicted or discharged under section 730 of the Criminal Code of (i) an offence in the commission of which violence against another person was used, threatened or attempted,

(ii) an offence under this Act or Part III of the Criminal Code,

(iii) an offence under section 264 of the Criminal Code (criminal harassment), or

(iv) an offence relating to the contravention of subsection 5(1) or (2), 6(1) or (2) or 7(1) of the Controlled Drugs and Substances Act;

(b) has been treated for a mental illness, whether in a hospital, mental institute, psychiatric clinic or otherwise and whether or not the person was confined to such a hospital, institute or clinic, that was associated with violence or threatened or attempted violence on the part of the person against any person; or

(c) has a history of behaviour that includes violence or threatened or attempted violence on the part of the person against any person”¹⁸. Also in the subsection 3, it is proscribed that notwithstanding subsection 2, in determining whether a non-resident who is eighteen years old or older and by or on behalf of whom an application is made for a sixty-day licence authorizing the non-resident to possess firearms that are neither prohibited firearms nor restricted firearms is eligible to hold a licence under subsection 1, a chief firearms officer or, on a reference under section 74, a provincial court judge may but need not have regard to the criteria described in subsection 2.

16 <http://www.legislation.gov.uk/ukpga/1997/5/part/I>

17 Kapusta ND et al. Firearm legislation reform in the European Union: the impact on firearm availability, firearm suicide and homicide rates in Austria. *British Journal of Psychiatry*, 2007, 191:253–257. According to: World Health Organization, 2010: 65.

18 <http://laws-lois.justice.gc.ca/eng/acts/F-11.6/page-2.html#h-5>

Canada's Firearms Act from 1995 in section 8 prescribed rules according to special cases – persons. An individual who is less than eighteen years old and who is otherwise eligible to hold a licence is not eligible to hold a licence except as provided in this section. An individual who is less than eighteen years old and who hunts or traps as a way of life is eligible to hold a licence if the individual needs to hunt or trap in order to sustain himself or herself or his or her family. An individual who is twelve years old or older but less than eighteen years old is eligible to hold a licence authorizing the individual to possess, in accordance with the conditions attached to the licence, a firearm for the purpose of target practice, hunting or instruction in the use of firearms or for the purpose of taking part in an organized competition. An individual who is less than eighteen years old is not eligible to hold a licence authorizing the individual to possess prohibited firearms or restricted firearms or to acquire firearms or cross-bows. An individual who is less than eighteen years old is eligible to hold a licence only if a parent or person who has custody of the individual has consented, in writing or in any other manner that is satisfactory to the chief firearms officer, to the issuing of the licence.

The same Firearms Act in Canada in section 9 prescribed that a business is eligible to hold a licence authorizing a particular activity only if every person who stands in a prescribed relationship to the business is eligible under sections 5 and 6 to hold a licence authorizing that activity or the acquisition of restricted firearms (subsection 1). A business other than a carrier is eligible to hold a licence only if: a) a chief firearms officer determines that no individual who stands in a prescribed relationship to the business need to be eligible to hold a licence under section 7; or b) the individuals who stand in a prescribed relationship to the business and who are determined by a chief firearms officer to be the appropriate individuals to satisfy the requirements of section 7 are eligible to hold a licence under that section. Subject to subsection (3.1), a business other than a carrier is eligible to hold a licence that authorizes the possession of firearms only if every employee of the business who, in the course of duties of employment, handles or would handle firearms is the holder of a licence authorizing the holder to acquire firearms that are neither prohibited firearms nor restricted firearms (subsection 3). A business other than a carrier is eligible to hold a licence that authorizes the possession of prohibited firearms or restricted firearms only if every employee of the business who, in the course of duties of employment, handles or would handle firearms is the holder of a licence authorizing the holder to acquire restricted firearms. A business other than a carrier is eligible to hold a licence that authorizes the possession of prohibited weapons, restricted weapons, prohibited devices or prohibited ammunition only if every employee of the business who, in the course of duties of employment, handles or would handle any of those things is eligible under sections 5 and 6 to hold a licence. In subsection (3), "firearm" does not include a partially manufactured barrelled weapon that, in its unfinished state, is not a barrelled weapon (a) from which any shot, bullet or other projectile can be discharged; and (b) that is capable of causing serious bodily injury or death to a person. Subsection 1 does not apply in respect of a person who stands in a prescribed relationship to a business where a chief firearms officer determines that, in all the circumstances, the business should not be ineligible to hold a licence merely because of that person's ineligibility. Subsection 3 does not apply in respect of an employee of a museum (a) who, in the course of duties of employment, handles or would handle only firearms that are designed or intended to exactly resemble, or to resemble with near precision, antique firearms, and who has been trained to handle or use such a firearm; or (b) who is designated, by name, by a provincial minister.

The Australian Government co-ordinated more restrictive firearms legislation with all State Governments. Australia today has arguably some of the most restrictive firearms legislation in the world. Australia is an example of reforms of firearm laws at the national level that have had promising effects. Australian firearms laws were reformed in 1996 after a mass shooting, and new legislation prohibited semi-automatic and pump-action shotguns and rifles and introduced a national firearms licensing and registration scheme, including a written safety test for purchasers (World Health Organization, 2010: 65). The government offered financial compensation to those surrendering weapons, and studies conducted after the reforms have provided mixed results, some of them found reductions in homicides and suicides by firearms, while another found only a decrease in firearms suicides¹⁹.

The USA federal law prescribes that receiving, possessing or transporting of any type of firearms or ammunition is illegal and punishable by up to ten years of imprisonment for persons: convicted of or under indictment for a felony punishable by more than one year in prison, convicted of a misdemeanour punishable by more than two years in prison, a fugitive from justice, an unlawful user of any controlled substance, who has been ruled as mentally defective or has been committed to any mental institution, an illegal alien, dishonourably discharged from the military, person who has renounced his or her U.S. citizenship, subject to certain restraining orders, or convicted of a domestic violence misdemeanour²⁰. In literature a usually cited example of the Washington, D.C. City Council law, passed in 1976, bans the residents to possess handguns²¹. The law was enforceable until 2008, when the U.S. Supreme Court decided that the law was unconstitutional. "During the years in which the handgun ban was in effect, in Washington D.C., murder rate averaged 73% higher than it was at the outset of the law, while the U.S. murder rate averaged 11% lower"²², but rising of the murder rate started after 1986, culminated around 1992, and then started to decline, although not in uniformly, until 2008 when handgun ban was revoked.

Using "individual rights theory," in the case *District of Columbia v. Heller* 554 U.S. 570 (2008), the Supreme Court of the United States revoked the District of Columbia law that banned virtually all handguns, and required that any other types of firearms in a place of residence had to be disassembled or bound by a trigger lock at all times. The Court rejected the argument that handguns could be banned as long as other guns (such as long-guns) were available, noting that handguns are the "most popular weapon chosen by Americans for self-defence when at home" (Thomas & Cohen, 2008: 84). The requirement that all firearms should be rendered inoperable at all times was found to limit the "core lawful purpose of self-defence" and the Court specifically stated that the Second Amendment did not limit prohibitions on the possession of firearms by felons and the mentally ill, penalties for carrying firearms in schools and government buildings, or laws regulating the sales of guns (Thomas & Cohen, 2008: 84). The Court noted that there was a historical tradition of prohibiting the carrying of "dangerous and unusual weapons" that would not be affected by its decision. Because the District of Columbia is under federal jurisdiction, decision of the the Supreme Court of the United States confirmed that the Second Amendment

19 Studies which have found reductions in homicides and suicides by firearms are: Chapman S et al. Australia's 1996 gun law reforms: faster falls in firearm deaths, firearm suicides, and a decade without mass shootings. *Injury Prevention*, 2006, 12:365–372, and Neill C, Leigh A. *Weak tests and strong conclusions: a re-analysis of gun deaths and the Australian firearms buyback. Discussion paper no. 555*. Canberra, Centre for Economic Policy Research, 2007, while study which found only decrease in firearms suicides is: Baker J, McPhedran S. Gun laws and sudden death: did the Australian firearms legislation of 1996 make a difference? *British Journal of Criminology*, 2007, 47:455–469. Studies cited according to: World Health Organization, 2010: 65.

20 <http://www.justfacts.com/guncontrol.asp#background> (Accessed 28 January 2012)

21 <http://www.justfacts.com/guncontrol.asp#crime> (Accessed 28 January 2012)

22 <http://www.justfacts.com/guncontrol.asp#crime> (Accessed 28 January 2012)

of the United States Constitution protects an individual's right to possess a firearm for traditionally lawful purposes such as self-defence when at home. In the case of *McDonald v. Chicago*, 561 U.S. 3025 (2010), the Supreme Court of the United States adopted decision which determined that the Second Amendment (the right of an individual to "keep and bear arms") applies to the individual states.

In this way, it was shown that the expectations from the ban on handguns, as well as, interpretations of the effects of such ban should be carefully taken into account by analysing many factors. One of these factors is the effectiveness of the implementation control over the regulations governing the possession and carrying of firearms, in which the police have an important role. These data are obtained by results of the implementation of a number of programs aimed at reducing gun violence. As examples we can use programs for reducing gun violence that were conducted in three cities in the United States - Atlanta, Los Angeles and Boston. Important activities in reducing illegal firearms are also firearms amnesties, preventing home manufacture of firearms or conversion of replica firearms and reducing illegal trafficking, especially through undercover operations, such as operations in some states in the United States, where police officers have posed as criminals to purchase firearms from licensed dealers (World Health Organization, 2010: 64, 66). Such operations were found to significantly reduce the supply of firearms to criminals when followed by lawsuits against offending dealers and high-level media coverage. By contrast, results were less positive when legal action was not taken and operations were less publicized.²³

Atlanta Police Department and some other partners adopted a problem-solving approach to juvenile gun violence, the so-called the Atlanta PACT. The five counties constituting the core of Metro Atlanta were included, and intervention was developed with four broad goals: 1) reduce illegal demand for firearms using youth outreach through community-based violence prevention, public education to reduce fear of crime, and high visibility enforcement to enhance deterrence; 2) reduce illegal supply of firearms through proactive law enforcement, specifically targeting adult suppliers of guns to juveniles; 3) reduce illegal carrying of firearms by strengthening street-level enforcement (as directed patrols and proactive patrols to identify and arrest felons in possession of a firearm) and reducing juveniles' fear of victimization and/or by increasing their fear of arrest; 4) rehabilitate juvenile gun offenders through court-based diversion programs and other strategies (Kellermann, Fuqua-Whitley & Parramore, 2006: 13). The focus of the intervention was on the three police beats in inner city of Atlanta. During the time of intervention (from 1995-2000) the number of homicides in Atlanta decreased by 27 percent. Although in 2000 there was the lowest number of homicide in the city in 30 years (134), that result cannot be attributed to Atlanta PACT for three key reasons: the number of homicide in the City began to fall 2 years before the intervention, the number the strategies developed for the program were not implemented as designed, and the decrease in homicides was no greater within the police beats that were intervention focus, as would be expected if the intervention was the reason for the decline (Kellermann, Fuqua-Whitley & Parramore, 2006: 23).

The aim of the second project "The Operation Cease Fire" in Los Angeles was to send gang members a message what the consequences could be for all members of a gang if any member commits a crime using guns (Tita, Riley, Ridgeway & Greenwood, 2005: 1). The Los Angeles Police Department (LAPD) allocated additional resources, stepping up patrol in the five police reporting districts, the County Housing Authority police stepped up patrol, police and probation officers visited homes of well-known gang members arresting some who had outstanding warrants or proba-

23 Webster DW et al. Effects of undercover police stings of gun dealers on the supply of new guns to criminals. *Injury Prevention*, 2006, 12:225-230. According to: World Health Organization, 2010: 66.

tion violations, and referred several gun cases to the U.S. Attorney for prosecution (Tita, Riley, Ridgeway & Greenwood, 2005: 12). Other actions included inspections by health and child welfare agencies and strictly enforcing public housing occupancy rules. The project began in the second half of 1999, and gang members received notice that accountability for a single violent crime would be collective in the sense of subsequent intervention by police and other partners in the Project. Gang members also got a message that services would be available to help them to resign from violent behaviour. Those services included job training and development opportunities, substance abuse treatment, and tattoo removal through various city agencies - police and probation officers, hospitals, employment referral centres, etc. (Tita, Riley, Ridgeway & Greenwood, 2005: 14). Unfortunately, after the evaluation of the Project researchers did not find out whether it reduced violent crime, gang crime, and gun crime during the time the intervention and during the following months. They concluded that it was difficult to say whether the successes of the Operation Cease Fire in Los Angeles outweighed the failures or vice versa, although the law enforcement components of the intervention showed more promising effects than the retailing components (Tita, Riley, Ridgeway & Greenwood, 2005: 15-19).

In contrast to these projects, the project in Boston was proved to be effective. The Boston Gun Project was a problem-oriented policing initiative aimed at reducing homicide victimization among youths in Boston, where such homicides were increased by 230 percent - from 22 victims in 1987 to 73 victims in 1990. (Kennedy, Braga, Piehl & Waring, 2001: 1). The implementation of the Gun Project Operation Cease Fire in Boston began in early 1996 with the two main elements: 1) a direct law enforcement attack on illicit firearms traffickers supplying youths with guns; and 2) an attempt to generate a strong deterrent to gang violence through delivering an explicit message that violence would not be tolerated and using every legally available intervention when violence occurred (Kennedy, Braga, Piehl & Waring, 2001: 1-2). The Operation Cease Fire was implemented during 1996 and 1997, and rigorous evaluation of the Project's effects found that the implementation of the Operation Cease Fire was associated with a 63-percent decrease in youth homicides per month, a 32-percent decrease in shots-fired calls for service per month, a 25-percent decrease in gun assaults per month, and a 44-percent decrease in the number of youth gun assaults per month in the highest risk district (Kennedy, Braga, Piehl & Waring, 2001: 3-4).

One of the key reasons for the lack of such success in Atlanta and Los Angeles was that the Departments failed to fully implement the planned activities. The problems that were encountered during the project in Atlanta were: little success of attempts to engage the local media and community groups because funds were insufficient, difficulties in coordination and similar other problems encouraging gun owners to secure their firearms never got off the ground, because too little financial support was provided for public education campaign; case load of the police Guns Unit (the unit also was responsible for investigating firearms assault cases citywide); case load of the Fulton County Juvenile Court which prevented intensive supervision of young gun offenders on probation (Kellermann, Fuqua-Whitley & Parramore, 2006). On the other hand, in Los Angeles the plan was not fully implemented for many reasons, and among other reasons are: urging community representatives that the law enforcement activities be put into effect immediately, before triggering event and before other services were ready; inconsistent and limited provision of services, and especially the problem was that the working group did not respond to each triggering event, but focused almost exclusively on two gangs (Cuatro Flats and TMC); frequent staff rotations, particularly in the LA PD; insufficient resources, and changes in the city's political leadership (Tita, Riley, Ridgeway & Greenwood, 2005).

CONCLUSION

The research on the availability of firearms as a risk factor for committing criminal offences, as well as the forms of firearms control shows that it is necessary to improve the availability of statistical data about firearms and crimes committed with them. In this regard it is necessary to ensure the intensification of scientific research through the collection of other information not contained in the statistical records, which are very important for determining the circumstances under which the criminal offences involving firearms are committed, and which are also important for planning effective preventive measures. The statistical data from the Small Arms Survey showed that the Republic of Serbia is among the countries that have high availability of firearms in legal possession of the citizens, but the data from the United Nations Office on Drugs and Crime also show that the rate of homicides involving firearms is similar in states that were estimated to have far fewer firearms in legal possession of the citizens according to the Small Arms Survey. Of course, numerous studies are needed to identify many details which is very important for considering the nature of relation between gun politics and violent crime, especially to identify ways in which citizens illegally come into possession of firearms, in order to improve the control of access to firearms through legal protection and removal of illegal markets.

There are two basic approaches to the firearms control: defining conditions for its acquisition, possession and carrying by the law, on the one hand, and ensuring effective monitoring of compliance with those conditions, on the other hand. The laws governing the conditions for the acquisition, possession and carrying of firearms vary to a greater or lesser extent from country to country. In terms of establishing unique political, cultural, economic, financial and security areas in the territory of Europe, the European Union has set certain minimum standards in this area, aimed at reducing opportunities for potential abuse of firearms for criminal purposes. Thus, the Council of the European Economic Community adopted Directive 91/477/EEC of 18 June 1991 on control of the acquisition and possession of weapons. When the provisions relating to conditions for the acquisition and possession of firearms by citizens are subject of consideration, we can say that the current provisions of the Law on Weapons and Ammunition in the Republic of Serbia in this respect, provide to authorities an important basis for making appropriate decisions on the requests of citizens to legally possess firearms, bearing in mind the interests of citizens' safety. However, it should be noted that with the current alignment of the provisions of domestic legislation with the provisions of the Directive of the European Union in this area, the effective implementation of legal provisions in practice is equally significant. The examples are programs aimed at reducing gun violence, such as programs of that kind presented in the work, which were conducted in Boston, Atlanta and Los Angeles.

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COOPERATIVE SECURITY CHALLENGE AND SECURITY SOLUTION FOR CENTRAL AND EAST EUROPEAN COUNTRIES

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Abstract: Southeast Europe, in spite of its progress in the security situation, remains a region of existing threats to security, deeply rooted in political extremism, extreme nationalism, religious and racial intolerance, which along with the existence of weak state institutions and absence of rule of law in certain countries and regions as well as the transnational dangers, are the basis of high risk level in the Republic of Macedonia and the countries in the region and Europe. The enormous amounts of illegal weaponry are a special threat and source of instability, which the Republic of Macedonia is not immune against.

The security condition is characterized with dynamic development of the countries and their adjustment to the new conditions and responses to the challenge of finding their place in the new order, during which course of event the international community and its institutions are sometimes faced with real and sometimes present and undesired military, non-military and other risks and threats.

The new phase of change in the relations both on global and regional level begins at the end of XX century and is characterized with new rearrangement of forces and relations, prompted by the disintegration of USSR and the Warsaw Pact and the post-cold war period.

The countries from Central and Eastern Europe, grounding their security system on the UN collective security and the regional security systems, put forward the question: What should they expect from the UN security system, the regional security system of OSCE, the collective defence systems of NATO and from the foreign security and defence policy of EU, or the intergovernmental institutions and organizations from the Council of Europe and EU? On the other hand, an array of criteria is being placed regarding the integration and the assessment for meeting these criteria by the countries.

The UN, with strengthened role and improved mechanisms and instruments for actions, still remains the widest framework and basis for the behavior of the states and their mutual international co-operation, based on the international law, including the right to individual state defence by themselves or aligned in collective security systems and defence.

Key words: security, cooperative security, stability, asymmetric treats end risks, democracy, rule of law.

COOPERATIVE SECURITY CHALLENGE AND SECURITY SOLUTION FOR CENTRAL AND EAST EUROPEAN COUNTRIES

In the aftermath of the Cold War, international relations acquire new characteristics. On the one hand, integration processes, which are distinguished by the promotion of EU positive characteristics, are present in Western Europe. On the other hand, there are crises and instability that emerge from disintegration processes and deep social trans-

formations in Central and East Europe. Moreover, the danger of a major armed conflict outbreak decreases, but at the same time the challenging opportunities for new options and risks increase. With the communist system disintegrating the Western Bloc remains without a European and world partner. However, the need for certain restructurings of security systems grows bigger for more effective response to new threats and risks.

In the situation in which crisis knows no national borders, international organizations find their assumptions about successful managing of crisis over the system development – crisis management.

This system is developed in the structures of: United Nations, Council of Europe, Organization for Security and Co-operation in Europe, North Atlantic Treaty Organization and the European Union.

Participation of different states in the support of peace operations and military regional initiatives has created the regional responsibility and demonstrated that the nations in the region have very different values that unite them. This participation has developed the regional potential for crises management and regional partnership has become reality.

By rising the interest and engagement in integration processes, “co-operative security is definitely a hope and perspective, particularly for the small states.”¹ It is a process that emerges from the defence and security systems. It is not a simple expansion of democracy but a security for the community which is welfare for all of its participants and may be a frame for regional security.

However: *How much a practical and efficient system of Co-operative Security can protect from the world? And: What should be the limit of its interests and ambitions?* Are the questions that cannot be answered easily.

Crisis management and organizational redesigning of the euroatlantic collective security systems

By placing the defence system in the UN collective security system and regional security systems the Central and East European countries raise the question: what could those countries expect from the UN collective security system, regional security system of OSCE, NATO collective security systems and EU defence and external politics, EU politics or intergovernmental institutions and organizations of the European or EU Council? On the other hand, there are series of criteria for integration and evaluation of their fulfilment set by these countries.

Faced with the possibility of its marginalization or withdrawal from political scene, NATO directs itself towards its transformation and demonstrates the capability for making internal changes such as: successive expansion and modification of national liabilities.²

With strengthened role and improved mechanisms and instruments of acting, the UN continues to be the broader frame and base for countries' behavior in their international cooperation, based on international law, including the right of individual state defense, alone or joined in collective security systems and defense.

NATO enlargement becomes the most controversial subject of public debates between the countries and international institutions and organizations.

¹ Doncevic, A., and Kuzmanovski, S., Peacekeeping and Regional Security, Defence and Security Sector Governance and Reform in South East Europe: Insights and Perspectives, A Self-Assessment Study, Vol. 2, Geneva, 2003, P. 148.

² Consequences of the Madrid Summit on Security and Stability in Europe, NATO Defence College, Rome, 1998, 104

Today, in the circumstances of no danger from the so-called traditional rival, the Alliance has directed its efforts towards the armed forces and possible changes in its own military preparedness. This places NATO's purposes as imperative, which initially includes: the dialog, cooperation and partnership with countries from Central and East Europe and other OSCE country – members.

In the context of the general changes, the adjustment towards the new situation in the world and further building and improvement of its own structure, NATO has undertaken few important steps and held several summits. The Summit held in Brussels in 1994 is of special interest of Republic of Macedonia, when the initiative – partnership for Peace – (PfP) was presented. According to William Perry, the partnership should use “the security cooperation as a catalyst for political and economic reforms”³

Cooperative security as a system for crisis management of the international community

In the period after the Cold War, when the number of risk causing situations that increase the need for a peaceful approach towards the security also increases through the international harmony and cooperation with reaffirmation of the old ideas for peace and security. Traditional concepts, such as deterring, crisis management and peace keeping, receive new meaning. International community presents a series of new concepts: **preventive diplomacy, peacemaking, enforcement to peace, humanitarian help, humanitarian intervention and post-conflict peace building process, democracy and human and humanitarian dimensions.**⁴

The need for security cooperation, as a crucial element of national politics, is not a new concept. The old ancient Greek cities- states were obliged to lead security cooperation with those which have joined against hostile neighbors.

Simple work definition for the **security cooperation** is “joined states' efforts, international organizations or nongovernmental actors to improve their security in response to the mutual threats or challenges”⁵. The basic presumption of security cooperation is that the security itself is undivided and joined efforts could significantly contribute.

The three leading American strategists Carter, Perry and Steinbrenner, present the “cooperative security as corresponsive approach for international security in the age after the Cold War”⁶. Actually, a pragmatic approach to cooperative security is needed in today's unstable and dangerous world.

Although, since 18th century when Kant proclaimed that “the Law on the Nations will be based on the federation of free states”⁷, it seems that the cooperative security model, developed after the Cold War, introduces two new dimensions of the security concept for the first time – **individual security and stability promotion**, besides the at that time known – **collective security and collective defense**.

Starting from the fact that the protection of basic human liberties is the nucleus from which all other forms must arise we come to the effect that individual security

3 Perry, W., Partnership for Peace Transforming Central, Eastern Europe, Speech at 33rd Munich Conference on International Security Problems.

4 Approaches have been taken from OSCE (OSCE – Organization for Security and Cooperation in Europe).

5 Haas, B. E., Collective security and the future international system, Stanford university press, University of Denver, 1968

6 Carter B. Ashton, Perry J. William, and Steinbruner D. John, Anew Concept of Cooperative Security. Washington DC: The Bookings Institution Press, 1993.

7 Kant, Immanuel, “Perpetual Peace”, 1795, quoted in “Classics of Modern Political Theory: Machiavelli to Mill”, ed., Steven M. Cahn, London/Oxford: Oxford University Press, 1996.

reduction in one state means reduction of the security of other states. Individual security reduction, caused by external or internal forces means that other people and governments too feel that their own security is reduced, i.e. "globalization of wariness appears". The individual security is now the heart of the international agenda.

The second component of the cooperative security is an active stability promotion outside the borders of the states which founded and fall in the system of cooperative security. Instability in the neighboring areas in the territory of the cooperative security system or more further, means a threat to its members and will be dealt with as a seriously concerning event. The stability may be ruined by the danger of a conflict between the states, and by the massive individual security violation in the neighboring countries.

We must emphasize the need for caution, because stability promotion may be understood as license for unjustified intervention of a super power or some international organization in the legitimate matters of the others, mainly smaller states. Therefore the active intervention, diplomatic, economic or military, must be carefully observed and approved.

The model of cooperative security is a strategic system which appears around the nucleus of the liberal-democratic states connected with the network of formal and informal members and institutions characterized with mutual values and practice and transparent economic, political or defense cooperation. In the collective security system, the goals of the state's national security are connected with the four rings,⁸ strengthening each other:

- Individual security
- Collective security,
- Collective defense and
- Stability promotion

The cooperative security is described as "**strategic system**" based on legal-political order of the existing and newly founded strong and flexible institutions.

The first ring – **individual security** means promotion and protection of the basic human rights in its own limits.

The second ring – **collective security** means peace and stability maintenance inside its joined space.

The mutual protection from the external aggression represents the third ring – **collective defense**.⁹

The active **stability promotion** in other areas where the conflict can be substitute of their mutual security, by using the political, economic and even military assets represent the fourth ring in the model of cooperative security.

Many international security organizations were founded on the basis of the collective security or collective defense, including: The League of Nations, UN, OSCE, NATO, and the Warsaw Pact.

Only NATO can function in all four rings in this model of cooperative security. According to the North-Atlantic Treaty, members of the Alliance are obliged to provide: liberty, mutual heritage and civilization norms for its citizens, founded

⁸ Cohen, R., Cooperative Security: From Individual Security to International Stability, The Marshall Center Papers, No.3 p.10

⁹ Provisions from chapter VII of the UN Charter, give authorization of the Security Council for appliance of forced measures, including the use of armed force, if it is necessary to maintain and return the international peace and security. The Council used these authorizations for the first time during the Gulf crisis which began in 1990 with the Iraqi occupation of Kuwait. This marked the new age in accomplishing the UN collective security system.

on the principles of democracy, individual liberties and rule of the law. Article 4 of the Treaty provides consultations between members when the territorial integrity, political independence, or security of any member is endangered. Article 5 of the same Treaty, obliges members to defend each other because the attack on any of the members of the Alliance will be considered as attack on all states.

EU functions in the first and the second ring and displays partial efficiency in the fourth ring. OSCE indicates partial efficiency in the first, the second and the fourth ring.

The UN Charter abandons the idea of individual national power and substitutes it with the idea of collective defense and collective security of all countries - members of the international community.

From the above mentioned we can conclude that the collective security system can be a base for a peaceful and more harmonized future. Combining the four rings, starting from the individual security, through collective security, and collective defense to stability promotion, the cooperative security system requires a will for close international cooperation, institutions organization, and response to crisis and crisis management from democratic states which are the founders of the system.

Actually, the cooperative security system becomes a tendency "to connote consultation as soon as possible instead of confrontation, conviction instead intimidation, transparency instead of permanency, prevention instead of correction and interdependence instead of unilateralism".¹⁰

Cooperative security imperative for crisis management of the countries from the South –East Europe

The security of the states, especially small ones,¹¹ such as Republic of Macedonia, could be provided only through a full membership in the collective security systems (UN, OSCE, NATO, European and European Union Council). Only in this way they could balance the imperfections in their own security system and personal protection, which seems to be on behalf of their own national identity and independence.

The NATO and EU enlargement is a positive factor for further strengthening of international stability and security. These are significant international processes for the Republic of Macedonia because they offer protection of independency and economic progress. Because it is a small country Republic of Macedonia cannot base its own security exclusively on its capabilities. Therefore security collective systems – based on the cooperation principles, trust, peaceful settlement of disputes, transparency and respecting international legal norms- are fully recommendable and acceptable for the Republic of Macedonia.

Therefore the need of the states in the region to raise initiatives for security cooperation and multinational formations in order to be better prepared to manage the crises is quite obvious. Only few years were needed for multinational formations to become a reality and to bring together states in the region with different statuses and interests: NATO members, NATO-candidates, and members of the Partnership for Peace – PfP. Mutual threats encouraged the states to work together and to build a regional system of cooperation. The condition confirms that the interests can bring the state together in regional partnership.

¹⁰ Evans Gareth, "Cooperative Security and Intra-State Conflict", Foreign Policy, No.96, Fall 1994.

¹¹ As relevant parameters that include the country in the group of small countries: gross social product (GSP), national territories and population. Countries with small GSP of 10.000 dollars per person with a territory smaller than 100.000 square km and with a population smaller than 10 million belong to the group of small countries.

Countries from South-East Europe assessed the security condition in the region in the *Common Assessment Paper on Regional Security Challenges and Opportunities* as a very useful paper which allows the beginning of cooperation in this field.

The cooperation in the Balkans can and must be useful for expanding the cooperation in the Black Sea region and especially in southern parts, where the ethnic confrontations, border problems, terrorist activities and insufficiency of initiative for regional cooperation must be overcome. Just a few years ago nobody could imagine the cooperation in the Balkans but, now this becomes a reality.

Responses to modified security threats

State measures regarding complex security threats may be successful only if complete, which means it is a matter of multidimensional, i.e. multilayer activity that comprises many different activities like: economic, investigative, military, diplomatic, transportation, judicial, police and correctional activities,¹² which have the purpose not only to remove the upshots of the modern security threats but also to remove the reasons for emerging of a threat itself.

That number of different security activities demands proper harmonization mechanisms that guarantee unison and mutually completing activity of numerous involved institutions at a state and/or international community level.

Efficient responding to new security threats, besides the encouraged interdepartmental cooperation at a state level, demands a high degree of international cooperation not only by the apparent NATO and EU allies but between USA, Russia, China and finally Pakistan and other states as well. Even Japan is already taking part in the international community from a military point of view, which is a precedent in its foreign affairs after the Second World War. Moreover, some traditionally neutral countries like Switzerland, Austria, Sweden and Finland are actively participating in the overcoming of the new challenges of the modern security environment. That complex threat connects the countries in an international security network, i.e. a coalition that, on the other hand, should be elastic and acceptable enough for all countries and other subjects of international relations that operate in the framework of the global security complex of that kind.

The new nature of modern security threats demands new strategies for providing national and international security. Restructuring the armed forces and defence reforms which are underway in the modern countries are only one side of solving the problem.

The limit between typical military tasks relating to the internal security, legal system and border security is becoming less visible, while civil crisis planning, along with the civil defence and the system for protection, rescuing and help are becoming more important. We can even talk about revolution in understanding the security, defence and military issues. What we can be sure of is that the classical understanding of armed forces, the list of their traditional tasks, their organization and practical doctrine will have to be changed substantially if the states and international community want to face the complex security threats efficiently. As long as the state exists as "community of power",¹³ part of the capacities of its armed forces, however, will have to be intended for classical but technologically well-supported warfare, while the second part of the military capacities will have to be shaped for resolving the 21st century threats.¹⁴

¹² Buzan, Barry, Waever, Ole in de Wilde, Jaap, *Security: A Framework of Analysis*, Boulder, London: Lynne Rienner Publishers, 1998.

¹³ Booth, Ken in Dunne, Tim, *World in Collision, Terror and the Future of Global Order*, New York: Palgrave Macmillan, 2002.

¹⁴ Moskos, Charles C., *Toward a Postmodern military: The United States as a Paradigm*, p. 14-31, New

Protection of universal human rights and basic liberties

In the new security environment, following the end of the Cold War, in the light of the two modified security concepts and universal human rights and basic liberties the issue of proper proportion between the security and freedom in the modern society was popularized again. While that proportion in the distant past (in the primitive communities i.e. in the so-called natural state) appeared in the shape of absolute freedom of the individual at the expense of his/her safety, with the appearance of the modern (sovereign) state, the absolute freedom of the individual has become subordinate to the legal system of the state (absolute freedom was replaced with common welfare which the country should provide for all of its citizens).

As a political organization of the society, the state has a double role:

- provides internal law and order and defence from external attacks; and
- stands as the basic regulator while guaranteeing the social, economic, political, educational and other functions of the society.

At the same time, the state is a political force which is a possible source of endangering the security of its citizens. Consequently, the development of the society also strengthens the normative-legal framework which protects the basic human rights and liberties from abuse, i.e. threat by the modern state.

The basic legal norms that protect an individual from the state's power are in the UN system. Among the most important international documents for human rights there are: the Charter of the Organization of United Nations (UN Charter), Universal Declaration of Human Rights (1948), Genocide Convention, American Declaration of Human Rights and Responsibilities, International Covenant on Civil and Political Rights, European Convention on Human Rights and Helsinki Final Act.

In these frameworks, for the first time in history of the modern international society the state action towards its citizens was legally regulated. Nowadays, it is undisputable that the operation of the modern state governments is under control of the governments of other countries, nongovernmental organizations and international organizations.¹⁵

However, it should be pointed out that the human rights regime within the framework of the UNO mechanisms in the period of the Cold War was significantly limited, principally due to:

- differences between permanent members of the UN Security Council which caused its constant blockage, and
- the importance of the generally accepted position that the use of force for protection of the victims of the massive violation of human rights would represent violation of the Charter of the United Nations. It, though, would provide states with the right to use force only in case of self-defence.

The Security Council of UNO has clear competences (Chapter 7 of the UN Charter), i.e. deciding upon the use of force for maintaining "international peace and security", but there are no clear provisions in the UN Charter on intervening in case of humanitarian disasters in the state itself.

By the end of the Cold War (1985-1990), the political will of the permanent members of the UN Security Council concerning the participation in certain international conflicts, as well as conflicts inside the states (for example, the war between Iraq and Iran, Afghanistan, Angola, Namibia) was strengthened.

York: Oxford University press, 2001.

¹⁵ Wheeler, J. Nicholas in Dunne, Tim, Good international citizenship: a third way for British foreign policy, International Affairs, 2001.

The hard conditions during the Iraqi attack on the Kurds – spring 1991, the surrounding of Sarajevo – 1994, famine of the Somalia population – 1990/91, pains of the civil population of Kosovo – 1999 and Macedonia in 2001, has popularized the humanitarian activities inside the state again.

Nonetheless, today, the respect of the basic human rights and liberties also includes guaranteeing the security of citizens. Those rights are inalienable and inevitable and therefore independent of the subjective assessment by legislators in certain states. Just like all states have the right to a safe existence and welfare, all people have the same rights and states are obliged to protect these rights.

After the end of the Cold War, international community is again faced with the question whether the humanitarian intervention in internal affairs of a state is acceptable, if human rights and liberties are massively violated.

What is a humanitarian intervention?

In international relations, intervention is a phenomenon which means despotism and more or less violent interference of a state in the affairs which belong to the internal or external competence of other state.¹⁶ Legal principle of non-intervention along with the international ban of aggression belongs to the general rules of international law.

Furthermore, the modern international law presumes possible exceptions from the non-intervention principle (such as humanitarian intervention, intervention with consent of the concerned state, intervention as an act of self-defence and reprisals).¹⁷

Hedley Bull, the author of the international relation studies, describes the intervention as “Forced interference by external actor (actors) in the field of competence of the jurisdiction of a state or wider independent political community”.

Mentioned authors talk about forced interfering and consequently their definition is not validly neutral as connotes force and is therefore characterized as a negative phenomenon beforehand.

As a result, it would be better to say “Forced action of an external actor (actors) in the field of competence of the jurisdiction of a state or wider independent political community”.

Any intervention presumes compulsion and thus the nonviolent forms of operation of a state or international organization, such as persuasion and diplomacy, cannot be considered intervention. International subjects that intervene can not only be certain states or groups of states but also international institutions and other subjects of international relations.¹⁸

Sometimes happens the state itself to call international protagonists to help resolving the internal conflicts and violence, and in such cases they are usually marked as interventions in the internal affairs of the state. Sometimes, the external actor is invited by both parties involved in the internal conflict.¹⁹

The humanitarian intervention is an intervention in the internal affairs of a country in order to protect the security and welfare of its citizens. Only the interventions that really intend to protect the security and welfare of the people are defined as humanitarian.

¹⁶ Turk, D., *Nacelo neitervencije v mednarodnih odnosih in mednarodnem pravu*. Ljubljana, Mladinska knjiga, 1984. str. 11.

¹⁷ Turk, D., *Nacelo neitervencije v mednarodnih odnosih in mednarodnem pravu*. Ljubljana, Mladinska knjiga, 1984. str. 256-288.

¹⁸ Kissinger, H., *Treba li Amerika vanjsku politiku? Prema diplomaciji za 21. stoljeće*, Zagreb Golden Marketing, 2003.

¹⁹ For example, in 1990 the government and rebels in El Salvador appealed UN to help the conflict to be resolved.

Contents, interpretation and definition of the concept of its justification in practice emerges from the relative innovation of what a humanitarian intervention is. It is a matter of a measure based on one of the largest general civilization achievements by the end of the twentieth century and hope of the mankind for the twenty-first century. Inclination to human rights, as universals, beyond the state, nation and people, even beyond interests of the local peace, affirms those rights. It is a warning for autocrats or (even legitimate) groups of autocrats that the international-legal sovereignty of their state will not protect them from intervention by the international community if they violate universal rights of their own population.

Hence, in the background of the again popularized issue about the humanitarian intervention there are two inseparable concepts: the concept of universal human rights and basic liberties and the concept of security. The comprehension of the following varies from country to country, and until the international community succeeds to establish one single position on what a security is, which security is worth the effort and how, human rights and basic liberties will be respected more in some countries and less in others.

Thus, nowadays, the popular question is: whether in terms of general globalization the international community guarantees security to states or, to individuals, regardless of their citizenship?

If the state suppresses the tendency towards security and welfare of its citizens, do other states and international organizations have moral right and even obligation to intervene in such state?²⁰

Acknowledging that the doctrine of humanitarian intervention would mean endangering the principles of sovereignty and non-intervention in the world where no agreement exists, which moral principles would guide the humanitarian intervention.²¹ Although there is no legal obligatory base for the humanitarian intervention, because there is no universal comprehension of the notions security and moral in the international community, the world countries, however, are unanimous about the existence of emergencies of ultimate humanitarian crisis (genocide, slavery, massive tortures and banishment), which justify a possible humanitarian intervention.²² It means that in the given circumstances only moral principles are those that justify the humanitarian intervention in emergencies.

In reference literature, authors who support humanitarian intervention in internal affairs of other countries discuss that on the basis of three basic assumptions.

Firstly, all people have equal moral interests, needs and rights that should be respected – when human rights are seriously violated (torture, killing, enslaving and imprisonment without trial).²³

20 After the year 1945, through the practice of states' activities, two forms of humanitarian intervention were established. A humanitarian intervention as an unilateral act (without the consent of the UN Security Council) happened in 1971 when India intervened in East Pakistan; in 1978, when Vietnam ended the brutal reign of Pol Pot in Cambodia, and in 1979, when Tanzania stopped the military dictatorship of Idi Amin in Uganda. However, the humanitarian intervention as a multilateral act has always been within the UN framework; for example, while establishing zones for banned flights in Iraq and within the first mission of the Organization of United Nations in Somalia. When UNO, after the year 1990, revived the mechanisms of collective security and forced missions, it encouraged, among the other things in the light of the brutal interethnic collisions on the area of former Yugoslavia and the genocide in Ruanda, numerous opinions and discussions for humanitarian intervention about the development of the security mechanisms and instruments of UN in general, and especially the political, legal, philosophical and moral.

21 Bull, H., Conclusion: Intervention in World Politics, Oxford, Oxford University Press, 1984, p. 193.

22 Franck, T., After Bangladesh: The Law of Humanitarian Intervention by Force, American Journal of International Law, Vol. 67, 1974, p.304.

23 Wheeler, J. Nicholas in Dunne, Tim, Good international citizenship: a third way for British foreign policy, International Affairs, 1998, p. 847-870.

Secondly, states should respect the interests and needs of their citizens (political state has no right to reign in a way it threatens the security and welfare of its population).

Thirdly, the humanitarian intervention may be successful. Some of the numerous authors, who make efforts to protect human rights, do not support the humanitarian intervention precisely because they have doubts about the successfulness of such concern regarding the internal affairs of other countries).²⁴

The authors, who in reference literature oppose the humanitarian intervention and prove that it is illegitimate, indicate, principally, the following claims:

- Such intervention does not obey the right of political independence. (Each country has “internal” right to be independent. The right of nations is nothing else but natural right applied to nations.);
- It destroys international stability. (The permission for humanitarian intervention would also encourage other interventions, which would destabilize the existing international order.); and
- It is rarely successful. (The intervention is usually unsuccessful for accomplishing the set goals. The authors who advocate this argument refer to empirical examples of unsuccessful interventions in Tanzania, Uganda, in 1978/79, but also to the latest conclusions about the efficiency of UNO on establishing peace.

Intervention unsuccessfulness is allegedly a result of, primarily, the following four factors:

- Being unfamiliar with the internal affairs of the countries in which is intervened.
- Wrong intervention motives as the states rarely react altruistically to protect the rights of the people in other countries, often due to their own national interests.
- Military factors against intervention are that external actors cannot provide long-term stability in other states because only the people that identify themselves with the political system of their state and are prepared to fight for it can do that.
- The resistance of different social groups in the country where the intervention took place. The practice shows that, usually, consensus is reached by all opposing parties for humanitarian intervention; however, if there is a resistance by minor groups that should not be a problem for the intervention bearers.

The preparation of the doctrine of the humanitarian intervention may be based only on the preparation of new common international (for example, under the auspices of UNO) security strategy which would respond to the new complex security challenges in the international environment (including the recognition of the universal human rights and basic liberties). Natural right of every subject (individual, nation, state) to self-defence (of course, not “preventive” self-defence), remains the basic element of the international contract and common law.

In these frameworks, humanitarian intervention is, in fact, a policy of removing consequences, adopted when human rights were already violated. Therefore, in any case it is better to prevent the reasons that cause that kind of human rights’ violation, then to resolve them, when they provoked violence once.

²⁴ On the other hand, the examples of genocide in Ruanda and massive murders in Srebrenica, demonstrated more than clear what the consequences of indifference and nonintervention of the international community can be.

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CRIME PREVENTION: APPROACHES OF UNDERSTANDING AND POLICY DEVELOPMENT

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Abstract: The notion “*crime prevention*” is one of the most abused notions in the literature concerning crime reduction. Because of its wide use there are different perceptions and understandings, not only in the theory and practice, but also among different countries. Crime prevention is aim of the sanctions, of every criminal policy in suppressing crime. At the same time, crime prevention is continuous process of crime problem solving that encompasses certain measures and activities. Therefore, prevention is part of every national strategy respectively each country should develop own long-term preventive strategy for crime prevention. Consequently, prevention can be analyzed as concept, value, aim, and result/outcome of certain activities undertaken by the criminal justice system, and by the wider community.

There are divergent practices and policies associated with crime prevention and different meanings in the wider academic community. In order to avoid dilemma what is crime prevention, in the article we will give short review of several definitions, and we will propose one comprehensive working definition.

This article, in addition, will present the role and effort of the Republic of Macedonia to develop National strategy for crime prevention, because government should play a leadership role in developing effective and humane crime prevention strategies and in creating and maintaining institutional frameworks for their implementation.

Key words: crime prevention, national strategy, crime.

INTRODUCTION

The notion “*crime prevention*” is one of the most abused notions in the literature concerning crime reduction. Because of its wide use there are different perceptions and understandings, not only in the theory and practice, but also among different countries. Crime prevention is aim of the sanctions and of every criminal policy in suppressing crime. At the same time, crime prevention is constant process of problem solving that encompasses certain measures and activities. Therefore, prevention is part of every national strategy respectively each country should develop own long-term preventive strategy for crime prevention.

Consequently, prevention can be analyzed as concept, value, aim, and result/outcome of certain activities undertaken by the criminal justice system, and by the wider community, in general.

There are divergent practices and policies associated with crime prevention and different meanings in the wider academic community. In order to avoid dilemma regarding what is crime prevention, in the article we will give short review of several definitions, and we will propose one comprehensive working definition.

This article, in addition, will present the role and the effort of the Republic of Macedonia to develop National Strategy for crime prevention, because government should play a leadership role in developing effective and humane crime prevention strategies and in creating and maintaining institutional frameworks for their implementation¹.

¹ United Nations Guidelines for the Prevention of Crime Economic and Social Council resolution 2002/13

DEVELOPMENT OF THE THEORETICAL BASIS OF THE CONCEPT OF CRIME PREVENTION AND ITS DEFINITIONS

Every notion, including crime prevention can be defined by different aspects. Existing definitions differ, depending on the time, objectives, theoretical basis, and intents of those who undertake preventive actions. In effort to define crime prevention, we will start from the same beginnings of the understanding of that concept. Firstly, crime prevention has been perceived as aim of the sanctions and security measures realized through individual and general deterrence. That understanding can be met in *Cesare Beccaria* (1764) learning, father of modern criminology and founder of the classical school. Reformation movement to improve the living conditions in prisons, pledge for rehabilitation of offenders, as special prevention. Concretely, *Bentham* (1791), founder of neoclassical school, was convinced that religious instruction and hard productive labor were intended to have preventive effect on the offenders.²

With positivist criminology and “homo criminalis” of *Cesare Lombroso* anthropological school (1876), crime prevention has been seen in curing and thus preventing “dangerous criminals” as potential offenders to commit crimes.

But, because of the failure of the sanctions (prison sentence and security measures) to achieve preventive effect, search for crime prevention diverts attention from the narrow focus on crime and personality of the offender toward social causes of crime. Therefore, the science and criminologists aimed at social roots and causes of crime that produce development and establishment of lot of sociological theories, such as *Durkheim's* Anomie theory, subculture theories, and labeling theories. But it is delusion to assert that every theory can provide efficient and applied solutions for crime prevention. Key for crime prevention is rational choice theory, routine activity theory and environmental criminology. On the basis of what we support their value?

In pursuit of theoretical basis for efficient prevention, it is necessary to distinguish crime prevention (crime as phenomena that include offender, victim and situation) and preventing criminality (as process of becoming criminals).³ Therefore, criminologists great interest and attention in crime prevention research put, not only on offender, but on victim and situation as well. For efficient crime prevention it is necessary to decrease opportunities for committing crime. In that regard, I agree with the thesis that “opportunity creates thieves.” Namely, according to *Bennett*, the decision to offend in the first place is socially or psychologically determined, but that the final decision - whether or not to offend against a particular target - is situationally determined. This means that situational factors are unlikely to motivate the unmotivated to offend, but they will influence the decision of someone who is committed to offending.⁴ Therefore, there is a need for integrative approach of crime prevention. Based on that, penetration and dispersion of situational prevention in crime prevention science incite establishment of comprehensive definition that encompasses several aspects. For practitioners and decision-makers, establishment of one working definition is important because of comparative studies and for development unified methodology, and long-term crime prevention strategy.

In this article we will give several definitions, although we agree that there is no better or worst definition, but narrower or wider.

² Gilling, D. (1997) *Crime prevention, Theory, policy and politics*, London and New York, Routledge, Taylor & Francis Group

³ Farrell, G. (2005) *Crime Prevention* in Bryant, C. (ed.) *Encyclopedia of criminology and deviant behavior*, Taylor & Francis, pp.124-135

⁴ Geason, S. & Wilson, P. (1988) *Crime Prevention, theory and practice*, Canberra, Australian Institute of criminology, str. 5

In that way, *Van Dijk* (1990) crime prevention defines as “*the total of policies, measures and techniques, outside the boundaries of the criminal justice, aiming at the reduction of the various kinds of damage caused by acts defined as criminal by the state*”⁵

On the other side, *Graham* thinks that criminal justice does have crime prevention role, particularly in prevention of recidivism (it is tertiary prevention).⁶

Freeman (1992) the notion divides on two constitutive parts (components): prognosis and intervention. If we want to prevent some criminal behavior/event we should make prognosis in order to predict its appearance. This means that with scientific method we should predict where, when and in what way the crime will happen. Next step is intervention in preventing criminal act.⁷

Brantingham & Faust (1976) crime prevention define as “*any activity, by an individual or group, public or private that precludes the incidence of one or more criminal acts*”⁸

Definition of *Eckblom* is: “*crime prevention is intervention in mechanisms that causes crimes*”. He put his focus on crime characteristics and on his causes. Therefore, his suggestion is crime prevention to focus on closer, proximal circumstances (they are: proximal criminal situation and offender potential disposition). According to *Eckblom*, crime prevention approach on distal factors doesn't give efficient outcome (“there can not be action at a distance”. Fundamental in crime prevention activities is to keep offender out of criminal situations.⁹

Wikstrom & Torstenssen (1997), under crime prevention perceive measures that produce reduction in number of crimes through reduction of individual tendency to commit crime or through reduction of situational circumstances that contribute to individual motivation to commit crime.

Lab (2000) in his definition entails reduction of fear of crime, whilst *Sahlin* speaks generally for minimization of the damage caused by crime.¹⁰

Broader explanation of crime prevention is stipulated in *UN Guidelines for the prevention of crime* (2002). In part II (Conceptual frame of reference) is stipulated that “crime prevention” comprises strategies and measures that seek to reduce the risk of crimes occurring, and their potential harmful effects on individuals and society, including fear of crime, by intervening to influence their multiple causes.¹¹

Also, generally accepted and comprehensive definition offers *Council decision of 28 May 2001 setting up a European crime prevention network*: „Crime prevention covers all measures that are intended to reduce or otherwise contribute to reducing crime and citizens' feeling of insecurity, both quantitatively and qualitatively, either through directly deterring criminal activities or through policies and interventions designed to reduce the potential for crime and the causes of crime. It includes work by government, competent authorities, criminal justice agencies, local authorities, and the specialist associations they have set up in Europe, the private and voluntary sectors, researchers and the public, supported by the media.”¹²

5 Gilling, D. (1997) *Crime prevention, Theory, policy and politics*, London and New York, Routledge, Taylor & Francis Group, str. 5

6 Ibid

7 Krivokapik, V. (2002) *Prevenција kriminaliteta*, Policijska akademija, Beograd

8 Jenion, G. (2010) *Beyond “what works” in reducing crime: the development of a municipal community safety strategy in British Columbia*, dissertation, School of criminology, Simon Fraser University, p.20

9 Eckblom, P. (1994), *Proximal circumstances: a mechanism-based classification of crime prevention* in Clarke, R. (ed.) *Crime prevention studies*, Vol.2, crp. 195- 196

10 Sarnecki, J. (2005), *Knowledge-based crime prevention. Theoretical points of departure for practical crime prevention*, Paper for the Eleventh United Nations Congress on Crime Prevention and Criminal Justice, 18 – 25 April 2005 Bangkok Thailand

11 United Nations Guidelines for the Prevention of Crime Economic and Social Council resolution 2002/13

12 Council decision of 28 May 2001 setting up a European crime prevention network (2001/427/JHA)

Above presented review addresses different aspects of crime prevention notion. Does it better to include fear of crime, or measures for victim support? Which classification of preventive measures to accept? Definitely there is no unique formula, not definitions are static. We will agree that prevention, in essence, presents concept and process of constant changing and amending. It will be difficult for the science and for the politics if they stay static in their definitions. As, Farrell points out that “progress always changes the shape of the crime”, and accordingly the shape of the prevention.¹³

In my opinion, definition should encompass answers of the following questions: what we want to prevent, what way, and who is responsible for crime prevention?

We want to prevent number of crimes, amount of damage, number of victims, fear of crime, risk factors and causes.

Regarding second question, we refer to the approaches given in *UN Guidelines of crime prevention (2002)* (a) Promote the well-being of people and encourage pro-social behavior through social, economic, health and educational measures, with a particular emphasis on children and youth, and focus on the risk and protective factors associated with crime and victimization (prevention through social development or social crime prevention); (b) Change the conditions in neighborhoods that influence offending, victimization and the insecurity that results from crime by building on the initiatives, expertise and commitment of community members (locally based crime prevention); (c) Prevent the occurrence of crimes by reducing opportunities, increasing risks of being apprehended and minimizing benefits, including through environmental design, and by providing assistance and information to potential and actual victims (situational crime prevention); (d) Prevent recidivism by assisting in the social reintegration of offenders and other preventive mechanisms (reintegration programmes).

In regards with the question who are holders/actors of crime preventive actions, without doubt we conclude that the emergence and essence of crime prevention is connected with the activities undertaken by the citizens, schools, business sector, NGO-s in partnership with the local authorities and criminal justice system. Based on that, actor is as called new infrastructure gathered at local level in order to address crime in different (preventive) way.¹⁴ Thus, partnership and collaboration in resolving certain questions of mutual interest is important part of crime prevention. Tendency for multi-agency approach and partnership in crime prevention begin in 90-ies and trend for collective and proactive approach is gradually increasing.¹⁵ Motives and idea for collective approach can be seen in failure of criminal justice responses to crime.

„Whether and what works,, in crime prevention

Discourse for prevention and its meaning in crime reduction and community safety rise up question for prevention effectiveness. Which preventive models have more effect in reduction of crimes; fear of crime or in diminishing risk factors that have great impact on crime.

Whether one activity produce preventive outcome, can be verified only through studying that outcomes. In that direction, the science undertakes certain activities to

¹³ Farrell, G. (2005) Crime Prevention in Bryant, C. (ed.) *Encyclopedia of criminology and deviant behavior*, Taylor & Francis, pp.124-135

¹⁴ Jenion, G. (2010) *Beyond “what works” in reducing crime: the development of a municipal community safety strategy in British Columbia*, dissertation, School of criminology, Simon Fraser University, p.17

¹⁵ Kemshall, H. (2003) *Understanding risk in criminal justice*, Open University press, UK, p. 131

establish culture of research and evaluation. *Nils Christy*, in 1966 in his article "Research into methods of crime prevention" has recognized the need and value of researches, particularly for practice and politicians.¹⁶ Namely, *Christy* states, that research has four major functions: it confers prestige, provides ideas, arguments and knowledge.¹⁷

Ekblom, Clark, Sherman, Marcus and other prominent experts proceed Nils's way, and keep on working and writing for good practices and ways for design, implementation and evaluation of good crime policy. In that regards, Beccaria project "Quality management in crime prevention" advocates and promotes unified methodology and best practices in crime prevention. That project is granted under AGIS program of European Union and implemented in 2004 and 2005 by 5 states (Denmark, Belgium, France Czech and Estonia). Its general objective is improvement of practical work in crime prevention and development of mechanisms for management and evaluation of preventive projects.¹⁸

Namely, referring to *Henry Ruts & Kevin Reitz* view that "crime reduction should not simply be asserted by program advocates, but should be studied under rigorous conditions, with no guarantees in advance that positive results will be found"¹⁹ and bearing in mind disappointment of the results of the first undertaken researches in crime prevention in 80-ies and 9-ies, in the science and practice have started strong campaign for quality in crime prevention. Away from many existing methods and techniques for design and implementation of preventive strategies and project, Beccaria project enacts *Guidelines for undertaking 7 steps for quality crime prevention project* (establishing and describing the topic, identifying the causes, specifying the goals, developing possible solutions, constructing and implementing the project plan, reviewing the impact, documentation and conclusions).

I will not go to describe 7 steps in details (because is not focus of this article) but, I will stress that Beccaria project succeed to gather and unify experts who work in the field of crime prevention and at the same time to offer possible solutions for establishing good preventive practices. Part of them, are *Ekblom's five "I"* (intelligence, intervention, implementation, involvement and impact) and *Clarks's 7 principles* for quality prevention (be clear about your objectives, focus on very specific problems, understand your problem, be skeptical about displacement, consider a variety of solutions, anticipate implementation difficulties, evaluate your results).²⁰

What works is also question that need appropriate researches and evaluation of the results.

Studies in crime prevention have started in 60-ties, first in USA, and afterward have proceeded in the eighties and 90-ties. First research is longitudinal study in 1962 for the impact of pre-school program on children behavior. It looked at 123 Afro-American families from Michigan whose children suffered from poverty and showed high risk factors and therefore were also at risk to fail in school. The information gathered through the interview with participants at the age of 40 shows that 97% has higher level of education, better incomes and law abiding life. This study

16 Christy, N. (1966) Research into methods of crime prevention, in Lengyel, P. (ed.) *Modern methods in criminology*, International Social Science Journal, Vol. XVIII, No 2, UNESCO

17 Ibid, p.146

18 Erich, M., Meyer, A. & Linssen, R. (2005) The Beccaria-Project: Quality Management in Crime Prevention in Marks Erich, Meyer Anja & Linssen Ruth (eds.), *Quality in Crime Prevention*, Hanover, Landespräventionsrat Niedersachsen, p. 25

19 Sherman, Lawrence W (2005) Enlightened Justice: Consequentialism and Empiricism from Beccaria to Braithwaite in Marks Erich, Meyer Anja & Linssen Ruth (eds.), *Quality in Crime Prevention*, Hanover, Landespräventionsrat Niedersachsen

20 Erich, M., Meyer, A. & Linssen, R. (2005) The Beccaria-Project: Quality Management in Crime Prevention in Marks Erich, Meyer Anja & Linssen Ruth (eds.), *Quality in Crime Prevention*, Hanover, Landespräventionsrat Niedersachsen, p. 25

emphasizes the meaning of early intervention that represents part of developmental prevention. Its aim is to decrease risk factors and to increase protective factors.²¹

Barry Poyner in 1987/88 has made evaluation of 122 studies. He divided preventive programs in 7 categories (Campaigns and publicity, Policing and other surveillance, Environmental design or improvement, Social and community services, Security devices and Target removal or modification) and their preventive effect has ranged in 4 scales.²² His evaluation shows that best effects has following preventive programs (security guards for housing blocks, increased staffing of facilities, wider market gangways, design changes to improve surveillance by staff, security devices, target removal or modification). Worthy of note, but measures within social services (counseling and social work, education projects, organized recreational activities for young people, localized housing services) doesn't show effect in crime prevention.²³

In respond to “**what works**” we refer to *Lawrence Sherman* study who classified his results in 4 categories: what works, what doesn't work, what promising, what unknown.²⁴ This approach and classification system is used to verify the efficiency of preventive programs and initiatives and it is evidence based. In his study, *Sherman* has examined connection of the crime prevention effects in 7th settings (community, family, labor market, school, police, place and criminal justice system). His general analysis shows that the effectiveness of crime prevention in each of the seven institutional settings depends heavily on local conditions in the other institutions. The necessary condition for successful crime prevention practices in one setting is adequate support for the practice in related settings. For instance, schools cannot succeed without supportive families, families cannot succeed without supportive labor markets, labor markets cannot succeed without well-policed safe streets, and police cannot succeed without community participation in the labor market.²⁵ Concretely, data for the police preventive role shows that police can work preventive only if they focus on specific aims, places, time and persons, and mostly on serious crime and serious offenders and on risk factors. Police without clear focus on risk factors has little effect. In addition, direct patrols, proactive arrest and problem solving on hot spots shows valuable indicators for crime prevention.

REQUIREMENT FOR DEVELOPMENT OF PREVENTIVE STRATEGY

As *Hannu Takala* declares, that states should not ask whether a national crime prevention policy is needed, but immediately should start to develop (if they don't have) or to implement (if they have). Namely, in his speech on the conference “*Crime prevention-strategic approach*” held 2005 in Budapest under the auspices of the UK Presidency of the European Union stresses several reasons in favor of developing national crime prevention strategy: it is the appropriate response by a national government to protect its citizens, a national crime prevention strategy can serve an educational purpose, by providing accurate information on crime and crime prevention methods to the wider population, developing a strategy helps national governments and its partners to prepare for future trends in crime.²⁶

²¹ Known as “Perry Preschool Study”

²² good evidence in crime reduction, some evidence in crime reduction, no measurable effect on crime and crime increased

²³ Poyner, B. (1993) What works in crime prevention in Clarke, R. (ed.) Crime prevention studies, Vol. 1

²⁴ Sherman Lawrence W., et al. (1997) Preventing Crime: What Works, What Doesn't, What's Promising, Report to the U.S. Congress. Washington, D.C.: U.S. Dept. of Justice

²⁵ Ibid, p. 23

²⁶ Crime Prevention – A Strategic Approach, A Conference Report written by the Office for Public Man-

UN Guidelines for crime prevention (2002) in the first provision emphasizes that well-planned crime prevention strategies not only prevent crime and victimization, but also promote community safety and contribute to the sustainable development of countries. Crime prevention offers opportunities for a humane and more cost-effective approach to the problems of crime.²⁷

For their fulfillment, government has key and leader role.

Analysis of the research undertaken in 2010 by the International Centre for the Prevention of Crime (ICPC) shows that 57 countries in the world have adopted national strategies for crime prevention. But, in some countries, crime prevention is considered as part of broader strategies for public safety (Argentina, Chile, Perry and in other countries in Latin America), strategies for crime control, or community safety.

Short review of the preventive policies in European countries shows that most of them (16) have formed central body for crime prevention responsible for enacting and implementing national crime prevention strategies.²⁸ From the countries of the region, only Slovenia has adopted crime prevention strategy, while Macedonia, Serbia, Bosnia and Croatia have adopted national strategies for prevention of juvenile delinquency and/or prevention of asocial behavior. Step forward is Serbian Initial Framework of national strategy for crime prevention enacted by the Ministry of Interior in 2009²⁹. MoI, in order to adopt national strategy has addressed initiative to the Government for establishment national council for crime prevention which will be responsible for implementation of the strategy.

THE REPUBLIC OF MACEDONIA ON THE ROAD OF PREVENTION

Development of preventive policy, as part of criminal policy, in great extend, depends on the state policy, on the allocated funds, on the readiness of the government to ensure institutional and material support, and on the development of the science in that fields. Where is the Republic of Macedonia on the road of prevention?

In the effort to give adequate answer we will make short analysis of the legal and institutional framework of the preventive policy (but, we will not make analysis in details because for that matter is needed more comprehensive and in-depth study).

The Republic of Macedonia has not enacted National Strategy for crime prevention yet, but has adopted several individual acts concerning prevention of particular crimes (or their negative phenomena), such as: National strategy for prevention of juvenile delinquency (2009),³⁰ Action plan for prevention and suppression of sexual abuse of children and pedophilia, National strategy for protection of family violence).

Step forward regarding preventive policy of juvenile justice is the Law on juvenile justice, adopted in 2009.³¹

In accordance with its provisions, National council for prevention of juvenile delinquency is established by the Macedonian parliament in 2009, as independent body, under administrative support by the Ministry of justice, together with local councils in several municipals.

agement (OPM) with the Home Office of the UK, 2005

²⁷ United Nations Guidelines for the Prevention of Crime Economic and Social Council resolution 2002/13

²⁸ Germany and Switzerland have no national strategies, but have established central body for crime prevention

²⁹ International Centre for the Prevention of Crime, International Report on Crime Prevention and Community Safety: Trends and Perspectives, Montreal, 2010

³⁰ Enacted by the National Council for prevention of juvenile delinquency

³¹ Official Gazette of the Republic of Macedonia No 87/2007

In terms of policing, basis legal acts that regulate police preventive role are the Law on police³² and the Rulebook for the way of police conduct.³³

According to article 10 of the Law on police “upon a request of the citizens, state bodies, public enterprises and other legal entities, the police provides them with information, data and notifications for issues related to its scope of work, for which they are directly interested in”. By the other side, the police has right to collect information related to committed punishable acts, in direct conversations with citizens and representatives of the state bodies and legal persons. In article 11 is regulated the cooperation with citizens, state bodies, associations of citizens, and other legal persons for the purpose of prevention or detection of criminal acts or misdemeanours.

Generally, the Law on police give only common framework for the police preventive role. It is in authority of the Bureau of public security, and in the Sectors of internal affairs. In the Rulebook for the way of police conduct, general and individual (for violent, property, organized crime and juvenile delinquency) prevention is regulated.

The preventive role of the police encompasses mostly foot and motor patrol. They represent immediate preventive activities of the police officers because with their presence they maintenance public order, protect life and personal security of the citizens, provide aid and protection and monitor situation in the region.

Concept “community policing” is part of Macedonian police reform and one of strategic objectives stipulated in the Strategy plan of the ministry of Interior for 2007-2011, under “Building partnership between “citizens-police”. Basis objectives of that concept is creating safety communities, improvement of the communication with the citizens and increasing the level of confidence in the police. For that purpose, Departments for crime prevention in each municipality are established.

But, the Republic of Macedonia is still on the low level of development comprehensive preventive policy. Why?

There are no researches for preventive impact of community policing concept regarding crime and fear of crime reduction. There is no analysis whether media campaign (for prevention of traffic offences, sport violence, school violence, prevention of burglary, trafficking inhuman beings, and drug abuse) have positive impact. Thus, is we claim that there is prevention, without verification of the effect is wrong.

CONCLUSION

Crime prevention is part of crime control, precondition for community safety and has impact on crime reduction. Without doubt, every society should invest in crime prevention through social development, through reduction of opportunities for committing crime, or risk factors, through citizen's involvement or through rehabilitation treatment in penal institutions. Prevention is huge field of work and covers numerous activities. Therefore, government as core supporter and builder of preventive policies should be able and wiling to invest.

In the Republic of Macedonia, many conditions should be fulfilled, first for development of such national preventive strategy, and afterwards for its realizations and evaluation.

32 Official Gazette of the Republic of Macedonia No 92/209

33 Official Gazette of the Republic of Macedonia No 114/2006

Taking into account all above stated, I will conclude that we should:

- Learn from good practices; because first condition for development of appropriate national strategy is knowledge, we should learn from good practices. In that direction, international community has opened the way through already established methodology and quality standards,
- Invest in crime prevention; because second condition is certain resources, government should ensure funds for implementation of the preventive programs,
- Build collective preventive approach; without good infrastructure i.e. network of institutions that will work together there is no effective crime prevention,
- Make researches; effective prevention can solely results from scientific knowledge and evidence,
- Provide training; everyone can not work in the filed of crime prevention, as everyone can not write laws and run politics. Thus, another condition is expertise and professionalism.

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METRIC FEATURES OF LIKERT - TYPE QUESTIONNAIRES AS AN INSTRUMENT IN RESEARCH OF SECURITY

Viktorija Todorovska

Abstract: Many methods, techniques and tools are used in the research approaches and the attitudes measuring scales are significant contribution tool in the defining of security concepts, but also defining of methodological approaches in the study of security phenomena. This paper will present the basic features of the Likert questionnaire (as the most exploited instrument in the attitudes research) and its metric characteristics in the security research. For this purpose we will use some of the results from three different surveys conducted at the Faculty of Security in Skopje between 2008 and 2009.

The overall interpretation of the results of the three studies suggested that Likert scale as an instrument has satisfactory indicators of reliability and validity. It has good metric features and enables further insight into the nature of the research concept. As a valid instrument for further processing of the data, this scale allows more complex statistical techniques.

Key words: security, research, Likert scale, reliability, attitudes.

INTRODUCTION

The accurate measurement of the constructs and variables in a study is a critical component of research. The best-designed study is meaningless and a waste of time and resources if the independent and dependent variables cannot be identified, conceptualized, operationalized, and quantified.

The term scale has two meanings in the construction of a research instrument. First, it means a set of answers where choices are exposed to a continuum of which the respondent makes the selection. Second, it means an instrument with multiple items that measure the underlying construct and that produce numeric values, or results that can be summarized to reflect the strength of the measure. When examining the opinions of people about a security problem, we are often not satisfied with the division of people to those who accept one attitude, those who oppose and those who remain neutral, or simply have no opinion on certain issue. These three categories of responses represent a classification of people who indicate the polarization of opinions, but as Rudy Supek highlights, we will be interested in the question: How much someone accepts or opposes a view? Attitudes can be positive and negative, i.e. they represent acceptance or rejection of certain contents. This means that the positions did not only encourage activity, but also inactivity (omissions, failure). Depending on their stability that the individual had passed, they still may be solid or hesitant.

This paper we will present some of the results from three different surveys conducted at the Faculty of Security in Skopje, and through their interpretation the application of the Likert scale as an instrument in the research. Namely, in 2009 the Faculty of Security conducted multidisciplinary research for "Psycho-social and legal implications on the members of the security forces - participants in the 2001 conflict". The battery of psychological tests was applied, and a range of social issues and relations and the legal status of participants in the 2001 conflict. Carefully selected questions allow the respondents to express their positive or negative attitude towards certain claims. In the same year a research has been conducted for the

views of students on crime, carried out on 357 students of the Faculty of Security, Faculty of Philosophy and Pedagogy Faculty in Skopje. Some of the questions in the questionnaire are Likert type questions. Furthermore, a part of this paper will contain the results of a survey on the attitudes of students on the subject program of Special Physical Education (SFE) and the grade at the final exam. Thus, 113 students of the Faculty of Security (78% of total enrolled in that generation) were surveyed, which at the end of the sixth semester successfully passed the final exam. A 5-point Likert scale is applied.

METRIC FEATURES OF THE RATING SCALES

In order to successfully measure the scales, they must be well prepared to meet several conditions, i.e. they must have some measurement features. Those characteristics are validity, reliability (consistency), sensitivity and objectivity.

Discriminative (sensitive) is the instrument that helps determining the existence of minor differences in the examining matter. In constructing a scale, the objective is to select a range of statements or judgments thus the acceptance or rejection that each of them expresses at the same time in greater or lesser degree of positive or negative attitude. As Supek stated, the statements must possess certain diagnostic value, i.e. they have to allow us to distinguish different individuals with different views, in a given array of statements or judgments. It is good if the statements express a position clearly and directly, so that it could be easier to compare responses of different individuals regarding the same problem.

Reliability is related to quality measurement. At its most general level, reliability refers to the consistency or dependability of a measurement technique. More specifically, reliability is concerned with the consistency or stability of the score obtained from a measure or assessment technique over time and across settings or conditions. If the measurement is reliable, then there is less chance that the obtained score is due to random factors and measurement error. This metric feature can be determined through a variety of methods - test-retest, parallel-forms reliability, **internal consistency reliability and split-half reliability method**.

The parallel forms estimator is typically only used in situations where you intend to use the two forms as alternate measures of the same thing. Both the parallel forms and all of the internal consistency estimators have one major constraint - you have to have multiple items designed to measure the same construct. This is relatively easy to achieve in certain contexts, but for more complex or subjective constructs this can be a real challenge. If you do have lots of items, Cronbach's Alpha tends to be the most frequently used estimate of internal consistency. This coefficient is based on variances and co-variances between the measurement variables that measure the same construct.

Each of the reliability estimators will give a different value for the reliability. In general, the test, the test-retest and inter-rater reliability estimates will be lower in value than the parallel forms and internal consistency ones because they involve measuring at different times or with different raters. The fact that different estimates can differ considerably makes the analysis even more complex¹.

Different methods have conceptualized and categorized validity in different ways. So many components enable certainly different classification methods and criteria for validity. However, it should be borne in mind that all types of validity

¹ Research methods Knowledge Base, Types of Reliability <http://www.socialresearchmethods.net/kb/reli-types.php> (last access on February 28, 2012)

correspond to one question: Have we measured what we meant to measure? In all forms of research design, the results and conclusions of the study are limited to the participants and conditions as defined by the contours of the study. External validity refers to the degree to which research results generalize other conditions, participants, times, and places. Therefore, a study has more external validity when the results generalize beyond the study sample to other populations, settings, and circumstances. External validity refers to conclusions that can be drawn about the strength of the inferred causal relationship between the independent and dependent variables to circumstances beyond those experimentally studied.

In other words, would the results of our study apply to different populations, settings, or sets of circumstances? One way to provide evidence of generalization is the choice of a representative sample, based on which you can automatically generalize the results. Studies related to public opinion polls usually devote considerable attention to defining the population of interest and drawing a good sample of that population. On the other hand, laboratory experiments often use so-called suitable samples. Thus, in this type the key validity issue is whether the research results can be replicated in other samples which differ for different demographic and descriptive characteristics such as age, gender, sexual orientation, education and socio-economic status. Also, the threat may also be for the effects that pre-test and post-testing can occur on the behaviour and responses to the survey. An important part is the time of assessment and measurement, i.e. whether the same results are obtained if measurement occurred at different time points.

Internal validity refers to the ability of a research design to rule out or make implausible alternative explanations of the results, or plausible rival hypotheses. A plausible rival hypothesis is an alternative interpretation of the researcher's hypothesis about the interaction of the independent and dependent variables that provide a reasonable explanation of the findings other than the researcher's original hypothesis.

How to obtain construct validity is probably one of the most difficult problems in social sciences research. Earlier in this section we referred to the fact that the social sciences are characterized by the existence of highly theoretical concepts or constructs: concepts that are derived from scientific theories and which cannot be inferred inductively from the observation of human behaviour. The methodological problem that arises is the following: How does the researcher really know that the items which are included in the scale or questionnaire actually measure the construct which the items are supposed to represent?²

There are two primary methods for improving the construct validity of a study. First, strong construct validity is based on clearly stated and accurate operational definitions of a study's variables. Second, the underlying theory of the study should have a strong conceptual basis and be based on well-validated constructs.

As its name implies, statistical validity (also referred to as statistical conclusion validity) refers to aspects of quantitative evaluation that affect the accuracy of the conclusions drawn from the results of a study. Statistical procedures are typically used to test the relationship between two or more variables and determine whether an observed statistical effect is due to chance or is a true reflection of a causal relationship³.

Validity and reliability are interconnected concepts. This can be demonstrated by the fact that a measurement cannot be valid unless it is reliable. Remember that validity is concerned not only with what is being measured, but also how well it is being measured. Think of it this way: If you have a test that is not reliable, how can it

² Mouton J., "Basic Concepts in Methodology of Social Sciences", 1996 (p.68)

³ Marczyk G., De Matteo D., Festinger D., "Essentials of Research Design and Methodology", 2005 (p. 192)

accurately measure the construct of interest? Reliability, or consistency, is therefore a hallmark of validity. Note, however, that a measurement strategy can be reliable without being valid. The measurement strategy might provide consistent scores over time, but that does not necessarily mean it is accurately measuring the construct of interest.

CREATING ITEMS TO USE IN LIKERT SCALE

Construction of this type of scale begins by defining the object of measurement. It is necessary to generate a number of issues. In preparing the questionnaire potential issues (set of statements or claims) should be carefully selected, simple and understandable for the participants, which acting together provide consistent answers, and also provide a useful and coherent picture of the object of research. Firstly, the purpose of research in the form of specific questions must be expressed. The answers you get to these questions will serve us to test hypotheses or to explore the social situation to which the research refers⁴.

In examining the same scale of the object type together with Likert and Thurstone's scale provide high correlation reliability. However, the Thurstone developed method is quite complex. The claims in the final scale of 20 items (or sometimes more) are selected according to two criteria. The selected items that have values on the scale at approximately equal intervals throughout grades 9 or 11-point scale of opportunity, and high agreement between judges estimate, narrowing the limits of the contents of that issue is set to avoid difficulties in his classification. This whole process is long and inefficient, which gives popularity to Likert scale.

A summary overview of the characteristics of Likert scale will list other advantages besides its reliability, which is often higher than in Thurstone's scale. Besides its greater simplicity of construction, the existence of multiple alternatives delivers more accurate information, unlike the stereotypical dichotomy of "yes" or "no." There are three good reasons why individual "yes" or "no" questions are not enough. They are related to reliability, accuracy and range. Individual items do not generate responses from people who are in consistency over time. Thus, individual items are notoriously insecure (unreliable). They are also imprecise because they limit the measurement of only two levels. People can be put into two groups, with no way to distinguish between people in each group. Finally, many measurement features are broader in scope, more complex and not easily assessed with one question. Another advantage of the scale is that it allows inclusion of items whose obvious (manifest) content is not in direct content with the latent content of the attitude test.

Some authors think that we should strive towards a greater number of claims to increase the opportunity for a proper choice, but be aware of the limitations that the research brings with it (e.g. reducing the concentration of the respondent in answering many questions, etc.). The selection of categories is based on their discriminative power (DP), i.e. ability to better distinguish those with high and low total score on the scale. We compare the results that are below the first quartile higher value results from the third quartile value (which clearly separated respondents who are higher on the scale continuum from those low). Also, the issues with greater discrimination show higher t-values. The final scale included the categories that have the greatest internal consistency and discriminative power, although the final selection of questions eventually depends on the researcher. The above values must be as large, but there is no fixed rule or exact amount of consistency and DP -

4 Mojanoski C., "Metodologija na naučno-istraživačkata rabota (izbor na tekstovi), Skopje, 1998 (p. 327)

which would condition the selection of categories for the Likert scale.

There are many debates about how opportunities should be offered. Steam number of categories (usually four) compels people to make choices, whether it reflects their true position or not. That is, if we eliminate the neutral option, it prevents “runaway” of the respondent in the “average” (so remain 4, 6 or more points). However, many methodologists doubt the validity of such proceedings believing allegations that some respondents may indeed represent a neutral stance. Thus, commonly used assessment scales 4 and 5 points. Seven or more points are rarely used rating scales. It is reasonable to use these ladders only on large samples, for greater discriminative strength of the instrument.

Related with this question, in February 2006, Infosurv conducted a forum of market researchers to understand their preference between 5-point and 6-point Likert scales. Our conclusion is that most modern researchers agree that the neutral rating in a 5-point scale is needed when conducting survey research. Of the researchers who participated in this discussion, 71% expressed a preference for 5-point Likert scales, 12% preferred the 6-point scale, and 17% were neutral on the matter.

Those researchers preferring the 5-point scale cited the following reasons:

- Survey respondents might truly feel neutral about a given topic, and presenting to these respondents a scale without a neutral midpoint can introduce respondent bias as respondents are forced to chose a more positive or negative response. Some researchers point out that in many cases respondents will accentuate the negative in an experience.
- Neutral is a legitimate opinion that exists among respondents. Generally speaking, if we solicit every opinion of the people that are surveyed, the neutral rating needs to be included in the scale. If we are not interested in the neutral opinion, we do not have to include it in the scale.
- With a 5-point scale you have a nice midpoint. The 3 rating is right in the middle and it indicates neutrality or mixed satisfaction. When calculating the mean weighted average you have a standard point of comparison. You will know instantly that an average rating of 3.4 is above neutral and 2.8 is below.

Those researchers preferring the 6-point scale cited the following reasons:

- They prefer having an even number of ratings in the scale to have respondents commit to either positive or negative end of the scale. These researchers disagree with giving the respondent a neutral or ambivalent answer choice.
- They also argue that neutral answers are rare anyway because in the majority of cases, only those who had a positive or negative experience/opinion will want to participate in a research study.

As the results of the Infosurv forum show, there are arguments for and against the various forms of the Likert scale. Though the majority of modern market researchers prefer a 5-point scale, it is ultimately the responsibility of the survey questionnaire designer expert to decide upon the scale that best fits their needs. It is important to remember that the ultimate purpose of the research is to uncover unbiased answers that can lead to actionable results, and most research experts agree that an odd numbered scale is better suited to capture the unbiased sentiments of survey respondents⁵.

⁵ Taken from: Infosurv White Paper 5-point vs. 6-point Likert Scales http://www.infosurv.com/wp-content/uploads/2011/01/Likert_Scale_Debate.pdf (last access 28.01.2012)

In addition, some researchers involved in this discussion pointed out that in the questionnaire design process, researchers must factor in respondents' knowledge of the topic at hand. The lack of respondent knowledge may lead to an abuse of the endpoints of longer scales resulting in lower reliability than with the shorter scales. If a respondent is very familiar with the subject, a neutral rating may not be as necessary compared to a situation where the respondent is not well acquainted. It could be argued that in the latter case the respondent could truly have a neutral attitude towards the subject at hand. As with other scales that cover the continuum levels of the most negative to most positive attitude, and for each level it is necessary to develop suitable numerical code, where the smallest number (1) expresses the most negative attitude, and the biggest (4, 5, 7 depending on the number of possible answers) express the most positive attitude. Care should be taken that the stated degree of numerical agreement is a logical response to the question.

WEAKNESSES

A problem can occur where people may become influenced by the way they have answered previous questions. For example if they have agreed several times in a row, they may continue to agree. They may also deliberately break the pattern, disagreeing with a statement with which they might otherwise have agreed. This patterning can be broken up by asking reversal questions, where the sense of the question is reversed. Sometimes the 'do not' is emphasized, to ensure people notice it, although this can cause bias and hence needs great care.

Respondents express their attitude towards each of these claims through several of the most positive to the most negative, and the final result of each of the respondents is the sum of the values of all its replies (because scales of this type are called Summated Rating Scales). There appears to be the biggest disadvantage of this scale. The respondents have very different individual views that may end in a similar place on the summated scale (e.g. respondent A gives extremely positive and extremely negative responses, while respondent B usually gives neutral answers, but the scale summated end in the same place) and to the careless researcher it may hide some important information about the correct interpretation of results.

For example, two statements which might be used in a scale to measure attitude toward capital punishment would be, "Capital punishment is nothing but legalized murder," and "Capital punishment gives the murderer just what he deserves." A person who is in favour of capital punishment would be expected to disagree with the first statement but agree with the second statement. Of course, the person opposed to capital punishment would be expected to give opposite responses. The individual responses "strongly agree" through "strongly disagree" are assigned numbers, usually 1-5. In this manner the responses to the various items are quantified and may be summed across statements to give a total score for the individual on the scale. It is necessary, of course, that the assigned numbers are consistent with the meaning of the response. For example, the first statement above could be scored 1-5 and the second statement scored 5-1. In this way a person with a strongly favourable attitude toward capital punishment would receive a score of 10 for these two items while a person strongly opposed to capital punishment would receive a score of 2.

Apart from consent, the respondent on the scale can estimate the frequency, quality, importance and other constructs. So, often as a choice of answers the following are used:

- The agreement (contract) where subjects indicate the extent to which they agree with items. Usually they are bipolar and symmetrical about the neutral point.
- The evaluation asks respondents about the rating (grade) of each item. It can be used to measure attitudes and to evaluate performance. For example, the university applied evaluation forms to assess the dimensions of the object of evaluation.
- Frequency of how often or how many times something has happened or should happen.

One of the limitations is that the Likert scale data rather produce ordinal data than interval or ratio. This means that participants can successfully put in their rank ordering of the dimension of the position, but we can be sure that the actual distance between two positions on the scale values is equal to the distance between two other values. A Likert scale example is whether the distance between "I do not know" and "agree" (3 and 4) is the same as the distance between "agree" and "completely agree" (4 and 5). It would be a handicap in Thurstone's terms of scale of appearing equal intervals, when it really would be interval. However, although this method tends to make appearing equal intervals, it is still ordinal, not interval scale. Thus in this respect there is no significant advantage over Likert's. Its disadvantage is indisputable (two participants can get the same result with a combination of different questions answered and acceptance of items with different intensity).

Technically, the ordinal scales should be treated with non-parametric techniques, but these restrictions are almost universally excluded. In most cases, statistical evidence suggests that violations of the assumptions underlying the use of parametric techniques do not lead to serious violations of their results.

METHODOLOGY AND RESEARCH RESULTS

The main focus of "Psycho-social and legal implications of the participants of the security forces of the Republic of Macedonia who participate in the 2001 conflict" research is based on the consequences and attitudes of the members of security forces (mostly policemen - 51.3%, then members of the Army of the Republic of Macedonia - 36.3%, and members of village guards, i.e. population from the place of conduct is -1.5%) for social interactions and relationships, the institutional capacity and the impact of the consequences of conflict in 2001 on their psycho-social and legal status. The survey was conducted in 10 cities in the Republic of Macedonia (Kavadarci, Tetovo, Brvenica, Skopje, Kumanovo, Prilep, Berovo, Stip, Radovis, Kriva Palanka) in the second half of May, June and first half of July 2009.

The purpose of this research was to perform scientific description of the sociological, psychological, behavioural and legal consequences of the 2001 conflict in Macedonia on the members of security forces who participated in it directly. Thus, the structure of the instrument is made so that initially sets of psychological tests, set of questions related to social and interpersonal relationships (total 68 Likert-type items) are found and issues related to the legal position and rights of the members of security forces. The questionnaire in the section on social, human rights and the rights of the defenders (i.e. the legal part) is designed for this occasion, i.e. for the purpose of this research. At the end of the instrument there are questions related to the characteristics of the respondents⁶.

⁶ Research report "Psycho-social and legal implications on members of the security forces in Republic of Macedonia involved in the 2001 conflict", Faculty of security, Skopje 2009 (p.18)

The free time and the way it is organized shows that in the general idea of interests of this research group there are characteristically determined sections. It can be concluded that most of the respondents most often are watching TV 60.86%, 35.18% are listening to the radio, 23.86% are sporting, then, 22.50% spend time in bars and restaurants, 21.29% work on computer and that many more (21.28%) have fun in front of a computer, 20.16% most often go on picnics. It is interesting that 20.00% of them respond that most often they are sporting (running, playing football, etc.), 16.07% hunt and fish (during the season), 14.90%, play music instruments, paint, write and similar activities, while 14.43% often go to restaurants, bars and night clubs, 13.84% do not visit their relatives and 88.62% do not read books.

The answers to this battery questions (which applies 3-point frequency Likert scale – never, sometimes, often) indicate that respondents are essentially left on their own initiative, lack some form of organized life or encouraged activities by sports associations, nongovernmental organizations, but also the initiatives for the way of organizing free time. Such structure of free time can be correlated with the economic status of the respondents. Based on the participation of the manifest variables, through the application of the factor analysis as a research technique, 7 latent factors are obtained.

Table 1 - Unrotated factor matrix

| Component | Initial Eigenvalues | | | Extraction Sums of Squared Loadings | | |
|-----------|---------------------|---------------|--------------|-------------------------------------|---------------|--------------|
| | Total | % of Variance | Cumulative % | Total | % of Variance | Cumulative % |
| 1 | 4,462 | 22,311 | 22,311 | 4,462 | 22,311 | 22,311 |
| 2 | 1,886 | 9,428 | 31,739 | 1,886 | 9,428 | 31,739 |
| 3 | 1,547 | 7,735 | 39,474 | 1,547 | 7,735 | 39,474 |
| 4 | 1,376 | 6,880 | 46,354 | 1,376 | 6,880 | 46,354 |
| 5 | 1,272 | 6,362 | 52,716 | 1,272 | 6,362 | 52,716 |
| 6 | 1,225 | 6,124 | 58,840 | 1,225 | 6,124 | 58,840 |
| 7 | 1,166 | 5,829 | 64,670 | 1,166 | 5,829 | 64,670 |

From the results (Table 1) we can notice that individually defined significant principal components draw a very small percentage of the total variance indicating heterogeneity of the obtained factors. This heterogeneity can practically be seen in diversity of activities carried out by security forces in their free time. Communalities (h^2) indicate that the best valid representatives of the obtained latent factors are the following variables: F1- I'm sporting (running, playing football, etc.) $h^2=0.711$, F2 - visiting friends $h^2=0.745$, F3 - having fun on computer $h^2=0.822$, F4- listening to the radio $h^2=0.577$, F5 - restaurants, bars, night clubs $h^2=0.774$, F6 - theatre, concerts, classic music, art exhibitions $h^2=0.688$ and F7 - playing music, painting and writing $h^2=0.689$ ⁷.

The research on "Students' attitudes on crime" is part of an international survey that was conducted in several countries of former Yugoslavia (Slovenia, Bosnia and Herzegovina, Serbia, Croatia and Macedonia). The data from the research were gathered by the survey which was conducted in April-May 2009, on a 357 students from the Faculty of Security (27.6%), Law Faculty (31.7%), Faculty for Pedagogy (12.6 %) and Faculty of Philosophy (27.7%) in Skopje. From the total number of surveyed students, 124 (34.7) were male and 233 (65.3) were female.

In the questionnaire used in the research there are several groups of questions related to the feeling of safety and fear of crime (4 and 5 point Likert scale is applied), issues relating to prior victimization of respondents and their opinions re-

⁷ Ibidem (p.91)

garding the role of the victim in criminal acts, questions concerning the attitudes toward punishment of certain criminal and antisocial behaviour and issues related to the attitudes on the death penalty.

Out of the whole system of Likert questions applied in this research, it can be concluded that the distribution of the majority variables ranges within the normal distribution of results, while in some other variables there is less deviation from the normal distribution. The results show that the values of standard deviation (Std. Deviation) in these variables (15.6 = 1.030, 15.7 = 1.073, 8.15 = 1.075, = 15.11, 804, 15:13 = ,904, 2.22 = ,930, 7.22 = 1.141, 3.23 = 1.510 , 4.23 = 1.649, 1.197 = 39.5, 39.7 = 1.159, 39.8 = 1.216) is greater than one-third in terms of the values of means of the same, indicating that there is little discrimination of items, i.e. that the results are not grouped into one response but that all options are represented in the answers of the respondents. The rest of the results of the values of standard deviations are one third in terms of their means, suggesting that the grouping of these results is mainly around one answer.

Table 2: Item Statistics for Likert questions

| Item Statistics | | | |
|--|------|----------------|-----|
| | Mean | Std. Deviation | N |
| 15.1. Life is full of many different dangers and risks. Some of them are already mentioned. We are interested in how much they currently make the life difficult/dangerous. 1. not to get sick seriously | 2,72 | ,943 | 231 |
| 15.2. that a car accident does not to me | 2,63 | 1,025 | 231 |
| 15.3. not to become a victim of violence | 2,83 | 1,094 | 231 |
| 15.4. not to become jobless | 2,87 | 1,094 | 231 |
| 15.5. that I would not be able to keep my life standard | 2,85 | ,897 | 231 |
| 15.6. when old, not to become burden to others | 2,32 | 1,030* | 231 |
| 15.7. not to be alone in older age | 2,32 | 1,073* | 231 |
| 15.8. not to break the family, i.e. partnership | 2,51 | 1,075* | 231 |
| 15.9. that an accident like Chernobyl does not happen | 2,45 | 1,070 | 231 |
| 15.10. not to grow big life expenses | 2,87 | ,860 | 231 |
| 15.11. that not too many foreigners come in the country | 1,61 | ,804* | 231 |
| 15.12. that a civil war does not break out | 2,58 | ,983 | 231 |
| 15.13. that the warranty for my rent / old age care is not enough – not of good quality | 2,03 | ,904* | 231 |
| 15.14. that terrorism would endanger us | 2,59 | 1,009 | 231 |
| 22.1. I could get hurt on a street | 1,81 | ,773 | 231 |
| 22.2. I could be called by insulting names in public | 1,98 | ,930* | 231 |
| 22.3. I could get bitten and hurt | 2,41 | ,941 | 231 |
| 22.4. my apartment could be broken into | 2,66 | ,894 | 231 |
| 22.5. I could be attacked and robbed | 2,96 | ,898 | 231 |
| 22.6. something could be stolen from me | 2,84 | ,854 | 231 |
| 22.7. I could get killed | 2,48 | 1,141* | 231 |
| 23.1. sexual harassment | 2,79 | 1,481* | 231 |
| 23.2. sexual assault | 3,03 | 1,493 | 231 |
| 23.3. raping | 3,10 | 1,510* | 231 |
| 23.4. bitten from your husband, friend or partner | 2,48 | 1,649* | 231 |
| 39.1. the offender/offenders to be reported | 3,90 | ,497 | 231 |
| 39.2. the offender/offenders to be convicted and charged guilty | 3,88 | ,360 | 231 |
| 39.3. the offender/offenders to be strictly punished | 3,71 | ,651 | 231 |
| 39.4. the offender/offenders to compensate the damage | 3,41 | 1,034 | 231 |
| 39.5. the offender/offenders to apologize to you | 2,73 | 1,197* | 231 |
| 39.6. the country to take care of the victim, such as to compensate the damage, that the offender/offenders maybe isn't/aren't able to do that | 3,07 | 1,004 | 231 |
| 39.7. to talk to the offender/offenders for the consequences of the act and to convince him/them to pay the damage | 1,99 | 1,159* | 231 |
| 39.8. social services to take care of the offender and his living conditions | 2,72 | 1,216* | 231 |

The variables that represent the space of the second set where the presented issues are situations in which citizens feel insecure, i.e. what they are most concerned of, are in mutual correlation with medium to relatively high values. The highest (.762) is between “I could be attacked and robbed” and “Something could be stolen from me”, and between “I could be attacked and robbed” and “Someone could break into my apartment”. The structure of the answers to these distributions shows similar results, which may be an indicator for the sincerity of respondents in giving answers, and greater confidence in research results. So, the biggest part of respondents feels a bit worried that they will be attacked (34.7%) and that something which belongs to them will be stolen (38.1%). Only 8.7% or 7.6% of the respondents are not worried at all.

Table 3: Inter-item Correlation Matrix

| Inter-item Correlation Matrix | | | | | | | |
|-------------------------------|------------------------------------|---|----------------------------------|--|-------------------------------------|--|-------------------------|
| | 22.1. I could get hurt on a street | 22.2 I could be called by insulting names in public | 22.3 I could get bitten and hurt | 22.4 my apartment could be broken into | 22.5 I could be attacked and robbed | 22.6 something could be stolen from me | 22.7 I could get killed |
| 22.1 | 1,000 | | | | | | |
| 22.2 | ,515 | 1,000 | | | | | |
| 22.3 | ,500 | ,585 | 1,000 | | | | |
| 22.4 | ,460 | ,467 | ,573 | 1,000 | | | |
| 22.5 | ,459 | ,553 | ,693* | ,704* | 1,000 | | |
| 22.6 | ,447 | ,446 | ,507 | ,625 | ,762* | 1,000 | |
| 22.7 | ,478 | ,443 | ,620 | ,541 | ,648 | ,513 | 1,000 |

The biggest link .947 is in the set of questions intended only for women, i.e. among the issues that concern you if you could be “sexually attacked” and “raped”. In this set the dominant issues are related to sexual offenses and sexual freedom, where mutual link is noticeable with very high level among almost all applied variables, and as expected the highest is the Alpha coefficient, which indicated that it is a homogeneous set of selected questions.

Table 4: Inter-item Correlation Matrix

| Inter-item Correlation Matrix | | | | |
|-------------------------------|------------------------|---------------------|-------------|--|
| | 23.1 sexual harassment | 23.2 sexual assault | 23.3 raping | 23.4 bitten by your husband, friend or partner |
| 23.1 | 1,000 | | | |
| 23.2 | ,910 | 1,000 | | |
| 23.3 | ,874 | ,947* | 1,000 | |
| 23.4 | ,755 | ,776 | ,800 | 1,000 |

In the third attitude survey of the students at the Faculty of Security for the program of Special Physical Education (SFE) conducted on a sample of 113 students, and 5 degrees Likert scale applied, including a neutral option (e.g. “I do not know”, “not affected”, “little influence”, “sufficient influence” and “significantly affected”). The attitude structure is determined with eight variables, which intend to provide basic information about the relationship, mobility and expectations of the implemented subject program. All of these individually may represent specific variables with their own prediction, and the variable with number one (grade of the exam passed), is mainly treated as a criteria in this system of variables.

The calculated measures of variability (SD and KV%), showed satisfactory homogeneity and low variability of the results in terms of the average values for all tests for all groups, except for the test “engagement” where the value of the standard deviation is greater than 1/3 in terms of mean, and coefficient of variability

shows a relatively weak homogeneity; the reason for this should be sought in the flow of the responses of the respondents in the scale of answers from 1 to 5 for their engagement outside of regular hours. The Skewness values for the tests “grade”, “competence”, “intensity” and “engaging” are within the limits of moderate asymmetry (+1 / -1), indicating greater homogeneity of the results mainly around their means, while the tests “interest”, “impact”, “pleasure” and “purpose”, the values are greater than -1, meaning that the answers of respondents are concentrated towards the larger numerical values in the scale of responses⁸.

Reliability as one of the basic metric features in all three studies is determined by alpha-Cronbach coefficient of internal consistency. To apply other procedures to check the reliability (methods of testing and re-testing, split halves method and the method of parallel forms) is condition to have successive measurements.

The results indicate a high degree of association of variables, particularly in defenders research where Cronbach alpha coefficient was .961. And the survey of the students for attitudes on crime, this coefficient shows a high internal consistency .888, while the attitudes of SFE students has a low value (.718) compared to the previous two, which does not mean that the instrument does not possess satisfactory degree of certainty or is not acceptable under the conventional criteria. One of the possible reasons may be that the neutral choice of responses is included. Although most research experts agree that odd-numbered scale is better suited for obtaining objective responses from the survey respondents, still at the end it is the responsibility of the researcher to decide whether the neutral level suits their needs.

Table 5: Research “Students attitudes on crime”,
Summary Item Statistics for Likert - type questions N=33

| Summary Item Statistics | | | | | | | |
|-------------------------|-------|---------|---------|-------|-------------------|----------|------------|
| | Mean | Minimum | Maximum | Range | Maximum / Minimum | Variance | N of Items |
| Item Means | 2,701 | 1,615 | 3,900 | 2,286 | 2,416 | ,282 | 33 |
| Inter-Item Correlations | ,198 | -,136) | ,947 | 1,083 | -6,956) | ,030 | 33 |

| Reliability Statistics | | |
|------------------------|--|------------|
| Cronbach's Alpha | Cronbach's Alpha Based on Standardized Items | N of Items |
| ,888 | ,891 | 33 |

The overall interpretation of the results of the three studies suggested that Likerts scale as an instrument, has satisfactory indicators of reliability and validity. It has good metric features and enables further insight into the nature of the research-

8 Furthermore, within this research regression analysis is conducted that indicates linkage system of predictive variables to assess the attitudes and personal criteria variable - passing the final exam grade, which is statistically significant at the level of Q = .00 and multiple correlation RO = .49. This statistical significance between predictive system variables and the criterion is explained by the coefficient of determination which is 24% (DELTA = .24). The remaining 76% of the total variability of criteria variable can be attributed to other anthropological features and capabilities (cognitive, conative, motor, functional, morphological, etc.), and this was not of interest in the research. See more: Jakimov J., Ivanovski J., Soklevska E.,”Analysis of the relation between students attitude towards the special physical education subject programme and the mark received at the final exam” Yearbook, Faculty of Security, Skopje, 2008 (p. 177-190).

ing concept. As a valid instrument for further data processing, this scale allows for more complex statistical techniques (multivariate analysis) or data processing in manifest (measures of central tendency, t-test, measures of dispersion, inter-item correlation, frequency analysis) and latent space (regression and factor analysis).

CONCLUSION

Validity and reliability without doubt are those metric features that are given most attention. Explicit or implied, they are considered the most important features of the metric instruments used in social sciences. We can conclude that the research approaches use numerous methods, techniques and tools, and that the application of scales measuring attitudes is a significant tool in defining the concepts, but also the definition of methodological approaches in the study of security phenomena. Rating scales retain the basic metric features based on assessing their usefulness and validity of conclusions drawn from results obtained by their application. The comparative view of the scale, especially Likert's and Thurstone's allow us to determine that the first is the most appropriate instrument in the study of security.

Almost everyone would recognise Likert type of survey question, even if not many people would know it by that name. This agree-disagree approach to measuring attitudes has for decades been ubiquitous in questionnaires of all kinds. It is easy for the researcher to construct and administer this scale, and it is easy for the respondent to understand. Therefore, it is suitable for mail, telephone, personal, or electronic interviews. Several variants of the Likert scale are commonly used in security researches that vary the number of scale points (for example, 4 or 5 points) as well as the descriptors (for example, importance, frequency, familiarity) and other characteristics.

Also, researchers need to consider whether they have the necessary resources to develop reliable and valid scale. Moreover, they must be aware of the fact that any methodological design is subject to at least some of the potential threats in terms of validity, reliability, objectivity, etc. The failure to implement appropriate controls affects the ability of researchers to derive valid conclusions.

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KERNEL DENSITY MAPPING AND HOT SPOTS IDENTIFICATION¹

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Abstract: Crime does not occur randomly. It tends to concentrate at particular places for reasons that can be explained in relation to victim and offender interaction and the opportunities that exist to commit crime. These concentrations or clusters of crime are commonly referred to as hotspots. While confusion is rampant about the theoretical definition of a hot spot, even more uncertainty exists as to the practical definition of a hot spot, or how to define a hot spot for analysis purposes. This paper points out to some problems regarding hot spots definitions. Crime mapping can show us where the high crime areas are and help to provide an understanding of the factors that affect the distribution and frequency of crime. Review of the basic hot spot identification spatial analysis techniques is also contained in this paper with the emphasis on the kernel density estimation (KDE) spatial analysis technique. The author performed spatial analysis of robberies committed in 2008-2010 time period, in one of Belgrade municipalities (Cukarica), using KDE technique. The methodology and results of this analysis are stated in this paper.

Key words: hot spot, crime mapping, spatial analysis, GIS, policing.

INTRODUCTION

The distribution of incidents across the landscape is not geographically random. For incidents to occur, offenders and their targets - the victims and/or property - are required to exist at the same location for a period of time. Several factors, including the lure of potential targets and simple geographic convenience for an offender, influence where people choose to break the law (Akpinar & Usul, 2004:1). Consequently, crime does not occur evenly across urban landscape - rather it is concentrated in relatively small places, around crime opportunities and other environmental features that facilitate criminal activity.

Finding that violence, or any kind of crime, is concentrated in particular places is not new. The earliest "spatial studies" of crime were carried out by André-Michel Quetelet and Adolphe Guerry in the 1830s. From this research came the first examples of crime maps, depicting crime rates for the provinces of France. The maps were shaded to reflect various socio-demographic features such as poverty and education levels. Guerry and Quetelet both found that crime was not evenly distributed across the country, and further that the distribution varied according to the crime type. Contrary to expectations, violent crime was highest in poorer rural areas while property crime was highest in wealthy, industrialized areas. By the 1930s, researchers at the University of Chicago (the Chicago School) had begun mapping juvenile delinquency patterns across the city by hand, using pins to represent the residence of each juvenile delinquent in Cook County, Illinois. Using this strategy,

¹ This paper is the result of the realisation of the Scientific Research Project entitled „The Development of Institutional Capacities, Standards and Procedures for Combating Organized Crime and Terrorism in the International Integration Conditions“. The Project is financed by the Ministry of Science and Technological Development of the Republic of Serbia (No 179045), and carried out by the Academy of Criminalistics and Police Studies in Belgrade (2011–2014). The leader of the Project is Associate Professor Saša Mijalković, PhD.

Shaw and McKay found that certain zones of the city had consistently high rates of delinquency over decades, despite turnover in the racial and ethnic composition of the population (Wortley & Mazerolle, 2008: 4).

The fact that the concentration of crimes in space (hot spots) may be relevant in crime suppression efforts was formally recognized in the literature even before the inception of the modern police organization². However, until the early '90s of the last century, policing strategies were not systematically directed towards crime hot spots and did not tend to deal with causes and conditions which lead to the increased criminal activities in these areas³. Such situation is changed by the inception of the concept of the hot spot policing which implies the identification of the crime clustering areas, determining of causes and conditions which bring about crime occurrence and directing available resources to those areas in order to eliminate opportunities that may lead to the commission of criminal acts⁴.

HOT SPOT NOTION

The first use of the term hot spot in the formal literature was by Sherman, Gartin, and Buerger, who defined it by size (a place is defined as "a fixed physical environment which can be seen completely and simultaneously, at least on its surface, by one person's naked eyes") and by activity level (places with "substantial concentrations of all police calls") (Sherman, Gartin, & Buerger, 1989. In: Maltz, Gordon & Friedman, 2000: 41). Thus a hot spot has no specific size and no permanent location; if crimes (or calls for service) decrease at that location, then it is no longer a hot spot. As far as the previously mentioned definition is concerned, Maltz, Gordon and Friedman found that it has some deficiencies. First, the hot spot is defined by a specific type of activity, one that generates calls for police service. There are many other problems (in particular, incivilities) that are considered by community residents to be of the same importance as those represented by calls for services data that never reach the police through the 911 emergency telephone system. Second, the hot spot is tied to a physical place, thus events that are precipitated by activity at a neighboring place are not considered (Maltz, Gordon & Friedman, 2000: 41).

The last remark stated by Maltz, Gordon and Friedman drew attention to the fact that although hotspot, above all, means the concentration of crime in an area, this does not mean that some other incidents that are the subject of police attention (e.g., misdemeanors) should be ignored or considered separately. Besides the fact that these incidents may have obvious negative impact on the quality of life in particular neighborhood, in a short time they can escalate in the commission of crimes and lead to the emergence of crime hot spots. Ignoring these "non crime" incidents indicates the absence of proactivity, which is nowadays one of the leading principles of modern policing. Except on the crime hot spots, police attention should be focused on the concentration of other, non-crime incidents that endanger the quality of life in some neighborhood and the causes and conditions leading to their

² Some examples can be found in: Farrel, G., Sousa, W.: **Repeat victimization and hot spots: The overlap and its implications for crime control and problem oriented policing**, *op.cit.* p. 223-224.

³ The emergence of the hotspot policing concept was enabled by three factors: (1) theoretical underpinning of the importance of the place where the crime is committed under the environmental criminology perspective, (2) a number of empirical studies which supported them and (3) development of (computer) technology (hardware and software) which facilitated the identification and analysis of spatial relations among crime incidents and environment in which they occur (above all the appearance of personal computers and Geographic information system (GIS) technology).

⁴ Hot spots policing is one of the most rigorously evaluated policing strategies. In the USA, the National Research Council of the National Academy of Sciences has stated that the research on hot spots policing constitutes the "...strongest collective evidence of police effectiveness that is now available" (NRC, 2004: 250).

appearance (“risk hot spots”). Otherwise, if they are neglected they can easily give the impression that the neighborhood in which they are manifested is without control, so the “risk hot spots”, in a short time, can be transformed into the crime hot spots. In other words, crime hot spots may arise first as concentrations of “low-level anti-social behavior” that later harden to more serious crimes. Consequently, when this happens, the police work is often overshadowed by the fact that it represents a belated reaction, because the consequences have already occurred, and in some situations they would never be corrected (e.g. loss of human life).

Such necessity is recognized by Sherman and Weisburd who, in a study aimed to examine the general deterrent effects of police patrol in crime hot spots, defined hot spots as “small clusters of addresses with frequent ‘hard’ crime call activity, which also had substantial ‘soft’ crime calls for service”. As examples of “hard” crimes authors state burglaries, rape, the use of firearms and bladed weapons in order to commit a crime etc., while the “soft” crimes include an alarm triggering, disturbing public order, debauchery, vagabondism, vandalism, etc (Sherman, Weisburd, 1995: 630). The introduction of “soft” crimes in the hot spots definition, gives it proactive feature. In the same year, in his paper *Hot spots of crime and criminal careers of places*, Sherman stated another definition, that contain previously mentioned proactive feature, as “small places in which the occurrence of crime is so frequent that it is highly predictable, at least over one year period“ (Sherman, 1995: 36). Namely, predictability is the basis to proactive actions since it allows identifying the most probable future crime events, and acting based upon these predictions, in a timely and efficient manner, could yield successful crime prevention efforts.

While there is no widely accepted definition of a hot spot, most police practitioners and academics would agree upon definition given by Eck et al., that a hot spot is “an area that has a greater than average number of criminal or disorder incidents, or an area where people have a higher than average risk of victimization” (Eck et al., 2005: 2). These hot spots can be either places (building or bar location) or spaces (e.g. neighborhood) and are usually consistent over some period of time⁵.

Beside the fact that there is disagreement over the theoretical definition of a hot spot, whereby some authors even believe that a rigid absolute hot spot definition may not be possible (Harries, 1999: 112-113), even more confusion exists as to the practical definition of a hot spot, or how to define a hot spot for analysis purposes. One of the first “practical” hot spot definitions was the above-mentioned definition, given by Sherman, Gartin, and Buerger, who defined it as “a fixed physical environment which can be seen completely and simultaneously, at least on its surface, by one person’s naked eyes”. In a similar way, Sherman and Weisburd limited the boundaries of hot spot “as being easily visible from an epicenter” (Sherman, Weisburd, 1995: 630). In another definition, hot spot was defined as “a single address, a cluster of addresses close to one another, a segment of a street block, **an entire street block** or two, or an intersection” (Taylor, 1998: 3). Some authors introduced strict requirements hot spots have to adhere, such as being no longer than a standard street block, not being within a half of a block from an intersection, and being at least one block away from another hot spot (Buerger, Cohn, & Petrosino, 1995: 240). Guidi, Townsley and Homel provide one of the clearest explanations of how crime mapping software can define hot spots in terms of the radius of an ellipse and the number of crimes within it. They suggest that the optimal size of a hot spot should be from 100 to 300 meters, depending on local circumstances. The radius

5 Some authors distinguish hot spots from high crime area. Hot spots are small geographic locations, such as an intersection or even a single address, while a high crime area is geographically larger than a hot spot (Farrell & Sousa, 2001: 227).

of a hot spot may be at the lower end of the scale in a densely populated urban area (Guidi, Townsley & Homel, 1997. In: Farrell, Sousa, 2001: 228).

A good way to resolve confusion regarding practical definition of hot spots offer Paulsen and Robinson, who states that the hot spots identification revolves around few criteria - the impact of time, scale, number of crimes, and risk in determining if a hot spot actually exists. According to them:

- *Time* is a key element in hot spot determination as a unit of analysis – specifically, how long time period will you analyze in order to determine if an area is a hot spot and how long must an area be hot to be considered a hot spot.
- *Impacts of scale* on hot spot identification – hotspots are relative to the area under study. A hotspot represents an area of high crime concentration, relative to the distribution of crime across the whole region of interest.
- The *number of crimes* necessary for an area to be considered a hot spot - there is no universal or standard numerical threshold that can be used to define the number of crimes that need to have occurred in an area for the area to be defined as 'hot'⁶.
- The final key issue in determining hot spots is the ignorance of *risk* when determining hot spots. Hot spots are generally determined based solely on the volume of crime incidents in a geographical area, ignoring the importance of the relative number of victims/targets in those areas (Levine, 2002). High volume areas of crime may be high simply because there are more people living/working in those areas, and in fact they may be less risky than other areas with fewer crimes but also less people. The danger in using measures based solely on volume is that police may focus interventions in areas where crime volume is high but crime risk isn't, leaving areas with a higher crime risk devoid of police interventions (Paulsen, Robinson, 2004: 314-315).

Depending on whether the area which is the subject of analysis is narrower or wider (micro, meso, macro approach), crime hot spots will have different shapes and sizes and they can involve a single location (address), a group of locations, the whole street, urban (residential) block, city area or even a state region. In the context of performing police functions at the local (tactical) level (police station), the term hot spot should be understood in the narrow sense (micro approach), according to which hot spots should include smaller areas. For example, in urban areas hot spots should include the concentration of crime and other incidents relevant to the police function at single locations (addresses) with or without area in their immediate environment, small areas that extend along a street (or part thereof), or a residential neighborhood (one or rarely more than one).

HOT SPOTS IDENTIFICATION TECHNIQUES

In order to facilitate hot spot identification, various software applications were developed. Although much of the spatial analysis can be done in GIS environment (e.g. *ArcGIS Spatial Analyst* provides a range of spatial modeling and analysis tools⁷)

6 D. Paulsen demonstrated that 10 crime incidents represented approximately 24% of the average weekly number of crime incidents in a small town, far more than is necessary for an area to be considered a hot spot. In contrast, 10 incidents represented only around 3% of all weekly crimes in a larger jurisdiction, a more reasonable percentage of total crimes for a hot spot. Thus, when determining the appropriate number of crimes necessary for a hot spot, individual jurisdictions need to analyze their crime distributions and establish minimum amounts that will show true clusters of crime (Paulsen, Robinson, 2004: 315).

7 ArcGIS Spatial Analyst allows the user to: create, query, map, and analyze cell-based raster data, perform integrated raster/vector analysis, derive new information from existing data, query information across multiple data layers and fully integrate cell-based raster data with traditional vector data sources. More information are available at www.esri.com

different software applications (such as the *CrimeStat* software⁸) have the ability to perform many of these analyses. One of the main goals of this analysis is to assess whether crime locations, abstracted as points on a map, are randomly scattered across space, or instead, show systematic patterns in the form of clusters (more points are systematically closer together than they would be in a purely random case) or dispersion (more points are systematically further away from each other than under randomness). The most common spatial analysis techniques used to identify hot spots are:

Manual or “eye-ball” method

The basic hot spot identification method is the manual or “eye-ball” method. Each crime location is represented by a dot on a crime map. This method involves users simply looking at point maps and determining areas that appear to be “hot”. In areas that experience large amounts of crimes it may be difficult to visualize and interpret accurate patterns in spatial distribution data. In addition, certain locations on the map that have more than one crime incident will only have one visible dot⁹. This can be avoided by the use of graduated symbols (usually circles) so that addresses with the largest number of incidents will be represented by the largest dots¹⁰.

Graduate color mapping

It allows analysts to examine incidents summed by larger area (e.g. police beats). It uses color intensity to shade areas on a map according to the number of criminal events those areas experience. According to Paynich and Hill “Caution is advised when choosing the unit of analysis. Selecting a unit of analysis that is too large will result in obscuring smaller hot spots placed in larger areas with limited crime” (Paynich, Hill, 2010: 375). Problem that affects all types of thematic mapping is the modifiable areal unit problem (MAUP). In essence, when thematically mapped, different boundaries may generate different visual representations of where the hotspots may exist (Chainey, Ratcliffe, 2006: 126).

Grid mapping

A technique that can help overcome the problems of varying sizes and shapes of geographic areas is to use a uniform grid (most GIS software include tools for the creation of these types of grids), where each cell (a quadrant) is of the same size and shape. Each grid cell can have a crime count associated to it, which can then be thematically shaded according to the count of crime points within it. The unit to

8 CrimeStat is a spatial statistics program for the analysis of crime incident locations, developed by Ned Levine & Associates under the direction of Ned Levine, PhD. The program is Windows-based and interfaces with most desktop GIS programs. The purpose is to provide supplemental statistical tools to aid law enforcement agencies and criminal justice researchers in their crime mapping efforts. The program inputs incident locations (e.g., robbery locations) in 'dbf', 'shp', ASCII or ODBC-compliant formats using either spherical or projected coordinates. It calculates various spatial statistics and writes graphical objects to ArcView, Map-Info, Atlas*GIS, Surfer for Windows, and ArcView Spatial Analyst. More information about CrimeStat are available at <http://www.icpsr.umich.edu/CrimeStat/>

9 This occurs when crime events at the same location have been geocoded to exactly the same coordinates.

10 Ratcliffe warns that “Care needs to be taken when interpreting maps of this type because the size of a symbol may be large enough to obscure patterns in surrounding areas. It is also possible that the size of the symbol is so large that it does not exclusively cover the precise location where the crime occurred, and so may lead map readers to falsely interpret where a crime happened. A large symbol can suggest that neighboring locations were the target of repeated crime events” (Chainey, Ratcliffe, 2006: 149).

thematically map could be a count of crimes per grid cell or a density value calculated from the count and cell area (Eck et al., 2005: 25).

Grid thematic mapping does tend to better representation of the spatial pattern of crime when an appropriate cell resolution has been set, in terms of determining the location, size and relative scale of hotspots. However, grid thematic mapping does suffer from certain similar problems to all thematic mapping in that it can still be affected by the MAUP. A coarse series of grid cells may hide some of the spatial patterning detail within the cell and that inappropriate class boundaries for the thematic map can produce unhelpful or misleading results (Chainey, Ratcliffe, 2006: 154; Eck et al., 2005: 26)

Density mapping

A more precise type of grid cell analysis is density calculations. In essence, the point locations are transformed into a continuous surface that represents an estimate of the expected number of events per unit area¹¹. Among density mapping techniques, the most popular is kernel density estimation (KDE) technique. It employs a grid analysis methodology to estimate crime density across an entire study area by assigning greater weight to those incidents that occur closer to the center of the search radius and lesser weight to incidents that occur farther out¹². The results then provide information on where crime is clustered together, but it also provides a density value relative to the entire study area.

The method can be described in the following steps:

1. A fine grid is generated over the point distribution;
2. The GIS defines a neighborhood (based on a specified search radius) around each cell center.
3. It then calculates weights for each point within the search radius and points closer to the center receive a higher weight and therefore contribute more to the total density value of the cell. That value is assigned to the cell (*Figure 1*).
4. The GIS moves on to the next cell and does the same thing. Final grid cell values are calculated by summing the values of all kernel estimates for each location. Density surfaces are created in a GIS as raster layers - each grid cell in the raster layer will have a density value assigned to it based on the number of crime incidents within the specified search radius of the cell (Eck et al., 2005: 26-27; Boba, 2005: 223).
5. The grid cells are then shaded according to their density scores to create a density map with a smooth surface. Usually areas with a small number of incidents are shaded lightly and the shading becomes progressively darker as the density of criminal incidents increases.

¹¹ The GIS uses one of two methods for calculating the cell values: the simple method and the weighted method which uses a mathematical function to give more importance to features closer to the center of the cell.

¹² Interpolation is an increasingly popular method for visualizing the distribution of crime and identifying hot spots. It aggregates points within a specified search radius and creates a smooth, continuous surface that represents the density or volume of crime events distributed across the area. For example, interpolation techniques are commonly used to create surfaces representing the distribution of rainfall, where the values between rain gauges are estimated from a function that considers the rainfall readings and the distribution of sample sites (i.e., rain gauges). It would make no sense to apply one of these techniques to estimate the number of crimes that may have occurred between the existing crime point locations. No crimes have been recorded in the areas between crime points, so the analysts should avoid methods that aim to create estimated intensity values in the gaps between the points. Instead, surfaces that the analysts wish to create that represent the distribution of crime should act as visualizations for helping them understand crime patterns (Eck et al., 2005: 26).

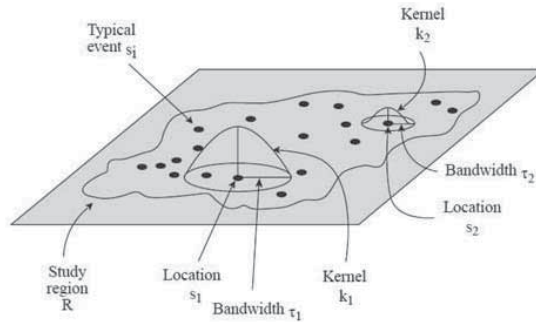


Figure 1. In kernel estimation, a moving three-dimensional function (k_1) of a given radius or “bandwidth” visits every cell of a fine grid that has been overlaid on the study region or area. As the kernel visits each cell, distances are measured from the center of the grid cell (s_1) to each observation (s_i) falling within the bandwidth (τ_1). Each distance contributes to the intensity level of that grid cell, with greater weight given to observations lying closer to the center of the cell¹³.

KDE typically requires three parameters to be determined before it can be applied against crime data: (1) the grid cell size, (2) bandwidth (also known as the search radius) and (3) calculation (interpolation) method. They affect how the GIS calculates the density surface, and thus what the output will look like. Bandwidth is the parameter that will lead to most differences in output when it is varied. At the same time, some software, like *CrimeStat III*, allow choosing different calculation method, which can also significantly affect calculation output.

- The cell size determines how coarse or fine the patterns will appear. The smaller the cell size, the smoother the surface. If each cell is so large as to include many features, subtle patterns may be obscured.
- The larger the search radius, the more generalized the patterns in the density surface will be. With a larger search radius, the GIS consider more features when calculating the value of each cell. A smaller search radius usually shows more local variation. However, if the search radius is so small that most cells have very low density values, broader patterns in the data may not show up.
- According to Lavine, there are five types of interpolation methods (kernel distributions) that can be used to estimate the density of the points. Four of the five distributions overlay a circle around each grid cell and assign weights to the points within the grid cell. The five types vary in the weights they assign to nearby points:

A) Kernel that assigns weights for entire study area

1. The normal kernel overlays a three-dimensional normal distribution over each point, that then extends in all directions and is limited only by the study area (it does not have defined radius). The weight for points declines rapidly for one standard deviation, and then enters a less dramatic rate of decline for subsequent standard deviations.

¹³ The graphical representation is taken from: Anselin, L., Cohen, J, Cook, D., Gorr, W., Tita, G. (2000) Spatial Analyses of Crime. In: **Measurement and analysis of crime and justice**, David Duffee (Ed.), Criminal Justice 4. Washington, DC: National Institute of Justice, p. 228.

B) Kernels that assign weights within a specific circle

2. The uniform kernel weights all points within the circle equally.
3. The quartic kernel overlays an inverted bell-shape surface that extends only for a limited distance from each point; the weights for points within the circle decline with distance, but gradually.
4. The triangulated (or conical) kernel overlays a cone over each grid cell; the weights for points within the circle decrease consistently (in a linear manner) with distance.
5. Finally, the negative exponential (or peaked) kernel overlays a sharply-decreasing function over the grid cell; the weights for points within the circle decrease very rapidly with distance. (Lavine, 2004: 242).

Depending on the input parameters chosen by the map user, the same data can produce visually different mapping outputs. Also as a KDE map can have a variable number of hotspots depending on the thematic class classification system (e.g., natural breaks, quantiles, standard deviations) used by map designer, as different choices can produce vastly different map outputs. According to Tompson et al., careful range setting is therefore vitally important to the credibility of the map and crime analysts responsible for making KDE maps are sometimes not aware of this nor alert to the problems it can cause (Tompson, Partridge & Shepherd, 2008: 81).

While KDE is still sensitive to the subjective setting of different parameters, it provides a more objective and statistically valid measure of high concentrations of crime than other methods. It allows analysts to visually simplify and examine complex point patterns of criminal incidents. The kernel estimate is a continuous surface and the densities are calculated at all locations; thus, the user can visually inspect the variability in density and decide what to call a 'hot spot' without having to define arbitrarily where to cut-off the 'hot spot' zone" (Levine, 2004: 817). However, using KDE map in everyday police practice requires that "we should keep in mind that the values in the areas between points are estimated interpolations. Thus, the more data points and the more dispersed they are, the more valid the resulting density patterns will be" (Eck et al., 2005: 43).

The popularity of KDE with practitioners centers on several factors. First, it overcomes the Modifiable Areal Unit Problem. KDE is not reliant on administrative boundaries and is consequently more sympathetic to the underlying distribution of crime. Second, it is easy to generate. The most prominent GIS software companies have devised extensions that allow the user to create KDE maps with a few clicks of the mouse. Third, it is easy to interpret. Hotspots are intuitively represented in red or other warm colors and areas with lower concentrations of crime are shown in cooler colors such as light yellow or blue. Fourth, it is visually pleasing. Compared with point or grid thematic mapping, KDE maps are easy on the eye (Tompson, Partridge & Shepherd, 2008: 80).

In hot spot analysis techniques such as *STAC*¹⁴, *Nnh*¹⁵, *Rnnh*¹⁶, and others, ellipses are drawn around the crimes that have been determined to be closer than would be expected by chance. The problem with this is that few crime distributions are elliptical and thus these hot spots are not the true shape of the high concentration areas but merely convenient output methods. However, with kernel density interpolation high crime areas are represented in their true shape, which is often odd

14 STAC stands for Spatial and temporal analysis of crime.

15 Nnh stands for Nearest neighbor hierarchical clustering.

16 Rnh stands for Risk-adjusted nearest neighbor hierarchical clustering.

shaped and irregular. Thus, kernel density interpolation can provide a much more accurate visualization of true high concentration areas of crime (Paulsen, Robinson, 2004: 326).

Finally, kernel estimation can be important in analyzing incident patterns over time. Density images can be compared for consecutive or corresponding time periods (e.g., the same month or year-to-date comparisons in successive years). Also density maps can be animated. Animation involves the creation of a series of single 'snapshot' images (e.g. density maps), each taken for a particular period of time, which are then displayed in rapid succession. It provides opportunity to examine spatio-temporal patterns in new and innovative ways¹⁷.

KERNEL DENSITY ESTIMATION MAP OF ROBBERY CRIMES IN THE URBAN PART OF THE CUKARICA MUNICIPALITY (BELGRADE)

In the territory of the Republic of Serbia, property crimes are the most present/common – they account for nearly 60% of the overall crime, with robbery crimes having significant share. Robbery crimes present a specific type of property crimes with the elements of violence which attracts significant attention/interest from citizens¹⁸. The social threat of these crimes are not reflected so much in the extent of the incurred property damage (i.e. the value of taken (stolen) items), as in the behavior of the perpetrator who uses the force or threat of immediate attack upon somebody's life or body in order to seize the movable property.

It is hardly possible to pass two or three days, and that the media does not report on a robbery attack. Pharmacies, kiosks, shops, banks, post offices, betting places, casinos, as well as citizens strolling along the city streets are all targets of robbers who, in order to take their money or other valuables, often do not choose the specific time and use a threat, a weapon and/or physical force, trying to achieve their goals.

The subject of the research presented in this paper was the analysis of the spatial and temporal distribution of robbery crimes committed in one of the Belgrade municipalities – municipality of Cukarica. The territorial coverage of this analysis referred only to the urban area of Cukarica, which is part of the Belgrade's urban area¹⁹. This analysis didn't cover all types of robbery crimes, but only those committed in the banks, post offices, betting places, pharmacies, exchange offices, casinos and gambling houses. Based on the analysis of spatial distribution of robbery crimes, the aim of this research was to represent obtained information in the form of KDE crime map which could serve as the basis for making the appropriate decisions regarding choosing and implementing the most effective (preventive and repressive) actions with rational utilization of police and other resources.

17 More information about visualization and description of temporal crime patterns using animation can be found in: Chainey, S., Ratcliffe, J. (2006) GIS and Crime Mapping, John Wiley & Sons, Ltd., pp. 240-245.

18 In some legal systems property crime only involves the taking of money or property, and does not involve force or threat of force against a victim. Although robbery involves taking property, in those legal systems, it is classified as a violent crime, as force or threat of force on an individual that is present is involved.

19 Cukarica's suburbs are separated from its urban part, and as such can be regarded as independent policing (security) entities. Although the suburbs of Cukarica include nearly two-thirds of its territory, during the three-year period covered by this research, in this, mostly rural, area only 25 robbery crimes were committed in the buildings (targets) that are the subject of this research (banks, post offices, exchange offices, betting places, casinos and gambling houses, pharmacies). Therefore, the characteristics of spatial and temporal distribution of the robbery crimes in this area can be noticed without much effort and demanding analytical work.

In the territory of the municipality of Cukarica (its urban and suburban parts) during the period which was the subject of this analysis (2008-2010), 179 robbery crimes were committed against banks, post offices, betting places, pharmacies, exchange offices, casinos and gambling houses. The subject of this analysis entailed only 154 robberies committed in the (urban) downtown of Cukarica (2008-2010 time span), as follows: 17 robbery crimes committed in the exchange offices; 58 robbery crimes committed in the betting places, 16 robbery crimes committed in the banks, 35 robbery crimes committed in the pharmacies; 21 robbery crimes committed in the post offices and 17 robbery crimes committed in the casinos and gambling houses.

In order to conduct KDE of robbery crime locations, the first step had to be data cleaning (e.g. correcting typing errors, data unification etc.) in order to transform raw data (in paper form) into electronic (*Microsoft Excel*) format. For each crime incident, the data relating to its time and place of occurrence, target characteristics, a means of execution, obtained benefits (e.g. amount of money that is taken), suspect(s) description, and the crime identification number ("KU number") were entered. In the next step, prepared tabular data (MS Excel format) were subjected to geocoding process. Geocoding is the process of assigning a geographic reference (X and Y coordinates) to a criminal incident. Generally speaking, there are two ways in which geocoding process can be performed. First, to obtain manually precise X and Y coordinate for each of 154 crime location (e.g. using GPS device) which is time consuming work, or, second, to automate and speed up this process by using geographic reference file which already contains addresses' geographic coordinates. In that case, the essence of the geocoding process is to match address (location) of crime incident with its corresponding address (X and Y coordinates) from reference file. The matching process is based on certain rules that are defined by creating address locator²⁰. In case that any of our (crime location) addresses is misspelled or contains a word that is "surplus" (i.e., if our reference file contains street address "Proleterskih Solidarnosti 14", and the same street address in our (crime) database is "Proleterskih Solidarnosti Street No. 14" the words "street" and "No." are surplus), the address would probably not be recognized in the reference file and successfully matched. Therefore, it is of utmost importance that basic crime reporting procedures are uniform and consistent (crime data that are entered into crime database). While most geocoding software packages incorporate complicated matching algorithms, a well established reporting procedure is often the best way to ensure a high rate of accuracy²¹. Also, if the (crime location) address is not contained in a reference file, it will not be geocoded. Hence, accurate and up to date reference file is a prerequisite for successful geocoding process²². In our case geocoding rate was about 70% because the reference file was not up to date. Geocoding rate denotes the number of addresses (crime locations) from the crime database (tabular file) that were located in the reference file²³. This

20 Parameters set to determine how tabular and geographic data are matched are set within the GIS software and may include spelling sensitivity of the match, address style etc.

21 Currently, in our police practice there is no automated computer aided dispatch (CAD) system and a record management system (RMS) which has the capacity to store digital information as well as standardized tables of addresses and location names. According to US Justice Department's report "Geocoding in Law Enforcement", the most important aspects of these systems as they relate to geocoding are that they reduce the need for manual data entry and provide clear and consistent rules in order to ensure that data are reliable and valid. Because individuals are the data entry mechanism, there is still the possibility of human error and inconsistencies, which is why training should coincide with the technology.

22 For the purposes of this analysis the geographic reference file is obtained with the courtesy of the company *GDi GISDATA Belgrade*.

23 Most GIS software will have geocoding outcome statistics that indicate how many of the cases were successfully geocoded, how many are a partial match, and how many were not geocoded at all. Obviously,

meant that a number of coordinates had to be “manually” entered in order to achieve 100% geocoding rate. Also, on several occasions it was necessary to go out, to the field, and determine the exact location of the facility in which the robbery was carried out. Finally, each of the crime locations that are the object of our analysis got its corresponding X and Y coordinates, which is the prerequisite of their cartographic representation²⁴.

Kernel density estimation was calculated using spatial analyst extension for ArcGIS²⁵. The interpolation method that was used in density calculation was based on the quadratic kernel function²⁶. The grid cell size of 20m and a bandwidth of 165m were chosen. Calculated density values for each grid cell (Z value) were visually displayed on crime map using color schema going from white (transparent) for lowest values, through blue, yellow and orange to red for largest values (Figure 1). At the first visual inspection of kernel density crime map, five hot spots can be visually identified and they are marked with letters A, B, C, D and E on Figure 2.

Hot spots policing involves focusing patrol, enforcement, and problem-solving efforts on very precise places – specific addresses, blocks etc. – that account for a disproportionate amount of crime. Larger, imprecisely defined, hot spots usually don’t allow focused response to be effectively implemented. Crime map that is made as a result of the kernel density estimation has enough analytical power to inform police decision-makers about where to direct available resources (none of the identified hot spot was larger than 0.3 km²) and through research of the causes and conditions of hot spots manifestations, create adequate response in order to prevent further crime occurrence.

As we can see in Table 1, at five identified hot spots total of 71 robberies was committed, which is 46% of the total number of the robberies covered by this analysis. Focusing police attention at these 5 hot spots, could lead to prevention of almost half of the total number of crimes subjected to this analysis.

| Hot spot label | Number of crimes | Hot spot area (km ²) | Top single crime location at the hot spot | Critical (“burning”) times | |
|----------------|------------------|----------------------------------|---|----------------------------|--------------------|
| | | | | Hour | Week day |
| A | 14 | 0,17 | (post office) 5 robberies | 8-9h 10-11h 18-21h | Thursday |
| B | 8 | 0,08 | (betting place) 6 robberies | 10-11h 20-21h 22-23h | Tuesday, Sunday |
| C | 17 | 0,16 | (betting place) 7 robberies | 19-23h | Sunday, Monday |
| D | 16 | 0,165 | (pharmacy) 4 robberies | 9-10h 19-20h 21-22h | Tuesday, Friday |
| E | 16 | 0,22 | (betting place) 7 robberies | 20-22h | Tuesday |

Table 1: Spatio-temporal characteristics of the identified hot spots.

the ideal successful geocoding rate is 100%. Depending on the number of cases and the purpose of the analysis, a rate of 95% can also be acceptable. The important factor in accepting a geocoding rate less than 100% is understanding why some of the incidents are not geocoded. More details about geocoding in law enforcement can be found at: U.S. Department of Justice & Office of Community Oriented Policing Services, publication “Geocoding in Law Enforcement: Final Report” (Retrieved in September, 2011 at <http://www.cops.usdoj.gov/files/RIC/Publications/geocodinginlawenforcementfinalreport.pdf>).

²⁴ Inaccuracies in geocoding may arise if the police failed to record the location of an incident correctly or completely.

²⁵ Kernel density can be calculated using different softwares like MapInfo or CrimeStat III.

²⁶ The quadratic kernel function used in this analysis is described in: Silverman, B.W. (1986) Density Estimation for Statistics and Data Analysis. New York: Chapman and Hall, p. 76. (Retrieved November, 15, 2011 from <http://webhelp.esri.com/arcgisSDEsktop/9.3/index.cfm?TopicName=How%20Kernel%20Density%20works>).

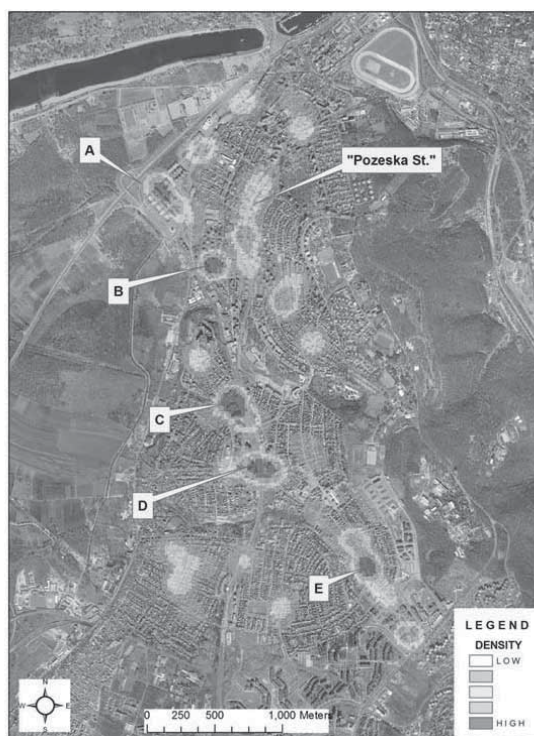


Figure 2: Kernel density estimation map of robbery crimes in the urban part of the Cukarica municipality (Belgrade)

At the same time, in *Table 1* we can see that five, single, the most crime frequent, crime locations, in each of the hot spots, are “responsible” for 18% of the total number of robbery crimes that are the subject of this analysis. In other words, early identification, directing resources and “solving” only these “top 5” single crime problems - robbery targets (three betting places, a post office and a pharmacy) - could reduce the total number of robberies by 18% in the entire study area.

Visual inspection of the kernel density crime map also reveals one interesting spatial pattern – linear hot spot²⁷. Namely, a significant number of robbery crimes (total of 16 robberies) are concentrated along 875m section of the Pozeska Street, which is one of the main and busiest streets in the Cukarica municipality (*Figure 2*). Due to its linear orientation, this type of spatial distribution does not have high density values that would attract our attention. In creation of the Kernel density map a 164m circular search radius was used, and because of the spatial diffusion of the crimes along the Pozeska Street, high density concentration could not appear. The complexity of the linear hot spot detection is recognized by Eck et al., who state that “commonly available mapping programs make it easy to identify hot spot places or hot spot areas, but do not make linear hot spots easy to identify. Simple dot maps can be used to identify hot street segments and this may be the most straightforward method” (Eck et al., 2005: 8). In the case of our spatial analysis, linear shape of contour lines draw attention to the “hot” section of the Pozeska Street and little follow-up research revealed the linear hot spot pattern existence.

²⁷ Linear hot spots are likely to be the results of the interaction of targets and offenders along thoroughfares. Since major thoroughfares concentrate people (including offenders), targets situated along thoroughfares face higher crime risks than targets on side streets far from thoroughfares. (Eck et al., 2005: 7).

Crime hotspots denote a place or space where the crimes are committed more frequently than in its surroundings. However, criminal activity at the hot spot does not necessarily occur the 24 hours, seven days a week. Certain locations and certain times provide more opportunities for crimes to occur than other times and locations. While a good deal of research has been conducted on geographic hot spots, as Jerry Ratcliffe notes, relatively little effort has gone into the examination of hot spots temporal dimension (Ratcliffe, 2004: 5). As the crimes can concentrate (cluster) in space, forming hot spots, so they can be concentrated in certain times - burning times. Burning times are defined as “temporal clusters of crimes at specific, repeated moments in some temporal cycle” (Brantingham & Brantingham, 1999. In: Lersch, 2007: 203). This means that if we strive to full and complete understanding of the dynamics of crime activity at the hot spots, the analysis of spatial distribution isn't enough. Attention should be paid to the temporal aspects (time distribution) of hot spots too.

In order to effectively counter the hot spots' crime problem, it is not enough just “to be on the right place”. It is necessary to know what „the right time“is. Directing resources to the right place, at the right time is a prerequisite for effective and efficient utilization of available resources and solving crime problem. In this regard, in *Table 1* for each of the identified hot spots their temporal characteristics are listed. In general, the criminal activity at the hot spots is usually carried out on Tuesdays, but when it comes to the time of day we can notice that particularly vulnerable are morning hours (9-11h) and evening hours (20-22 hours). In other words, the offenders usually perceive good opportunity to commit robberies immediately after the opening and before the closure of target facilities, expecting a very few people (costumers) in those facilities at that time. Also, at the end of the working time the largest amount of money is already collected in these target facilities.

Discussions regarding hot spot identification often disregard the fact that in everyday police practice, it may happen that hot spot may cross administrative boundaries (e.g. police station jurisdiction borders, police sectors borders etc.). In that case, it may happen that police station commander, sector leaders or local crime analyst pay attention only to “his garden”, failing to perceive that multiple crimes at his territorial jurisdiction are part of a broader crime pattern. The fact that crime problem (hot spot) is not identified (in its true extent) means that it can't be analyzed in a holistic manner, which hinders problem solving efforts. In order to facilitate identification of “crossing borders” hot spots, 3D density maps could be very useful tool as can be seen at *Figure 3*. In our spatial analysis, except “Pozeska St.” linear hot spot, three additional hot spots (those labeled with letters A, C and D) crossed the borders of two policing sectors.

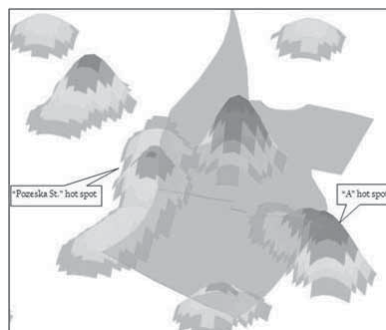


Figure 3: 3D kernel density map and “crossing borders” hot spots identification. The figure shows a hot spot “A” and hot spot “Pozeska St.” that exceeds the borders of the 3rd policing sector.

CONCLUSION

Nowadays crime maps are powerful analytical tool that can enhance effectiveness of police organization in carrying out its everyday tasks. With approximately 300-400 incidents happening daily in a big city, it is difficult to have a genuine picture of what is happening daily, weekly or monthly). Considering the old adage “a picture is worth a thousand words” crime map becomes a list of incidents, which often require only one glimpse to see what is happening, where is happening and when is happening – usually, in a much easier and faster way than it is possible from a textual content, charts, statistical reports and tabular displays.

Spatial clustering of crime incidents (hot spots) may indicate the existence of common causes and conditions in the background of their manifestation. When it comes to hot spot identification, spatial analysis techniques come to the fore. One of such techniques, that has gained great popularity among crime analysts, is the kernel density estimation. KDE maps provide a realistic and accurate image of the location and shape of the hot spot distribution. While kernel density interpolations are still subject to the subjective setting of several different parameters, Paulsen and Robinson argue that they provide a more objective and statistically valid measure of high concentrations of crime than other measures (Paulsen, Robinson, 2004: 326).

Good cartographic design is important in hotspot mapping as it clearly identifies areas that persistently suffer from crime. A visually appealing map can help enable a more focused approach to understanding areas that require crime reduction resources, and can offer direction for initiating the next analytical stages that explain the problem and how it can be tackled. Hotspot maps are therefore a blend of good cartographic design and robust methodology, and are a first step towards exploring crime patterns in more detail. (Chainey, Ratcliffe, 2006: 147). After the crime problem is analyzed and appropriate solution implemented, what follows is the evaluation (assessment), which should provide answer to the question whether the problem is really solved. In this phase crime maps and spatial analysis techniques play an important role too, as they can show whether the problem (hot spot) still exist and to indicate the existence of spatial displacement²⁸.

Although crime mapping can make hot spot identification easier and more efficient, we should be aware of its limits. Specifically, the problems police face on everyday basis will not always have a clear spatial reference (e.g. domestic violence), nor does they have to be manifested as a concentration of crime incidents. In that case they will not attract crime analyst's attention on crime maps. Therefore, we should not be too much “fascinated by technology” and to use crime mapping as a sole method of identifying community crime problems, since many data that the police need in order to achieve a complete and accurate “picture” of crime problems, do not have to be on the maps, just as those who are already displayed on the maps, may not necessarily reflect the real situation at the field (because of geocoding errors, inappropriate map design etc).

²⁸ Spatial displacement means that offenders switch from targets in one location to targets in another location (for example, a burglar stops offending in one neighborhood and begins offending in an adjacent community).

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JARGON AS A MODEL OF COMMUNICATION BETWEEN OFFENDERS¹

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While we walk down the street, offenders walk down the stripe.

Radović Nenad, Djurdjević Zoran

Abstract: Rational choice theory describes the decision models of perpetrators, whether to commit an offense or not, based on the risk of detection and potential benefits obtained from a criminal offense. To reduce the risk of detecting, offenders, particularly members of organized criminal groups, seek to protect their communication. One of the oldest forms of this is through the use of jargon or slang (“*šatrovački*” in our language), which is due to the richness of its forms, different ways of formations, and dynamic changes, always current. The available information is often not a useful information or information that the police could understand without knowledge of criminal jargon and other forms of communication. Given this importance, the authors of this paper will point out the characteristics of criminal jargon as an element of delinquent tactics. Since the communication between the offenders may be verbal and nonverbal, the authors will only look at verbal communication, i.e. the jargon of the criminal environment.

Key words: jargon, slang, “*šatrovački*”, argot, criminal group.

INTRODUCTION

Technology development has caused major changes on a global scale, starting from economy, science, industry, through information systems and politics. In this context, the phenomenon of crime is not a static phenomenon, but has a long and varied history. Crime in today's conditions will be reflected through: the diversity of forms, a high degree of organization and professionalism, the transnational nature of crime, use of highly sophisticated and brutal methods in the implementation of criminal activity, interface with government officials and establishing communication between offenders through various digital devices and modes. Given that use of modern information technology, computers and cell phones greatly changed the ways of communication between people, it also influenced the emergence of new forms of crimes, such as high-tech crime, and provided quicker and easier communication between offenders.

We are nowadays simply overwhelmed by e-mail, Internet forums, SMS or MMS messages via mobile phones, direct chat protocols, etc.

The most important means of communication is language, which appears in the form of verbal and written communication. Language as a normative grammati-

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cally adopted system of verbal signs is the most important symbolic order, without which it is impossible to imagine symbols, and is at the core of human communication. In relation to the category of quantity, i.e., the communication process, it is possible to distinguish four categories of communication (Tomic, 2003:41-59):

Intrapersonal communication is communication performed by the subject with himself. When we think about something, solve a problem or write a diary, we communicate intrapersonally.

Interpersonal communication is the communication between at least two people. Although the most common communication in this regard involves face to face contact, telephone chat also belongs to this type of communication.

Group communication is one form of communication that takes place within a group, or between two or more groups. Groups can be large or small. Large groups behave and communicate differently from small, not so much because of differences in quantity, but rather because they constitute themselves for the goals that differ from the objectives or purposes of small groups. For example, the audience at the stadium or employees of a corporation is examples of large groups.

Mass communication is the communication model in which a large number of participants participate, regardless of any professional, age, gender or other status.

Although each organization operates on the principle of effective communication, conflicts are inevitable. The roots of such conflicts may be different. First, it is about personal conflicts of individuals whose ideas and value system contrast with the values of the group. In this sense, conflicts may be the result of frustration for failures in achieving personal goals, as well as the possibility of disproportion between the individual's capabilities and his/her expectations. Interpersonal conflicts occur as a result of differences of experiences, perceptions, opinions, values, status, ambition, and models of behavior, but also as a result of competitive practices following the advancement in the organization. The organization itself is a source of conflicts as a hierarchical structure and because of division of power among members. The ability to deal with conflicts in a healthy way depends directly on the ability to communicate, and the nature of connections and relationships that we establish with other people. A positive attitude to exchange of opinions, and that means above all to listen and sympathize with others, the correct use of language and non verbal signs, such as cooperation and openness to others, are key elements of successful communication in the organization (Tomic, 2003:72).

Similarly, among the offenders, interpersonal and group communication is most frequent. It is achieved verbally and nonverbally² among them, and often imbued with certain secret symbols and codes that are understandable only to its members.

The common way of life of a social group represents the basis of subculture formation. This way of life is based on a specific cultural pattern, a system of values, ideas, norms, rules of conduct, appearance, speech and language. Thus, when it is confronted to dominant model of culture, such way of life transforms itself to subculture (Bozilovic, 2004:20). Thus, the subculture of crime groups differs from others in the system of values, view of the world, adopted social norms, rules of behavior, language, etc.

The characteristics expressed in relation to certain social groups occur at the level of rules of behavior, language, religion, dress code, tastes, games, entertain-

² Body language is an expression of emotional state of a person. Any gesture or movement could be a significant indication of what a person feels at that moment. The most common ways in which people communicate non-verbally are: facial expressions, gestures, body posture, and touch. Emotions and mood of a person are best observed on his/her face, based on eye and lip signs.

ment, music, sports. Subcultures are formed in relation to social classes, as much as to gender, age, profession and the independent professions. Socially important thing is contained in the fact that subcultures indicate the disappearance of the idea of wholeness and announce a symbolic violation of social order.

During criminal activity, a delinquent background has a major role and significance for his behavior, so as his need for identification, the role of the profession, and previous convictions. This implies the presence of certain delinquent tactics and techniques during the commission of crimes (Radovic & Djurdjevic, 2011:352).

The medical and scientific literature on delinquent tactics and techniques suggests working methods and means applied during execution, preparation, and covering up crimes (Vodinelic, 1984:4).

The systems of values, attitudes, habits, and behaviors are defined differently within crime groups. Some of these characteristics vary depending on the group and type of crime it perpetrates (economic crime, criminal offenses with elements of violence). A member adopts delinquent tactics, ways of committing criminal acts (including the signature of a criminal group), possible ways to solve unexpected problems that may occur during the commission of the crime (for example, the problem of potential witnesses), how to behave if arrested, and even which lawyer's help to seek. Organized criminal groups, especially those that commit criminal offenses where the risk of detecting is high, plan every element of the action (including backup options if there is a problem) and modes of communication (basic, backup, where SIM card is used for one or two calls only) (Djurdjevic & Radovic, 2012:165).

Since the jargon is model of communication used by perpetrators, it is necessary to mention that its use is evident before, during and after the commission of criminal activity within the criminal group. Crime today is characterized by the large number of criminal groups³ which focused their activities on one or more crimes. Regardless of the different structure of criminal groups, there are some relevant factors affecting the survival of the mentioned. Some of them have common goals, means of communication, interests and norms of behavior. Communication between offenders within criminal group is permeated with predetermined rules and signs, which are often characterized by a high degree of confidentiality.

Secret communication related to criminal activity could be achieved among persons who are free, among those deprived of their freedom (they are in jail or prison), or between persons who are free and those who are not. Offenders, in order to avoid criminal liability, make secret agreements on statements they give to the police forces and courts, on measures to be taken to influence the witnesses or to destroy objects and traces of the offense, the escape, on obtaining forged documents and vehicles, establishing links with other members of criminal groups and the like. The choice of the secret way of communication could be affected by a variety of circumstances: educational and intelligence level of people who communicate, their imagination, a way of life, characteristics of the environment in which they live, work and the way in which they spend leisure time, life experience, language skills and specific skills, availability of appropriate technical resources, the knowledge of their use, etc. (Zarkovic, 2010:78).

³ An organized crime group is established for the purpose of committing criminal acts, as its primary goal. The activities of members are based on a hierarchical basis and professional basis. The organised criminal group has a permanent character and seeks to achieve a monopoly in a particular area. Also, it is prone to use violence and seeks to corrupt some government bodies. The entire membership tries to operate at maximum discretion, considering that the secrecy of its work is a prerequisite for achieving its goals, which are criminal in nature (Skulić, 2003:47-61).

Having reviewed the transcripts of telephone conversations conducted by some of the accused members of Milan Zarubica's criminal group, in a trial before the Special Court for the production and sale of synthetic drugs, one could see that the indictment stated they used following codes: "sawmill", "girls" (pills), "Pera Ždera" (buyer), "rails", "dry", "wet", "compact discs". Codes were allegedly related to the type and amount of drugs produced, transport of pills, purchase of raw materials, etc. (www.glas/javnosti.co.yu).

"Zemun Clan" also knew that they were under surveillance of police and the Security Information Agency, so they had purchased a large number of anonymous telephone cards and mobile phones they were constantly changing. Communication was established only from certain phone numbers and handsets, and there was an instruction in which telephone base to turn on mobile phones, and in which districts they should be turned off. They were called "specials" in the jargon of this group. How clever they were is reflected in the fact that police had no intelligence about the activities they were preparing. The system operated on a principle that every thing has its codeword, so "I am going to my aunt" or "My uncle is sick," meant something else, of course. This method of pre-arranged communication is understood only by the members of the same criminal group, so no one else is able to understand them. Those who help the police to decipher this kind of discussion are most often members of a criminal group to whom such a way of communication is already known (www.bspasic.net).

Criminals around the world have begun to use one of the newest ways of secret communication that very simply prevents the police from eavesdropping on them, thus they don't use cell phones and send SMS messages, which are easily obtainable by police. Thus, offenders today are increasingly using Skype, i.e. telephone services over the Internet. The Czech police say "we know exactly with whom and when was the conversation done, but we have no way to know the contents of the conversation." While a traditional telephone wiretapping police could connect to the exchange, at Skype it is impossible – the conversation goes from one computer to another (Lazarevic, 2009:14).

Police efficiency is conditioned by knowledge of the basic features of criminal careers of offenders. A criminal career is the period of execution of criminal acts through different stages of life, whose beginning and end are defined by the first and the last criminal offense. Blumstein defined a criminal career as a series of criminal acts committed at different ages (Blumstein, Cohen, Roth & Visher, 1986). A criminal career is determined by its beginning, end, and duration. To draw conclusions about the perpetrator's criminal career, several indicators are commonly used: the number of criminal offenses; frequency of crime, complicity, and specialization (Structure of offenses, changes in the offense structure, same-different) (Djurdjevic & Radovic, 2012:161). It is necessary to point out the changes in the criminal career over time through a function of age of the individual. Lehoczky, in his research, has defined the three main aspects of criminal careers: criminal activities tend to change with age; population of offenders is highly heterogeneous, offenders often commit more crimes in a very short time and then have a period with little or no criminal activity (Lehoczky, 1986:381).

JARGON AS A MODEL OF COMMUNICATION

Expressing and satisfying different needs represents the purpose of human communication. Different needs, primary as well as secondary ones, are satisfied by people in the course of communication. To satisfy many of them (or fail in satisfy-

ing) another person is needed. Consequently, one might say that human communication, with human languages in its center, represents not only an expression of human consciousness and its relation to the world, but also an interesting engaging action of the subject, which is involved in creating and shaping social relations in parallel with the activities of human interaction with other entities.

Speech is a direct function of a particular culture. It is fast, direct and flexible form of communication that does not depend on any technological aids. But the timbre, volume and rhythm of speech, is under the influence of conscious control to a lesser extent than the content of speech (Tomic, 2003:62). In parallel with the standard language there is a jargon - a set of words, phrases, idioms, and sentence structures, used by people in every day communication.

Jargon is a language in small. Generally speaking, the jargon could be any informal, speech variety of a language that is used for identification and communication within a particular social group - professional, social, age, etc. - whose members are bound by common interest and way of life, and which could be territorially bound. Jargon is marked by specific linguistic means, primarily lexical and those referring to phrases, but mostly by grammatical and phonological. Hence, it is poorly understandable to other speakers of the same language, who often evaluate it negatively, in supposed opposition to the default or standard literary language. Thus there are mechanic, judicial, administrative, political, journalistic, computing, sport, military, street jargon, that of thieves, drug abusers, school, student, Belgrade or Dorćol jargon, possibly with narrower divisions within some of them (Bugarski, 2006:5-11).

It was observed long ago that jargon users are mostly young persons. The conclusion as to why it is so immediately arises - they tend to be creative in every field, including the language (Halilovic-Tanovic-Šehović, 2009:149). The tendency to use non-standard varieties, such as jargon, for example, is explained by Chambers and Trudgill by sociological factors rather than psychological in nature: "to younger speakers, the most important social pressures come from their friends, and they are expressed at linguistic level, under the stronger influence of friends than anyone else. The influence of a standard language is very weak. Later, as they get older and start to work, they are influenced by mainstream of social values. That explains why a jargon is generally less present in the speech of older people. (Chambers-Trudgill, 1980:92).

In the dictionary of literary terms, dating from 1992, it is stated that until 12th century, the term *jargon* meant "the language of birds, chirping" and that was used in today's meaning only in 14th century. It is "specific language spoken by the people of the same class, profession or social group, and is different from the common spoken language, understandable only to those who belong to the respective class, profession, group."

According to Jespersen, jargon is "evidence of man's tendency toward play" (Jespersen, 1970:130).

For a specific jargon, especially those from social margins, alternative international terms, such as slang (originated from English), and Argot (from French) are used in some narrower sense. In our language, we have "*šatrovački*" (which reminds of the secret languages, and the Gypsies) and "*frajerski*". The basic division of jargon could be into expert, subcultural and youth. Technical jargons are characterized by excessive, repetitive, and often pretentious use of professional terms, unpleasant to non-experts. When those are standardized, they became expert terminologies of different professions, which, in principle, belong to standard language, but in their use it is still justified to talk about jargon. In contrast, youth, and subcultural slang types are rich in imaginative and colorful creations. Jargons of these categories, es-

pecially of those criminal subcultures targeted by law, are deliberately incomprehensible outside of a given group, so they change fastest of all kinds of language varieties, in order to protect against “invasion” of the outside world. Words and phrases from the jargon of these categories often go beyond the individual groups, entering into a wider circulation as a kind of common jargon, and could last longer (Bugarski, 2006:13-15).

Considering the manner in which some slang words are created, Bugarski suggests the following possibilities (Bugarski, 2006:22):

- New slang meanings of existing words, often derived with standard metaphORIZATION:
designer (car crane), pathologist (mental patient), key (informant), mole (spy), Sheik (gasoline street seller), verify (finish off the victim with a shot in the head).
- Loan words or syllables, often modified from various languages, mostly English today:
đoint (joint), *kul* (cool), *faca* (hot shot, from “face”), and *spika* (language, speech, conversation, from “speak”), *luknuti* (to look at something)
- Permutation of words or syllables, including the impossible “humorous” inversions.
- Permutations with additions, the patterns of “*šatrovački*” type.
- Shortening of words.
- Initials: *CZ* (*Centralni zatvor* - Central Prison), *prp* (“peasant remains peasant”)

Also, it is very difficult to differentiate the jargon from individual language forms. It is difficult to estimate how much has some expression “reached to public” and thus became slang and crossed the line of privacy (individuality), where the purpose of jargon is, among other things, to be exclusive, except in an informal group where mostly used are slang language signs and signs systems in general. The way of life of professional offenders forced this category of people to create their own speech (Krivokapić & Krstić, 1999:87).

We believe that there are several reasons for the use of jargon among offenders, and some of them are: for speech to be mysterious, distraction, the showing of criminal group belonging, achieving intimacy, to be different from others, the exclusion of others, to be funny and interesting, departures from clichés, etc.

Andrić also pointed out, in his two-way dictionary of the Serbian slang and jargon related words and phrases, to certain rules and characteristics of jargon. Thus he pointed to the following jargon characteristics (Andrić, 1976: XII, XIV, XV):

1. **Associativity**, wider or narrower, layered or one-way, direct or discrete. He who is in love – he is on the edge (of high risk? Madness?).
2. **Secrecy**: the expression: “she works in the brewery” conceals an allusion to the very thin legs of mentioned girl, which can wash the bottles with her feet, since it (if is all necessary to perform this retrograde analysis to the end)
3. **The double game of content and form**. The term “*obrazovati*” (to educate) is not related to its slang meaning (to dance cheek to cheek), but also hints this is a form of basic sex education.
4. **Pejorativity**, it goes without saying - it is almost a synonym for jargon, if not all, then certainly for the “*šatrovački*” and youth slang.
5. **Irony**, also present at each step. Still, just one example here: history - hysteria
6. **Sarcasm**, it is less frequent, but could be hard: to urinate - to let the tears.

7. **Surreal compounds** of what is never possible in real life. Such an example could be: his hair is growing out of his eyes (very stupid or puddingy).
8. **Nonsense**: raped by negligence (joking with someone out of boredom), or the apparent nonsense: fish are not sheep (girls are not naive).
9. **Resonance**
10. **Picturesque**. Take the student term for dry food: still nature.
11. **Contrast**. The contrast in meaning: It is terribly adorable. He's dead gorgeous.
12. **Hyperbolic language**, as if young people easily fit into the dimensions of reality if they distort them with jargon first. "Only his shoes are left out!" they will say for a sycophant, someone "crawling under someone's skin".

Prejudice that jargon is not worth of scientific studies have so far prevented linguists to start to study jargon in a greater extent, from linguistic point of view, although jargon is language in a little. It is easier to perceive some aspects in jargon as language that are not easily noticed if only literal or standard language is being studied. And because of its specificity, its way of creation, which is spontaneous, because of anonymity, very rapid changes, efficiency, jargon is a very specific ethical manifestation, which can and should be studied, not only for its own sake, but also because it can provide insights into the nature, structure and function of changes in language, in general (Bugarsky, 2006:15).

During the preparation and perpetration of crime, offenders communicate in different ways, using mostly already agreed signs or linguistic ambiguities. Analogously, criminals often use street jargon, where Balkan⁴ is typical in using "šatrovački" speech. Knowing how to slang words⁵, and specific rules and characteristics of slang, can greatly assist operational staff in detecting and proving some offenses. The criminal environment is constantly giving birth to new words and expressions that have a secret character, of which knowledge is a necessity in the work of the Criminal Police.

"ŠATROVAČKI" LANGUAGE

"Šatrovački" jargon originated in the Middle Ages. It is characteristic of the occupational language and is closely related to the properties and the environment from which comes a large number of professional delinquents.

Prevalence of "šatrovački" in the territories where the spoken language was so called Serbo-Croatian, is varied and uneven. It is liveliest in larger urban areas, mostly in Belgrade and Sarajevo, and smaller towns in Serbia and Bosnia. In Croatia, it is quite widespread in Zagreb, in the whole region of Slavonia, and less in the coastal towns and Istria. In Zagorje and Montenegro "šatrovački" is virtually non-existent. It is interesting there is no "šatrovački" in other Slavic languages, not even in traces. We would expect at least some similarities in the closest of South Slavic languages, but neither the Slovenian nor the Macedonian show any sign of this phenomenon. It is known that the most similar slang metathesis exist in French. This phenomenon has its own unique name - *verlan*, from *l'envers*, which means the

4 In our country, criminals had a habit of sitting in cafes and making new words during conversation. From that period of time comes the term "zip cops" which was a warning that police is coming. All their life revolved around their desire not to get caught, so it was logical there were so many terms for cops - beak, gendarme, griffon vulture, plastic, angel, body, blonde, light cavalry ... (Spasic: www.bspasic.net).

5 In a survey conducted among young people in Serbia, most used were seven universal jargon words: brother, extra, ace, to flirt, fish, to cast iron, joke (Ašić, 2011:158).

“reversed”, “inverted”. “*Šatrovački*”, just like *verlan* is not random distortion of syllables or sounds. There are strict rules. As is usually the case in any language, speakers are not aware of the rules, but they apply them without errors. There are very few exceptions, but they can be explained. (Čosić, 2004:14).

It also serves as a covert way of communication between offenders⁶. In the same extent that professional offenders alienated their way of life from the social organism, their language, that is their coder, concealer and a guard, differentiates from the language of the country of origin (and upon which grammar it relies, not having its own, just like any other jargon); the riskier the act, the more mysterious the word. Because of that, such a language is smuggling, in its journey through the lands and ages, the ancient words of different origin; in the jargon of our slangers – there were words of Sanskrit, Egyptian, Greek, Jewish, Latin, Gypsy⁷, Albanian roots. It is difficult to trace the changes in meaning which may be lost with the deformation of words. Drawing attention to defensive tasks of “*šatrovački*” language, however, usually leads to negligence of one of its functions, important one, sharing with other jargons: to be a constant confirmation of a group membership, and one of the more easily available and therefore generally accepted means of promoting it. The symptom of weakness, the language (more precisely speech) needs to evoke power with its crudeness, which is a reflection of insecurity, that aggression is trying to cover up. If the ugliness is even uglier by language, in comparison with its verbal picture it becomes acceptable; obscenity thus play the role of catharsis (Andrić, 1976: XI).

Some professional groups of offenders develop their own versions of “*šatrovački*” language, rich in terms for cases and activities characteristic of the crime type they do (e.g., slang speech of pickpockets, burglars, drug smugglers, drug addicts, prostitutes). Knowledge of “*šatrovački*” language has great significance in crime, because it allows us to fully know and understand the psyche of offenders, their customs, habits, and lifestyle (Aleksic, Škulić, Zarkovic, 2004:427). Since it is intended to reflect the accepted lifestyle and things that are especially important for persons who use it, slang of offenders mostly contains expressions that denote the concepts related to crime, prison, police, money, and sex. (Zarkovic, 2009:78).

Slangy way of communication is derived from the special psychology of offenders, especially those professionals, brought together more tightly by the jargon they are linked to. In the jargon, things are not referred to by their proper names, but with some kind of descriptions. This is explained by hesitation to refer to crimes and persons by their true names. Description, jokes, humor, fantasy, prank, malice, and scorn come out of “*šatrovački*” jargon, which is a true picture of the mental state of those who use it. In their own way of life, offenders, whether they are pickpockets, prostitutes, gamblers, vagrants, criminals or other categories - are characterized by brutality and primitivism, as reflected in their way of communication. Because of this, there are no abstract concepts in slang speech, while the specific concepts associated with everyday life of offenders are much richer in expressions (Simic, 1970: 739-740).

By origin, slang words are formed by figurative change of the existing words. The words are often taken from the vernacular, and they are given specific secret meaning, in keeping with the users’ own taste and need. For example, “stump” in

6 Having reviewed the transcripts of wiretapped telephone conversations of the “Zemun clan”, one can conclude those are people with a fund of 200-300 words. According to the lawyer Toma Fila, “they haven’t even read a bus ticket.” I recently heard the term “to put in the trunk” It is about the actual case of Sreten Jocić, aka Joca Amsterdam. One of Joca’s friends, from Zagreb, has threatened a man who refused to sell him a travel agency, with words: “You will be put in a trunk by Joca Amsterdam!”

7 According to Sabljak, slang speech was created under a tent in and its creators were actually Roma. He supports his claims by certain examples in his “Dictionary of *šatrovački* language” (Sabljak, 1981:5).

our language means “the part of a cut of tree remained in the soil”, while in slang it bears the meaning of a “package”. However, jargon goes a step further. There is a slangy way of talking called “*kozarac*”, where each word is separated into two parts and the last syllable of the word is transferred to the front. (Simic,1970:740).

Knowing “*šatrovački*” is of help to police, especially criminal police in detecting and solving crime, and in crime control and treatment in general (Krivokapić & Krstic, 1999:87).

Also, Milos Vasic, in his book “The Assassination of Zoran” used the language of the Serbian underworld, so the general public could understand what is meant when “Zemunians” (citizens of Zemun) “stitch up” someone (kill someone), who is “packing bricks” (racketeering) whom and where were the “stacks” (hiding places) (Vasic, 2005:29).

In addition to “*šatrovački*”, or some foreign language, secret communication could be achieved by using pre-agreed signs and certain movements (of head, arms, shoulders, eyes, eyebrows, lips), which is an unambiguous and precise way to communicate some message. Using the agreed signs is especially widespread, as this provides a great opportunity for secret arrangements (if well chosen they are hard to recognize and even harder to reveal their true meaning). For example, whistling or singing certain melodies, imitating animal voices, the way of combing hair, moves, carrying and displaying of clothes and other items can be a sign of recognition, a signal that everything is all right, but also a warning of danger. The specific method of secret communication is in the way of using sound signals or tapping, in the rhythm and by according to the Morse code or some other individually-designed system. (Žarković, 2010:78).

UTROVAČKI LANGUAGE

“*Utrovački*” jargon is more complicated than “*Šatrovački*”, and became popular in the 1990s, in Belgrade. Unlike “*Šatrovački*” it has never become so widespread and accepted. Common words are translated to “*Utrovački*” so that a first syllable in the word is replaced with the letter “U”. Prefix “ZA” is often added for easier communication, and then the replaced syllable is combined with syllable “NJE”. Also, word “ZA” could be excluded, and then the two remaining words are combined into one.

A formula for generation of “*Utrovački*” jargon would look something like this:
“U” + last part of the word + first part of the word + “NJE”.

SLANG AND ARGOT

Those familiar with the language and speech, suggest that the Argot appeared as a phenomenon in society from the late twelfth and early thirteenth century. These authors point to its cryptological (hidden, clandestine) character. Argot (from French) marked a group of beggars and thieves in 17th century, and later their language also (Ilic, 1978:245). Viktor Hugo was the first to study Argot in France more closely. In his novel entitled *Les Misérables*, he described Argot as the language of darkness and at one point he asked: “What is Argot, frankly speaking? Argot is a reduced form of language. The first dictionary of Argot was made in some Parisian prison, and included 1500 words. Argot is the language of small and closed groups, created with the intent to exclude all other communications.

Argot has a secret, hidden character, which is more or less successfully used by some delinquent and criminal groups. Argot is used to divert attention from their lies and deceits. In its beginnings it was exclusive and secret, but later experienced a change in terms of spreading to a growing number of those social groups who are not its creators and carriers. It originated as a secret speech to defend and conceal group members.

The origin of the word *slang* is uncertain. It has a connection with Thieves cant, and the earliest attested use (1756) refers to the vocabulary of “low or disreputable” people. Beyond that, however, its origin is unclear. A Scandinavian origin has been proposed (compare, for example, Norwegian *slengenamn*, which means “nickname”), but is discounted by the Oxford English Dictionary based on “date and early associations”.

The first recorded use of slang in Britain occurred in the sixteenth century in the works of Thomas Dekker and William Shakespeare.

While some of the English slang words were used throughout the UK, others are specific for particular regions. What is interesting in terms of British slang is precisely the diversity and uniqueness of the London slang, with the rhyming slang as one of them.

Eric Partridge defines slang as informal language, which contains words or meanings that are disrespectful and used in a short period of time. Such words are used by specific groups of people who know each other and prefer to pronounce them as such and not using them in writing (Partridge, 1934:19). The Oxford dictionary describes slang as “words and phrases that are considered informal and are often limited by specific context or are unique to a particular profession or group” (Chalker, Weiner, 1994:7). According to Živančević, slang is a kind of language or jargon of a language that replaces the true and standard low-intensity expressions; slang expressions are more emotionally colored and express affirmative or sneering attitude toward authority, whether it was of ethnic, sexual or social kind (Živančević, 2003:145). Slang can be regional (that is, used only in a particular territory), but slang terms are often particular to a certain subculture, such as music or video gaming. Nevertheless, slang expressions can spread outside their original areas to become commonly used, like “cool” and “jive.” While some words eventually lose their status as slang (the word “mob”, for example, began as a shortening of Latin *mobile vulgus*), others continue to be considered as such by most speakers.

When slang spreads beyond the group or subculture that originally used it, its original users often replace it with other, less-recognised terms to maintain group identity. One use of slang is to circumvent social taboos, as mainstream language tends to shy away from evoking certain realities. For this reason, slang vocabularies are particularly rich in certain domains, such as violence, crime, drugs, and sex. Alternatively, slang can grow out of mere familiarity with the things described. Among Californian wine connoisseurs (and other groups), for example, *Cabernet Sauvignon* is often known as “Cab Sav”, “Chardonnay” as “Chard” and so on; this means that naming the different wines expends less superfluous effort; it also helps to indicate the user’s familiarity with wine.

British lexicographer Eric Partridge, in his book “Slang: Today and Yesterday,” stated the following reasons why people use slang (Partridge, 1934:23):

1. It is used by all the young at heart or of young age, often for fun;
2. As an exercise of wit and ingenuity, and humor as well,
3. To be different;
4. To express the imagery (positivity or rather to avoid insipidity i.e. negativity),

5. In order to escape from the clichés, and be short and concise;
6. In order to enrich the language;
7. To reduce excessive pomposity and seriousness of a conversation, in order to alleviate the tragedy, to disguise the ugliness, to facilitate the inevitability of death or insanity;
8. For ease of social relationship;
9. For an abstraction to be more specific,
10. In order to encourage a friendship or intimacy;
11. To show membership of a particular school, profession, social group, to establish contact;
12. In order to discuss with less educated persons, or to entertain the audience;
13. To be secretive - incomprehensible for others (children, students, lovers, political party members, offenders, etc.)

In English slang, police car is referred to as „Black Maria”, drug dealer as „candy man”, the promiscuous woman as „charity girl” the imposter as „con man”, the secret shelter as „crib”, conflict between criminal gangs as „dance”, snitch as „dime dropper” or „pigeon”, drugs as „dope”, the new prisoners as „fish”, the professional killer as „hired gun” or „hit man”, police officer as „John Law” or „Irvine”, common man as „Johnny”, the marijuana cigarette as „Mary Jane”, a member of the criminal group as „mobster”, the police patrol as „prowl car”, the inspector as „snoop”, the indestructible proof as „smoking gun”, the criminal leader as „top dog”, a coward as „wussy”, to murder someone as „to put someone on ice”, to arrest someone as „to nick”, to serve in jail as „do the time”, having addiction as „monkey on the back”, to inject narcotic as „to bang”, cocaine as „bazooka”, combination of heroin and cocaine as „murder”, drug dealer as „big man”, combination of marijuana and cocaine as „champagne”, bad quality heroin as „crap”, cocaine addiction as „dynamiter”, police file as „rap sheet”, prison as „slammer”, repeater as „old lag”, heroin as „old Steve”, „dog food”, „Rambo”, „nurse”, „lemonade”, drug hidden in rectum as „kester plant”, LSD as „Lucy in the sky with diamonds”, police station as „local nick”, police spotting as „obbo”, informer as „snitch”, very important informer as „supergrass”, prisoner at the end of its sentence as „gate fever”, very nasty police officer as „Zombie”.

In most countries of the world offenders use appropriate jargon in their everyday communication. Thus, in the Netherlands, the Bargoens is used, Fenyo in Russia, Rotwelsch and Gaunersprache in Germany and Switzerland respectively, Lunfardo in Argentina, Rovarspraket (The Robber language) in Sweden, Slang and Polari in England, and Calo and Pachuco in Mexico and Spain.

CONCLUSION

Communication within the criminal groups is done through verbal and non-verbal means, where secret signs and codes are often used, known only by its members. Jargon is the specific language spoken by people of the same profession or social group, differing from the common spoken language, and understandable only to those who belong to the respective class, or group. Street language is equally important to offenders in prison as to those who are at large. It allows them privacy of work, expression of group membership, as well as drawing attention, and being different. Given that secrecy is one of the most important feature of criminal slang, some words i.e. jargonisms which receive widespread use outside of the criminal

group, are being replaced with new expressions. In this context we note that the delinquent jargon as well as the crime itself, is highly variable category that depends on the current socio-economic circumstances. It is also distinctive by the imagination, coarseness, contrast, irony, creativity and originality. Jargon used by criminal groups in our country originated in the Middle Ages and is known as “šatrovački” language. It is about jargon that is used by young people in their everyday communication. In certain countries a variety of jargons are used, for example Slang and Polari in England, Fenyó in Russia, while in France Argot and Verlan are in use. Jargon of the crime members is part of their delinquent tactics and serves as a strong degree of identification of each group member. A man can be judged only if his language and form of expression is known. The importance of jargon is not a useless subject for discussion, because the knowledge of its form can help operatives in detection and clarification of certain criminal offenses. Criminal law abounds with words and expressions used by offenders, however, it is noted they are not recorded, which is not in the function of crime solving practice.

Thus, relation to the jargon, the attitude of those who do not use it, is a strange mixture of curiosity and restrictive impulses. We could ignore it or hate it, like, say, opera or popular music, but we can not deny the right for fans or users of jargon to prefer it, even in the case they do not ask for language tolerance. Yet, we are spontaneously inclined to do just that, equating, for example, “šatrovački” with slang users, and forgetting that they are guilty to the society because of their deeds, and not because of the language. Their language is not at fault, even it seemed so according to our reactions (Andrić, 1976: XVII).

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OBLAST III
SAVREMENE TENDENCIJE
U KRIMINALISTICI I FORENZICI

CRIMINALISTICS IN REPUBLIKA SRPSKA SITUATION AND PERSPECTIVES

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Abstract: The study of criminalistics in Republika Srpska (RS) represents continuity in the studies of criminalistics system in former Yugoslavia. Nowadays, criminalistics is systematically studied at the College of Internal Affairs, the group of criminalistics subjects (Annex 1), including the existence of a separate criminalistics orientation. Also, Law Faculties in RS teach criminalistics as a compulsory or optional (elective) subject. Besides that, it is important to mention that the significance of studies of criminalistics in RS is especially accentuated by the introduction of prosecutorial concept of investigation, imposing the necessity that the prosecutors adopt criminalistics knowledge and skills, not only police officers. However, the present degree of development and representation of criminalistics in our society is not on a satisfactory level. Two groups of problems are especially dominant: first, the nomenclature of fields and narrow scientific branches in RS has not precisely determined to which field and narrow scientific branch criminalistics belongs. Criminalistics, with criminality being the subject of its scientific research (detecting and proving criminal offences and perpetrators i.e. informational-cognitive activity in the field of proof theory) uses scientifically grounded ways of cognition, research and treatment of the objects of criminalistics cognition that belongs to scientific branches of social sciences, natural sciences, engineering and technology, medicine and health care sciences as well as human sciences. Hence, we are at liberty to say that criminalistics belongs to an interdisciplinary branch of science (as the branch of science of various branches, fields and narrow branches of science and technology). Since the fields within the interdisciplinary branch are set up for each individual case, we can speak of the field of criminalistics in that context as well. The second group of problems is the concept of studies of criminalistics. The issue that arises is that how the current contents of criminalistics, as the scientific discipline, corresponds to the criminal practice. The problem above all is in the compatibility of the criminalistics content with the criminalistics practice. It appears that the criminalistics contents (including its disciplines) lag behind the criminalistics practice. We are lead to this conclusion by an analysis of criminalistics contents present in scientific and expert papers, including the monographic and textbook contents. Besides that, the problem is also the quantity of those contents, with regards to the fact that the number of source criminalistics papers is limited, with the greater number of works concerning „big“ topics. There is also a problem that previously issued contents are being partially or even entirely copied, without monitoring current problems and practical situations. The special problem is in neglecting technological aspects of criminal investigations i.e. nonuse of modern technology and software in detecting and investigation of criminal offences.

Key words: criminalistics, criminalistics tactics, criminalistics technique, criminalistics methods, criminalistics operations, forensics, criminal investigation.

“Criminalistics will be the hope for each wrongly accused man and it will be feared by any perpetrator aware of his own deed.”

Criminalistics Professor Zivojin Aleksic, PhD, 1931

INTRODUCTION

Criminalistics is a science that, since its foundation, draws attention of expert and scientific public for many reasons. Its scientific character was questioned several times in the past. There has been a whole concept that equalized criminalistics with the art of investigation of criminal offences¹. Also, criminalistics was defined as the technical investigational methods used to detect an unknown perpetrator of a criminal offence². The characteristic of these approaches is the lack of theoretical consideration (systematically and objectively) of a subject and system of criminalistics, which, as a consequence, had a whole line of non-systematic knowledge and experiential skills. Therefore, and including the whole line of doctrinary facts, criminalistics is without any doubt considered a science characterized by a group of methodically collected and systematically arranged knowledge, objective and logically argued data about the methods of detecting and proving criminal offences, criminal phenomena and perpetrators. Criminalistics is a science that, with its scientific and expert and practical methods, discovers, researches, adapts and improves the most adequate ways, procedures and methods aiming at discovering and solving a criminal offence, discovering a perpetrator, collecting and securing material and personal evidence, all in order to establish the truth, successfully institute and end a criminal procedure, as well as to prevent criminal offences (Vodinelic, 1985). That is a science about a technique, tactics and methods of investigation and prevention of criminal offences (Aleksic, 1979). It applies the knowledge of natural and technical disciplines aiming at discovering and solving a criminal offence and detecting their perpetrators (Ignjatovic, 1998). Criminalistics researches regularities significant for detecting and proving criminal offences and perpetrators (Simonovic, 2004). One of the latest and complete definitions of criminalistics was given by Professor Branislav Simonovic who considers that: „Criminalistics is a science that deals with the study of methods for detection and investigation of criminal offences and their perpetrators, as well as with the development of a strategy to combat criminality. It studies the ways to commit a criminal offence; methods of practical suppression of criminality (repressive and preventive ones); improves streams of information within all stages of investigation; finds out the most efficient ways to conduct operations and prove an offence within the limits of current legislation; optimizes the use of technical methods and means and contributes to the creation of new ones and studies the patterns of origination, detection, processing and evaluation of proving information. In other words, criminalistics is a science that deals with the study of strategy, tactics, methods and techniques of detection, suppression and prevention of criminality at the level of a single offence and the phenomenon in its entirety“ (Simonovic, 2004).

In its practical appearance, criminalistics uses its own experiential methods, methods of other sciences in practice adjusted to its needs, when those adjusted and perfected ones necessarily gain their criminalistics character. It means that crimi-

¹ Certain authors, especially in the earlier period, did not comprehend criminalistics as a science, but they levelled it with the art of practical detection and proving criminal offences. It is symptomatic that in such a concept, due to a lack of theoretical approach, there are no regularities that objectively exist in the field of execution, detection and investigation of criminal offences, and give criminalistics its scientific character.

² The term „scientific criminalistics“ is often used in that context, as an entirety of methods borrowed from biology, physics, chemistry and other sciences which enable us to prove criminal offences.

nalistics does not mechanically adopts and transfers the results of other natural and technical sciences, but only after they are thoroughly processed and adjusted to specific conditions and tasks of investigation they become criminalistics methods³ (Aleksic, 1979). Criminalistics with its disciplines (criminalistics tactics⁴, technique⁵, methods⁶ and operations⁷) studies and improves the methods of detection, investigation and proving all criminal offences. New tendencies in the sphere of criminality, the expansion of organized criminality above all and the development of science and technology (primarily IT), contributed to the inclusion of a fourth part into the term of criminalistics and that is criminalistics strategy⁸, which has a critical role in the opposition to organized criminality. Modern tendencies in the development of criminalistics have significantly advanced and improved criminalistics thought up to a level of scientific description, generalization, scientific thinking and explaining, that is the creation of scientifically verifiable methods and means used in the opposition to criminality (Matijevic, 2005).

Also, it is important to mention that the concept of *criminal investigation* is becoming used more and more, as well as its practical approach in the criminalistics practice. It is an American concept of investigation of criminal offences, when the term of *criminal investigation* could loosely be translated as criminal investigation or to be more precise criminalistics investigation. *Criminal investigation* is defined as the totality of scientific and systematical methods and activities adapted for the use of various information and proofs in order to solve a criminal offence, identify suspects and establish a link between a criminal offence and a suspect (Berg, 2008). So, *criminal investigation* means the collection of information and proofs in order to identify, arrest and convict suspects (Osterburg, Ward, 2007). The contents of *criminal investigation*, with full appreciation of author's approach, correspond to the contents of criminalistics here. With that in regards the terms *criminal investigation* and *criminalistics* can be used as the synonyms for the science of detection of criminal offence and perpetrator (criminal investigation and criminalistics investigation) (Maver, 2009). Therefore, we deem that criminalistics and *criminal investigation* are the same disciplines, with certain terminological and contextual differences when the term of criminalistics is widely accepted in the science and practice of the countries of European/continental legal system, while the term of *criminal investigation* is more frequent in the countries of Anglo-Saxon legal system. Hence, these are

3 Hence, the criminalistics methods taken from other sciences (e.g. biology) are no longer part of those sciences. Dactiloscopia received a new, independent quality, because criminalistics adapted that method. We agree with Professor Aleksic who deems that: „The best medical practitioner cannot carry out a dactiloscopic identification if he does not know criminalistics“ (Aleksic, 1979).

4 Criminalistics tactics represents a basic, fundamental part of criminalistics that studies and improves general criminalistics rules and work methods aiming at their practical use in suppressing criminality i.e. detecting and solving committed criminal offences as well as their prevention (Krivokapic, 1996).

5 Criminalistics technique is part of criminalistics and deals with the improvement and application of exact scientific/technical methods for the purpose of registration and identification of persons and items and discovery, fixing and interpretation of material traces aiming at suppressing criminality, detecting perpetrators and solving criminal offences and events (Maksimovic, Todorovic, 1995).

6 Criminalistics method is a discipline of criminalistics that researches and studies specifics, i.e. what is relevant for detection, investigation and solving of a certain kind of a criminal offence (Boskovic, 1998).

7 Criminalistics operations, as a discipline of criminalistics featuring operational work, can be viewed in a wide and narrow sense. The concept of operational work in its broad sense encompasses all criminalistics tactical and technical measures and actions, investigative actions, special investigative techniques and operational communications, while in its narrow sense, from all the aforesaid criminalistics measures and actions that the police conducts, includes only special investigative techniques i.e. special investigative actions and operational communications which are approved by a special procedure and for which use the police is authorized (Boskovic, Matijevic, 2007).

8 Criminalistics strategy in a wider sense of the word, consists of an operationalization of criminal-political concepts of the suppression of crime in its totality or its individual forms, but with the use of criminalistics measures by the bearers of criminalistics activities (Simonovic, 2004).

the disciplines that are compatible in context, also taking into account a various aspect of their demonstration (application). Also, we can say that, practically, *criminal investigation* is a concept that does not lag behind practice.

When we talk about a scientific opus of criminalistics, its scientific field and narrow scientific branch, there is no widely accepted attitude. Criminalistics is differently treated in European countries. In some countries like Germany, Russia, Serbia, B&H and Poland criminalistics has a status of a separate science, which is often connected with criminal/legal sciences. In other countries, criminalistics has a position of a scientific discipline formally incorporated into criminology (Slovenia, Austria and Croatia) or a sub-discipline of police sciences and criminology i.e. as part of forensic science (France, Italy, Great Britain) (Maver, 2011). Besides that, in some countries (from Anglo-Saxon speaking area above all) criminalistics is linked to forensic medicine and toxicology. In that sense, criminalistics usually has its use in court procedures with methods of medicine and other natural sciences which serve in the identification of perpetrators and traces (Saferstein, 2007).

CRIMINALISTICS IN REPUBLIKA SRPSKA⁹

Criminalistics, as a science that includes knowledge and methods required for detecting and proving criminal offences and their perpetrators, has always been present in Republika Srpska. The study of criminalistics in Republika Srpska represents a continuity of studies of criminalistics in former Yugoslavia¹⁰. So it is not new or unknown discipline. On the contrary, a great number of people in Republika Srpska study the theory and practice of criminalistics. And as such, it has been recognized by the narrow expert and scientific, as well as broad, public. Even besides that, criminalistics in Republika Srpska is not developed enough, nor established as other sciences. Also, constant tendencies to underrate criminalistics science in a way by its insufficient study, as well as inclusion of staff that do not have criminalistics knowledge into criminalistics affairs, all contribute to that. Because of that, studying, knowledge and explicit application of fundamental and modern knowledge of criminalistics are necessary (Matijevic, 2005)¹¹. There are other reasons and facts that support the aforesaid theses. Some of these we will mention through an elaboration of the following criminalistics activities in Republika Srpska: educational (teaching) activities, education and expert specialization, publishing activities (text-books, books, scientific and expert magazines and other publications), scientific/research activities (empirical and theoretical research) and applicative activities (use of knowledge and skills in practical procedures for the purpose of detecting and proving criminal offences and perpetrators). In order to make answers to the aforesaid questions full and objective it would be necessary to conduct some research study which this paper certainly is not. That is why we will provide a description of the aforesaid aspects of criminalistics and suggest a necessity for the realization

⁹ The work exclusively observed criminalistics in Republika Srpska. It is necessary to mention that criminalistics is studied in Bosnia and Herzegovina too. It is especially significant to mention the Faculty for Criminalistics, Criminology and Security Studies of the Sarajevo University where criminalistics is studied at a special study program. Also, this faculty issues the magazine *Criminalistics Themes*. For more details see: <http://www.fknbih.edu/>

¹⁰ Yugoslav criminalistics as an integral scientific discipline was created after the Second World War. Before this period, in the Kingdom of Yugoslavia criminalistics was very underdeveloped and available literature more than poor. Only after this period criminalistics is studied as a teaching-scientific discipline, usually through the system of criminalistics: criminalistics tactics, criminalistics methods, criminalistics technique (Vodinelic, 1985; Aleksic, 1979).

¹¹ Professor Mile Matijevic, who can be considered a sort of a pioneer of criminalistics in Republika Srpska, correctly deems that only with such apprehension and work can we establish criminalistics thought and practice, and eliminate non-scientific character i.e. quasi-criminalists.

of a scientific-research project which goal would be to consider the situation and perspective of criminalistics in Republika Srpska.

1. Educational (teaching) activity – is an activity which is the most frequent one when it comes to criminalistics in Republika Srpska. It is unavoidable in police education at all levels, and in the last several years criminalistics has a growing share in civilian education too. It should be stressed that criminalistics has been studied since the very foundation of police education in Republika Srpska and, as such, takes up a central position in police education. The cadets of the Secondary School of Internal Affairs attended the criminalistics subjects in Banja Luka in 1992, and the students of the College of Internal Affairs in Banja Luka in 1995¹². The development of police education in Republika Srpska was followed by the development of studies of criminalistics as a teaching discipline. With that in regards, criminalistics is being systematically studied at the College of Internal Affairs, in the group of criminalistics subjects (Annex no. 1), including the existence of the Department of Criminalistics Sciences¹³ and separate criminalistics specialization. Besides that, at law faculties in Republika Srpska (public and private) criminalistics is studied integrally, as a compulsory, or, more often, optional (elective) subject. Also, criminalistics is studied at certain security faculties, like the Faculty for Security and Protection in Banja Luka. Therefore, criminalistics in Republika Srpska today is represented as a teaching subject above all, at police schools predominantly. Regardless of what were said earlier and certain advancements too, criminalistics education in Republika Srpska is not at a satisfactory level. Criminalistics education should be represented more widely; especially at the criminal/legal specializations at law faculties (make them a compulsory part). Besides, it is grounded to think about the introduction of certain subjects, even into secondary and primary schools, which would specially consider the issues of prevention of criminality and other criminalistics fields of interest to the citizens¹⁴.
2. Publishing activity – is viewed in the publication of textbooks, books, monographs, scientific and expert magazines and other criminalistics publications. Textbooks are primarily related to the criminalistics teaching activities. Hence, the greatest number of criminalistics textbooks was published by the College of Internal Affairs in Banja Luka¹⁵, while some individual works

12 The first curriculum contained the following criminalistics subjects: criminalistics tactics, criminalistics technique, criminalistics psychology and criminalistics medicine.

13 The Department of Criminalistics Sciences has an obligation to: a) considers the curriculum, b) analyzes the presentation of teaching material, c) suggests projects to the Ministry and coordinates their execution, d) suggests the participation of lecturers at scientific and expert conventions, e) suggests the procurement of expert literature and magazines, f) perform other tasks by the order of the Senate. The subjects at the Department of Criminalistics Sciences are: 1. Criminalistics Tactics, 2. Theory of Criminalistics, 3. Criminalistics Technique, 4. Legal Medicine, 5. Criminalistics Methods, 6. Criminalistics Operations, 7. Juvenile Delinquency, 8. Organized Criminality, 9. Forensic Sciences, 10. Criminalistics-Intelligence Analyses, 11. Methods of Investigation of Property Criminality, 12. Methods of Investigation of Economic Criminality, 13. Methods of Investigation of Fire, Explosions and Wrecks, 14. Methods of Investigation of Violent Criminality, 15. Criminalistics Strategy, 16. Criminalistics Prevention and Prognostic, 17. High Technology Criminality and 18. Special Investigations Management. The classes in the aforesaid subjects are conducted by subject teachers and associates from the list of teachers in charge. According to the Web site of the Directorate for Police Education: <http://www.education.muprs.org/index.php/vsup/organizacija-vsua-a.html>

14 In the same way that the ideology of the Communist Party of Yugoslavia created a wide spectrum of education in the field of National Defense and Protection, nowadays we should consider the introduction of adequate education in the field of the prevention of criminality (Matijevic, 2005).

15 The following criminalistics textbooks have been published by the College of internal Affairs in Banja Luka so far: Criminalistics Methods (Mico Boskovic and Dragomir Jovicic, 2002); Criminalistics Operations (Mile Matijevic, 2003); Organized Criminality and Corruption (Mico Boskovic, 2004); Criminalistics Operations (Mile Matijevic and Mico Boskovic, 2007); Organized Criminality (Mile Sikman, 2011).

were issued by other university institutions¹⁶. Also, the RS Ministry of Internal Affairs issues the magazine „Security-Police-Citizens“ in which criminalistics papers are published. Also, the International Criminalists Association¹⁷, edits and publishes a magazine „Criminalistics-forensics research“ whose goal is to interest established criminalists, forensic experts, researchers of criminalistics-forensic reality and practice and initiate greater interest, scientific discoveries and technological aspirations. In the context of criminalistics content we can mention some monographic papers published in Republika Srpska. The question that arises is how much are the textbooks as well as scientific and expert works compatible with current criminalistics issues. Above all, the problem is also the quantity of those contents, with regards to the fact that the number of source criminalistics papers is limited, with the greater number of works concerning „big“ topics. There is also a problem that previously issued contents are being partially or even entirely copied, without monitoring current problems and practical situations.

3. Scientific-research activity – means the conduct of empirical and theoretical research of subjects of interest to criminalistics. It appears that this criminalistics activity is the most neglected one in Republika Srpska. Besides individual scientific-research approaches, that are primarily realized for the purpose of magisterial and doctoral thesis, we feel the lack of systemic criminalistics research. It seems that besides the non-existence of institutional support to systemic criminalistics research, there is no interest of young researchers for this problem. The special problem is in neglecting technological aspects of criminal investigations i.e. nonuse of modern technology and software in detecting and investigation of criminal offences.
4. Applicative (applied) activity - it can be viewed in the application of knowledge and skills in the practical procedures for the purpose of detecting and proving criminal offences and perpetrators. The goal of applicative criminalistics is practical use and verification of adopted knowledge, skills, rules and methods, and confirmation of legality and principles of criminalistics as a science. In that context we can speak of criminalistics as exceptionally heuristic, syllogistic and empirical science. Therefore, the applicative activity should include the human potential who should apply the criminalistics knowledge in practice. And this human potential is exactly the critical point since the greater number of people who work on the suppression of criminality in Republika Srpska have no (or very limited) criminalistics education, while only small number of them is recruited through criminalistics education. That is why the question arises quite often who deserves to acquire the vocation of a criminalist. Are those the people who completed the criminalistics education (to a greater or smaller extent) or the people who adopted the criminalistics knowledge through additional forms of expert education (courses, seminars

16 For instance, the Faculty for Security and Protection in Banja Luka issued several criminalistics textbooks, including: *Criminalistics* (Mico Boskovic, 2009), *Economic Criminalistics* (Mico Boskovic, 2008), *Environmental Criminalistics* (Mico Boskovic, 2009) and *Organized Criminality* (Mile Sikman, 2011). Also, the Law Faculty of the East Sarajevo University published *Criminalistics* (Branislav Simonovic and Uros Pena, 2010).

17 The International Criminalist Association is an independent, non-profit and nonparty organization of freely associated criminalists whose basic goals are: development and establishment of scientific-expert work in criminalistics; quality connection of criminalistics theory and practice; promotion and protection of criminalistics profession; autonomy of profession and independence of criminalists in their professional work; advancement of professional and ethic standards, expert and professional training of members of police agencies and security subjects; participation in scientific, research and publishing work in the field of criminalistics and other related disciplines; influence on advancement of professional engagement of criminologists and cooperation with other related organizations and associations who promote the same goals and principles. The seat of the Association is in Banja Luka. For more details see: <http://www.iak-bl.com/>

e.g.), without prior criminalistics education? We agree that a criminalist could be the person who primarily has the criminalistics education acquired in schools (college/university degree), where criminalistics is studied and who applies the acquired knowledge in the practice of suppression of criminality and advancement of theoretical criminalistics thought (Matijevic, 2005). Only with this approach can we establish criminalistics, the need of its study, scientific verification and valorization of acquired knowledge and skills.

Besides that, it is important to mention that the significance of studies of criminalistics in RS is especially accentuated by the introduction of prosecutorial concept of investigation, imposing the necessity that the prosecutors adopt criminalistics knowledge and skills, not only police officers.

IMPORTANCE OF STUDYING CRIMINALISTICS

Starting from the subjects¹⁸ and tasks¹⁹ of criminalistics as a science, we come to its significance. Without commencing a detailed elaboration of importance of studying criminalistics, we will point out to the significance of criminalistics in criminal/procedural systems in which a prosecutorial investigation is used. In fact, the concept of prosecutorial investigation is characterized by the expressive role of the prosecutor and authorized police officials in the investigation. Actually detecting and proving criminal offences is their prime activity. In that context, the knowledge from the area of criminalistics stands out, especially in the respect of taking over certain proving actions (proceedings tactics). Very frequent problem in the prosecution practice is just insufficient expertise of prosecutors in terms of leading the investigation, with respect to proceeding according to criminalistics rules in taking over certain proving actions. The purpose of this paper is to point out on this problem in Republika Srpska and BiH and it is very probable that this problem is (or will be) present in some other countries in the region due to similar education of prosecutors and knowledge improving systems (law study programs with very little and/or without criminalistics contents).

Prosecutorial investigation, as a European trend, has been introduced in procedural legislation of Republika Srpska and BiH. Hence, the prosecutor takes over the complete leading of the investigation by leading the investigation and monitoring the work of authorized officials. Active role of the prosecutor in the investigation is followed by the more active and more significant role of authorized officials (police officials) in the investigation. The evidence collected in the police investigation has full significance as such if collected in a legal way (primarily supervised by the prosecutor). The cooperation between the police and the prosecution, i.e. the synergy of their actions, is of the key importance for the successful investigation within this

18 The subject of criminalistics includes: detection, investigation and studying of regularity of conception, continuity, collection (fixing), investigation and use of operational information and proofs of a criminal offence and a perpetrator; study, analysis and generalization of delinquent practice (tactics and techniques of execution and cover-up of criminal offences), in order to spot the patterns, general and typical ones (criminalistics methods); study (research) of operational, investigative and judicial practice. Criminalistics does not study legal (procedural) side of practice because that enters the field of science of criminal procedural law. It studies the contents and cognitive side of that practice and its application in the existing criminalistics-strategic, preventive, tactical measures and technical resources (for instance, alarm systems or chemical traps) (Simonovic, 2004).

19 There are three basic tasks of criminalistics as a science: a) gnoseological – the cognition of pattern that enter the subject of its study; b) constructive – finds new methods of strategic and tactical actions and improves technical means in order to develop operational, judicial practice and prevention of criminality and c) communicational – transfers scientific results transformed into the models of optimal practical activity to practitioners, student and citizens (in order to reduce the danger of victimization and increase their defensive ability). (Simonovic, 2004)

concept. So generally speaking, the prosecutorial investigation and actual concept of investigation in Republika Srpska and BiH demands the direct participation of a prosecutor in the investigation and overtaking evidence providing actions. On the other hand, the successful evidence providing actions depend on the way those actions are applied (procedural tactics), stipulated by the familiarization with the rules of criminalistics. This may be the weakest link of the actual concept of investigation, not due to the lack of prosecutorial investigation concept (which does exist but is not crucial), but due to the lack of criminalistics study system, thus preventing actual and future prosecutors to learn about the criminalistics and its skills. Actually, on the most Law faculties in Republika Srpska and BiH, as well as in the region, criminalistics is not studied in a systematic and integral way; but as an optional subject or as an obligatory subject in one semester. Also, the prosecutors' improvement programs include criminalistics as a system (tactics, techniques, methods, operations, strategy) to a very small, or no extent at all, but partially regard some subjects within the other areas of expertise. Hence the necessity of the additional education of prosecutors concerning the tactics/way of applying certain evidence providing actions, i.e. adopting basic criminalistics knowledge and skills. This thesis is supported by the fact that the biggest number of problems in the investigation occurs during the performance of evidence providing actions. Reasons are clear. In most cases the police is carrying out the evidence providing actions whereas the prosecution is only occasionally included. The problem occurs when certain mistakes happen during the evidence providing actions or when collected evidence needs to be legalized (provides prosecutor's supervision). Hence, the police and prosecutors agree that the operative part of the investigation should be under the jurisdiction of authorized officials, whereas the prosecutor should lead the legal part of the investigation (Simonovic, Sikman, 2009). Surely, for the whole duration of investigation, the prosecutor should supervise the investigation, so the evidence collected in the course of investigation have the valid significance. So, the significance of criminalistics in detecting and proving criminal offences is great and the need for the use of criminalistics knowledge and skills is absolute.

THE CHALLENGES AND THE PERSPECTIVE OF CRIMINALISTICS IN REPUBLIKA SRPSKA

As a studying topic, criminalistics belongs to an extremely dynamic category, so the changes that criminalistics faces as a science are dynamic too. The new challenges that contemporary criminalistics faces are evident: occurrence of more complex forms of criminality, especially organized, economical and high-technology criminality and terrorism; growing trans-nationalization of criminality, especially organized (trans-national organized criminality), misuse of modern communications for criminal purposes (Internet, mobile phones, VoIP.) etc. On the other hand, stronger insisting on respecting guaranteed human rights and freedoms; new (contemporary) criminal-procedural standards significantly influence criminal proceedings. With reference to all mentioned, criminalistics, as a science, studies and improves methods and techniques of detecting, investigating and proving all criminal offences and, as per theoretical understanding, shall have a significant role in future criminalistics practice. There is no dilemma there. The question that arises is to what extent the actual criminalistics contents match the criminalistics practice. There are two groups of problems especially dominant in that context.

Firstly, the nomenclature of fields and more specific scientific branches in Republika Srpska, does not specify what field and what more specific scientific branch

the criminalistics belongs to. Criminalistics and other sciences about crime are connected by the existence of the same general object of scientific research, and that is the criminal event as possible criminal offence, i.e. establishing the legality over the supposed (within the criminal event) or established crime, criminal offender and victim. Within the general object (criminality and the necessity for its suppression), every criminal science has a special area of scientific research, contents and methods where the differences are.²⁰ Within the criminal science, the difference should be made between science on criminal law (characterized by legal method), comprising criminal law and criminal procedural law, and non-legal sciences comprising criminology, forensic medicine, forensic psychology, forensic psychiatry, criminalistics and other. Criminalistics, having the criminality (detecting and proving criminal offences and perpetrators, i.e. informational-cognitive activity in the area of evidence providing theory) as an object of scientific research, uses scientifically based cognitive methods, investigations and proceedings with the objects of criminal cognition which belong to scientific branches of social sciences, natural sciences, engineering and technology, medicine and health sciences, as well as humanistic sciences. Hence, one may say that criminalistics belongs to inter-disciplinary scientific branch (as a scientific branch of various branches, fields and more specific branches of science and technology). Since the branches within the inter-disciplinary branch are established in every individual case, in that context we may speak about the criminalistics branch.

The other group of problems is present concept of studying criminalistics. The significant issue is to what extent the actual contents of criminalistics, as a scientific discipline, correspond to criminalistic practice. Above all, the problem lies in the compatibility of criminalistics contents with criminalistics practice. It seems that the criminalistics contents (including its disciplines) are far behind the criminalistics practice. This conclusion arises from the analyses of criminalistics contents that are present in scientific and expertise papers, including monographs and textbooks. Besides that, the problem is also the quantity of those contents, with regards to the fact that the number of source criminalistics papers is limited, with the greater number of works concerning „big“ topics. There is also a problem that previously issued contents are being partially or even entirely copied, without monitoring current problems and practical situations.

All mentioned challenges point out to the perspectives of the development of criminalistics. Firstly, it is necessary to introduce criminalistics in the nomenclature of scientific fields and branches. Which scientific field or branch shall it be (criminal law and criminal procedural law or separate inter-disciplinary branch) should be a subject of scientific and expert definition. Also, criminalistics should respond to the challenge of its practical application. It is surely needed to redefine the existing concept of criminalistics concept which would respond to contemporary needs of fighting criminality. This task, of course, cannot be subject to random and subjective decision making process, but objective and empirically based research of actual criminalistics problems and practice.

CONCLUSION

As a scientific-educational discipline, criminalistics in Republika Srpska is present and well known. This conclusion may be drawn from even partial analysis of criminalistics activity presented in the paper. Therefore, we can state that educational side of criminalistics is the most expressive one present in police education

²⁰ Vodinelic, V.: Is criminalistics criminological science, *Annals of Faculty of Law in Belgrade*, no. 1-2/1994, page 47- 49.

and more and more in civilian higher education. This activity is followed by publishing activity reflected in publishing textbooks, scientific and expert magazines and other publications of criminalistics contents. We have already mentioned the problem of the quantity of those contents, which points out to a conclusion that it is necessary to perform their analysis and give some concrete suggestions in order to achieve the optimum quality of criminalistics contents. The applicative activity of criminalistics is a special problem. It seems that the criminalistics knowledge is not sufficiently established in the practical proceedings. Reasons should be sought in already mentioned contents of criminalistics, but firstly in staff potential with persons working on detecting and investigating criminal offences and perpetrators. At the end we may state that the scientific-research activity of criminalistics is the most represented activity of criminalistics in Republika Srpska. Surely, lack of systematic scientific and empirical researches slows down the development of criminalistics, firstly as a scientific discipline. Due to that, it is necessary to ensure special affirmation of this area of criminalistics life in Republika Srpska.

This conclusion opens up a view to the future of criminalistics in Republika Srpska. It largely depends on answers to some of the problematic points. Regardless of the fact that criminalistics was constituted and recognized as the teaching and scientific discipline in Republika Srpska, it is necessary to work on the further advancement and development of its potential. That means the establishment of the existing criminalistics activities (teaching, publishing, scientific-research and applicative) and the development of the new ones. Surely, criminalistics in the future should be a subject, not only in the field of police education, but other educational profiles too, jurists above all (future prosecutors and judges) or security majors. The publishing activity should be richer with quality papers published in reference magazines, foreign and domestic. We have already pointed out the need for stronger scientific-research approach, which would significantly enrich criminalistics with new knowledge about its research subject. All that would significantly influence its practical applicability. Therefore, we can conclude that criminalistics in Republika Srpska has perspective, but a significant effort should be put into it.

Annex 1: The list of criminalistics subjects studied at the College of Internal Affairs, according to the current Curriculum

| I YEAR | | | | | | |
|-----------------------------|---|----------|--------|----|-------------------|------|
| Ordinal No. | Subject | Semester | Weekly | | Total semester in | ECTS |
| | | | | | | |
| 3. | Criminalistics tactics | II | 3 | 1 | 45+15 | 5 |
| Elective subjects: | | | | | | |
| I semester | 2. Theory of Criminalistics | | | | | |
| II YEAR | | | | | | |
| 3. | Criminalistics Technique | III | 2 | 3 | 30+45 | 6 |
| 3. | Criminalistics Methods | IV | 2 | 3 | 30+45 | 6 |
| III YEAR | | | | | | |
| 1. | Legal Medicine | V | 2 | 1 | 30+15 | 4 |
| 5. | Criminalistics Operations | V | 2 | 2 | 30+30 | 5 |
| 4. | Organized Criminality | VI | 2 | 2 | 30+30 | 5 |
| Elective subjects: | | | | | | |
| VI semester | 1. Juvenile Delinquency | | | | | |
| | 2. Criminalistics Prevention and Prognostic | | | | | |
| IV YEAR | | | | | | |
| Criminalistics major | | | | | | |
| Ordinal No. | Subject | Semester | Weekly | | Total Semester in | ECTS |
| | | | II | B | | |
| 1. | International Police Cooperation | VII | 3 | 2 | 45+30 | 6 |
| 2. | Forensic Science | VII | 3 | 3 | 45+45 | 7 |
| 3. | Criminalistics Intelligence Analysis | VII | 3 | 3 | 45+45 | 7 |
| 4. | Elective Subject | VII | 2 | 2 | 30+30 | 5 |
| 5. | Elective Subject | VII | 2 | 2 | 30+30 | 5 |
| Total | | | 13 | 12 | 195+180 | 30 |
| 1. | Methodology of Scientific Research | VIII | 2 | 2 | 30+30 | 5 |
| 2. | Criminalistics Strategy | VIII | 2 | 2 | 30+30 | 5 |
| 3. | Elective Subject | VIII | 2 | 1 | 30+15 | 4 |
| 4. | Specialist Practice | VIII | 0 | 5 | 0+75 | 6 |
| 5. | Specialist Work | VIII | 0 | 9 | 0+135 | 10 |
| Total | | | 6 | 19 | 90+285 | 30 |
| Elective subjects: | | | | | | |

Source: Curriculum of the College of Internal Affairs, No: S/M – 3109/10 dated 14 October 2010

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USE OF VISUALISATION TOOLS IN PREVENTION OF MONEY LAUNDERING

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Abstract: Money laundering is the process which aims to hide traces of the real source of illegally acquired money. Nowadays, in the era of information society, it is recognized as international problem since its participants instead of reinvesting in high profitable jobs prefer reinvesting in jobs where origin of fund is unlikely to be found. A consequence of money laundering can be reduction of monetary stability, with potentially devastating economic, political and social consequences.

To stop and prevent such occurrences in the field of national and world finance, appropriate preventive and repressive measures are used and between them the application of modern information technologies is inevitable. Namely, today the criminal activity could not be easily realized without the use of computer technology because it is based on processing large amounts of information in a short period of time in order to impede the visual representation of committed transactions in the money laundering process.

The aim of this paper is to bring the achievements in the field of software tools for visualization as operational analysis tools that are now indispensable tools in criminal investigations, especially in the field of money laundering, since human perceptual system is sensitive to images and graphic representations of data, and thus can process and analyze visual information in a simpler and easier way.

Key words: money laundering, social networks, visualisation, tools for visualisation and analytics.

INTRODUCTION

Money laundering is the process that wants to hide traces of the real source of illegally acquired money, where financial and more frequently non-financial sector and profession are exploited. It indicates the legalization of criminal capital of the acquired business, or financial transactions to disguise the real origin of money and other forms of capital in the market. It consists in the falsification of financial documents and manipulation in the system of interbank transactions. In recent years, it is significantly expressed in the channels of organized crime in western countries in tax evasion, illegal trade in drugs and arms or in organized gambling industry and prostitution and racketeering and at the same time as capital used in the privatization in the former socialist countries of Eastern Europe. The term “money laundering” originated in the U.S. during Prohibition in 1930s when the criminals earned money from the illegal production and smuggling of alcoholic beverages and the profit was shown as achieved in the chain of their laundry and car wash shops and this is why this phenomenon began to use the term “money laundering”.

Launderers do not generally seek to achieve the highest rate of profit on the money, but there are more important places or investments that will enable the easiest and fastest processing of money. That money can travel from countries with good economic policy which generate more profit rates to countries with worse policies and lower yields from invested funds, and so is the money laundering capital free to invest less rationally, which certainly undermines the current economic trends and changes the demand for money - as a result of money laundering that is not reflected in official indicators at the national level is that it may result in interest and exchange rate instability.

THE CONCEPT OF MONEY

Money is created from a practical idea that an object can be determined by the value that can be used in a store that is very old so the money is very old tool that anyone experiencing a different way, especially in a world of different cultures. Money is most often understood as cash. How much is one dinar, dollar or euro really worth? Therefore, it is perhaps a better definition that it is "all that is generally accepted as a way to settle the costs".¹ Money can have any shape. At different times in different places, money can be almost anything you can imagine. Why is all this so important for the prevention of money laundering? Although most of the money laundering process involves some form of money, everything can be used in the process of money laundering: diamonds, gold, credit cards, stocks, guarantees, rare coins, insurance and many other different forms of money. These kinds of transfers of money in various forms are limited only by the imagination of people, not by the form in which money appears.

THE DEFINITION OF MONEY LAUNDERING

- It is not unusual to be just in the U.S. in 1986. The "legislative premiere took place" so that the State of Launderington enacted the Law on Money Laundering, which strictly punished any failure to report cash transactions above \$ 10,000. Otherwise, the literature mentions that the term "money laundering" was promoted by London's "The Guardian" thirty years ago in connection with the famous Nixon Watergate affair, and it was about the amount of \$ 200,000 provided to the fund of the Republican election campaign. In the early 1980s the term was included in the documents and the Council of Europe. Given that money laundering is usually carried out in three phases and that it often spreads across international borders, where smaller or larger groups of people appear established on ad hoc or permanent basis, and that it differently predicts criminal acts, this all clearly indicates the complexity of the process of money laundering. This is exactly why there are different definitions of money laundering in the literature, some of which are the following:
- Money laundering is any technique aimed to the transformation of the illegally acquired income, so it seems like a fair and lawful wage (Heršak, 1992:741).
- Money laundering is an activity aimed at collecting unfairly or illegally acquired income through legal businesses (Vukelic, 1994:29).
- Money laundering can be defined as the shortest transformation of illegally obtained money from apparently legitimate (Novoselec, 1996:41).

1 Ljutić, B. Ž. "Revizija. Teorija i praksa", Beograd, 2002., str. 15.

- Money laundering includes activities aimed at concealing the proceeds obtained by criminal act, including, storage and disposition of those cases (money, securities and jewels) while creating the illusion of legal acquirement of these items (Giunio, 1998:40).
- Money laundering is a financial transaction made for the promotion of certain illegal activities or to conceal illegal activities it was obtained from (DeGabrielle, 2001:192).
- The term money laundering refers to the changing shape of illegally acquired money to make it look legal. In addition, it is covering up the illegal source of income or its use (Claessens, 2000:22).
- Traditionally, money laundering is (among other things) the cleaning of dirty money derived from illegal activities in the collective consciousness it is probably related to drug trafficking (Lilley, 2000:1)².

STAGES OF MONEY LAUNDERING

Dirty money is the money gained by the criminal offense and any property arising out of the money. This means that money laundering without prior criminal activity does not exist. The U.S. government anti-money laundering (FinCEN) has described the process of money laundering through three stages: placement, processing and integration. At the stage of taking funds from criminal activity, they are invested in the financial system or in real estate and movables. The main goal is to put money into the financial flows and transfer it abroad. Launderers do not expose their earnings, so this phase is crucial due to the possibility of detection of dirty money. Regardless of whether it appears as the money derived from criminal activities in the form of cash or not, taking is the most dangerous phase of the criminal. Here there is a connection between money and the criminal. From that moment, the money is not cash but it is converted into numbers on paper or on the display.

The next stage in this process is known as breeding, but also called swamping or mixing. In the processing stage washers make numerous transactions to cover traces of the real source of money. Legal transactions transfer money to accounts in the country and abroad, and change its shape, in order to make following its course difficult. At this stage offshore companies anywhere can be used as suitable means. The ultimate goal is the dispersal of the transfer of money laundering and obtaining as many paper traces in order to obstruct the supervision of an ongoing or future investigations and eventually earned a false origin or source of money. Finally, in the integration stage washers integrate their resources into the economy and financial system so they interfere with the lawful means which make it difficult to detect the real source of money. The final phase of the money laundering process is actually the integration of illegal funds that have become legitimate and which are successfully embedded in the financial system. This phase is sometimes called the phase of the drying or centrifugation.

TECHNIQUES OF MONEY LAUNDERING

Money laundering is a complex system that develops, applies new techniques, and money launderers are increasingly sophisticated. Criminals are hiding behind the complicated transactions involving international transfers, chopped

² Ehrenfeld, R. "Evil Money: Encounters Along the Money Trail", Harper Collins Publishers, New York, 1992., 566-571

into smaller transaction amounts or transferred to the accounts of a number of people, changing the shape of money, the process using the advice of top banking executives, brokers, investment bankers, accountants, consulting firms, attorney and notary public. The money laundering process never stops no matter how many phases dirty money went through and how many forms unlawful means changed, such means will never be clean in the eyes of the law. Hashing technique-using a large number of cash deposits, each less than the amount that must be reported. Such cash deposits with these small accounts converge on one central account and they are deposited into the accounts from there to a number of different banks that qualify for those funds in legitimate businesses. Facade of a company/companies that have no real business activity, but are only used to open accounts in different banks and later used by them to demonstrate that the funds are generated through legal transactions. In this way it washes the majority of money. Physical transport of dirty money - money is physically transferred to countries where they do not pose too many questions about the source of money and is now less in use. Exchange of domestic goods stolen. Purchase of various financial products - it refers to different forms of games of chance, and it is now more widespread.

MONEY LAUNDERING MISUSE OF INFORMATION TECHNOLOGIES

With the growing cooperation at the international level, it is possible to improve national security and the protection of national interests as an ongoing strategic interest in a democratic society and civil institutions. Pronounced instability of the modern world in economic, political and social terms, the unipolar world order that has pushed the traditional block division and the Cold War, bring new challenges. One of the biggest challenges is certainly money laundering. The enormous progress in the development of information technology, internet, e-business, makes IT resources relatively cheap (very easy option to purchase a personal computer by almost every individual, rental and internet providing services), and thus the dream is realized of many years' of purchase from an armchair or over the network, using a payment card to pay for by electronic money, which creates the preconditions in the minds of individuals to create ideas for abuse³.

Intensification of the struggle against terrorism, terrorist acts becoming harder and harder, new methods of work, including a growing number of IT professionals in the work of terrorist organizations and groups require new responses and creating coordinated national and international strategies in the fight against money laundering. A strong national financial, banking and regulatory system and state institutions have pledged to fight an effective counter money laundering. The modern struggle against abuse of information technology is taking place on several fronts: national, regional and international. Creating a national strategy to combat money laundering involves the development and preservation of human rights and freedoms, democratic institutions of society. Key role in this struggle will belong to banks and their information systems [27]. The largest responsibility of banks regarding money laundering is to prevent that illegally gained money gets into banks, and prevent its introduction into legal channels. It is very important elaboration of a comprehensive and complex procedures to get knowledge about the actual activities of clients, gaining a clear and unambiguous knowledge and insight for which purposes the funds are used (short term), invested capital (long term), with a focus on internal control procedures and inter-

³ Petrović, R. Slobodan, „Kompjuterski kriminal“, Beograd, 2001., str.153.

nal audit and external commercial auditing. The incidence of money laundering and combat against the abuse of information technology is necessary to establish aspects of early detection, eradication and prevention of money laundering in banks and in the payment system. Continuous counter money laundering significantly hinders the prevention of financing of all types of crime. It is therefore necessary to consider what kind of position will be held by banks, banking, financial and economic systems of nations, regions and globally by introducing new measures for combating money laundering as well as improving the mechanisms for control and monitoring through use of information technology in this type of activities.

The system of opposing money laundering is one of the newest subsystems in the integral security system (public and national) and includes a series of actions and measures within the organization of physical and technical protection and security protection (active and passive), to prevent various forms of crime and other threats to national security in the area of money laundering and combating terrorism at national, regional and international levels, to uncover the perpetrators, as well as effective mechanisms to protect the states and economies from money laundering and terrorism which is central to national security, national economy and citizens.

Literature dealing with money laundering says there are four common factors for all such operations. The first is based on the fact that there is no need for laundering, if anyone knows who the money belongs to when it gets out of laundering machines. So the first rule is that ownership and origin must be hidden. The latter implies that the money has to change shape. Therefore, the cash goes into bank accounts, expensive paintings, luxury villas, cars, land, checks ... For example, open a company or bank on the Dutch Antilles in the name of someone to provide you in any way and there lay their illegally earned money. With the help of good connections, transfer money in Rotterdam, at the expense of shipping companies registered in Panama with headquarters in Cyprus. They send them to Singapore, to an insurance company registered in Liechtenstein based on Isle of Men, where that money is at the expense of building a company registered in Hong Kong working in Monaco, and has an account in Los Angeles. So it is repeated at least forty times. If you are clever, you can do the entire job in less than an hour.

An example of the relentless struggle against money laundering is an international judicial process which is initiated in 2009 by the European Union, accusing the company Reynolds for money laundering. R.J. Reynolds (RJR) was the second largest tobacco group in the United States. The EU has been indicted for alleged money laundering. The indictment against R.J. Reynolds, manufacturer of cigarettes, "Camel" and "Winston", the EU claims that the company: "More than ten years, led and supervised money-laundering." According to the indictment of the EU on 145 pages "RJR was involved in organized crime and supported by the fact that it laundered money originating from drug trafficking and other crimes". It argues that the EU heads of underground wash their illegal income by buying cigarettes in large quantities, which are paid by commission agents and money launderers. The investigation was carried out by the members of OLAF, the German state prosecutor Franz-Hermann Bruennera. The indictment gives details of the intricate ways of Reynolds cigarettes in one and the rebate in the opposite direction ... What the final epilogue to this indictment will be will be settled by court. On the basis of the above so far there is clearly a need for increased state control and social factors occurrences of misuse of information technologies and loop these phenomena of money laundering. Such criminal acts certainly influence the need for training of specific categories of professionals such as auditors of information technology, information technology experts and others.

MEASURES TO COMBAT MONEY LAUNDERING

Based on the prediction of future trends and the development of organized crime in Serbia, as well as assessment of available national capacities and capabilities to combat this phenomenon, and therefore money laundering as well as its manifestation, it is within the adopted strategy for the fight, to take the following measures [3], [4]:

1. Normative-legal: To formulate a unified legal definition of organized crime that will be compatible with European and international criteria and to enable greater efficiency in combating this phenomenon;
2. Assess the normative legal framework in terms of reviewing the existing legislation and adoption of new one and to continue with the accession of Serbia to international conventions until the complete and consistent application of international recommendations, standards and initiatives to combat organized crime;
3. Pass new laws to regulate the work of the Security Intelligence Service and Military Intelligence Agency, taking into account the specific features that need further statement that the security services retain certain police powers;
4. Institutional: To develop the institutional conditions for efficient detection and verification of drug trafficking, human trafficking, vehicles, small arms and other goods, money laundering, corruption and crime in the area of high technology and consistently confiscation of criminal offenses;
5. To promote all forms of cooperation and coordination of state authorities responsible for implementing the Strategy at all levels in Serbia and at regional and international level;
6. To improve prevention in the fight against organized crime, focusing on the study of cause and effect, in cooperation with state bodies and institutions of higher education institutions in the country and abroad;
7. Capacity to provide and develop quality staff in government agencies responsible for implementing the Strategy, with emphasis on objective selection criteria and a high, full, development and career advancement based on merit and performance, the required specialization, motivation and reward, education and training and to develop management system and their management and organizational competencies;
8. To develop a proactive process for the effective investigation and prosecution to prove criminal acts of organized crime;
9. To provide and develop the material-technical and financial capacities of state bodies responsible for implementing the Strategy; to participate in joint projects with the media, local communities and other partners of the Strategy;
10. To develop special investigative, operational and tactical, criminal-intelligence, operational and analytical methods of struggle against organized crime;
11. To create joint investigative teams and implement coordinated actions;
12. To establish and develop a system of effective tools for strategic analysis; and
13. To establish new and develop existing organizational units to combat organized crime⁴.

4 Giunio, M., "Mere za sprečavanje pranja novca", Beograd, 1998

IMPLEMENTATION OF MEASURES TO COMBAT MONEY LAUNDERING

In order to ensure full implementation of the Strategy and achieve success in the fight against money laundering, it is required to establish a rational and efficient management at the highest level. In case of change in circumstances, the Strategy review can be arranged. Within six months after the publication of the Strategy Action Plan for its implementation will be adopted, which will develop measures, and especially to consider preventive and repressive form of struggle against money laundering and confiscation of assets derived from criminal acts.

The structure of the document will comprise the following elements: the establishment of effective organizational structure (creation of new organizational units and working groups); division of responsibilities in relation to strategic oversight, control, monitoring, evaluation and revision (further development) strategy, management system, a system of measures for the implementation of measures strategies, indicators of success, carriers and perpetrators of activities, finances, possible risks and deadlines.

For the effective implementation of the Strategy, the Government will establish a task force composed of representatives of state bodies involved in implementing the Strategy, as well as other interested parties, with the main tasks of:

- Establishment of the Working Group for drafting the Action Plan;
- Coordinating the work of state bodies responsible for implementing the Strategy;
- Reporting to the Government on the implementation of the Strategy;
- Proposing to revise strategies as needed.

MONEY LAUNDERING AND INVESTIGATIVE JOURNALISM

The role of investigative journalism, among other things, to detect illegal activities in which journalists do not put people behind bars and have no legal power to invite persons to testify under threat of punishment. Tools that are used in investigations of the police, prosecutors and secret services are different from those used by journalists, but there are also common characteristics. Secret service agents indicate the increasing importance of “open intelligence”, i.e. intelligence data from open sources, mainly media reports, collected by institutions dealing with implementation of the Act. These data are very useful for all institutions around the world to investigate organized crime. The connection of these institutions and journalists is mutual because journalists rely heavily on their findings and press releases. Journalists indirectly exchange information and should certainly use modern tools as used by police forces, prosecutors and intelligence agencies around the world. International Center for Journalists (ICFJ) and Romanian Centre for Investigative Journalism (CRJI) published a manual for the use of databases and software tools in the coverage of these topics under the heading “Follow the Money: A Digital Guide for Tracking Corruption”⁵ as “follow the money trail” is increasingly becoming a global enterprise that requires new tools for collecting, analyzing and interpreting data.

⁵ <http://www.media.ba/mcsonline/bs/tekst/kako-otkriti-nevidljiveveze>

VISUAL ANALYTICS TOOLS AND THEIR APPLICATION IN THE PREVENTION OF MONEY LAUNDERING

The distinction between data, information and knowledge is one of the foundations of information science. It is the main association of a layman on the word information, visualization in the form of a table or chart of some sequences of alphanumeric characters and various pictures. The amount of electronic data in today's information society⁶ steadily increases among other things because of the appearance of e-government and business on the one side and the social networks and media in all their forms on the other side. It requires their visualization for easier understanding and the analyses are often necessary. Visualization is a set of technical means and methods that allow a meaningful graphical data representation [2], [6]-[11], [21] and [31]. The data have hidden meanings, patterns and trends and the task of visual analysis, which is the integration of new computer-based interactive tools and techniques based on cognitive, perceptual design principles and their identification. Visual analysis[12]-[13] is a multidisciplinary field that has as its primary focus to enable users to obtain deep insights that directly support the assessment, planning and decision making. There is also a new field of visualization tools connected with data mining jobs, see [30] and [32], but this is not a subject of consideration in this paper.

This work considers some of the commercial and non-commercial visual tools and techniques such as matching.

THE CONCEPT OF DATA VISUALIZATION

Data visualization is an area of a number of methods that are used on large data sets - whether they are public and open or closed resulting in the best possible display in graphical form. In this way, we can easily discover the meaning and relationships between data, and predict some future trends. The purpose of visualization is to transform data into information and knowledge.

Visualization can be interactive or static. If visualization is interactive, talking about some kind of web services and tools within a closed structure that allows us to dynamically display and filter data, and create reports. Static visualization now occurs most commonly in the form of info-graphic.

Data visualization is an interdisciplinary area. Creating static or interactive visualization involves cooperation or knowledge in areas such as statistical analysis, graphic design and information visualization. Good visualization of data sets should be high-quality, simple, usable, relevant and informative.

OBJECTIVES OF DATA VISUALIZATION AND THE METHODS OF THE WORK

Data visualization is a graphical representation of data, information or knowledge with the purpose of finding relationships between them and their grouping based on similarity or other measures. Today, data are most visualized using tables, various types of diagrams, charts and graphs, or mental maps. There are also new tools for the visualization of large networks: social networks, citation networks, portals, news sites, books, documents, network patents, etc.

6 Randjelovic D., Jacimovski S., "Policijska informatika", KPA Beograd, 121-124

New specialized search engines have been made recently that return us grouped and associated data, and at the same time we provide also their graphics team. Search engines are, for example, EyePlorer and VUKram Alpha.

Related data is difficult to understand using traditional tools. Some provide advanced visualization tools that will help you find complex information and provide answers to questions such as:

- Find - hidden relationships;
- Identify - clusters and patterns;
- Perform - *ad hoc* analysis and testing of theories and scenarios;
- Organize - manage complex networks and groups.

The known methods of data visualization are: Flexible visualization which automatically builds charts, networks and provides complete control over the layout and appearance and searches the database entities and relationships in the system which automatically organizes the data into a coherent and clear visual network; Visualization and analysis which together enable automated analysis and facilitate the ranking of a group of complex data by different criteria and use color and other visual signals to quickly create forms, groups and clusters, while unique time slider lets you specify a time “window” and move the slider back and forth to see how the network data changes over time; Spatial visualization which includes an integrated spatial view so that any geographical data may be automatically displayed on the map; Collaborative visualization which enables the inclusion of its work in sophisticated reports and presentations where diagrams can be saved and “what-if” analysis to share within your own team, with titles and narratives to describe the work. They can also share knowledge with various external reports and sending options, print charts and reports, and can be saved as files in pdf, Word, Excel, or website; Metrics Network which is an advanced technology for identifying, grouping and ranking mutual related data. Network metrics are generated as a set-sequence of numbers where one can see how the players are connected to the network, the shortest or best path between two elements of data, etc.; and there are others methods, as well.

VISUAL ANALYTICS

Visual analytics is the science of analytical reasoning facilitated by interactive visual interfaces. It is based on several scientific and technical fields from computer science, based on information visualization and cognitive and perceptual sciences, but also includes the scientific disciplines of social sciences.

This science of analytical reasoning provides the reasoning and framework upon which to build next to the operational and strategic and tactical visual analytics prevention and response.

TOOLS FOR DATA VISUALIZATION

A person's perceptual structure is sensitive to image and graphic representation of data, and thus can be simpler and easier to process the information. Recently, we meet very often with terms such as Infographics and visualization of data/information, i.e. data visualization/information. In the past years, visualization is present in the field of information retrieval. One can say that this is the distinguishing feature

of the Semantic Web⁷. There are specialized search engines to visualize the results but they are not subject of considerations of this paper, where we will among many tools for visual analytics such as StPO: Many Eyes - IBM's free online service for data visualization, Gephi - Open source tool for analysis and visualization of large networks, Sentinel Visualizer - a tool to support demanding intelligence analyst (commercial tool), Pajek - program for analysis and visualization of large networks of tens or thousands of vertices primarily through their decomposition into smaller (Pajek is a readily available, for non commercial use), consider two tools: commercial - Analsyst's Notebook (I2) and non-commercial - XL Node tool⁸.

Analsyst's Notebook (I2) [14] - is a very useful analytical software that allows clear visualization of law enforcement or intelligence analysis. This software allows sorting and displaying information from different sources and organizes them in a meaningful way, and then analyzes them using various techniques. To display the desired entities and links between them, it is necessary to first enter the entity, which may be different, for example, people, places, events, transactions of money and so on. The selected data are entered in the worksheet that was the start-I2 visualization tool. Key features of this exceptional software are:

- A wide range of visualization and analytical tools that allow you to quickly identify and establish relationships and create schemes to complicated sets of data.
- Flexible data acquisition for fast data entry, dynamic analytical processes.
- A simple display of complex information using charts that allow quick, accurate information based on it and decide.

NodeXL ([15]-[17]) - is favorable, open the template for Excel 2007 and 2010 that allows us to bring networked data and video network chart, with the Excel window. We can easily adapt the chart layout, zoom, volume, dynamic filter for vertices and edges, change the layout of the chart, we find a cluster of connected nodes and calculate the metrics graphs. NodeXL provides a range of basic network analysis and visualization functions. This tool uses a workbook that contains several worksheets to store all information needed for the graphic representation of the network. The relationship is represented as a network "edge list" which contains all pairs of nodes that are connected to the network. Other sheets contain information on each node and cluster.

This tool supports the work of the modest size of the network of several thousand nodes, although some users are successfully working with tens of thousands of nodes.

THE CASE OF MONEY LAUNDERING, PROSTITUTION AND DRUG TRAFFICKING IN SOUTHERN SERBIA THE USE OF I2 AND NODEXL

To make a comparison in the work of the two proposed tools - Analsyst's Notebook (I2) and NodeXL - we will deal with their use at the example where one can see how the software can be applied for visualization of information relevant for

⁷ M. Randelović, D. Randelović, M. Suknović: An Approach to Intelligent Web-Based Multiattribute Decision Support System, Telfor 2011, pp. 1511-1514

⁸ D. Randjelović, B. Popović: Visual analytics tools and their application in social networks analysis, Telfor 2011, 1340-1343

the elucidation of a criminal offense, in this case it is the case of money laundering, prostitution and drug trafficking in southern Serbia. Due to space available, we will only display the first information in the full format as is given in Table 1 and the other part.

Table 1- Format a form of operational information

| | | | |
|--|---|----------------------------------|--|
| ASSESSMENT OF SOURCES | | SOURCE OGNJEN 234 5066 998 | Number of information |
| CODE | C | | MC/1240/10 |
| Any information should be evaluated according to the source. Estimated using the official codes A, B, C and X | | | DATE OF INFORMATION |
| | | | 05.12.2010. |
| SUBJECT Union of prostitution | | OFFICER | Vladan |
| CONTENTS: The said person is serving a seven-year prison sentence in Solin, for armed robbery. He recently requested and was granted an interview with Ministry of Internal Affairs of the Republic of Serbia, which is responsible for contacts with prisoners. During the talks, the person claimed that he was the leader of prostitution, dealing with escorts and bringing prostitutes in hotel rooms, the visitors of luxury hotels in other towns in Kosovo and southern Serbia. In an interview, he explained the role of the leaders "to ensure that a group of prostitutes be sent to the rules imposed by their organizations. According to his statement, leaders "have been eliminated, so that, since there is no other knowledge and experience, became involved in looting of small shops, and during a robbery was arrested and convicted. Bitter about the relationship of the organization towards him, he is ready to give information about the activities of the Union. In return for the information provided he requires preferential treatment during serving time in prison. During the talks any agreements have not been reached. The talks will be resumed. ADDITIONAL INFORMATION: | | | Estimated content (code) 3 |
| COMMUNICATIONS | | SUPERVISOR SASA | Every piece of information (content) must assess the employee who filed using the codes: 1,2,3 and 4 |

Information 02/07 December, 2010, source Milan: The examination of prisoners by the officer on the case has been confirmed based on the following findings:

Prostitution is well organized as is given in Figure 1- view in - NodeXL and Figure 2- view in i2 Analyst's Notebook. Prostitutes are recruited in Kosovo and parts of south-eastern Serbia where it is familiar with the rules of organization and methods used in the work.

Logging uses modern business methods. One person takes care of data members and the amount earned payments. Others are responsible for recruiting. The role "the leader" is repealed by the Trade Union leaders for their decision to use the money rather than physical methods for control of the organisation. The person leading union is isolated from all operations in a way that sets a person who manages the operation. MILOS person is fully aware of all activities. Various groups work in different parts of Serbia. Catherine leads a group of Tina and she is personally responsible coordinator of the group, the person named Vanja. VANJA corresponds to MILOS-in, the head of operations.

Information 03/09 December 2010, source Ognjen: Detailed discussion with someone MARKO came to the following findings on groups engaged in prostitution in luxury hotels: A total of 6 groups defined in prostitution, and take them to the following persons: Miss EMA - group Luna, Ms. Vanja - Group Mona, Miss Tina - Katrin group; Miss Zejnepa - Viva Group, Ms. Fatima - a group of Emona, Miss. SARA - Merima. Each group leader reports directly to the person Vanja, who is coordinator of the group. VANJA's responsible person is MILOS, director of operations. Helen is the person in charge of information and payments to members. Several are liable to Vanja.

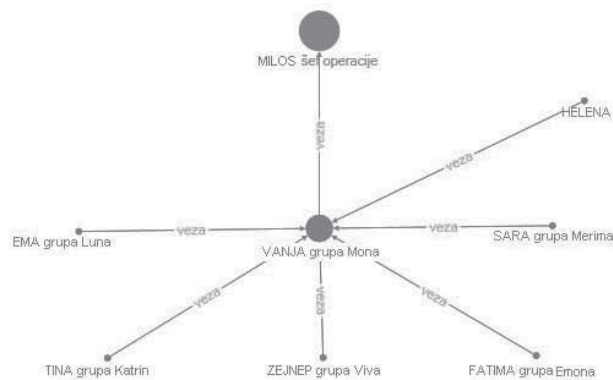


Figure 1 - Prostitution network - view in - NodeXL

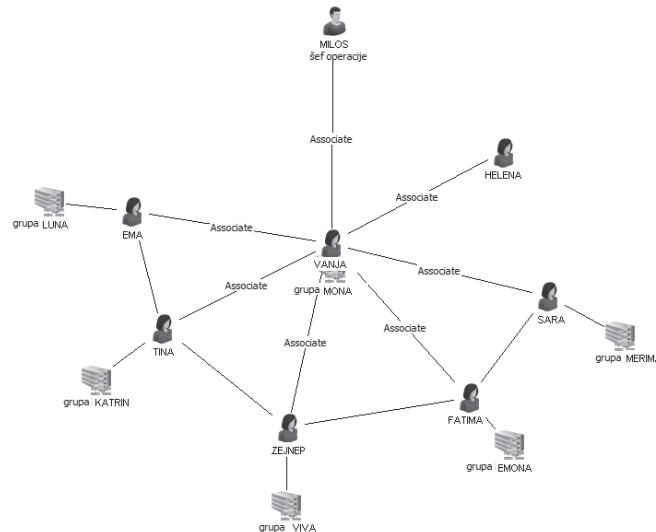


Figure 2 - Prostitution network - view in i2 Analyst's Notebook

Information 4/07 December, 2010, source the Commissioner: According to some reports, operational links, NIKOLA was involved in drug trafficking and for five years a member of a criminal organization that is engaged in criminal dealing. His address is Bujanovac, in Industrial zone.

Information 5/12 December 2010, source Ognjen: In further discussions with Mark came to the following additional findings: People STEVA and Alex are two majors recruiting new prostitutes for the union.

The same persons may work together or separately, and the main liaison is MILOS.

Information 6/13 December 2010, The Commercial Court: Criminal MILOS-checking and came to the following findings: MILOS owns 30% minority share in the company UNIVERSAL. From Company Registry records it was observed that the main activity of the company is importing and selling goods. Company for trade and services, Jugoimport “is the company that owns 70% share in the company UNIVERSAL.”

Information 7/14 December, 2010, KEP Bank: The subject company, Universal, has a very modest premises at Kosovska 15, Vranje. During the last week the premises were constantly closed. According to the external appearance it is estimated that the premises are in very poor condition. The company has an account with the Bank KEP. Reports obtained from the relevant authorities indicate that the account is very active (fixed deposit and withdraw funds) - see Figure 3.

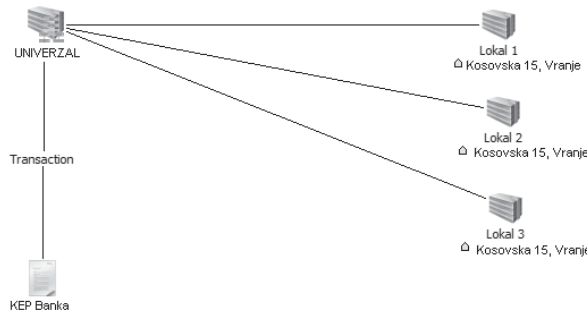


Figure 3 - Shops and bank accounts - view in i2 Analyst's Notebook

Information 8/16 December, 2010, source The Commercial Court:

Company for trade and services, Jugoimport “was established on September 10, 2009, after the takeover and reorganization of the Company HEBA, an old and well established import company. Company for trade and services, Jugoimport “is fully owned by three people. According to official reports, the company’s main activity is import and distribution of goods. Also, according to official statements, the directors and owners are – see Figure 4: LUKA - President of the Board; COLIC - President, DANILO - Vice President and KOSTA - the general manager.

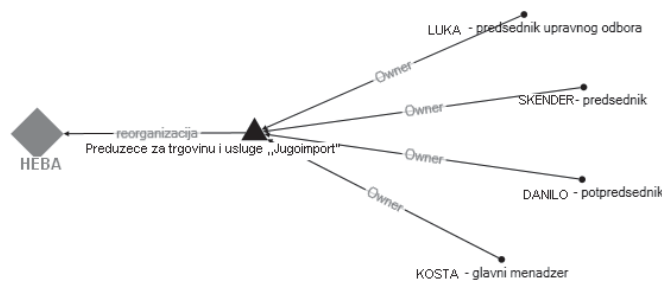


Figure 4 - Overview of the owner and director of the trade and services, Jugoimport - in NodeXL

Information 9/16 December, 2010, source the Commissioner: Pursuant to our request, the Commissioner has obtained knowledge of the prostitution syndicate, which could be the same as those that have been obtained from sources Search. The Union is very well organized and uses modern techniques of business. The head of the Operations identified as MILOS, which operates under the company UNIVERSAL. UNIVERSAL shows a very small business. The Commissioner said that the company has opened an account in the local KEP branch of the Bank.

Information 10/19 December 2010, source the Commissioner: At our request, the Commissioner has obtained additional information about the union of prostitution (Report from 23/09/2010). The Commissioner said the union has six coordinators in the field and for each of the coordinators about 15-25 prostitutes. The Commissioner argues that the cost of services of prostitution, depending on whether it is accompanied or services in a hotel room, from 850 to 1,600 euros per girl for an evening or night.

Information 11/22 December 2010, source the Commissioner: The Commissioner has today given notice to the 18 October 2010, Watched the meeting between the same persons, restaurant Cafe Bar Exit at John F. Kennedy 8th. All three people familiar with the Commissioner personally. During the meeting MILOS reportedly stated that, your father was “satisfied with the quality “newcomer” and should continue to work so well.

Information 12/23 December 2010, source the Commissioner: Commissioner who had previously worked in the company of Enterprise Trade and services, Jugoimport gave information about another client of that company, and the company Kos Intel in Pristina. Regular disbursement Enterprise Company for trade and services, Jugoimport “Kos Intel, is done through bank accounts in the EPC.

The Commissioner argues that the fictitious invoices and billing company that actually trade and services, Jugoimport “does not deliver any goods to the same company.”

Information 13/25 December 2010, source the Commissioner 2: The Commissioner has a friend who occasionally works at the UNIVERSAL. This person delegated to the Commissioner the following information: UNIVERSAL receives invoices for payment of goods by the Company for trade and services, Jugoimport. Copies of certain invoices are held with the intelligence services. Invoices are paid after receipt of the time. Deposit to the account of the company UNIVERSAL KEP Bank was paid in an amount sufficient to cover the amount of the check, which is charged with the same account – see Figure 5.

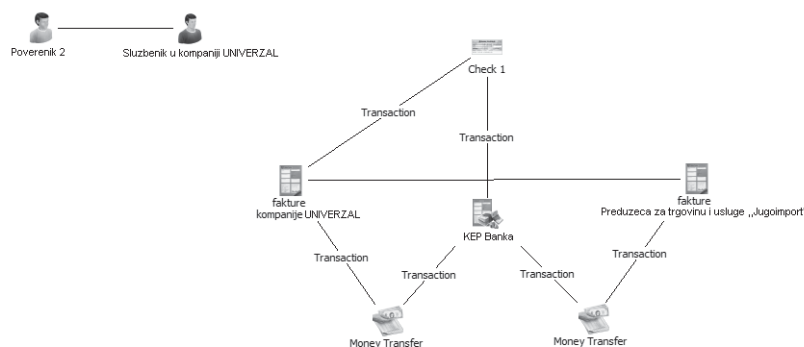


Figure 5 - Display transactions through the bank - a view in i2 Analyst's Notebook

Information 14/25 December 2010, source The Commercial Court: A register of the company stated it was found by BORIS CEO. According to this, BORIS owns 35% of the company, and the remaining 65% is owned by the Company for trade and services, Jugoinport. Further checks revealed that the entire company is located in a small office at 23 Railway, Obilic. We found no data about warehouses that have anything to do with the company.

Information 15/26 December, 2010, source Police operational information: BORIS has been the subject of continuous research by the Ministry of Internal Affairs of the Republic of Serbia. He was suspected of smuggling heroin operation, management and distribution in the area of Kosovo. The collected findings suggest that BORIS acts under the auspices of the company's MS style a.d. During control (minors) identified that people socialize and cooperate with BORIS, and to David and VUK.

Information 16/27 December 2010, source Police escorts: 26 October, 2010, Nicole was used for the accompaniment. He left his home address, Bujanovac, Industrial zone at 08.25h, in a blue Mercedes car, license plate 233 GL MS, registered in his name. He drove to a warehouse in industrial area, where he arrived at 08.38h, at the address Rr. K. Hyrja 23rd SAMIJA worked in a warehouse all day. Van, white in color, license late G281HB, returned to the facility at 14.40h. Some activity was noticed at the front of the van, which is not clearly seen from the place of observation. Van left at 15:01 h. SAMIJA stored and locked at 16.58h and drove home. White van reg. G281HB is not currently registered to any name.

Information 17/28 December, 2010, source the Commissioner– see Figure 6: The Commissioner said about the meeting between the same persons held on 28 November 2010, in a restaurant. The Commissioner said that he heard Milos says Helena, for which the waitress said she was a regular guest that your father, “is satisfied with the way money circulating in the organization.

Information 18, 19/28, 29 December, 2010, source Police escorts: During surveillance (accompaniment) BORIS, on 07 November 2010, he was seen at a restaurant along with Nicole and Gani. When they all three left the restaurant, he could be heard talking to Gani, “Verify that the warehouse is prepared for it” On 20 November 2010, Nicholas was seen driving the blue Mercedes in the warehouse. At 13.02h, yellow Audi vehicle license plates E21JP arrived to the first Location. The vehicle was registered to a person LAZAR, address Radnicka 5, Merdare. The driver was identified as Lazar. Luggage is transferred from the blue Mercedes in a yellow Audi, which was driven by Lazar. SAMIJA after all that drove back to the warehouse.

Information 20/29 December 2010, source the Commissioner: The Commissioner has come to new insights about the suspicions regarding smuggling of heroin that BORIS was involved in. The person you know under the name of the Commissioner, David, has the phone number 381 36 2586 4, in order for the organization as a finance officer, and about his business associate BORIS directly. Another person I know named trustee VUK, has the phone number 381 28 4515 3, is responsible for organizing the importation of heroin from Bujanovac. VUK person has engaged a person named Gani to organize network of suppliers for different parts of Kosovo. Information 21, 22/ 29, 30 December 2010, source Telecom: The owner of the number 381 36 2586 4 David, Veljko Vlahovic 122nd. The owner of the number 381 28 4515 3 VUK, Masarikova 25, Bujanovac.

Information 23/30 December 2010, source Police escorts: Supervision of BORIS, on 01 December 2009, resulted in the identification of persons as staff person SKENDER BORIS. Named individuals are seen together in society. BORIS was driving the car and stopped in front of a hotel and picked up Skender.

Information 24, 25/02 January 2011, source the Commissioner: The Commissioner informed the meeting between two people, George and KOSTA, into the house “Theatre” on March 8, 100 The Commissioner heard the LED when said person named Kosta, “everything is in place, continue to invest money where it looks clean.”

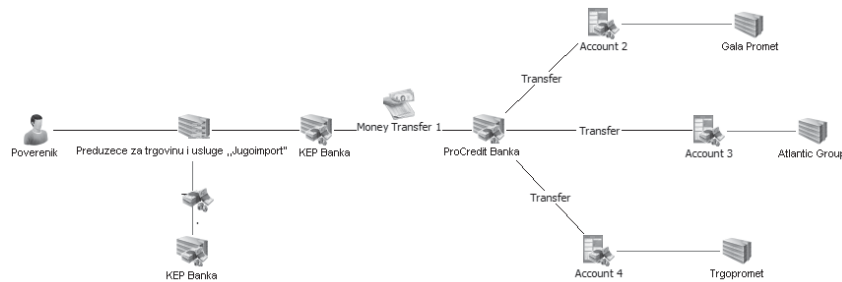


Figure 6 - Transfer of funds between companies - views in i2 Analyst's Notebook

Information 26/04 January 2011, source The Commercial Court is given in Figure 7: According to data from the register of enterprises, enterprises of trade and services, Jugoimport owns 90% share in the following companies: Gala Transportation, executive director PETER, Atlantic Group, an executive director and Trgopromet UROS, Executive Director of the LAV. Executive directors are the owners of the remaining 10% stake in the companies. All these companies are based in Serbia.

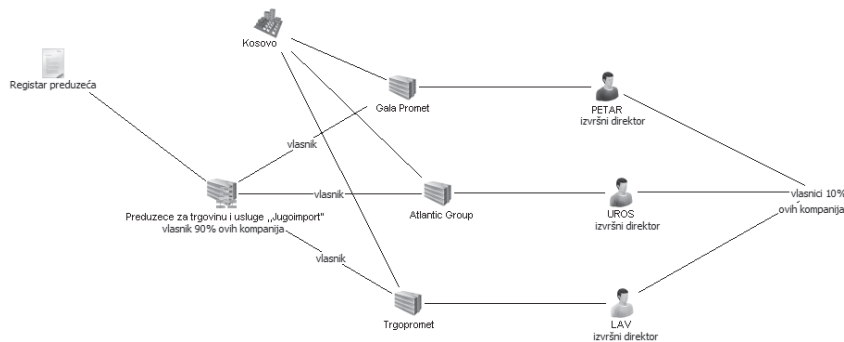


Figure 7 - The register of companies and directors of companies - i2 Analyst's Notebook

Information 27/06 January 2011, source the Commissioner presented in Figure 8: Gani was confirmed by sources as a major distributor of heroin BORIS network. Its distributors in the field are: IGOR, DAMIR and Lazar. The total network consists of three regional distributors working for Gani and at least two local dealers who are working for each of the regional distributors. IGOR's local dealers are SEMIR and Victor. DAMIR's local dealers are: Kristian and Andrew. LAZAR's local dealers are: Miha-jlo and ARSENIJE.

Information 28/08 January 2011, source The Commercial Court Register of Companies has the following relationships within the company. Enrichment was in the last three months of 2009. Gala Transportation Capital owns 90% of Commerce's. John was given as a manager-director and owner of 10% Capital Commerce. Atlantic Group owns 90% of companies Monus Ltd. Elijah is shown as a manager-director and owner of 10% of the company Metalac.

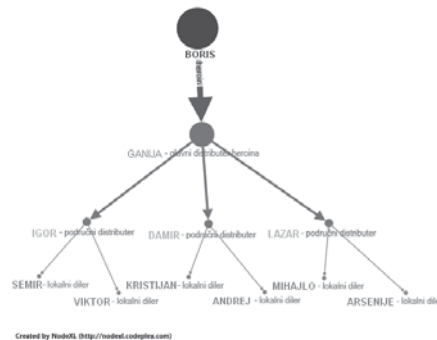


Figure 8 - Outline of the main and regional distributors and their local dealers - NodeXL

Information 29/09 January 2011, source the Commissioner: The Commissioner informed the meeting between Milos and a man he identified by the Commissioner of Police photo collection of the Republic of Serbia, as a port. They met for lunch in a restaurant in the street. Dositejeva 98th Milosevic was soft on Luke and that he had heard him speak, Vanja has everything under control. PORT laughed and was very pleased. Information 30/10 January 2011, source the Commissioner 2: The Commissioner has provided information that one man was picked up at the airport, on 10 November 2010 at 21.09h. The man was returning from the road with the goal of organizing the main imports. Drugs should arrive in separate flights from Europe three weeks later.

Information 31/10 January 2011, source the Commissioner: the Land Registry shows the following purchase of property by a Commerce Capital, LLC and Monus Metalca. Kapital Commerce: office space, a hotel IHOTEL second Monus Ltd.: commercial and office space. Metalac: apartments, houses and hotels.

Information 32, 33/11 January 2011, source Police escorts: Monitoring was carried out by customs police against Nicholas, on Tuesday 29 November 2010. Nicholas is seen at the airport, terminal 4, in an encounter with VUK, who had just flown by flight VA333.

Supervision of VUK was performed on 02 December 2010. Following his arrival, VUK was seen to drive Fiat Punto Blue Plate PR 010 JJ along the highway, where he met with Gani and Boris. After an hour Gani went in white van license plate G33JM. BORIS drove in a yellow Alfa Romeo M445ST plates.

Information 34/11 January 2011, source Telecom: Phone number listing for 381 28 4515 3 on behalf of VUK for a period of 03 November 2010 - 11 November 2011. GANIJA 03 November 2010, 16.05h. NIKOLA 03 November 2010, 16:13, Gani 03 November 2010, 16.24h, BORIS 03 November 2010, 17.25h, Gani 04 November 2010, 11.04h, Gani 04 November, 2010, 14.34h, NIKOLA 06 November, 2010, 12.22h, BORIS 06, November 2010, 14.55h, BORIS 06 November, 2010, 20.02h, Gani 08 November 2010, 13.05h, Gani 08 November 2010, 19.55h, Gani 10 November 2010, 12.45h, BORIS 10 November 2010, 14.23h, Gani 11 November 2010, 09.58h.

Information 35/15 January 2011, source MI: Serbian police is investigating the suspects for corruption - two airport workers. During supervision, 18 October 2010, a worker was seen in conversation with someone and another person LEA in Caffe bar. The third woman was identified the next day as Irina, a niece of the LEE. So far, the Serbian police arrest is initiated and the workers were still employed at the airport.

Information 36/18 January 2011, source the Commissioner: The source reported a conversation he heard in a trade and services, Jugoinport. SKENDER phoned and said, “A man will come through the next three days.”

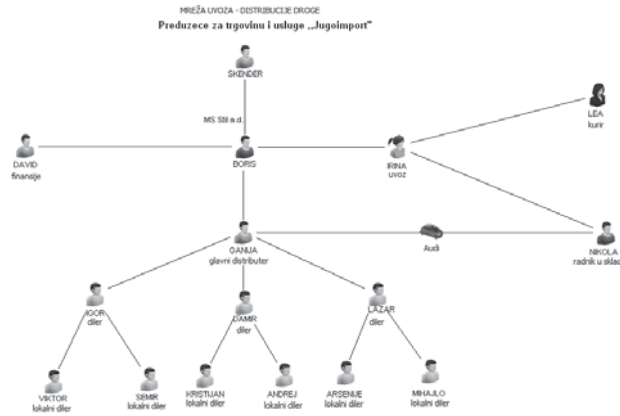


Figure 9 - Map link in the distribution of the drug organization - i2 Analyst's Notebook

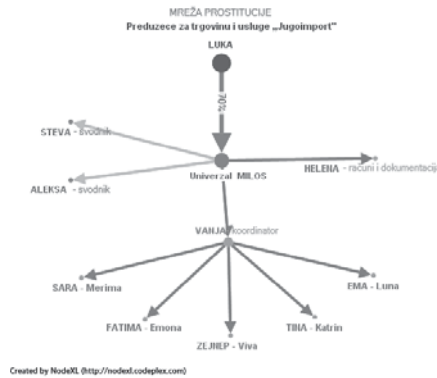


Figure 10 - Map links to business organizations organizing prostitution - NodeXL

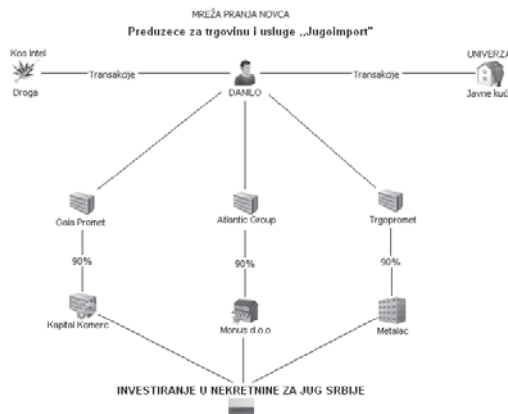


Figure 11 - Map links to business organizations MONEY - i2 Analyst's Notebook

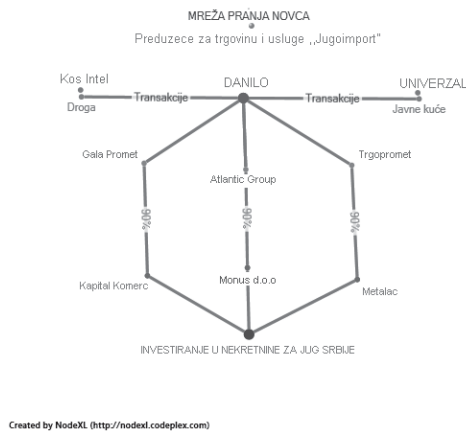


Figure 12 - Map links to business organizations MONEY - The view in NodeXL

Using visualization tools in the investigation, the i2 Analyst's Notebook and NodeXL, given in the Figure 9 and Figure 10, we can conclude:

The profits from prostitution and drug sales are used as the main sources of property investments in southern Serbia. The main people involved in that activity are LUKA, COLIC AND DANILO. The three control company for trade and services, Jugoimport, a key organization through which money is laundered and invested in real estate in southern Serbia.

DANILO, Skender and the main ports are in the company for trade and services, Jugoimport. MILOS organized prostitution network in Kosovo and report port. BORIS organized network of drug selling, and importing heroin from MILOS and Bujanovac to Kosovo to disperse it. BORIS reports SKENDER.

Univerzal is led by MILOS, and leader of Intel Kos is BORIS. These are channels that fund directing funds to the company for trade and services, Jugoimport, false invoices and fictitious assets.

LED manage money laundering operation for the company for trade and services, Jugoimport, which controls a network of companies that profit through direct branches of Kosovo, through the banks and other companies established in Serbia - see Figure 11 and Figure 12 which present map links to business organizations MONEY and that respectively the view in NodeXL and i2 Analyst's Notebook.

The network company in the last three years includes a number of property companies, which together have 212 million euros in Serbia, in the form of real estate.

The dramatic increase in reported profits and big bucks that go through the bank accounts of the company for trade and services, Jugoimport and its business is not supported by legal affairs.

RELATED WORK ON THE VISUAL ANALYTICS TOOLS

At the moment of writing this paper Google Scholar responds with more than million results on the query (1,270,000) connected with visualization tools, more than fifty thousand (exactly 51,300) connected with money laundering and less than thousand (exactly 771), which clearly indicates how great the interest for visual analytics tools in academic community is but like the modern scientific discipline it

is not too much presented in money laundering. Because of that for the purpose of this paper some of the work from the wide field of criminology has been consulted.

New interactive visualization techniques for analyzing, organizing, and presenting network event data at multiple levels of detail for the purpose of forensic analysis are shown in [18] and [19]. How I2 Notebook analyst and similar tools can be used in the field of research journalism and how they can improve their work is shown in [20]. Practical application in Chicago Police Department which has reorganized its information system and, more to the point, has changed its policies regarding the sharing of information, in support of a full implementation of community policing, is shown in [1]. How data visualization can be used in criminal justice is described in [22] and [23]. Mapping crime in its community setting using geography analysis is shown in [24], and how homicide can be visualized is analyzed in [25]. Finally, new pathways for analyzing life course histories can be found in [26]. References [27]-[29] consider modern solutions of application of visualization in digital forensics computer crime investigation.

CONCLUSION

In this paper we considered application of visualisation tools on concrete example of the case of money laundering, prostitution and drug trafficking in southern Serbia and that on two possible groups: for commercial tool-Analyst's Notebook (I2) and for non-commercial tool-XL Node using three criteria:

1. Quality and variety of graphics and clarity of the display;
2. Possibilities of predictive analytics, and
3. Cost and availability.

It is evident that for quality and variety of graphics and clarity of the display also and analytical finding of hidden relation in considered data, Analyst's Notebook (I2) with its Social Network Analysis Task Pane gives better possibilities. From the aspect of third considered tasks better possibilities are given by NodeXL.

ACKNOWLEDGEMENTS

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TACTICS BIOTERRORISM AND GENETIC ENGINEERING IN THE SERVICE OF THE BIOLOGICAL WEAPONS

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Abstract: Advance in technology development and the fact that biological weapons has features that in certain situations and circumstances are very suitable tool for violent exercise of political, religious and other purposes have created the possibility of its misuse by terrorist organizations.

Current, a very significant global problem of human population, genetic engineering and the development of biological weapons poses a growing threat because in the hands of terrorists can be found genetically modified viruses and many other microorganisms, bacteria and rickettsia. Increasing bacterial resistance or an increase of infectious pathogens of potential biological weapons will be lethal. Biotechnology allows the cultivation of microorganisms in large quantities with altered properties and great possibilities for the dissemination and dispersion throughout the world.

Transfer of biological agents in aerosol air gives more severe clinical picture and a short incubation, period, and the best medium for the dissemination of biological, agents epidemiological scale is water.

A successful fight against bioterrorism involves the development of vaccines drugs and diagnostic tests physical and other food security and water out of a possible attack.

It is necessary to know the method and manner of use and dissemination of biological agents, in order to better organize health care for many patients and reduce the effects of bioterrorism.

Key words: Biological weapons, biological agents, bioterrorism, genetic engineering, pathogens, viruses, bacteria, microorganisms, prevention.

INTRODUCTION

Biological agents used intentionally or unintentionally are the silent and insidious weapon with a very pronounced and the subsequent effects of severe consequences for the population. The biological weapons are launching devices, devices for dispersion and active devices (agent), which are products of genetic engineering cell parts of organisms that can cause harmful biological agents consequences. The use of biological agents as a rule, causes serious illness and great sacrifice.

Discovery and development of recombinant DNA technology is of great importance for further development and progress of human medicine. Great is the importance of genetic engineering in gene therapy, the study of disease mechanisms and its use for diagnostic purposes, and misuse can cause great harm to human populations through biological "war" a number of facts and indicators suggest that bioterrorism is quite possible, if not our reality.

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BIOTERRORISM AND BIOLOGY

Progress in technological development has a direct impact on improving the technology. Man has always sought in the evolution of tools and means to maintain the competence of its kind and among populations. Using his intelligence has developed a variety of weapons and the idea to use other types of living organisms against her came from ancient times. For protection against these weapons as well as its use, it is necessary to know the biological laws. If we take into account the fact that these weapons are used for biological agents, microorganisms that are naturally present with the exception of genetically modified microorganisms then we must follow these laws. They are based on routes of transmission, routes of entry into the organism, and studies have shown that physically fit body and a very important factor and the consequences of these weapons. Roads transfer” the media” to spread microorganisms and microorganisms in them are able to reproduce (air, food, water, animal and human) vectors. Roads entering the body are the respiratory, digestive and respiratory system and skin damaged epithelium (early).²

Healthy skin is an excellent insulator of microorganisms not only for epithelial cells but also the skin flora (bacteria that are naturally present in the skin ea. *Staphylococcus epidermidis*), which due to the natural competence of the microbial contamination of the skin prevents other (pathogenic) microorganisms.

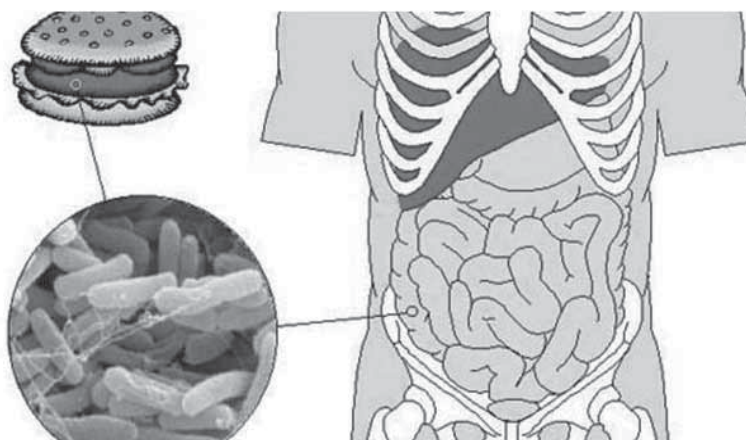
A similar defense against infection in the body using bacterial competition, especially developed in the digestive system, but the bacteria *Escherichia coli* in the digestive system has a role to synthesize vitamin B₅. The bacterium *Escherichia coli* in addition to being the most sought after in molecular biology, microorganisms is used as a model to study the functioning of DNA. The wild strain of this species is one of the oldest living organisms in the world, and its genome during evolution has not changed. The problem for humans is that the strain resistant to most antibiotics. Mode of transmission of microorganisms and their entry into the human body depend on the characteristics of microorganisms. Germs spread by air enter the body through the respiratory tract, and those transmitted by food and water makes through, the digestive system. The division into useful “humane” and harmful “pathogenic” bacteria as the basis for biological warfare can be greatly compromised methods of molecular biology, genetic material forming microorganisms themselves, because these methods of human bacteria can get very dangerous strains (biological war agents)³.

Biological weapons include biological agents that are capable of reproduction and secretion of toxic products caused mass illness or death of people or animals. The group of microorganisms that cause infectious diseases of humans and animals listed as bacteria viruses, rickettsia and fungi. For military applications using the high contagious biological agents that can be easily introduced into the body, the efficiency is measure by mortality and disability stage opponent. Bacteria can easily raise the nutritive media such as broth with the addition of peptone. Suitable for spraing aerosol imply special bacteria that cause the following diseases plague, antrax, tularemia, brucellosis suitable for water contamination as cholera and dysentery, which is most easily transmitted sabotage actions.

Production of virus is more difficult and more expensive than in bacteria because it is necessary for the cultivation of living tissue (smallpox, influenza, hepatitis, yellow fever,

² Biological Weapons Technology Office of the Under Secretary of defense for Acquisition and Technology, U. S. Department of Defense, Washington D.C, 1998.

³ Leitenberg. Milton Assessing the biological weapons and bioterrorism threat. Strategic Studies, institute of the U. S. Army War College, Carlisle.2005.



Picture: 1. Time transfer of microorganisms Sallmonella from food in the gastrointestinal tract

dengue fever and encephalitis). According to some classifications rickettsia are transitional forms between bacteria and viruses, are mentioned for the transfer of freckled and typhoid fever me. The fungi are pathogens in humans kokcidiomycosis and histoplazmozis.. There are about one thousand two hundred biological agents, of which only some can be used as biological weapons. American Center for infectious Disease Control bioterrorism classified into their bosc categories A, B and C.⁴

A weapon categories include microorganisms that pose a great threat to national security because it is easy to spread and spread from person to person and cause high mortality with potential impact on the health of the wider circle of people. A category of weapons also can cause panic, require special measures for the preparation of the entire public health system and they include the Variola major (Smallpox), Bacillus anthracis (Anthrax), Yersinia pestis (Plague), Botulinum toxin (botulism), Francisella tularensis (tularemia), Filoviruses, Arenaviruses (Hemorrhagic fever).



Picture 2. Child with Smallpox

⁴ Preparedness for the deliberate use of biological agents. A rational approach to the unthinkable, World Health Organization, Geneva, 2002.



Picture 3. An area infected with Anthrax

In category B biological weapon agents include the relatively suitable for expansion and are characterized by low mortality, but difficult to detect. *Coxiella burnetii* (Q fever), *Burkholderia mallei*, *Brucella melitensis* (Brucellosis), Enterotoxins B *Staphylococcus*, Alphaviruses (VEE, EEE, WEE) Encephalitis. There are agents and sub-category B which includes pathogens that are transmitted through water or food types of *Salmonella*, *Shigella* dysenteriae, *Vibrio cholerae*, *Cryptosporidium parvum*.



Picture 4 Category B biological agent – Coxiella burnetii

Weapons include category C pathogens belong to the third type of priority because they are characterized by ease of production and dissemination of potentially high mortality and impact on the health of many people. These are pathogens that are due to its characteristics and availability of suitable for mass destruction, and require constant research in order to improve the detection of disease, diagnosis, treatment and prevention. The weapons category C agents include the following: nipa virus, hanta virus, hemorrhagic fever, encephalitis viruses, yellow fever, tuberculosis.⁵

⁵ www.bt.cdc.gov/agent/agentlist-category.asp.

MISUSE OF GENETIC ENGINEERING

Genetic engineering is not without reason called a technology century and most often presents as a possibility in vitro genetic manipulation, manipulation where the meaning is not clear and may be associated with abuse. However, the most acceptable definition describes it as a target change and recombination rDNA in living cells. Taking into consideration the previously mentioned facts, it is obvious that the basic criterion of genetic engineering crop target DNA, joining the cut fragments of DNA fragments from the same of different sources, include such recombined molecules in the cell in which it is still necessary to copy or controlled.⁶

The development of genetic engineering begins with the discovery of the enzyme reverse transcriptase (RNK, dependent DNA polymerase) and a group of enzymes that are called restriction endonucleases. They are isolated from bacteria and cut foreign DNA in areas with specific arrangement of nucleotides.

So far, the isolation of restriction endonucleases are hundreds of different both tracks that cut DNA at specific places. These enzymes were named to the bacteria from which they were isolated. So EcoR1 isolated from *Escherihia coli*, and the first restriction endonuclease from *haemophilus influenza*. DNA fragments cut with restriction endonucleases may be that such areas tend to spontaneously come together and they are called "sticky" ends or may be without that feature, so called beind ends. In addition to restriction endonucleases, the genetic engineering of enzymes that are used to re-connect the broken parts of DNA (DNA ligase), proceedings in which the rDNA is inserted into the. Inserting DNA into a cell is done with the help of a vector. Most commonly used vectors are plasmids (out of a bacteria chromosome DNA, the ability of self-reproduction, bacteriophages viruses and cozmidi . Plasmids are the most common carriers of genes for resistance to antibiotics. Insertion of foreign DNA in a region of the gene for resistance to antibiotics is associated with loss of resistance of bacteria to a given antibiotic. As used plasmids using a gene for resistance in other antibiotic, bacteria growing on media containing antibiotics and enables separation of recombinant clones of bacteria with plasmid. The lack of plasmids is that they are often unable to proliferate stable if they contain large fragments of DNA, and for this purpose using different viruses and plasmids.⁷

Production of vaccines engineered from the viewpoint of our problem is very interesting becous any potential aggressor will try to protect the user's own unit of biological agents.

Using genetic engineering for diagnostic purposes, significantly improves the anility to detect possibly the used biological weapons.

No doubt, genetic engineering can be misused to create a cause of many infectious diseases so that they become more virulent, more resistant to some antibiotics or most antibiotics; it is even possible that such changes do not cause more resembles the initial strain. As in most cases, major scientific discoveries are preceded by "backdoor research" with a militaty purpose. If genetic engineering in civilian laboratories so advanced, the question is how advanced military labs and in what direction? At a time when many countries carry act research in the field of genetic engineering and not publish the results of the risk cannot be underestimated.

Recently, the experts have been examining the possibility of using the military products of genetic engineering in cells or organisms that can cause harmful effects, working on cloning and modify properties of humans and animals. rDNA technol-

⁶ Colic M, et al. Fenetic engineering in immunology. VMA Belgrade, 1994. year.

⁷ Watson J.D. et al. Recombinant DNA-a Short Course, New York, 1983.

ogy has found wide application in epidemiology and diagnosis of infectious diseases and genetic disorders. Some will cause epidemics, especially if one bears in mind the possibility of creating microorganisms with completely new properties, it is practically impossible to identify if it does not perform the analysis of genetic material (epidemic causing agents) with the help of genetic engineering techniques. Using rDNA technology study and development of mechanisms of disease “lowered” to the level of genes. The effect is well known that any agent of the external environment in the body leads to a series of biochemical reactions via mediators (hormones, cyclones, receptors, enzyme systems, enzymes). The information in the cell are integrated at the level of sails ie genetic apparatus that manages a series of reactions which attempt to adapt the organism to the new situation. This means that genes are in constant communication with the surrounding environment, and understanding of many physiological and pathophysiological mechanisms in the body requires an understanding of mechanisms of regulation of expression of certain genes. Also increasingly used transgenic animals (in which the gene that expresses in vitro inserted into their genome after fertilization of the egg cell), and it is expected that the results in this area contribute to a better understanding of how the process of maturation and differentiation of cells and whole organisms, and mechanism of formation and development of those diseases that are under genetic control.

The possibility of genetic manipulation the creation of chimeric organisms, and even cloning of higher organisms are reasonably opened a number of ethical issues related to the possibility of abuse of genetic engineering for military purposes. However, since the beginning of the application are met in the laboratories of the Commission at different international scientific. The best protection of the population of this kind of attack involves preparing the nation to recognize this kind of danger associations made up of experts in various specialty physicians, biologists, technologists physicists, political scientists, officers who made binding upon central rules and recommendations for work in these laboratories in order to prevent accidents and abuse. Thus, genetic engineering with their abilities to create organisms with completely new properties actualized possibility of using biological weapons in a possible war. Using genetic engineering for diagnostic purposes is improving the ability of detection of the used potential biological weapons.⁸

Namely, it is now possible to produce very cheap “perfect” weapon that the enemy would inflict huge casualties, while the tangible property was spared destruction. Own people were to be protected by vaccination or new chemotherapeutic agents known only by the aggressor. It is clear that the possibility of protection against NBC weapons requires a mastery of technology rDNA.

Convention on the prohibition of biological weapons in 1972. prohibits the development, production and storage of biological weapons and poison, and if this convention is acceptable for the twenty-first century? Of course not. War for a genetically altered bacteria or viruses is much greater danger, the possibility of misuse of genetic engineering methods for civilian purposes primarily due to the object and purpose of application and the target of obtaining lethal characteristics of microorganisms used as biological agents. Many features of the bacteria primarily antibiotic resistance, and antigenic changes that can cause errors in diagnosis, and improved production, it is possible to modify or gain by manipulating genes.⁹

The bacteria produce toxins that can be modified to increase the production of these toxins. Toxins produced by animals (snakes) can be produced by the bacteria

8 Carus W. Seath, *Bioterrorism and Biocrimes The illicit Use of Biological Agents Since 1900*. Center for Counterproliferation Research National Defense University Washington D. C. 2001. pp. 3-9.

9 Center for Diseases Control and Prevention- CDC. www.bt.cdc.gov/bioterrorism/overview

entering the toxin genes in bacteria, a way for obtaining such bacteria is essentially the same as the time for the production of natural insulin.

The toxic microorganisms include some bioregulator. These are some related proteins or enzymes in the body co-enzymes involved in the biochemical cycles, and can be used as a physiological state of a body mimic their effects, with symptoms of pain, drowsiness and disturbances in blood pressure. Because of its properties and possibilities of production using genetic engineering methods have become available and interesting for terrorist activities.

TACTICS BIOTERRORISM

To give timely notice and identify biological agents terrorist actions or intentions of the terrorists need to know the methods and means that the attack can be performed. From the moment of action until the first symptoms of this weapon has a delayed effect (incubation period), and bioterrorism can be said that one of the "quietest" forms of terrorism at least in times of terrorist acts.

Regarding the effect of destruction, contamination may last from several hours to weeks following the late effects and symptoms that cause disabling or fatal. The specificity of biological weapons is also reflected in the fact that most of the liquid agents decompose rapidly, although some toxins and germ agents that are too, stable so it takes some time to develop the effect. In contrast to the effects of chemical agents used as biological weapons are unpredictable due to greater susceptibility to the influence of temperature, and weather conditions and the height from which the moste, as well as terrain. At the sametime the manner in which an agent will be used in the attack determines the degree of danger to the victim. For example: the same disease is more deadly, as a dry fine powder that can be spread and inhale over a wider area than if it were expanded in the form of agents in liquid form.

Weapons and agents in the event of an attack bioterrorism identifiable because for such a handy means of warfare used by the transfer – bottles, umbrellas, mailing envelopes, and is not ruled out suicide or the use of man. For the tactic is necessary to know the characteristics of biological agents, pathogenicity, route of transmission, resistance to environmental factors.

The success and the result of an attack depend on the area where the attack is done if it comes to outdoor or indoor space. From the standpoint of the terrorist tactics of the most interesting places are subways underpasses, indoor sports hall with air-conditioning, large shopping centers, as well as buildings with separate ventilation. A major problem is the inability to forecast that the new agent terrorists could use.

The diversity of biological weapons to predict how it will be used, the main problem in detecting and responding to terrorist threats. Secret testing of agents in public places because of the incubation period has a delayed effect on people, so for example it can happen that the first victims identified medical personnel outside of the attack. The first symptoms of the victims may refer to a type of disease to the gradual manifestation of symptoms has been a true diagnosis, which indicates infection.

During that time, medical personnel should not conclude that the attack took place, to identify the agent and prevent further casualties. The potential damage caused by bioterrorist attack, depends on the time required for distribution of antibiotic drugs or vaccines. The extent to which preventive measures respond to threats of bioterrorism attack carries depends on many factors. One factor relates to how much the humans developed an awareness that an act of bioterrorism could happen. Starting from the knowledge that the probability of attack un known and

whether the attack will happen. When there is awareness of the possibility of attacks following bioterroristic factor contributing to the success of preventive measures, is to prepare a defense. It implies the use of public health services and includes medical supervision, the effectiveness of medical services and the creation of necessary supplies of medicines. Willingness leading third factor, which is that public health and medical community take the lead against bioterrorism.

In case of the knowledge that there is threat of biological attacks and alert to the deadly pathogen will be released in a public place, physicians are the ones who have to recognize and report suspicious cases, public health services must be able to conduct an investigation to determine the time and hour of exposure, size and location of the exposed population to assess the prospects for secondary transmission, and laboratory personnel should be trained and able to identify the biological agent. The problem is more pronounced when the agent during the liberation of infected people show symptoms after a few days or weeks, leading to the danger of smooth spatial spread of infection, as well as the difficulties in accurately identifying those who are exposed to infection.

The product of three factors is the first quarter, which implies the necessity of comprehensive cooperation at local and national level. In order to determine exactly what happened, you must have strong communication network between the initial report of epidemiological and laboratory data to public health services have taken swift action. Center for Disease Control and Prevention should play an important role because of their special expertise in monitoring infectious diseases and public health. The cooperation also includes the need to support state and local plans for preventive measures, provide training at all levels and the development of medical infrastructure to be able to fully and effectively to bioterrorism threats. Without the cooperation of governments, national and local medical community, public security and intelligence agencies cannot talk about a comprehensive fight against this type of threat. The contribution of local doctors for emergency response planning includes the ability to quickly assess the health of the population in the affected areas, the expertise needed to implement surveillance systems for monitoring the health of the population.

Bearing in mind that bioterrorism is a global emergency, WHO, Red Cross, medical and pharmaceutical companies to appeal any State law, which relied on the Convention and international regulations governing the establishment and control of microbiological work and genetic laboratories. In particular, it insists on the establishment of legal regulations that sanction abuse of biological agents weapons and intergovernmental cooperation in this field..

CONCLUSION

Biological terrorism as a phenomenon of modern times is certainly its unpredictability action, determination, zeal and cruelty, is a major threat to humanity today. Bioterrorism is a specific security threat because it is characterized by a combination of high mortality rates, a relatively simple method of secret use. Biological factors as causes of human suffering and pain, disease and mass death followed human civilization from its inception to the present.

The late twenty and the beginning of the twenty first century brings different dangers of misuse of new scientific achievements in the field of biological agents as weapons by terrorist organizations. The diversity of biological weapons and the difficulty in predicting how it will be used is a problem in detecting and responding to such threats.

The number of potential biological agents indicates the need for health care infrastructure is equipped to efficiently and relatively quickly resolve crisis situations resulting from attack by biological weapons especially due to the fact that early detection and timely response is crucial. A comprehensive approach to combat bioterrorism and abuse includes legislative cooperation which is reflected in the adjusted national laws with international laws

However, the best protection of the population of this kind of attack involves preparing the nation to recognize this kind of danger.

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17. www.slocounty.ca.gov/health/publichealth/btprep/biologicalagents.htm.
18. www.bt.cdc.gov/agent/agentlist-category.asp.

THE SIGNIFICANCE OF CRATER FOR DETERMINING EXPLOSION CAUSE IN FORENSIC ENGINEERING

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Abstract: Effects of explosion as a process of rapid expansion of energy through the pressure and heat to the surroundings are often used for terrorist and other criminal activities. There is a need for determination of the cause and responsibility for an explosion in order to punish the perpetrators and this can be done by analyzing the traces that can be found after the explosion. The crater is the most characteristic, recognizable and the most important evidence of an explosion. The significance of the crater lies in the great amount of information that can be gathered through its analysis (the type and the mass of explosive charge that was used, the type of explosive device, the way of initiation of explosive device, etc.). This paper will emphasize the possibilities of preliminary and fast estimation of explosive charge mass that has been used based on the crater characteristics through the review of the existing empirical equations.

Key words: crater, brisant explosive, explosive charge, explosion, forensic engineering.

INTRODUCTION

In accordance with their distribution, diversity and tragic consequences that are left behind, as means of execution, formational and improvised explosive devices have an important place in national pathology and represent the most important *modus operandi*¹ in various forms of criminal acts in the modern world. Those criminal acts are the most serious ones, such as: terrorism, murder, attempted murder, causing serious bodily injuries, causing general danger, aggravated thefts, etc. The perpetrators of these criminal acts use explosion effects for the achievement of their goals. In such a way, the terrorists use the powerful explosion effect (rapid expansion of heat and pressure into surroundings followed by the sound effect) to spread fear and panic among the population in order to destabilize the ruling elite. Because of that, lots of explosions occur under the bridges, inside the subways, shopping centres, sports or concert halls, and other places where people gather. The perpetrators of the criminal acts of murder also use the explosives as their execution means in order to kill a person (for example, by setting the explosive on the surface under the parked vehicle or they attach the explosive to the vehicle's chassis with a magnet, or they plant the explosive in different items that their victim will touch, move, open, etc.). In order to scare a person with the intention to inflict light or serious bodily injuries, the perpetrators use smaller masses of explosive or the explosive charges with weaker characteristics or they place explosives on bigger distances in relation to those spots on which their victim will be. The perpetrators of the criminal acts of aggravated thefts sometimes use explosive to overcome an ob-

1 Aleksić Ž., Škulić M., Žarković M. (2004): *Lexicon of Criminalistics*, Belgrade, p. 185

stacle in order to get to the money or some other valuable items (when an explosive is activated it will create an opening on the wall of some cashbox or safe, or on some other surface). Sometimes, an explosion can occur unintentionally and its consequences can range from causing general danger to serious consequences – loss of life, substantial material damage, etc.

The increasing use of lethal explosive devices as the means for execution of individual crime acts as well as the increasing progress of science and technique, which is, unfortunately, used in the production of these devices, requires the involvement of more subjects in identification of perpetrators and proving of criminal acts. Cooperation between experts of criminalistics as well as of experts from other areas of forensic engineering, physical chemistry, criminology, etc. is more than necessary. Thus, the development of new explosive devices is made with the use of new types of explosives that are regularly produced in military industry or that are produced at home by mixing different chemical substances that individually may or may not be flammable. Development of an explosive device is also made in the sphere of device's ignition and the use of electronic devices (from radios to mobile phones) for that purpose is increasing. Unfortunately, these days, one can find the instructions for making an explosive device on the Internet, and those instructions can be misused.

Criminalistics deals with the identification of perpetrators, detection and proving of performed criminal acts. According to most of the authors, criminalistics can be defined as “the science that studies methods of detection and investigation of criminal acts and perpetrators of those acts, and that deals with the development of strategy for combating crime²”. Namely, in professional literature, one can find that the criminalistics is just a segment of a wider area – forensics (*Forensic Science*).³ The broadest definition of forensics involves the use of science and scientific methods for judicial purposes. More precisely, forensics can be defined as the use of science in the criminal and civil justice.⁴ From the linguistic perspective, forensic science (Latin *forensis*⁵, who is on trace, public, who is serving judicial investigative and proving procedure) has its origin in the name of one square in the ancient Rome – Forum Romanum. On that square prosecutors and defence solicitors spoke about facts relating to a specific case, which is the predecessor to the modern fact presentation done within some judicial investigative procedure. Forensic science⁶ represents the use of natural science (physics, chemistry, biology, etc.) within the legal context. Saferstein defines forensics as “... *the use of science in the area of criminal and civil procedures, which are, within the criminal judiciary system, performed by the police*”, while Mašković⁸ defines criminal forensics as “... *a part of forensic science that is defined as an area where the methods of fundamental and applied science are used for investigation of criminal acts (events)*”.

Continuous progress of science, along with the value and technical importance of material traces in solving criminal acts and events will definitely rise.⁹ Lots of forensic disciplines that are being developed represent the use of appropriate science

2 Simonović, B. (2004) Criminalistic, Kragujevac, p. 3

3 Lee H., Harris H. (2000), Physical Evidence in Forensic Science, by Lawyers & Judges Publishing Co., Inc., Tucson, Arizona,

4 Saferstein R. (2007) Criminalistics: An Introduction to Forensic Science, Pearson International Edition, Prentice Hall, New York.

5 Aleksić Ž., Škulić M., Žarković M. (2004) Lexicon of criminalistic

6 Kolarević D., Forensic science and criminalistics, Science, Safety, Police, no. 1, 2008, pages 121-138

7 Saferstein R., 2007 Criminalistics: An Introduction to Forensic Science, Pearson International Edition, Prentice Hall, New York.

8 More about forensic disciplines in Mašković Lj., 2010, Criminal technique, Belgrade: Criminal Police Academy - electronic optical disc (CD-ROM)

9 Lee H. C., Harris H. A., Physical Evidence in Forensic Science, by Lawyers & Judges Publishing Co., Inc., Tucson, Arizona, 2000, p.2

discipline for the judicial needs. There are many forensic disciplines¹⁰, among which is the forensic engineering, which, among other issues, deals with explosions.

Usually, the term forensic scientist is connected with some scientist in the laboratory who works for the needs of the judicial system. Since such laboratories usually deal with the analyses of traces from the criminal acts/events, which are considered as material evidence once they leave the laboratory, those laboratories are known as criminal/forensic laboratories. Some authors also call them forensic laboratories. Some of these laboratories function within the Ministry of Internal Affairs – Police, some of them are within the Ministry of Justice – prosecution office, some are independent, and that is why there is no universal model in this world with which the functioning of a forensic laboratory/centre could be described. No matter under whose jurisdiction these laboratories function, in all of them there are employees with various educational backgrounds. Accordingly, the forensics can be divided into different scientific disciplines from the areas of natural, technical, technological and even social sciences. In such a way, within a forensic centre there are several laboratories; for example, for chemical and physical examination (it covers the disciplines such as forensic physics, forensic chemistry, forensic geology), for biological examination (forensic biology), ballistic laboratory (forensic ballistics), photo laboratory (forensic photography), laboratory for the examination of documents, toxicology laboratory (forensic toxicology), dactiloscopia laboratory (forensic dactiloscopia), laboratory for polygraph tests (forensic psychology), laboratory for analysis of human voice, laboratory for pathological examination (forensic pathology), laboratory for anthropological examination (forensic anthropology), laboratory for psychiatric examination (forensic psychiatry), laboratory for entomology examination (forensic entomology), laboratory for identification based on dental records (forensic deontology), laboratory for investigation of failures, fire, explosion and analyses of traffic accidents (forensic engineering), laboratory for computer and digital analyses (computer and digital forensics), etc., and the contribution of this paper is within the field of forensic engineering, specifically in the area of resolving the criminal acts in which the explosion was used.

Forensic engineering is the application of engineering principles and methodologies to answer questions of fact. These questions of fact are usually associated with accidents, crimes, catastrophic events, degradation of property, and various types of failures¹¹.

Forensic crime scene investigation is the starting point for the successful use of traces of some criminal act/event in the forensic (criminal) laboratories, but also for the use of information for operational (detective) purposes. Each mistake made on a crime scene has the influence on other activities whose objective is the detection of perpetrator and proving the criminal act, so it is of essential importance that the crime scene is investigated properly.

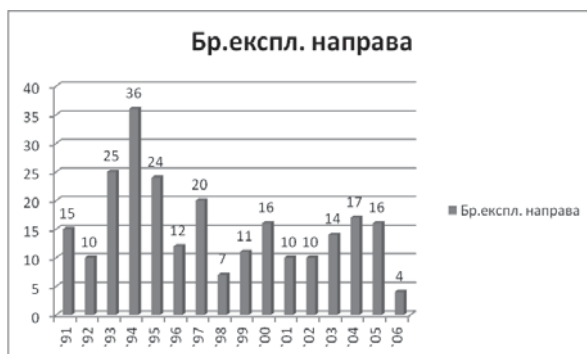
Regardless of the fact that each event for which an investigation is performed is specific, when we deal with the explosion that results in a crater, a review of mutual characteristic for the investigation of such scene of explosion can be made.

The practical use of all researches in connection with the explosion effects, as well as of the explosions with craters, is obvious from the analysis of a number of cases involving the explosion of bombs and explosive devices, as shown in the pictures no. 1, 2 and 3 of this paper. Picture no. 1 shows the total number of cases per year with the explosion of explosive devices on the territory of Belgrade from 1991

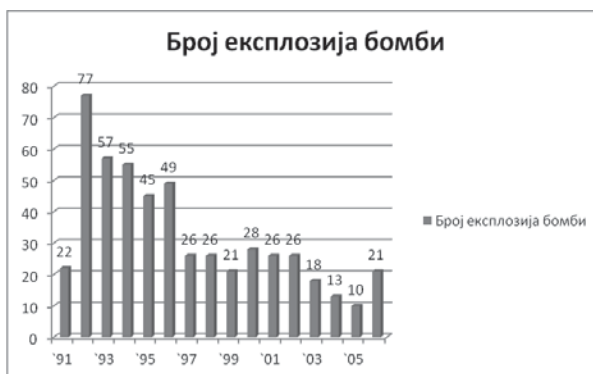
¹⁰ More about forensic disciplines in Mašković Lj., 2010, Criminal technique, Belgrade: Criminal Police Academy – electronic optical disc (CD-ROM)

¹¹ Noon R. (2001) Forensic Engineering Investigation, by CRC Press LLC, Boca Raton, Florida

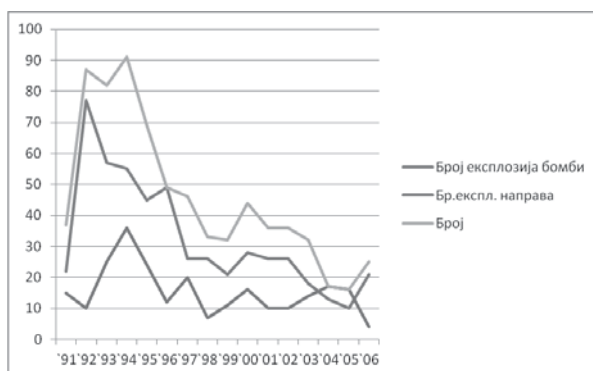
to 2006. Picture no. 2 shows the total number of cases per year with the explosion of bombs on the territory of Belgrade from 1991 to 2006, while the picture no. 3 shows the trend of cases with the explosion of bombs and explosive devices on the territory of Belgrade from 1991 to 2006.



Picture no. 1 – the chart shows the total number of cases per year with the explosion of explosive devices on the territory of Belgrade from 1991 to 2006.



Picture no. 2 – the chart shows the total number of cases per year with the explosion of bombs on the territory of Belgrade from 1991 to 2006.



Picture no. 3 – the chart shows the trend of cases with the explosion of bombs and explosive devices on the territory of Belgrade from 1991 to 2006.

Based on the displayed charts, it is clear that in the period of time when Serbia was in the war environment (during the nineties of the last century), and when the explosive and explosive devices were more easily available, there were more cases of explosions of bombs and other explosive devices. This analysis does not cover a division of cases of explosion according to the purpose (criminal acts of negligence or criminal acts with intention) and consequences (murder, infliction of serious bodily injuries, light bodily injuries or the values of material damage). The trend of explosion cases with the use of bombs and explosion devices shows the decrease compared with the 1990s, but not a subsiding number of cases on the territory of Belgrade, so our opinion is that all the researches in connection with the explosion effects on the surroundings are still very useful and topical.

FORENSIC INVESTIGATION OF AN EXPLOSION SITE

In order to understand forensic investigation of an explosion site it is necessary to start from the etymology of the term – explosion. Namely, the term originates from the Latin word *explosion* that means bang, shot, splashing with the shot¹². When giving the definition for explosion some American authors say that “... *the energy must be released in the short enough time and within small enough volume...*”¹³. According to majority of authors¹⁴ explosion can be defined as a “*rapid release of the large quantity of energy from relatively small volume of the explosive mass in the surrounding space*”. In his book, Kennedy¹⁵ defines explosions as “*gas-dynamic phenomena that, in ideal theoretical conditions, manifest as expanding spherical heat and pressure wave*”. Generally, explosion¹⁶ is “*the process of very rapid physical or chemical change of system that is followed by the transformation of its potential energy into mechanical work*”. Explosion effects have multiple influences on the surrounding¹⁷. Damage after an explosion can result with respect to numerous factors, such as: air blow, creation of crater in the ground, ejection of ground, seismic vibrations, building demolition, and thermal effect of the explosion’s fireball.

Explosion is the process of disintegration of explosive matter, in this case brisant explosive, which creates almost instantaneous gaseous reaction products. Detonation products continue to spread in the surroundings with which they collide, causing the formation of a shock wave. That shock wave is responsible for the victims and damage around the explosion site. Its starting parameters depend on the characteristics of detonation wave (velocity – V , pressure – p and density – ρ) and characteristics of the surroundings through which the wave spreads (density, etc.)

Forensics also deals with the cases of unintentional and intentional explosions, identifying methods of explosion occurrence, as well as the responsibility for the explosion regardless of the fact whether the case is under the criminal or civil jurisdiction. Namely, when an explosion occurs, experts will go to the crime scene (scene of crime officers and other experts) and there, in accordance with the court order, they will conduct an investigation. At first it cannot be said with certainty what kind of explosion that was (chemical or not). Answers to that and all the other questions

12 Klajn, I., Šipka, M. (2007) Dictionary of foreign words and expressions, Prometej, Novi Sad

13 Baker, W.E., Cox, P.A., Westine, P.W., Kulesz, J., Strehlow, R., A. (1983.) Explosive hazards and evaluation, in Fundamental Studies in Engineering 5, Elsevier Scientific Publishing Company, Amsterdam.

14 Lees, F. (1996.) Loss Prevention in Hazard Identification, Assessment Control, Ch.7-Explosion, Butterworth Heineman, Oxford, page no. 5

15 Kennedy, P.M. Kennedy J. (1990). Explosion Investigation and Analysis, Investigations Institute, Chicago

16 Jaramaz, S. (1997.) Physics of explosion, University of Belgrade, Mechanical Engineering Faculty, Belgrade

17 See more in Bjelovuk I. (2005.); Investigation of traces after the explosion of an unknown device, Security, Vol.47. no. 2 pages 302-310,

related to the explosion will be given by an expert – registered court's expert, who, with the authority of his knowledge, skills and experience from a certain area, gives his expertise and opinion regarding the facts that are determined in the procedure. He is actually an expert witness¹⁸. Expertise as an action is defined with the Code on Criminal Procedure of the Republic of Serbia, and it can be performed when it is necessary to have the opinion of the person who has professional knowledge in order to determine or evaluate some important fact (article 113)¹⁹. The investigation of an explosion scene can involve the engagement of experts from lots of areas considering the multidimensionality of the event and various approaches. Thus, the following experts can work at an explosion scene: chemistry experts who are able to give the information about the type of used explosive based on the appropriate analyses methods of samples collected at the scene; forensics experts – engineers give information about the mass of used explosive based on examination of damage caused by the explosion, type of used explosive device, way of explosion ignition, and information about material damage; specialists of forensic medicine give information on victims' injuries; forensic biology experts give information about the possible DNA profile, while dactiloscropy experts deal with traces of papillary lines of the perpetrators, and they may be accompanied by many other experts.

The main purpose of forensic investigation of an explosion scene is to determine the origin, cause and responsibility for the explosion. The origin of the explosion is usually related to the place of explosive initiation. The cause of explosion is the circumstance that led to the explosion. The basic reason for which forensic engineers examine the cause of an explosion and its origin is the investigation of responsibility for that explosion, financial loss and determination of injuries and the number of the fatalities that may happen. Responsibility for the explosion lies in circumstances, activity, mistake and purpose, which are all related to the human factor.

The investigation of an explosion starts with the investigation of the explosion scene, which means the collection of material and personal evidence (various sorts of statements).

It is of vital importance that the explosion scene is "frozen" i.e. secured with the existing methods for securing the conditions found at the explosion scene immediately after the explosion (verbal, i.e. minutes securing, photography securing, measuring and graphical securing, securing by exclusion of traces from the crime scene and casting of imprinted traces).

Research of an explosion is not a simple task and an investigator must be specially trained for that work. This work cannot be done as some additional activity by the police officers, forensics personnel, graduated chemists, military engineers, etc. Explosion investigators must have adequate academic education with wide knowledge on explosives as well as the knowledge of how to investigate an explosion. Also, they must have practical experience in handling explosives and access to the laboratory, as well as capability to transfer this knowledge and conclusions they make in the course of the investigation to legal subjects (lawyers, judges, prosecutors, etc.) using the language that is understandable for all (without unnecessary use of specialized terminology). They must, up to a certain level, be familiar with the legal framework connected with the criminal acts with the use of explosive as item or means of criminal acts performance. Such an expert must make fast assess-

18 Žarković, M., Kesić, T., Bjelovuk, I. Modern tendencies in expertise as the form of international criminal and legal assistance, 2nd international scientific and professional conference Suppression of crime within the international police cooperation, Tara, 2011. pages 29-37

19 Code on Criminal Procedure of the Republic of Serbia, Official Gazette of SRY, no. 70/01 and 68/02 and Official Gazette of RS, no. 58/04, 85/05, 115/05, 49/07, 20/09, 72/09 and 76/10.

ment of each crime scene within his knowledge and experience²⁰. Thus, the expert on explosions – expert with engineering profile must set minimum standards for verification and confirmation of an opinion. There are 4 levels for the expression of experts' opinion, as follows²¹: reasonable level of scientific/engineering certainty; probably true; possibly true and most likely true (it is considered as true).

Formal experts' education is not a condition – many experts on explosion have little or no formal education in the area of explosion. Their expertise is based on many years of experience, which means the work on hundreds and even thousands cases.

During the detonation time, potential energy of chemical explosive is distributed in several different forms within time and space: wave energy, residual energy i.e. energy losses of explosion products, potential and kinetic energy of explosive device fragments, and radiation energy²².

Traces of explosion are the changes that, just like the cause of an explosion, remain at the explosion scene – objects in close surrounding of the place where the device was placed - items, people, animals and plants. The traces can be found either by visual examination or with the use of different optical or other devices (magnifying glass, metal detectors, explosive detectors, portable x-ray devices, etc.). Considering that the explosion has multiple effects on the surroundings of the explosion site we distinguish traces as the consequence of heat, brisant or destructive effect of explosion, effect of the shock wave, pieces of explosive device, and micro traces of explosive substance on the pieces that were in direct contact with the explosive. As the consequences of destructive explosive effect on the surroundings of the explosion site, a crater is formed on the surface; there are openings in walls or tearing of construction elements, rejection of items and material. Based on these characteristics, the direction of the shock wave can be determined. The biggest demolitions are found in the path of the shock wave. As the consequences of the heat effect of the explosion, in its centre and in its immediate surroundings there are traces of melting and deformed plastic, metal and other materials, metal discoloration, burned paper, wood, fabric, etc., so that burned or scorched flammable items could be found. If there were living beings in that place, there would be injuries in the forms or burns on the human or animal skin or burned hair. As the consequences of the explosion's thermal effect, there can be a fire and then some traces could be destroyed completely. In that case, upon the arrival on the scene it is necessary to determine if the fire happened first and then caused an explosion or vice versa. In such a case the attention must be paid to the witnesses' statements. Any damage caused by the shock wave are found on its path, which, besides the openings and craters, would include demolished walls and objects, damaged concrete constructions and plaster, broken window and door frames, moved or turned items and objects, deformed and ruptured items, broken glass, etc. Pieces of the explosion device can also be found at the scene of an explosion. Depending on the device that has been used, pieces of formational or improvised explosive device such as lighter or its pieces, pieces of burned or unburned fuse, parts of detonation caps, clock mechanism, pieces of circuit components, pieces of explosive packaging, etc., can be found at the scene. Traces that originate from the fragments of an explosive device (consequence of the chipping effect) are very important from the forensic point of view since based on them it is possible to determine the type of the explosive device that has been used and the ignition method. Sometimes it is enough to have even the

20 Yallop H. J., Kind S. S., *Explosion Investigation*, (1980), The Forensic Science Society, Harrogate, England and Scottish Academic Press, Edinburgh, Scotland

21 Kennedy P. M., Kennedy J. (1990) *Explosion Investigation and Analysis – Kennedy on Explosions*, Investigations Institute, Chicago, Illinois,

22 Mohantu, B. (1998) *Physics of Explosion Hazards*, in *Forensic Investigation of Explosions*, Beveridge A., p.15

smallest piece in order to make a conclusion about the type of an explosive device, especially if that is a formational device. Explosion pieces spread radially and most of those pieces can be found at the centre of an explosion – in the crater or in its surroundings, but also on the surfaces that are normal to the direction of the pieces' spreading. Fragments of the explosive device's body or of the ignition device can be found at the bottom of a crater, since the detonator is firmly stuck into ground when the explosion device is placed. If, at the scene of an explosion, there were injured or dead persons, it is possible to calculate the mass of the explosive used for that explosion based on the damages on their bodies (those damages are determined by a forensic pathologist after a forensic examination or an autopsy) and the distance on which that happened. Traces that occur on human and animal bodies in the shape of injuries are caused by the explosive device and its parts – pieces (shrapnels, pellets, cubes, sticks, etc.) that were released by the explosion of some lethal device (bomb, mine, grenade, improvised explosive device, etc.). In general, all of those are mechanical injuries in the form of lacerations, cuts, small punctures, burns and injuries caused by the shock wave of gaseous products for detonation products (the so-called blast injuries) depending on the spot in which a person was situated in relation to the explosion centre. The traces that are secured from the scene are then examined in a scientific or forensic engineering laboratory.

Many traces – explosion consequences, which can be used in the identification of the explosion cause can be scattered over a large area and, at the same time, they are very unstable, while the damage is more permanent. Yallop²³ speaks about the importance of damage after an explosion: "Examination of damage is a general starting point for investigation of an explosion cause". Damages from a contact explosion of a condensed explosive charge can appear in the form of various mechanical damages with an obligatory characteristic trace – a crater, which represents the explosion centre and the spot where the explosive device was placed. The crater has an important role when determining the centre of an explosion, since it emerges when an explosion occurs on the ground, just above or below it²⁴. The explosion centre and its close surroundings (approximately 7 meters, depending of the mass and type of the explosive used) contain the most significant traces²⁵. During the preliminary examination of a crater, explosion traces can contain important information i.e. characteristics of an explosive device²⁶. Craters can be the source of device fragments and residue of unexploited explosive substance.

During the performance of a forensic investigation at an explosion scene, in relation to the use of other explosives, the use of brisant explosive can be recognized by the characteristic blast effects that are manifested with intensive damages caused by the pressure. That force originates from the movement velocity of chemical reaction front through the unexploited explosive, which is greater than the velocity of sound. The characteristic way in which this pressure acts on close surroundings is known as explosive brisance²⁷. The brisant effect of a shock wave is dominant explosion effect on its immediate surroundings, especially in cases when the explosive device has no jacket, which is the topic of this paper. The explosion

23 Yallop H. J., Kind S. S., *Explosion Investigation*, 1980., The Forensic Science Society, Harrogate, England and Scottish Academic Press, Edinburgh, Scotland, p.40

24 In the case when there is an height of burst which is big, it can be explosion without crater – so called camouflet. More about camouflet in: Г.И.Покровский, *Взрыв*, (1980), Недра, Москва.

25 Korajlic, N. (2009) *Criminalistic methods of discovery and clarifications of explosion proofs*, Sarajevo, p.144

26 Baker, M.T. Winn, J. M. *Evidence of Explosive Damage to Materials in Air Crash Investigation*, in *Forensic Investigation of Explosions*, Beveridge A., 1998:417).

27 Strobel R. A. in *Recovery of Material from the Scene of an Explosion and its Subsequent Forensic Laboratory Examination – a Team Approach*, in *Forensic Investigation of Explosions*, Beveridge A., 1998:107

shock wave causes demolition and crushing of immediate surroundings. Explosive brisance is the measure of its power. Explosive brisance is equal to the velocity of explosive decomposition (that is the velocity at which the explosive releases its energy).

Chemical reaction of explosive decomposition lasts 10^{-6} – 10^{-8} s, high temperature is created as well as the pressure that is several thousand times bigger the atmosphere pressure. In the case of chemical explosion almost 100% of released energy is transferred into the shock wave energy. On detonation of military brisant explosives (TNT is a typical representative) the shock wave has a dominant effect on causing damages.

Explosions of brisant explosives create huge pressure forces and, as such, they cause great movements of massive items situated in the path of a shock wave, as well as deformation and demolition of surrounding objects. The main cause of explosion rupture is in the created shock wave during the reaction of explosive charge decomposition when a huge quantity of gaseous products is created in a short time interval. The shock wave spreads rapidly from the explosion centre radially in all directions. The wave front travels through the surroundings and it contains the most of the released explosive energy and that is the explosive wave²⁸.

Above-ground explosions can be at the zero “depth of entrench” where the centre of an explosive charge is on the ground surface or above it. When such a charge is initiated, the shock wave is coupled to the ground. Such a wave demolishes the ground and ejects most of ground material into the air. Soil, compressed and in plastic current, has an attenuation wave that goes into the compressed zone with partial velocity of reverse direction and backwards ejection of more material. Some of the scattered material falls back into the hole leaving a crater behind. Soil that falls back into the hole also contains sediment that is encumbered in comparison with the upper walls and edge²⁹.

The actual area of ground surface can sometimes appear to be a “perfect reflector” but in more realistic situations the surface explosion leaves a crater that is related to the energy scattering³⁰.

The brisance degree in which the explosive influences the surroundings is connected to the raising velocity of explosive decomposition.

The research on explosion effects on surroundings started with Hopkins at the beginning of the 20th century. His experiences led to the discovery of “scaling law” that is still the basic part of the analyses of explosion effects on the structures. Knowledge is stored in government archives and serves for testing weapons and other war assets. Lately, the results of laboratory testing and important technical reports were published by American military services. Many conferences were held on the same topic, but the collections of papers from those conferences were not widely distributed.

The topic of this paper is the crater as a characteristic trace – the consequence of the condensed charge explosion which emerges at the contact spot of an explosive device and ground surface, and not as a consequence of the impact of some of its fragments after the scatter that happened due to the explosion.

28 Henrych J. *The Dynamics of Explosion And its use*, Amsterdam 1979

29 Cooper, P. *Explosive's Engineering*, p.421, Willey-VCH, New York, 1996

30 Szuladzinsky G., (2010) *Formulas for mechanical and structural shock and impacts*, CRC Press, Boca Raton, page 560

CRATER AS AN EXPLOSION TRACE

A crater emerges as a consequence of brisance effect of an explosion on its immediate surroundings. Namely, the explosion effect on the surroundings is determined by the movement amount (pulse) that is given to the surrounding particles as a result of detonation products³¹.

When an explosion occurs on the ground surface or just above it, a pressure wave is created that compresses surrounding space. The explosive wave spreads through the air and through the soil³². On that occasion it destroys all that exists in the way of its spreading. The biggest destruction effect takes place in the most immediate charge surroundings because at that moment the pressure and specific energy of detonation products are still large enough and they can cause rupture and crushing of the environment. The blast effect is determined by the movement quantity that is given to the surrounding particles as a result of the impact of gaseous products. That momentum is equal to the pressure force pulse I [$kgms^1$].

$$I = \int_0^t F(t) dt \int_0^t F(t) dt \dots \dots \dots (1)$$

where $F(t)F(t)$ is the change of pressure force in time unit.

A crater emerges as the result of destructive i.e. brisance effect of an explosion. According to Radić V., brisance effect of an explosive is limited to the “so called frontal part of full pulse i.e. to the work of detonation products limited with the decrease of pressure in a short time interval (from detonation pressure - p_d to some sufficiently high pressure when the brisance effect of an explosion ends”³³.

Detonation pressure is calculated with the use of following equation:

$$p_d = \frac{\rho_\varepsilon D^2}{4} = \frac{\rho_\varepsilon D^2}{4} \dots \dots \dots (2)$$

where ρ_ε ρ_ε is the density of explosive charge [kgm^{-3}], and D is the detonation velocity [ms^{-1}].

Looking at the equation (2) it is clear that the explosive brisance is linearly proportional to the density of the explosive charge, while it is quadratic proportional to the detonation velocity.

The crater will always emerge if there is a contact between the explosive charge of brisant explosive and solid environment (obstacles to the spreading of a shock wave). The primary crater is usually the surface in contact with or near to the explosive charge. Secondary craters are formed when the explosive generates missiles which penetrate an object, such as a piece of furniture, wall, ceiling, and/or a vehicle floor³⁴.

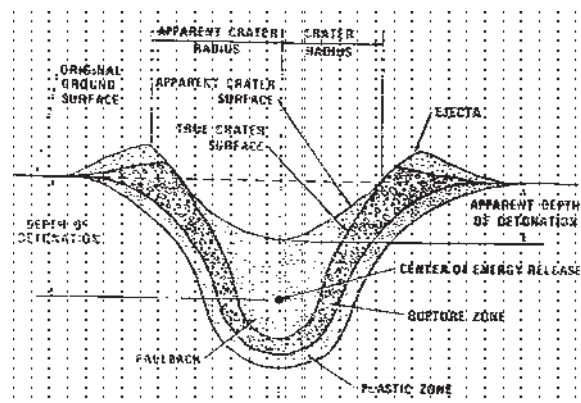
There are certain confusions among the researchers when it comes to definitions and terms in creation of a crater that would imply the definition of border between crater and natural structure, as well as what does the “crater size” mean.

The word crater has its origins in the Greek word *crater* that means cup, mug, 1. funnel opening at the top of a volcano, volcano's crater; 2. deep hole in the ground

31 Jaramaz, S. (1997) Physics of explosion, University of Belgrade, Mechanical Engineering Faculty, Belgrade,
 32 Bjelovuk I.D., et al., Estimation of explosive charge mass used for explosions on concrete surface for the forensic purpose, Sci. Justice (2011), doi:10.1016/j.scijus.2011.07.003
 33 Radić V. (2011) Hazardous substances, Belgrade, page no. 100
 34 Bjelovuk I.D., et al., Estimation of explosive charge mass used for explosions on concrete surface for the forensic purpose, Sci. Justice (2011), doi:10.1016/j.scijus.2011.07.003

that emerges after a bomb explosion, fall of a meteorite, etc.³⁵. Traditionally, in the Russian language there are two terms, *воронка* (*voronka*) that is translated as 'funnel'; and *кратер* (*krater*) that is translated as 'crater', which are respectively related to the cases of explosion of chemical explosives and nuclear explosions, as well as the high velocity collisions. The English language adopted just one term, *crater*. Since a crater usually emerges at the centre of an explosion scene (in cases when a brisant explosive is used) it represents a very important trace. With the ejection of surface particles into the air the true crater is created first. As the particles fall back down into the hole, because of the gravity, the apparent crater is created. It can happen that the crater is not visible at first glance, since the explosion scene is often covered with ruins.

The look of the crater with its characteristics is shown in picture no. 4, which is supported by most authors.



Picture no. 4 – A typical explosion crater³⁶

When brisant explosives are initiated in contact with a surface, they eject part of that surface and create an explosion centre. Military brisant explosives such as TNT, PETN, and hexogen leave visible black trace in the explosion centre (usually in a crater) that indicates the presence of carbon in decomposition products due to contents of organic components and their negative oxygen balance, which is not the case with civilian explosives.

When an explosion takes place in contact with the ground surface, or just above or below it, a hole that emerges is usually described as a crater. For a forensic expert the crater found in the surface at an explosion scene holds a great potential. As previously said (Yallop, H.J., 1980), "... the crater size depends on the location of explosive charge in relation to the ground, type of ground and the type and mass of used explosive."

The crater situated in the explosion centre is a characteristic trace of an explosion. As the point of beginning of investigation of an explosion scene, the crater is a place where a large quantity of information about that explosion can be found (based on the samples taken from the bottom and the crater edge, one can learn what explosive was used; based on the device fragments one can get information on what type of device that was, as well as on a possible manufacturer; from biological traces found on fragments one can get DNA profile, blood type, fingerprints, etc.).

35 Klajn, I., Šipka, M. (2007) Dictionary of foreign words and expressions, Prometej, Novi Sad, page no. 668

36 Source: Cooper, P. Explosive's Engineering, Wiley-VCH, New York, 1996 page no. 421

Namely, if the explosive charge was placed at the great depth under the ground surface, the soil above the charge and its mass will disable any manifestation of explosion at the ground surface. When an explosive charge is closer to the ground surface (charge mass is smaller than the critical mass with which the crater will not form at all) the crater that is formed will be shallower and wider. Charges placed above the ground surface create relatively shallower and narrower craters than those created by the similar charges placed at the surface, and there will be no craters above the critical height.

Ground type affects to the crater size, so the explosion at a soft and slack ground creates a bigger crater.

The type of explosive used affects the size of the crater, so some low brisant explosives create bigger craters than high brisant explosive of the same mass if placed at a bigger depth, due to their characteristic – explosive gas, which is not the case in explosions at the ground surface when the low brisant explosive can detonate leaving little trace on the surface it has had contact with.

Besides the above mentioned factors, the crater size depends on the way in which the explosive charge was placed in relation to the ground i.e. the contact surface of an explosive charge and ground, shape of that charge and the initiation spot.

Most information on the crater emerging on the ground surface after explosions, available in professional literature, is based on experimental data. From the forensic point of view, the data about the type and mass of used explosive is of great interest because, among other things, it can indicate the perpetrator's intention. Namely, if the explosive mass used was big it means that the intention was to cause more casualties and material damage (for example, criminal acts of terrorism, sabotage, general danger, murder, serious bodily injuries, etc.). The method of mass estimation that is based on crater dimensions can be used to test other methods used for the estimation of explosive mass. Based on the crater dimensions, the shape and dimension of the explosive charge can be estimated, and this in turn may indicate the supply source, since explosive charges are mostly produced in accordance with standard procedures with certain characteristics within the military industry.

Craters can be the sources of fragments of used explosive devices. If the explosive is inside a casing, its pieces will scatter radially. If the crater emerges in the soil or some other soft material, its fragments will penetrate the crater bottom. Due to this, after the preliminary crater examination, photographing and sampling for chemical examination, that crater should be excavated and the soil must be searched in order to find primary device fragments.

REVIEW OF EQUATIONS THAT ESTABLISH RELATION BETWEEN THE MASS OF USED EXPLOSIVE AND CRATER DIMENSION

There are lots of equations in the professional and scientific literature that give the relation between the mass of used explosive (along with the characteristics of the surface on which the explosion took place) and explosion effect. Since the topic of this paper is the crater that emerged as the consequence of brisance effect of the explosion, the equations here are those that establish the relation between starting conditions (characteristics of surface and used explosive) and effects of surface explosion in the shape of a crater (crater volume, diameter, radius, height and coefficient).

Relations between the cause and effect of the explosion of brisant explosives on the surroundings, used for forensic purposes in providing a fast estimate of used explosive mass, usually indicate equation between the explosive charge mass and volume i.e. the crater dimension. Thus calculations related to the creation of crater were made by *C.S. Robinson* in 1944 and *V. J. Clansey* dealt with this in 1972 and 1977.

Empirical equations that are used for calculating the crater dimensions that emerged from dynamite explosion at the surface with usual (average) characteristics are:

$$- V = 0,4Q^{8/7} \text{ (Olsen equation)} \quad (3)^{37}$$

where V (ft^3) – crater volume,

Q (lb) – mass of used explosive charge

Later on, in 1987, when *V. C. Marshal* used the relations by *C.S. Robinson* and *Olsen*, he created the following equation:

$$- D = 3 \frac{V^{0,5}}{h} 3 \frac{V^{0,5}}{h} \text{ (Marshal's equation)} \quad (4)$$

where D – crater diameter (m),

h – crater height (m),

V – crater volume (m^3)

Later on, *V. C. Marshal* assumed that the crater height is equal to the half of the crater diameter ($h = D/2$) and in that case the equation (2) becomes:

$$- D = 6V^{0,25} \quad (5)$$

Assuming that the crater volume is proportional to the cube of the crater radius ($V \sim r^3$) and taking into consideration equation (1) it can be said that $r \sim W^{1/3}$.

In professional literature the following equations can be found that give us the relation between the mass of used brisant explosive and crater dimensions:

$$- m \sim D^3/16, \quad (6)^{38}$$

where m is explosive mass [kg], and

D is the crater diameter [m].

$$- d = (0.8 m/kg^{1/3}) (W)^{1/3}, \quad (7)^{39}$$

where W is the explosive mass in equivalents [kg] THT, and

d is the crater diameter in [m].

$$- V = kW^{7.14} \quad (8)^{40}$$

where V is the crater volume,

W is the explosive mass and

k is the constant.

Szuladzinsky gives equation for the calculation of used TNT explosive mass in the function of the visible crater diameter as follows:

$$- M_c = p_2 d_c^2 + p_1 d_c + p_0; \quad (9)^{41}$$

where M_c is the mass of explosive charge and

d_c is the diameter of a visible crater.

37 Lees, Frank, 1996. Loss Prevention in Hazard Identification, Assessment Control, Ch.7-Explosion; Butterworth Heineman, Oxford, crp.536

38 Girard J. E. (2008): Criminalistics, Forensic Science and Crime, Jones and Bartlett Publishers, Massachusetts,

39 Noon R. K. (2001). Forensic Engineering Investigation, Boca Raton CRC Press

40 Yallop H. J., Kind S. S., Explosion Investigation, (1980), The Forensic Science Society, Harrogate, England and Scottish Academic Press, Edinburgh, Scotland

41 Szuladzinsky G., (2010) Formulas for mechanical and structural shock and impacts, CRC Press, Boca Raton Str 684

Marks p_0, p_1, p_2 are used for soil coefficients – dry sand, dry sandy clay, wet sand, dry clay, wet sandy clay and wet clay.

The relation between the radius of the visible crater $r[m]$ and the explosive mass was noticed by Merrifield, too:

$$r[m]=kM^{0.33} \quad (10)^{42}$$

where k is coefficient, and

M is explosive mass.

Boreskov, Vlasov, Pokrovskii, Kinney and Cook gave equations (11)-(15)⁴³

$$m_e = 38 \kappa_1 h^3 (0,4+0,6n^3) [kg] \quad (11)$$

where κ_1 is coefficient depending on the explosive charge,

h is the crater height,

r the crater radius, and

n – the crater coefficient.

$$m_e = 2pr u_{kr} r^3/100 \quad (12)$$

where r is the surrounding density,

u_{kr} critical velocity needed to crush the surrounding and

r the crater radius.

$$m_e = 0,02r^3 g_{EM} \quad (13)$$

where r is the crater radius and

g_{EM} is explosive density.

$$m_e = 0,032r^3 [g], \quad (14)$$

where r is the crater radius.

$$m_e = 0,132 F (r^2h)^{0,877} [g] \quad (15)$$

where r is the crater radius,

h is the crater height and

F is coefficient.

In the above listed equations there are mostly sizes – crater characteristics (volume, diameter, radius, height) and explosive characteristics (density, mass of used explosive, and critical velocity needed to crush surroundings) while surface characteristics are mostly given through the values of appropriate coefficients.

DISCUSSION

Thorough knowledge of physics and effects of an explosion on its target is the prerequisite for adequate procedures on an explosion site, and the ensuing forensic analysis that has the aim to determine the cause of an explosion – the determination of the type of an explosive device that was planted, type and weight of the explosive used in perpetrating a criminal act, the identification of the person/s who made the device, the identification of victims of the attack, as well as the assessment of the damage⁴⁴.

⁴² Merrifield R., Fire and explosion hazards to flora and fauna from explosives, Journal of Hazardous Materials A74_2000. 149–161

⁴³ Bjelovuk, I. (2005), Forensic trace characterization of brisant explosive effects on surface and surrounding, MA thesis defended at the Faculty of mechanical engineering, Belgrade University.

⁴⁴ Žarković, M., Bajagić, M., Bjelovuk, I.: Criminal Investigation Procedures on the Bomb Scene in the Case of Suicide Terrorism Act, Proceedings of the conference "Policing in Central and Eastern Europe – Social Control of Unconventional Deviance", Ljubljana, Slovenia, 22-24 September 2010, p. 497-521

Relatively simple equations that do not request the knowledge of large quantities of information and previous measurements are used when estimating the explosive mass for the needs of the court. The equations (1)-(13) that establish the relations between crater dimensions and mass of used explosive the explosion of which resulted in a crater have been obtained from experimental data, so these are empiric equations that are appropriate for certain experimental conditions. These conditions never perfectly match the conditions in which certain criminal act are performed and in which the explosion effects occur. That is why the use of these equations (designated in this paper by numbers (1)-(13)) means that one must predict certain variations when using them for the forensic estimation of explosive mass based on demolition effects i.e. crater dimensions. These variations depend on the type of the used brisant explosive (that will be seen from the spot test reaction at the scene or the laboratory analysis) and on the characteristics of surface on which the explosion took place.

CONCLUSION

The crater is a trace that almost always occurs in the case of explosion of some brisant explosive charges when the explosive is placed in the ground, placed at the ground surface (case of contact explosion) and when it is placed at little height values above the surface and above the critical value. As a trace, the crater is recognizable and easy to spot at some explosion scenes. The crater size depends on the location of an explosive charge in relation to the ground, type of ground, type and mass of used explosive, the way in which the explosive charge was placed in relation to the surface, geometry of the explosive charge and the place of initiation. From the samples taken from the crater bottom and edge, it can be determined what explosive was used based on momentary reactions, as well as on samples analysed in a forensic laboratory by means of chemical analyses (thin layer, gaseous or liquid chromatography, infrared spectrophotometer, etc.). Data about the type of used device and possible producer can be learned based on the fragments of the used explosive device depending on their damage degree. The DNA profile of the person who was in contact with the device can be extracted if there are traces of blood, sweat or papillary lines, etc. on the fragments, provided that the concrete piece of the device has not been burned (high temperature destroys biological traces).

From the above mentioned it can be concluded that the crater is a very important trace of an explosion from which one can determine the explosion cause, and define material damage and responsibility for that explosion, which brings about the appropriate punishment. Information about the value of the used explosive charge mass, for which the information on explosive type is needs, is useful for the court for determination of perpetrators intentions to, with the use of explosion effect, commit criminal act of terrorism, murder, serious bodily injuries or general danger. Information on how the explosive was initiated at the explosion scene can provide the clue about the used device, but also the skills that are specific just for certain people, and in this way the number of suspects can be decreased. Information on type of the used device can imply the supply source.

Although the empiric equations (3)-(15) are very simplified and they do not contain details on soil characteristics, they are usable in forensic practice and can be used for preliminary estimation of the explosive charge mass, based on crater dimensions, having, of course, the previous information on the type of used explosive.

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CRIMINAL RESEARCH OF TAX EVASION AND MONEY LAUNDERING

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Abstract: Tax evasion and money laundering crimes belong to financial crimes where there is a relationship between tax evasion as a predicate crime and money laundering and other proceeds as a process of legalization of money subject to criminal tax evasion. These two crimes are usually carried out by organized criminal groups of offenders with prior criminal purpose and certain specified ways, methods and means of criminal conversion. Criminal cases are usually complicated by the involvement of multiple perpetrators of the criminal act as responsible persons in legal entities, and in behalf of legal persons, by executing a series of criminal behaviour with elements of falsification of business documentation in order to fully or partially avoid tax liabilities to the State, and divert money to other purposes. The process of discovery, clarification and provision of evidence is a complex process of combining multiple operational tactical criminal ways, methods and means in order to clarify the crime situation and provide evidence of committing tax evasion and other crimes with elements of abuse and frauds. But the research process according to the new concepts of conducting law enforcement investigations should be directed to providing information and supporting materials where and how money derived from predicate acts is diverted, in order to provide supporting materials to money laundering and other proceeds of the offence as the second degree crime. Providing evidence of crimes committed and evidence of criminal proceeds are legalized under the jurisdiction of several state organs - law enforcement agencies. Through cooperation, coordination and exchange of information, they should clarify the criminal situation and allow the courts, despite the underlying conviction of the perpetrators of crimes, to impose a measure of confiscation of criminal proceeds, which will deliver a clear message to criminals that the crime does not pay.

Key words: tax evasion, money laundering predicate offence, criminal situation and confiscation.

INTRODUCTION

Financial crime throughout history has changed forms, but one of the earliest manifestations is tax evasion, where perpetrators by violating legal regulations appropriated cash for taxes or contributions, or diverted it for other purposes, and were obliged to calculate and pay the costs of the state budget. Criminal actions are partially or complexly aimed at evasion of taxes or other contributions, and perpetrators falsify business financial documentation in accordance with legal regulations they are obliged to lead. Criminal actions in this crime are with elements of fraud and forgery, but it makes sense that the perpetrators of animosity cash income are going to use it for other purposes, mostly personal enrichment, investments in other businesses and so on, and this legalize criminal offenders gained animosity tax money and perform a secondary crime that has elements of money laundering. Who are the perpetrators of these criminal acts, whether there is an organization,

a manner of organizing the perpetrators and patterns and forms of execution of these two crimes of tax evasion that has the role of the predicate offence and that the existence of the secondary crime with elements of money is a challenge to study and provide an adequate contribution to the scientific and professional public. The organization of the offenders, their criminal activity, is a well planned activity where perpetrators use their knowledge and expertise in order to deliver crime and illegal acquisition of criminal proceeds, or personal enrichment at the expense of the state budget.

TAX EVASION

Tax evasion is a crime within the group of criminal acts against public finances, which is directed against the established system of taxes, excises and other relevant contributions. It has the character of evasion which is expressed through the appropriation of funds, which the perpetrator is obliged under legislation to pay to the state budget. Tax evasion is a crime that the offender has performed with the intent and criminal actions aimed at full or partial payment of tax, contribution or other charges provided for by law. Tax evasion occurs in two forms:¹

1. Tax fraud is done by giving false information about the income of the offender, objects or other facts of influence to determine the amount of liabilities.
2. Failure of informing about facts relevant to taxation, or intolerance of compulsory tax return earned income, subject or any other fact of significance for determining liabilities.

Intent to avoid legal liability for the calculation and payment of tax or failing compulsory tax return is an important element for the existence of this crime which is perceived by the criminal actions of the perpetrators. For preparing fictitious documents proving that a full or partial tax is calculated, wholly or partly is not paid refers to intention of perpetrators and criminal purpose, the appropriation of funds that are obligated to pay towards the state budget and that is why they produce or falsify documents.

The object of the criminal - legal protection in this work is the obligations relating to payment of taxes, contributions or any other charges. The tax is part of the profits or assets which the state takes from the individual and legal persons to cover their costs, without allowing the taxpayer having a direct counterpart favour. Contributions are those charges or tax payments, based on the law and paid to the state to meet the common needs in different areas of social services (welfare, health, education, culture, science, etc.).

Giving false information relates primarily to the income of the taxpayer (showing lower revenues or higher than actual costs), or to the objects subject to taxation. False information may relate to other facts that are important for determining the proper amount of the obligation. For the existence of this crime it is irrelevant how and in what form tax return is filed, it can be written or spoken. The work may be performed by indicating the business books that contain false information to the competent authority.

For the existence of crime, tax evasion, it is required that the amount of the obligation is of greater value, and as a qualified form is seen to be if the work is of considerable value at the time of execution of the work. For a criminal

¹ Камбовски В. , Казнено право, Просветно дело, АД Скопје, 2003 година, стр. 374 – 375.

act committed by any forms of criminal action is envisaged criminal liability for legal persons in cases where the act is done on your behalf and on behalf of the entity or its founders and owners. Criminal behaviour has elements of embezzlement, taking certain criminal behaviours with the input of data in the mandatory documentation that a tax is embezzled or intentionally some information is not entered into the data according to business records that an action of contract, or service is taxable, and this is not included in the statutory books of business or legal entity in the tax return which should be regularly submitted to the Public Revenue. Although this act is called tax evasion, by its characteristics, it is a specific form of fraud. This criminal activity is accompanied by other criminal acts carried out as preparatory work for tax evasion such as fraud, falsification or destruction of business documents, but in some cases even the corrupt offences contribute to the execution of tax evasion. It is known by corruption authorizing tax audit and inspection and their selective access, control and inspection, or, by privileging specific not controlled taxpayers who appear in the role of tax misfiring. This is known in the organized crime networks that do not choose means and methods in achieving the goal crime, one of the methods is corrupting tax inspectors and the avoidance of inspections for the proper calculation and payment of taxes, especially with the return of the Value Added Tax not controlling leads to recovery by legal persons who do not need to do the VAT return. The actions are intended so that the laws are played, tax services corrupted, in order to show oneself as good businessmen, and successful people in the country, and the real truth is that they make a fortune at the expense of the State. The tendency to become richer and better is accomplished by the prominent awareness about the raising labour productivity or finding new technologies. But unfortunately for many, improving earnings and the living standard link to crimes which are accomplished through an easy prey and financial results with little effort.²

Tax evasion is criminal behaviour that is executed through numerous forms of action, but without taking any action either. Criminal acts with doing actions consist of preparing fictitious documents that require VAT returns, preparation of documentation for partial calculation and payment of taxes - partly calculated and paid, and part suppressed (partly legal as well as illegal work), concluding contracts for a fictitious service, and the request for refund of VAT and so on. While with not doing, when required annual tax returns is not submitted, and is bound by law all natural person and legal entity who earn income from any activity.

Obligations for filing an application form, or false data contained in it, should apply to legally gain income, property, or any other fact which is of importance for determining the amount of legal obligation. Illegally acquired income or other income, cannot be subject to reporting, because nobody is obliged to report their illegal actions.³

One of the forms of tax evasion is through a refund of VAT, performed in a way companies submit requests for refund of VAT for sales made, or services, through the service calculation and payment and cash withdrawal through the latter company started the business as subsidiary of underlying business or through other firms in cash, and then it fades over indebtedness. The application for the VAT refund is given in cases of import of goods where the taxpayer requests expressed by the alleged sale

² Камбовски В. и Наумовски П., Корупцијата – најголемо општествено зло и закана за правната држава, Скопје, 2002 година, стр. 52.

³ Витларов Т., Репресија и превенција на корупцијата, Штип, 2006 година, стр. 43.

of imported goods at a lower price than imported. "Fictitious" firms are open to be used for tax evasion. They are formally opened to perform certain activities, but basically, the objective is to avoid paying tax or other obligations to the state. With their illegal operations they create problems and cause enormous harm to the state budget. The term "fictitious" is of Latin origin and means devised, false, supervisor.⁴ Tax evasion committed by request for illegal refund of VAT is a problem which nearly all states are faced with, and the manner of criminal planning and implementation through the registration of fictitious entities is almost identical and is practiced in order to prepare fictitious invoices, transfer the money through accounts of several entities of which the last registered for performing activities that are difficult to control⁵, but they are legal entities commonly used for drawing cash without paying the VAT as the ultimate consumer, and all previous legal persons apply for return of VAT, so at the end state remains without estimated tax, which was recovered.

As a mode or manner of tax evasion in the offence of money laundering, an earmarked registration of legal entities is detected that are used for issuing false invoices in order to legalize the merchandise purchased in the black market, and raising funds in cash. There are also used firms and their subsidiaries, both domestically and abroad who are guided by the same persons, where cash on different grounds are transferred from account to account for legal entities with no real economic base that would be derived from their business relationships, and to probe more difficult and impossible to follow the money trail. We can use a mode and non-domestic accounts opened in banks that shift funds through legal entities registered in the Republic of Macedonia and other countries that take money in cash or transfer it to other accounts of legal entities in order to integrate them into the financial system of the country.

MONEY LAUNDERING

Money laundering today is quite widespread, that according to the International Monetary Fund the amount of money laundered annually amounts two to three percent of the total world's annual gross income, 790 billion dollars to 1.5 trillion dollars.⁶ The numbers point out the severity of this problem which affects every country, but is also the global problem, because as money and capital have no borders, criminals seek a refuge to keep their money beyond the reach of law enforcement organs.

Causes of money laundering by criminals:⁷

1. Hiding wealth - criminals can hide illegally acquired wealth to avoid seizure by the authorities.
2. Avoiding criminal prosecution - criminals avoid prosecution by the authorities by moving away or distancing themselves from the illegal assets.
3. Avoiding taxes - criminals can avoid paying taxes on income from assets.
4. Increase profits - criminals can increase profits from reinvestment of illegal funds in businesses.
5. Legitimacy - criminals can use legalized funds to start a business and ensure its legitimacy.

⁴ Sućeska, M, Utaja poreza, Fakultet kriminalističkih nauka, Sarajevo.

⁵ Маринковић Д. , Сузбијање организованог криминала, Прометеј, Нови Сад, 2010, стр. 102.

⁶ Прирачник за спроведување на мерки и дејствија за спречување на перење пари и финансирање на тероризам од страна на субјектите, Скопје, 2010 година, стр. 15 – 16.

⁷ Исто, стр. 18.

Money laundering could broadly be defined as a procedure for concealing the existence, illegal sources and use of revenues resulting from criminal activity. Fraud is the centre of the whole process of money laundering through false disclosure of the properties origin to relevant institutions, as legally and its use as legally acquired incomes.⁸

The offence of money laundering shall enter into the so-called new forms of organized crime, where money or proceeds obtained by performing offences infiltrate in legal businesses, or in the payment system, banking financial and other forms of economic activities. The focus of the impropriety includes the involvement of criminal proceeds or dirty money into legal economic flows.⁹

The harmonization of national legislation concerning money laundering is incriminated in the direction of implementing the provisions of international legal acts that considers money laundering and applies to all criminal activities of offenders who have gained illegal proceeds of crime, or that earlier work may be any crime that resulted in the acquisition of criminal proceeds and assets. Provisions provide that is sufficient to have a doubt about the existence of illicit criminal proceeds and property, in cases where law enforcement authorities are unable to provide sufficient evidence of the predicate offence. The implementation of the provisions of the Vienna Convention of 1988 is important, Strasbourg Convention of 1990 which provides expansion of incriminated money laundering on money and property derived from any kind of serious crime, and the same is envisaged by the FATF recommendations. "Given that the criminalization of money laundering is the final stage of involvement in previous criminal activities and their material result is considered a crime, whether the offender will respond or not for that earlier work is punishable, and the very inclusion in trade of the illegally obtained assets, implicitly means that the previous criminal activity is not filed as long as the offender has received benefit and until he tries to put it into circulation, sale or trade. This claim is fully substantiated by the provisions incorporated in the international documents that distinguish the effects of money laundering or money launderers from the act of doing the offence from which criminal proceeds originate. But, the opportunity for the criminalization of criminal proceeds cannot be rejected."¹⁰

Money laundering is illegal, increasingly used sanctioned activity, forging business- financial documents, or performing other actions so that money derived from illegal activities are shown as legally earned profits from commercial activities.¹¹

Money laundering is a process that takes place in three phases: **placement** - where cash acquired from criminal activity is placed in financial institutions or used for purchasing goods, values or interests; **concealing or transferring** where money is divided into smaller amounts and directed towards other financial institutions or entities and the last stage of **integration** in which the perpetrators enjoy the benefits of their criminal activity. Part of the criminal proceeds is gained through corrupted officials involved in such organizations in which way offenders are enabled to smoothly legalize their business.

Money laundering allows criminal organizations to buy protection for themselves and their profits through corruption, and to consolidate their economic power, entering into the legal economy, thereby creating important link between criminal world and legal society.¹²

8 Бановић Б. , Обезбеђење доказа у криминалистичкој обради кривичних дела привредног криминалитета, Београд, Земун, 2002 г., стр. 152.

9 Тасева С. , Развој на казненоправната рамка на во борба против перењето пари и сикуствата во нејзината имплементација, Македонска ревија за казнено право и криминологија , бр. 1 2009 година , стр. 99.

10 Исто, стр. 102.

11 Мршевиќ З. , Спречување прања новца мерама националног законодавства, ЈРККП бр. 4/92, Београд, Стр.91.

12 Тасева. С.,оп цит. стр. 21.

TAX EVASION AND MONEY LAUNDERING

The purpose of the perpetrators of criminal activities for tax evasion is not only to disguise tax, but also the funds they are obliged to calculate and pay as taxes, they divert in the acquisition of goods and values, but through the application of certain methods of preparation of counterfeit documents and transfer money through multiple accounts of legal entities so that it is more difficult to receive information that the money were derived from tax evasion. In this respect, the perpetrators plan and systematically organize and through pre-planned criminal activities succeed in realizing their idea. For that purpose new entities are registered and responsible persons in legal entities that are willing to take part in "criminal business" are engaged in order to flout regulations and profit from "criminal business".

Money launderers use more patterns for money laundering so as to successfully conceal the criminal origin of the money, and most of the sources correspond to patterns of criminal money. Criminal situations with a link to tax evasion and money laundering use the schemes of registration to false firms, or a combination of several simple patterns. This scheme is simple business - a mask, with the creation of, mask / cover, for business. Usually it is a company which by its nature works with cash. Like commonly used masks, it is firms showing higher turnover than real, mixing the actual revenue with the criminal one and such can be: restaurants, video rentals, parking, car wash facilities, laundry racks, travel agencies, exchange offices, shops for equipment rental, and popular and most used are consulting and management services. The weakness of this scheme is the evidence in the documentation.¹³ Also, as a scheme applicable in these criminal situations is a combination of bank - business and this is one of the basic laundering schemes with elements of fraud which is a kind of a complete cycle of money laundering. This scheme uses components from the two schemes mentioned above, in this case money launderers exploit the good features of the two patterns in order to place, implant and integrate dirty money. The purpose of money laundering is to make an impression that the money originated from a legitimate source. Most of the money appears to originate from legal business and come from a bank where the legal entity - a business company, has an account. A further stage of this process includes registering any further transactions which have been duly certified in bank records in accordance with the rules of bank operations. Money launderers play by the rules of the global financial system, requiring sheltering their money in places where laws provide secrecy and do not require the origin of the money. Another way is dividing money into smaller amounts and transferring it to other accounts of natural persons and legal entities, and searching for a way of extracting and converting the money into other assets - property, cars, precious metals and so on. This scheme can easily be tracked down because of easily available evidence, but it should be found, selected and analyzed in order to have proof of the predicate offence of origin and pattern of money laundering including collecting evidence against a corrupted bank employee who failed to apply banking rules and laws regulating the prevention of money laundering.¹⁴

Money launderers or perpetrators of financial crime with elements of tax evasion and money laundering create types of networks that prevent tax inspectors

¹³ Поопширно, Медингер Ц., Перење пари, водич за кривични иследници, Дата Понс, Скопје, 2009 година, стр. 321- 324

¹⁴ Исто, стр. 328 - 332.

and law enforcement authorities to provide relevant data and information about the crime as well as the evidence for criminal prosecution of perpetrators. We build networks from simple to more complex depending on the power capability and the need criminal money that the taxpayers have to pay on account of the State to avoid it, and money for the tax forward to other targets, most new investment, expansion of business and so on. The perpetrators of this crime are organized and operate according to the rules set by the organizer of the criminal group who builds a criminal network well known as a tax pyramid. This scheme is developed from one centre, or owner of a firm who organizes finding persons who are registered with other firms previous determined criminal idea through to them turning fictional documentation in order to display some trade and payment of tax, so that the return of tax can be required from the State, and the last firm or firms in the pyramid to derive money in cash and are back to the first company - organizer. It is a scheme of criminal tax evasion of value added tax which under the law you pay end users and end users rather than pay the tax to derive money in cash and thus to the state tax is not paid. The involved offenders who are in the role of responsible persons in legal entities - companies that are purpose registered doing it for certain amounts which range from 3 to 5% of the money provided for tax, so instead of legally prescribed 18%, offenders pay 5%, but against members of criminal groups that derive money in cash, 13% of the claim and the state remains deluded. These criminal groups are registered as many of the firms and as founders and responsible persons, chosen, persons who are unemployed and existentially threatened, and this circumstance is that the perpetrators skilfully used to attract a larger number of persons whose name will register firms and work on their behalf and for its own account. The practice shows the existence of organized criminal groups according to the involvement of offenders, the place the pursuits of the crimes resulted and consequently, in the case of unpaid taxes to the state, have the character of international organized crime groups. In fact, a few months revealed a criminal group that operated in the territory of the Republic of Macedonia, acting in its criminal perpetrators from Serbia and Bulgaria, who committed a series of criminal acts with elements of tax evasion, money laundering, forgery of the business documents and criminal association. Offenders have committed the following crimes: in false invoices bringing spurious content as it is made supply of goods or to be made certain services stated value added tax of 18% and invoices are guided by five firms – users of false invoices, that these firms represent input value added tax, which then ground it dwelt with their output value added tax. These firms supposedly made goods or services purchased on the black, with the admission of false invoices in legalized, then sold to other companies and received inflows of funds accounts. Because firms - users of false invoices had the need to purchase other goods (also undocumented black), tidal means of transporting the goods sold accounts of 13 other firms that had an obligation to prepare false invoices with VAT, submit them to the top five firms acting in the payment of cash and assets for VAT, then the responsible persons in 13 firms raised the money in cash, of course, a certain agreed percentage in cash over to the responsible users of false invoices or top 5 firms. In this way the top five firms offset VAT, or seek recovery of VAT by the State and the other 13, although calculated and charged, debtors, against the state does not pay VAT, but money back in cash. The entire criminal operation is legalization of money acquired by purchase and sale of banned goods to tan, and false invoices to show another circulation of goods and services, a process of legalization of criminal money. This criminal money as operations are taxed, but money paid tax recovered by companies rather than pay money for the tax to the state, the draw the of bank accounts in cash and handed them back to those who paid and repatriated tax, so did the offence with elements

of tax evasion, and it is all done by preparing false documentation or committing a series of criminal acts with elements of falsification of the business documents. Because this criminal operation is found to have acted criminally 18 firms through their responsible persons, indicating the existence of an organized criminal group or the existence of grounds for suspicion of criminal association to commit crimes where the victim or damaged state. Organizers of the criminal group were responsible persons from 5 firms detected persons on whose behalf the registered firms and guided in criminal work consisted in the preparation of false invoices, submitting them to the top 5 companies, and then raising the money in cash and return back to the top 5 companies which work for the compensation of 5% of the amount of estimated tax fraud. Crime offenders to makes under the 4 years, and tax inspection was impossible to control the operation of firms for failing to find in the rooms that was completed their registration. The case is detected and solved in cooperation more directly responsible authorities to detect, clarification and evidence of organized financial crime, and international police co-operation, necessary in the process of providing evidence. In this way the perpetrators have gained illegal profit of over 22 million euro.

Another known scheme of practice use pattern of firms registered earmarked for making fictitious invoices and extracting money in cash in conjunction with joint stock companies and contributing through fraudulent conduct, the responsible persons to obtain funds from companies and they use the increasing equity. The organizer of a criminal operation is person responsible legal entity - a joint stock company which will work with fraudulent behaviour decision of Board agreements on market research abroad, management or consulting services to firms who are relatives or firms aided by the organizers in the registration and operation by preparing false invoices based on prior agreement. Certainly the invoice is calculated and the value added tax and shall be submitted to the firm - client service that pays the invoice calculated tax, and then seek return of tax. The second company passes bill to a third company, the fourth and made a series of difficult target detection of crime, the last firm in the series draws money in cash and gives the hand of the person responsible in the first firm, corporation, without pay value added tax as the last user of the role. The first in a series or organizer pays 5% of the amount tax fraud and other money used for the loan of the firm (loan has long been the firm against the person in charge) or purchase of shares from other shareholders in the firm. Criminal money extracted with fictitious documentation stock company return back to the same company, but as money becomes property of the person and present his claim or his money acquired in a criminal manner ready for new investment or laundered money obtained by forging business documentation, fraud and tax evasion. In addition to prominence is a practical example of a crime committed by an organized criminal group suspected of criminal association, tax evasion, forgery business documents and money laundering.

Money laundering schemes are constantly upgrading, money launderers seek shelter for their money and secure way to legalize criminal earned money, but the investigation authorities have a legal obligation to identify knowledge, collect, explore and prove the crime that generated the new elements of the crime money laundering, but also an obligation to ensure, seizure of criminal revenues, money and property with a view to their confiscation.

The connection of tax evasion and money laundering is a complex process which requires research expertise and competence of investigators, but successful investigation of criminal actions, clarification and evidence as the predicate offence or first degree crime, and timely disclosure of the existence of ele-

ments laundering money will enable the timely provision of criminal proceeds and enabling their future confiscation, which is the goal of research on these crimes, but also disabling the offenders and their families to enjoy the fruits of their criminal activity.

INVESTIGATION ON TAX EVASION AND MONEY LAUNDERING

The criminal investigation is actually responsibility of the competent authorities which have police powers: the police, financial police and customs which in criminal situations where there are grounds to suspect that the crimes tax evasion and money laundering and other proceeds are committed.¹⁵

The criminal investigation is developed in specific disciplines or different types of criminal investigation targeted at specific investigations¹⁶ towards a separate group of crimes that have the same or similar crime characteristics.

Criminal investigation is operational, research of the crime problem that has a complex nature and its clarification is a complex procedure which apply more legal action, criminal actions and methods, but includes many authorities who have statutory responsibility for investigating certain economic - financial crimes, all of that it is possible with well organized research, the purpose of research is discovery, clarification and evidence of criminal behaviour and involved offenders through legal procedure in which will be respected human rights and freedoms.

The process of criminal investigation is associated with obtaining initial operational information. Furthermore, the process of the criminal investigation is very important to have tactics of the criminal investigation that Boba¹⁷ defined as, „**tactical criminal investigation is the study of recent criminal incidents and potential criminal activity by examining the characteristics of how, when and where the activity took place so as to assist in the development scheme, to investigate, identify the suspect and close the case**”.

The criminal investigation has several species and for big importance are tactical and operational criminal investigations by applying research and analysis of criminal data and information relating to offenders, manner and place of criminal activity and information indicating the relationship between criminal offenders and specifically performed crimes, and all this with interest to prove the criminal objectives of doers, or acquired through illegal proceeds use through identification of criminal proceeds and assets acquired, which is already the interest of financial investigation. Operational research is specifically planning and taking appropriate legal methods, means and actions in order clarification of the criminal situation and providing evidence.

Investigation of financial crime with elements of tax evasion and money laundering and other crimes committed in the given stack is a complex process that consists in applying the measures and activities in order to detect the elements of criminal offences, identify offenders who are responsible persons in legal entities, clarification of the criminal activity through analysis of a period which is determined depending on the criminal act, usually analyze cyclical periods of one year and an analysis of several related years, depending on the data obtained during the inspection control. The expertise and professionalism are important element in the research process that

15 Чл. 145 од Законот за кривична постапка, Сл. весник на РМ бр. 15/05.

16 Боба Рејчел, Криминалистичко истражување, Нампрес, 2010 г., стр. 62

17 Исто стр. 63.

moves towards the criminal and financial research. The research process to actively participate in the tax inspectors, police and financial police through planned and coordinated measures and actions of action in terms of performance to inspect company documents, finding and securing offenders, providing evidence linking specific crimes committed and determination of properties the perpetrators and certainly criminal intent and criminal purpose. Parallel criminal research initiated and conducted financial research over the flow of money between suspected offenders, or the entrance and exit of funds from their bank accounts.

PRACTICAL EXAMPLE

Example: During the month of December 2003 and January 2004 in the town A and town B, the reported T.D., T.V. and K.M. can for themselves and their businesses, obtain unlawful gains, and simultaneously to avoid paying full tax, after having concluded oral agreement committed the following crimes.

First person, prepared fictitious invoice no. 16 of 10th December 2003 in the amount of 3.2 million, MKD which input spurious data content, as by the firm B, where the responsible person is the first person T.D, as by the firm B, for the firm, where the responsible person is the second person T.V, committed service, market research, also prepared an invoice for payment to the Company A, where although the second person knew about the fictitious invoice on the day 16 February .2004 approved transfer payment of the invoice against the firm B, then the first person on 17/02/2004 with help of K.M in cash and in the name,, material costs", withdrew this paid cash, while keeping for himself the amount of 267 160 MKD, while the remaining 2 932 840 MKD he gave to the second person, who although he knew that stem from a crime, on 18/02/2004 with cash register - no pay 67 input cash in the firms as loan, for daily liquidity, that is released into circulation money derived from K.D.

The second person in the invoice calculated and paid VAT of 18%, but immediately asked for return of VAT. Second person avoided paying VAT in the amount of 448 000, MKD Law on VAT, (Fig. Gazette no. 44/99, 59/99, 86/99, 11/00, 02/01, 21/03 and 19/04,) reduced the profits of his business for an amount of 3.2 million, MKD, avoiding having to pay tax and profit of 564 705 MKD under the Income Tax (Fig. Gazette no. 804/93, 11/01, 02/00, 04/02 and 51/03), while the first person damaged the company to the second the amount of 267 160 MKD, causing damage all along the budget based on the unpaid amount of tax in 1012.841. MKD.

Criminal charges are brought against three perpetrators on reasonable grounds for suspicion for committing a crime, tax evasion, according to art. 279 t. 2 and t.1 and a crime, money laundering and other proceeds, according to article 273 t. 3 and t 1 one of two acts committed in number according to the Criminal Code of RM.

According to the criminal procedural legislation criminal investigation is under the jurisdiction of public prosecutor who coordinated the investigation with direct relevant authorities such as: police, financial police and customs for investigating criminal offences with elements of tax evasion and money laundering, and they have police powers to take measures and activities for discovery, clarification and proof of this kind of financial crime that gets quality of organized crime. But despite these state agencies participating in accordance with legal responsibilities and tax inspection, responsible for determining the type and amount of tax fraud, and detection of type and amount of the tax return based on fictitious documentation, records of completed tax audit is evidence or evidential basis upon which the prosecution authorities to identify other evidence in the process of

proof to link the works with offenders with evidence and disclosure and provision of criminal proceeds acquired. System for investigating financial crime is complex involving multiple operating officers of these authorities who have police powers and tax authority that its investigations work began on the basis of initial findings or information concerning most of the perpetrators, and then proves the crime by providing evidence of its scope and content. Characteristic of financial crime investigation is that usually starts from actors to criminal acts, which differentiates it from classic crime where the investigation is crime against the offender. Highlights are the initial findings and timely taking legal measures and activities, and then lead the investigation data.

Planning as a method to combat contemporary forms of criminality, deals and E Kube, stressing that this struggle can be conducted in two ways: one is unplanned dominated by empiricism and voluntarism, and the second is based on a system, with planning as an expression of conceptual strategy comes to full expression, and the grounds for such planning are based on scientific knowledge.¹⁸

Planning is a dynamic process and aims to choose the most efficient and most economical way to search for crime and criminal - procedural relevant circumstances of the criminal event. Stereotypical approaches to planning can adversely affect the conduct of the proceedings, because a criminal - a planned solution in case you can prove otherwise incomplete as effectively.

Planning is supplemented or replaced depending on the tactical situation. The planning phase begins when the Criminal - operating officer will have general indications of a criminal event, event and continues with the criminal - methodical, forensic - psychological and logical plan. Planning allows you to discover and highlight objective - subjective circumstances of the offence and to determine the responsibility of perpetrators, and to determine future goals of general and special prevention in a planned, programmed and content rich prophylactic activity of elastic and permanent operational character.

“The collected material, moral and psychological clues that through appropriate versions eliminatory methods to strengthen the conviction of the existence of organized criminal attack, an operation starting material for planning a range of operational - tactical measures (especially discrete) and investigative (court) action.”

The successful fight against organized financial crime criminality the necessity of criminal operational strategy in action. Operational crime strategy is not a random set of operational - tactical measures, investigations and special investigative measures, but it is global, comprehensive, or does not exist. Its essence is to raises far more than tactical processing of each individual case and focus on the creation and application of complex operational - tactical measures to combat crime in its entirety, its suppression as a total complex. “Lack of proper operational strategy reflected in the organization (structure of enforcement officers), which knows only by criminological specialization based division of criminal acts and not by groups of cobweb organized crime.”¹⁹

The new crime strategy involves offensive in every respect. Information can no longer be procured by accident. They must be collected systematically before “a” reasonable suspicion of specific criminal acts, and that means within the criminal environment around it. Based on these clues, and even versions of the existence of

¹⁸ Kube E., Planing in der Verbershenkbekan plun anf der Grundlagle wimenchaftlicher Erkenntnisse, Die Polizei, Eisbaden, br. 3/87, str. 77.

¹⁹ Водинелиќ В. , Проблематиката на криминалистичко – тактичките институти – информант, информатор и прикриен полициски извидувач во демократската држава, Безбедност, вонреден број, Скопје, 1993 година, стр. 19.

cobweb crime with elements of abuse must be organized operational - tactical actions to operational actions of police and other state organs such as the Directorate for Money Laundering, Financial Police, Customs and etc.. Who in their jurisdiction have discovery, illumination and proof of organized crime elements of abuse?

Accordingly, new strategies for prevention of money laundering at the national level a system of prevention of money laundering in order through the application of appropriate measures financial and non-financial institutions (entities) engage in timely detection of criminal behaviour with elements of money laundering.

Investigation of financial crime with elements of tax evasion and money laundering in the jurisdiction of several state agencies and institutions that planned and coordinated according to legal provisions and act in order to detect, clarification, evidence, and prevention of money laundering. This system is complex and despite the law enforcement organs in it especially the preventative plan, in the prevention of money laundering, emphasis is put on measures and actions which by law should apply to entities which are financially and non-financial institutions through which criminal proceeds are placed. And this is the first stake in the system for preventing money laundering, and the second pillar are Financial Intelligence Units (FIU), and according to them subjects should submit information on financial transactions over 15,000 euro and all suspicious transactions, and the suspicious is determined upon pre-defined indicators.

Investigation of money laundering arising from tax evasion is the responsibility of the relevant institutions directly, but in this process consisted of measures and activities for criminal investigation which aims at providing the evidence arising from reasonable doubt of criminal deed tax evasion and that is tangible evidence or documents. Often it invoices receivers, receipt and a charge for refund of VAT and so on. Parallel to research of the criminal enforcement authorities of persecuting in coordination and exchange of information under the Public Prosecutor and the area of financial research or hunt for money and criminal proceeds are conducted by financial intelligence, but adequate professional help in elucidating and proving of these criminal acts has the PRO(Public Revenue Office). In the process of research, investigators elucidate all crimes and provide evidence linking the crimes perpetrators with their deeds, but elucidate and moments of connection in the crime situation and other offenders who abused his official position and authority, or help in legalizing of money earned criminally.

Often in these situations there are criminal elements of falsification and destruction of business documentation, but elucidate and prove the elements of the relationship of the perpetrators in criminal conversion, or providing evidence of a crime criminal association of individuals, responsible persons in legal entities and determining in whose name and for whose account criminal proceeds are earned, i.e determination of originally acquired criminal proceeds and procedure of their transformation and transfer to other natural persons and entities in the country and abroad.

For full clarification and evidence of tax evasion and money laundering experts are used in the field of tax operations in order to be preserved the legal procedure and calculated tax evasion as further evidence in criminal proceedings, it is a calculation operation that should be completed in the preliminary investigation, because criminal charges and later charges should be based on relevant facts and data for this particular crime. Caution should be exercised when analyzing tax incentives in order not to suspect some unfounded. For clarification and proof data and elucidate the responsible persons in the legal entities involved in the calculation and payment of tax, but extends itself as a responsible entity. If you provide data about the existence of the personal income tax evasion, latter case should be extended towards responsibility and other persons who are unfounded paid in cash based

funds supplement, rather than any calculated or paid income tax to check whether each has personal assets were reported in the annual tax return and whether they are taxed additionally. International cooperation is applied in situations when there is involvement of foreign offenders when work is performed on the territory of two or more states and when there are information and data for transfer of criminal proceeds of accounts of natural and legal entities abroad.

The process of investigating tax evasion and money laundering ends with the preparation of an overall report on all measures and actions taken and operational documentation for legal proceedings in taking measures and actions and, if established by evidence that there are suspicions that are committed these and other crimes, public prosecutor brings charges against the perpetrators of these crimes, and simultaneously filed a request to freeze criminal proceeds and assets that are frozen under court order, and thus prevents the perpetrators to cover up, hide evidence from the organs of justice. Confiscation is a measure imposed by final court decision that was rendered and the basic sanction to the perpetrators of criminal acts. The confiscated property is managed by an agency, and when it comes to criminal proceeds derived from tax evasion, confiscation is done at the expense of the State Budget.

CONFISCATION OF CRIMINAL PROCEEDS, PROPERTY AND MONEY

In recent years in European legislation begins the trend of reaffirmation of confiscation of property as a measure that the subject has the property of the offender, along with special confiscation consisting in the seizure of objects that are used, have been or are subject to criminal attack. is a new tendency of criminal prosecution in terms of looking not only by the act and the perpetrator, but also in criminal income generated by illegal activities, most effective tool in the fight against organized financial crime. Persistence detection, freezing and confiscation of all criminal income and all items that occurred with the executed criminal actions or items that are used in a criminal attack, to strengthen warnings to offenders who have formal powers that, crime is not paid.

Providing uniform application of national legislation on this criminal law measure becomes one of the central areas of the latest international regulations. Of particular importance for its recognition in international conventions whose signatory is our country as aspiring to join the European Union, and thus adjusting our legislation to the Western European criminal law. This measure is provided separately in the Criminal Convention against Corruption in 1998 and the Civil Convention on Corruption in 1999 the Council of Europe which is provided as an obligation of States Parties to take measures necessary to enable confiscation or seizure of the instruments and the income works. "For the purpose of the Convention Committee of Ministers set up a special expert group (GRECO) with independent position, and that i approaches and Macedonia in 2000. Each state is required to prepare special reports, and the group may require additional reports, to conduct visits and prepare a report for the Committee of Ministers on the situation of corruption in individual countries. Each state should designate a central national body to communicate and cooperate with (GREKO). "

Confiscation of criminal proceeds, property or money made from the perpetrator and can confiscate money, valuable items, property or proceeds obtained from a crime. Proceeds confiscated from persons who have been transferred assets if they knew, could know or were required to know that the property was acquired with

a crime. Since in our criminal legislation is introduced liability for legal persons is provided and confiscation of property by a legal person.

Basis for confiscation is immediate and indirect proceeds of crime are confiscated by court decision that found he committed the crime under the conditions provided by law. And according to ratified international agreements confiscated property can be returned to another country. Addition the direct financial benefit from the perpetrator will be confiscated and indirect financial benefit that consists of:

1. Property which is transformed or converted benefits obtained from crime,
2. Property acquired from legal sources, if the benefits obtained from crime is mixed, in whole or in part, with such property, the estimated value of compound benefits obtained from crime and
3. Income or other benefit arising from the benefits obtained from crime, from property that benefits obtained from crime is transformed or converted or from property that is mixed benefits obtained from crime, the estimated value of compound benefit obtained by crime.

The perpetrator will be confiscated and immediate indirect proceeds of crime which consists in money, movable or immovable items of value, like any other property, property or assets, tangible or intangible rights, and if their confiscation is not possible from offender will confiscate any property that matches the value of the proceeds benefits. The direct and indirect financial benefit proceeds are confiscated and the third party which is achieved by running the offence.

Proceeds confiscated from members of the family of the offender who is transferred if it is obvious that gave compensation corresponding to the value of the proceeds benefit or a third persons if not prove that the object or property given compensation corresponding to the value of acquired proceeds. Objects that are declared cultural heritage and natural rarities and those injured is personally connected, are confiscated from third person regardless of what they did not know or could not have been obliged to know that they are obtained by crime. Confiscation proceeds, property and money o be returned to the victim, if not damaged becomes the property of the state.

Property confiscated by a third party that is generated by running the offence. Property is confiscated and family members of the offender who is transferred when it is obvious that gave compensation corresponding to its value or the third if not prove that the object or property given compensation corresponding to their value.

he significance of extended confiscation should primarily be understood as a measure that allows confiscation and seizure of property by inmate whenever you can determine that the property is derived from committed crimes or not commensurate with legal declared income when a person can't provided proof that the property has a legal background. The burden of proving the origin of property in many European countries is a legal obligation on the suspect or defendant, that principle is introduced in the Republic of Macedonia and is explicitly stated in the criminalization of unlawful acquisition of property. The purpose of the introduction of this measure is to enable the implementation of legal proceedings for confiscation of illegally acquired proceeds.

Confiscation of the legal entity is a measure which applies in cases when the property is an offence to acquire legal entity. If a legal person can't confiscate property or property interest because it ceased to exist before the execution of confiscation, legal successor or successors, and if there are no legal successors, the founder or founders of legal person, or shareholders or partners in trade company in the cases determined by law, jointly commit to pays a cash amount corresponding to the proceeds.

CONCLUSION

Tax evasion and money laundering are two crimes that are inevitably linked, because offenders who avoid paying tax certainly take action for concealing criminal activity, and actions for diverting money to other purposes, all in a hidden way through preparation of fictitious documents. Investigation of these crimes is a complex process involving several state agencies and institutions through a coordinated approach and sharing of information. By providing solid and compelling evidence of the type and amount of suspicious funds, and their generating into other property values the court is able to carry high-quality judicial decisions that provide confiscation of criminal assets and proceeds despite the basic sanctions to the offenders. With the confiscation of criminal proceeds and property justice will be satisfied, and will also give a clear message to future potential perpetrators of tax evasion, that there is a danger that their crimes will also be revealed.

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PROBATIVE VALUE OF EXPERTISE IN CRIMINAL PROCEEDINGS

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Abstract: Expert testimony as a proving action is a very important action in the context of the entire proving system in criminal proceedings. Since crime is very heterogeneous in its forms and characteristics, especially in the way of perpetration, used assets, and consequences that follow, there is a special interest, and often a problem in providing high quality interpretation of cause and effect relationships in the commission of the offense, from the aspect of collecting, studying, and determining relevant evidence, and relevant facts in a criminal proceedings. For this reason, special attention is paid, in addition to taking a series of measures and actions to identify and clarify the offenses and offenders, to obtaining expert evidence and the corresponding importance of its role.

Applying the expertise as the relevant evidence makes it possible for certain experts to make a contribution in any area which requires additional knowledge, skills, to the level of special scientific analysis of specific facts, circumstances, where the findings and opinion of experts would contribute to the determination of the ultimate truth. Since expertise is thought to provide additional quality of evidence that will assist the Court to make better and more correct assessment of the available evidence in a criminal case, there is a real question about the actual "significance" of expertise in a particular criminal case.

Depending on the complexity of the criminal case, the types of expertise, expert's quality, the result i.e. the finding and expert's opinion is treated differently. In order to determine the actual role and contribution of expert testimony in criminal proceedings the question is: "who makes the decision – the expert or court/ judges?"

Keywords: crime, expert testimony, expert witness, criminal matter, evidence, truth, judicial decisions.

ABOUT EXPERT TESTIMONY AND EXPERTS

Expert testimony is the act of proving, offering evidence that assists in the determination of facts that require special expertise or special technical skills, or just expressing an expert opinion on the established facts based on expert knowledge or skill. According to the Criminal Procedure Code of Republika Srpska, expertise is determined¹ when the fact determination or assessment requires opinion of the person with required professional skills. Expert testimony is a procedural action aiming to establish or clarify a fact on the basis of special extralegal knowledge, experience or skills². All prior definitions imply the same comprehension of expertise as an action which involves the special quality of the knowledge, skills, and the

¹ Expert testimony is usually ordered by the prosecutor or the court, and in exceptional cases, the authorized official. There are doubts, disagreements about the legitimacy of expert testimony pursuant to a law enforcement officer. However, it is considered that in exceptional situations he can order the necessary expertise, but with prior notice to the prosecutor.

² Pavišić B, Modly D, P. Vejić, *Kriminalistika, Goloden marketing, Tehnička knjiga, Zagreb, p. 496th.*

identity of the expert. Therefore, all relevant textbooks of criminal procedural law and criminology state that the experts are people with special, additional knowledge related to the subject of expertise³.

The expert is a process-disinterested person who has expertise and special skills⁴. In addition to compulsory education in the area which is the subject of expertise, additional specialized, scientific, and other knowledge is required, as well as the verified experience in the field⁵. In this regard, the relevant ministries of justice would have to introduce more order regarding the conditions the expert must meet (Busarčević M, 2008: 265), both in terms of education and in terms of additional skills, knowledge⁶.

In theory and practice of criminal procedural law, the question is whether expert testimony is evidence or some form of assistance to the court in making decisions and assessment of the important facts in criminal proceedings. It is considered that the expert testimony is not classical evidence, but only the form of help to the court in establishing facts. There are, however, opposing views, held by those who believe that the expertise is evidence just like the other⁷, and that an expert's opinion is not specific evidence, but evidence like any other that the court will appreciate in accordance with free judicial conviction when making an assessment of the evidence⁸.

Expert testimony is created only upon the order of the authority conducting the criminal proceedings. Thus, expert testimony in a previous criminal proceeding is determined by the public prosecutor and in the main one, by the trial court. Proposal and selection of expert witnesses is a matter that concerns initiating party affiliation, i.e. the proposed expert witness. In this way, when the prosecutor suggests an expert, he will also determine the expert according to his discretion, judgment⁹. There is a special question of participation of parties in the expertise process in terms of presence during the expertise implementation, asking questions during the testimony, and specific expertise control. In order to obtain the final quality of results it can be insisted on contradictory expertise i.e. expertise by two experts testimony (at the request of defense), which will contribute to higher quality of truth in the report provided by the expert. There is a problem related to ordering expertise in the investigation, when the perpetrator is unknown, in which case the defense is unable to engage an expert witness who would have some benefits for the defense. In the context of the above, the third solution is to determine a third i.e. control expertise, which may be determined by the court. This can provide a neutral opinion, which will assist the Court in assessing the evidence in the specific criminal case¹⁰.

3 The integrity of the expert would have to be constantly raised to a higher level of professionalism, scientism in the application of methods and tools in the performance of expert testimony, and thus the contents of the results of expert evidence to be better and more fruitful.

4 In relation to the identity and authority of the expert, we must distinguish his status and criminal procedural position in relation to the specialist, which has some similarities but more differences.

5 Today there is general confusion in the selection and verification of expert in terms of the profession, occupation, special knowledge, skills. It would be interesting to examine and analyze the some areas of expertise regarding the qualifications of expert witnesses, where they will get information about the many "occupations - qualifications" which certainly affects the future non/quality and integrity of expert testimony).

6 Given that the expertise has become quite a lucrative business, more and more average experts and persons with classic quality knowledge get a license expert, which is later reflected in the overall quality of expertise and integrity of the expert.

7 A crime scene investigation, reconstruction of events, search, seizure, questioning of the suspect, hearing witnesses and others.

8 There is a constant debate in the theory and practice, in particular, "whether to judge judges or experts." Given the fact that there are cases where judges classically prescribe expert opinion, and establishes it in the form of the relevant - determined facts, one gets the impression of force of expert opinion.

9 This raises the practical question, concerning hiring expert witnesses by the prosecution or defense, whether the same commitment is related to "certain" expectations of those who propose experts. (More details on the nomination of experts in the textbook T.Vasiljevića Krivično procesno pravo). p. 338th

10 There is also an expertise which simultaneously perform two experts appointed by the court, each one for themselves.

Crime character of the expertise is actually irrelevant (Busarčević M, 2008: 266), i.e. in the circumstances of the investigation it can only have a certain orientation - a preliminary value. Therefore, according to the ZKP of BiH, expertise can be ordered only by the prosecutor in the investigation¹¹ and the court at trial. In such circumstances the prosecutor has the legal authority to order the expertise to verify the evidence obtained in an investigation (the most common being the criminal - technical expertise), carried out in the laboratories of the Ministry of Internal Affairs. The prosecutor has his arguments for engaging an expert, i.e. for obtaining evidence in the form of expert's findings and opinion at the time of the indictment, which can be very important for a better decision of the prosecutor at the time of indictment - non-indictment in the specific case.

EXAMINATION OF EXPERT WITNESSES IN COURT

When the expert has prepared the report and opinion of the case that he was entrusted to analyze, he delivers the same to the authority that ordered the evaluation. After submitting the findings, the relevant body - and it is usually the court - will ask the expert witness to present his findings at the trial and to be examined as a witness¹². Expert testimony in court is essentially the evidence.¹³ The expert shall submit preliminary findings and opinion, stating the facts found by the sensory observation¹⁴, under a special expertise in a particular scientific or technical field. The testimony of experts consists of findings (*visum repertum*) and opinions (*parere*). The findings include the facts that the expert determined based on sensory observation, using additional and adequate resources, scientific methods and the profession. An opinion is a professional conclusion which is based on the fact that the expert indirectly and personally observed during the expertise of material evaluation. The opinion must be the conclusion and explanation.

When the expert testifies, he can present all the findings or just give an opinion, depending on the request of the criminal proceedings authority¹⁵. In practice, it is most often required from the expert to read and comment on the findings and opinion, with an emphasis and specific explanations on key conclusions. After that the expert provides testimony in accordance with the rules of examination of witnesses. First, the expert is being examined by the party that requested the evaluation. If the expert testimony has been requested by the prosecutor directly, the examination will generally refer to the requirements of the prosecutor in analyzing specific facts and circumstances of the case. The course of the interrogation is in fact already known, because the prosecutor will examine the expert so as to get the expected answers to the questions he has already asked and which he generally favors.

11 According to the former Law of Criminal Procedure of the Republic of Srpska, expertise was in fact ordered by the police, which sometimes caused practical problems regarding "suspicions" in the planting of evidence, while now the police have the possibility to ask for an expert opinion only "exceptionally", but to inform the prosecutor about the same, which is essentially still problematic and unclear, and still allows some errors and abuse.

12 There are opinions that the expert is not a witness, but there are also the ones that identify him as a witness. It may be noted that the expert is some sort of specific witness who doesn't give the classic statement about the facts he perceived, but by applying their scientific and professional knowledge, which is certainly a different basis than the testimony of a classic witness. Also, the witness is a person who states in his testimony the fact that he noted without evaluation of their significance, and the expert provides, besides the facts, his opinion, which often has a particular impact and importance of evidence in court.

13 In theory of the criminal procedure law, the question raises whether the evidence is an expert as a person, or expertise as expert's activity, or expert testimony as a result of these activities?

14 Certainly, the indirect sensory perception of an expert is enriched with his intellectual, scientific, professional knowledge, making it substantially different from the witnesses, who also perceives the fact, but without experts, intellectual and professional capacities.

15 Such a situation can be when the body is familiar with the findings in another way.

However, when we observe the cross-examination of expert witnesses, that is, the examination performed by the opposing party, you can expect trouble, as well as surprising and unexpected questions. First, the “opposite” side wants to, in some way, discredit the expert¹⁶, and challenge his expertise and objectivity. The course of examination is a matter of a factual nature. The examiner will often leave the test box, so it is very important that he is closely monitored by the Judicial Council, judges, so as to prevent the so-called arbitrariness of the opposite side during the cross-examination¹⁷. In addition to the examination of an expert assessment within the range of findings and opinion, it is often the case that the expert is examined about other facts, circumstances, even the ones of a legal nature, which certainly do not fall within the jurisdiction of the expert. The question is whether such an examination and expert testimony regarding such matters is to be regarded as evidence in a specific criminal offense. In relation to the above, there are conflicting opinions in the theory of criminal proceedings: there are those who believe that the expert’s empirical evidence is testimony that may have evidentiary value, whereas others believe that such evidence is not evidence but a particular form of professional assistance in determining the facts, which differs just because it does not represent the detection and identification of new facts. (Milosevic, 1996: 89).

It is also interesting to analyze the understanding of the legal nature of expert testimony, which has provoked a lot of disagreement in criminal law theory and practice. Thus arose a few ideas about this issue, which essentially provides the legal capacity and legitimacy of expertise. According to the first conception it is believed that the expert is “a separate kind of evidence.” (D Modly, Korajlić N, 2002: 724) Such expert evidence produced by expert testimony essentially differs from other statements, statements of witnesses, and other parties in the case.¹⁸ The expert is a professional judge, court guide, technical assistant of the court, the person whose testimony is valued as a kind of “professional judgment”. Defenders of this opinion believe that the expert’s findings and opinions cannot be evaluated by the “incompetent” ones, because they have professional knowledge and skills.

The second group is similar to the previous one in understanding of the testimony of expert witnesses and identifying it as a “judicial investigation”. It is a concept that sees expertise as a complex investigation, in which expert testimony is a form of investigation, and the expert is an assistant adjudicator in this regard. (Vodinić V, 1984: 45) The third view of expert testimony fully identifies it with the testimony of witnesses. This understanding does not respect the fact that the expert, however, is still a scientific, professional witness who is different from other witnesses in that he is more credible based on his knowledge and skills. The fourth concept that is now prevalent with most criminal procedural theorists assumes that expert testimony is independent evidence that manifests, as a rule, the expert’s finding and opinion, although it has some similarities with other means of evidence. (Stevanović Č, 1974: 70). The probative value of the final expert testimony finally depends on the nature of the conclusions produced by the expert himself. The essence of the expert’s evaluation lies in the fact that in each case it is necessary to determine whether a qualitatively new fact (evidence) has been

16 The position of an expert is often unrewarding because in most cases the findings and expert opinion do not correspond to one of the two interested parties (the defendant or the injured). Therefore, it often happens that an expert witness at trial can be subjected to the unpleasant attitude of the disaffected party, especially if not adequately protected by the competent authority. In such situations he should keep calm and polite manners and object to the inappropriate behavior of the parties during his expertise.

17 It often happens that the interviewer very unpleasantly and without a single argument refers to the testimony of expert witnesses, trying to belittle, devalue its findings, opinions, and complete objectivity. In particular, it relates to examiner’s desire for expert to satisfy his questions, with the so-called short answers (yes - no).

18 Expert testimony is also scientific evidence – an opinion that is independent, original evidence created by the expert as a person who has their particular scientific or professional knowledge / experience and skill, and that, resolving questions ordered in the proceeding, exhibits the results.

established, as well as whether it confirmed or denied the existence of disputed facts. The confirmation or denial of these facts by the court is based on a judge's free conviction within the range of the modern criminal procedure.

THE PROBATIVE VALUE OF EXPERT TESTIMONY

One of the most important questions regarding the issue of expert evidence is probative value of the results of expert evaluation. Expert testimony, as any other evidence, is subject to the dual assessment of the opposing parties at trial before making a final decision. Probative value assessment is conducted by the court within its jurisdiction, as well as other parties¹⁹. The judge is, according to the law on criminal procedure in Bosnia and Herzegovina²⁰, free of critical evaluation on expert's testimony²¹, because he is "the expert of experts." This statement implies that the court is free in its evaluation of evidence derived from expert opinion. (Aleksic Z, 1982: 118). However, there are different views in terms of the notion that under the influence of expert evidence, the court does lose its independence in evaluating the evidence²². The expert's opinion does not bind the court (but in that it is only an opinion²³), so the judge is completely independent and free in the report assessment, even if it is unanimous.

In the case of non-acceptance of expert evidence, the court will give a detailed explanation of the reasons for not accepting the findings and opinions²⁴. If the court does not explain thoroughly the reasons for not accepting the results of an expert evaluation, it may constitute a fundamental breach of the criminal proceedings (Art. 297 CPC Serbian Republic).

The court also cannot modify the expert's opinion based on its own opinion. If the court disagrees with the opinions of experts, it will conclude that expert testimony failed and that the facts that expert testimony had established remained undetermined. The investigating judge and the trial assembly evaluate the expertise as well as all the other evidence at their own discretion.

This means that the findings and opinions do not a priori have the most important contribution in evaluating the evidence. Since a whole range of expertise involves the application of a large number of scientific methods, it is expected that the probative value will be high. The ultimate probative value of expert testimony essentially depends on the correlation of objectively and subjectively determined facts in expertise. The expert is guided by scientific methods of establishing a fact, which he presents in his findings, but also by his personal knowledge, experience, skill, which represents his subjective attitude to the subject of expertise. In this situation, the expert's finding may be called the scientific evidence²⁵, largely because it derives from the application of scientific methods in a specific practical matter.

19 The evidence evaluation is very important in the investigation, where the expertise is often made upon the order of the prosecutor who orders and leads the investigation.

20 Zakon o krivičnom postupku Bosne i Hercegovine, Zakon o krivičnom postupku Federacije Bosne i Hercegovine, Zakon o krivičnom postupku Republike Srpske, Zakon o krivičnom postupku Brčko Distrikta.

21 "The judge is the expert of experts" - "peritustus peritorum"

22 Grubiša M, gives a completely different opinion, which states "there is only an illusion that he "evaluates" an expert opinion "determines" the facts based on that opinion. All this leads to the fact that the science, personified in the experts, becomes more and more a fact-finding judge, and the judge becomes only "prejudge", i.e. the science or expert becomes more *judexfacti*, and judge becomes limited in the trial function.

23 In Art. 323 French Code of Civil Procedure states: "The court is not required to observe the expert opinion, if its conscience is opposed."

24 The judges may conclude the opposite of what is stated in the expert opinion and "judge the opposite of unanimous opinion of experts," and they may reject the opinion of experts and rely on their own knowledge of things.

25 Yet we cannot say absolutely that the expert opinion is evidence, because it has yet to undergo the evidence evaluation and verification, which is only made by the court, the Council, based on free judicial opinion.

The probative value of final expert testimony depends primarily on the character of the conclusion. A categorical conclusion of the expert has the highest probative value, where the expert fully and unconditionally establishes the existence or absence of disputed facts, which are the subject of expert testimony. (Milosevic M, 1996: 86) From the viewpoint of the role of evidence, it is argued that the expert's opinion can substitute the other evidence, which essentially is not recommended or fully justified, because any evidence will give you an explanation of important facts in a criminal matter. The expert opinion should fit in the framework of the other available evidence²⁶. Theoretical discussions that are related to practical results and expertise range from understanding the key role of expertise in forming the evidence, to the perception that the expert's findings and opinion present just evidence, like any other, although they may be subject to more contradictory discussion at the hearing.

Based on the obtained expert evidence and the examination and cross-examination of the expert during the trial, a judge (or a judicial council) receives valuable evidence that will help him considerably to establish and form the "system" of evidence solely on the basis of his intellectual opinions and free beliefs. Based on the above said, the question arises regarding the overall ability of judges to assess all evidence. However, the court will appreciate the most essential and some important questions about the expertise, such as:

- To what extent has the expert respected the regulations of criminal procedure in his expert performance (acting outside certain limits in terms of scope, stepping into legal issues, delegating work to another person, hiring staff without prior approval of the court, etc.);
- Is the report within the range of the expert's specialty;
- Are the facts which the expert has taken as his starting point of the research and conclusions objectively determined and whether there are other significant facts the expert did not take into account;
- Inspect the authenticity of the subject of expertise, suitability and sufficiency of material in terms of quality and scope, to obtain the correct conclusion;
- It will assess accuracy of methods used by the expert and the extent to which expert testimony is completed (T Vasiljevic, 1981: 344).

Finally, the judge can check the contents of expert reports by control of logical conclusions. Acting in this way, the judge shall note any inconsistencies, contradictions in the report, and on the basis of everything, he shall create his own judgment. In the overall assessment of expertise and evidence produced in the expert's findings and opinion, the judge will focus, in particular, on the stability of the rules of scientific laws, logics, and comprehension. The judge may require further assessment of those experts, or engaging new experts to clarify certain uncertainties which are not sufficiently clarified and defined. Objectively, the judge must be the master of his own decisions, but such a decision is often determined by the high quality expert's opinion.

When we look at the jurisprudence on the territory of the region, we can note two situations, namely:

The first situation is a complete and uncritical acceptance of the expert report, in the form of what it says, subjecting it only to formal and superficial assessment. It even happens that the court accepts the report, which has a hypothetical conclu-

²⁶ The court must always appreciate the findings and opinions (not just finding or opinion only) the expert in relation to the results of other evidence presented at trial, that does not coincide with the testimony of expert witnesses. If other evidence contradicts the testimony of expert witness, the contradiction must be clarified

sions (what if, likely, possible, etc.)²⁷. This position does not require great effort, the investment of intellectual capacity, and for the court it's especially acceptable because it "hides behind the back of a purported expert."

In the second situation, the judge takes the expert report starting from the prejudice that it must be true, considering the position of an expert, his scientific and professional credibility, experience, vocation etc. This is especially the case when the judge does not want to antagonize the expert, i.e. does not have the courage to oppose the opinion of experts in the domain of their legal authority and responsibility. Such a case actually encourages experts, who believe that their findings and opinions are free from any control, and accountability.

CONCLUSION

Based on the presented ideas on the legal and actual character of expertise, as a means of evidence within the modern criminal procedure law, we have focused only on some understandings that can be found in the former Yugoslavia. The genesis of the expertise in this area was quite restrictive, i.e. it used to be assigned to police authorities within certain jurisdictions for a long time, so that they could prepare themselves some "alleged" evidence and put it to the test. However, more recently, in the last decade, there has been acceptance of "modern" perception of expertise, i.e. its positioning within the exclusive competence of the scientific, technical institutions, and possibly individuals.

With this approach, an expert opinion takes on a new character and shape within a democratic structure, but it also meets an increasing criticism, depending on who it is entrusted to and who performs it in the context of all other evidence obtained through expert testimony. This applies, in particular, to the evidence obtained through expertise, delivering expert evidence, and expert testimony in court. In the context of recent trends, which suggest that the expert testimony is to be double-checked and criticized at trial during the examination-in-chief and cross-examination, there is a specific review of all circumstances, which essentially aims to contribute to even greater quality and integrity of expert evidence. In this respect, the value of expert testimony should be assessed in each individual case, depending on how much the findings and opinion are incorporated in the court decision.

The attitude of courts towards expertise, based on the research of case law (Milošević 1996: 200), ranges from accepting the findings and opinions and "incorporation" of their contents in the judgment²⁸, to requests for a re-do, additional expertise. We think that the expert should be more firmly bound to apply modern achievements of science and technology, which are powerful tools in scientific, professional study of available facts and circumstances, and which will, through the immediate presentation²⁹ of expert results in the courtroom, contribute to the final establishing of the truth.

27 In practice, it may happen that expert witnesses, despite their formal qualifications, titles, etc., have not fully mastered the essence of the scientific and technical understanding of the essence of the area in which the expertise is required, especially if they are superficial, insufficiently persistent, and corrupt.

28 The judgment states that "the expert evidence is accepted because the expertise is done accurately and professionally."

29 The immediacy of expertise results presentation is reflected in particular through the implementation of new computer technologies (3D expert testimony) that, through the dynamic display (reconstructive expertise), enables all parties to present all relevant facts in a particular criminal case in a new, but far more obvious way, which is the ultimate goal of the trial.

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TECHNOLOGICAL INNOVATIONS IN CRIME SCENE PHOTOGRAPHY

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“One picture is worth a thousand words.”

Abstract: Photography is the most objective way to present scenes from reality. For legal purposes it has been used since 1839. Crime scene photography is an accurate reproduction of the crime scene or traffic accident using photographic techniques. It is often said “a picture is worth a thousand words”. Today there are two types of images: analog and digital.

Analog (conventional) images are obtained by using an analog camera to record light from the lens to the film. The film is then in the laboratory, the so-called darkroom developed into negative images which are used for creating positive images on the paper, known as a print. These two processes are chemical processes.

Digital cameras create an image by electronic sensors. Instead on a film, photographic image is stored on a magnetic device (media). All phases of the making of photography (capture, processing and storage) are available in a digital camera. It can also be captured by a mobile phone. The development of that type of photography was enabled by the development of personal computers.

Digital photos introduce into the crime scene photography more technological innovation such as digital camera, memory cards, and software for film post-processing, the use of computers, scanners and printers and the ability to shoot short sound movies.

Police forces in different countries of the world have different views on the use of digital photography. There are many reasons for pros and cons. The advantages of using digital photography in crime scene and traffic accidents photography are: more images than on a film, the ability to view recorded images immediately after shooting and send them instantaneously as an e-mail message. To print them, only the printer is needed. Those who are against the use of digital photography state that there is more chance to manipulate the images; the price of the digital cameras and necessary equipments (accessories) is much higher; the sensitivity on the viruses and problems with storage is ever present, i.e. there is a problem concerning persons who will keep and have the right to access these photographs.

The conclusion is that the digital photography will replace analog photography very soon not only because of technological innovations, but also because the production of analog cameras and films are stopped and factories are closed every day.

Key words: the future of photography, crime scene photography, digital photography, technological innovation, digital camera.

INTRODUCTION

Photography is the most objective way to present scenes from reality. Nevertheless, one can ask whether the images are able to convey reality or the truth about it, or whether they are only an interpretation of the author. In principle, only the criminalistic and medical photographs are considered realistic because there are rules under which they must be taken.

Classical (analog) images have been used for legal purposes since 1839. Today, in criminology, photography is used for: video (surveillance, analysis and documentation of a criminal/accident scenes or during an investigation); patrol car recording, the presentation in court – to refresh memory, substantiate testimony, clarify understanding, various types of reconstruction, the recording of taken fingerprints, a variety of analysis (traces of blood, bullets, etc.) recording and making arrest photographs, making photo robots, research of criminal events, rapid transfer of information on missing persons and evidence, capturing images of small or latent traces and evidence, digitalizing documents, during the autopsy.

CRIME SCENE PHOTOGRAPHY

Forensic photography often referred to as crime scene photography is only one type of crime photos. Crime scene photography should represent an accurate reproduction of the crime scene or accident using photographic techniques. This photo captures the existing situation on site and traces of a criminal offense and objects or events. It shows on the apparent (visual) way the face of a criminal act or event, and it is the most objective way to fix the exact place of the offense. It is used in court or serves as an aid in the investigation. Forensic image is a part of the process of collecting evidence.

There are rules on how to record objective findings and the crime. Used modes and capturing techniques vary from case to case, depending on its nature, the investigation phase and needs for fixing conditions (panoramic and comparatively – stereophotogrametric photos, etc.). All images must be carefully taken so that they represent the situation found at the crime scene and must provide a quantitative comparison of the position and size of clues and objects.

Because of the legal purpose and the aim of capturing photos and specificity (the importance of the legal process), crime scene images are very different from the general photography.

An often used saying “one picture is worth a thousand words” certainly tells the truth about crime scene images. No matter how well the investigator can verbally describe the crime scene photos can tell the same story a lot better and much easier.

The tasks of crime scene photography are manifold and complex. The main task of crime scene photos is to completely, accurately and clearly document all objective findings at the crime scene, for the legal system, so that they could acquire the right insight of the criminal event and the scene in the later stages of the proceedings. Crime scene photos are often used in forensic procedures.

Today there are two types of images: analog and digital. So far, the most used was analog photography that is slowly being replaced by digital photography. Digital photography implements much innovation into the crime scene photography. First we must explain and understand the concepts of analog and digital photography which is followed by understanding the differences.

ANALOG PHOTOGRAPHY

Analog (classic) images have been used for almost two centuries. At the middle of the first half of the nineteenth century, William Henry Fox Talbot combined light, paper, chemicals and a wooden box to produce a printed image. It was the foundation of modern photography with the celluloid (film) tapes. This process of making photographs has refined over time; however, the concept has remained the same.

Analog images are obtained using an analog camera. Analog cameras record light from the lens to the film. Upon completion of this process using analog camera, first, you need to develop film (negative) and then, by reverse process, create (print) images on photo paper (positive). Developing negatives and making prints are the chemical processes that are performed only in photo laboratory, the so-called darkroom.

These processes are quite expensive and require well trained technicians and a lot of time.

Analog photography requires:

- camera (with variety of interchangeable lenses, equipment and accessories);
- film;
- photo laboratory – darkroom – a dark chamber (with chemicals needed to develop negatives and prints, enlarging device with a color head and the drying apparatus). It is necessary, among the other things, that a darkroom has running water.

When negatives are processed (developed) the analysis are made, the selection of the best negatives, which then will be printed on paper. After photographs are printed the analyses are made again for selection of photos that will be included in the photo documentation, or which will form a photo album. Photos can be selected only on the basis of their quality. Photo documentation has the information that is very important. It begins with all data and explanations (the recording conditions, shutter speed, exposure, time and date, place, the name of the photographer, etc.). The data can be preprinted sheets or can be hand-written. From negatives, the so-called contact copies must be made. Negatives and contact copies are kept permanently in the photo documentation in special envelopes.

DIGITAL PHOTOGRAPHY

Digital photography is a new generation of photography. It is created by transferring optical images on the digital medium. The goal of digital photography is to ensure maximum image quality whenever possible. Digital cameras are the latest technology. This is the trend of today and the concept has been well known for nearly five decades. Digital photography has emerged due to advances in technology, particularly the development of personal computers (PCs) and is now available to almost everyone. Digital camera¹ is only one aspect of digital photography.

Although a digital camera is required to make the picture, the overall concept of digital photography is a bit more complicated. It takes a couple of different devices and equipment that work together (in concert) to obtain digital images which are familiar to us in the form of the photography.

¹ The first digital camera on the market has presented by the company "Apple" February 17th 1994. It was QuickTake 100.

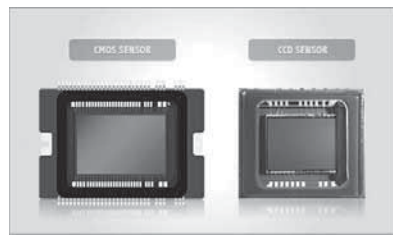
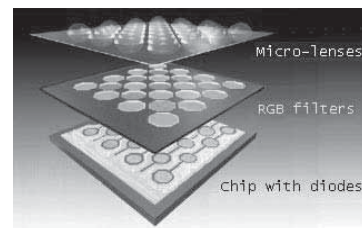
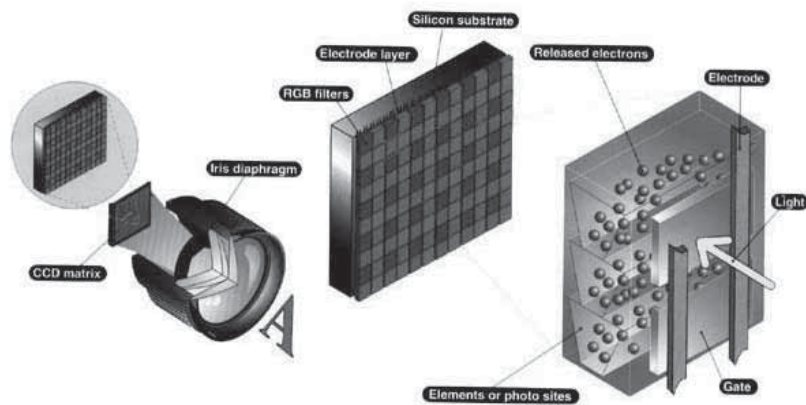


Image sensors



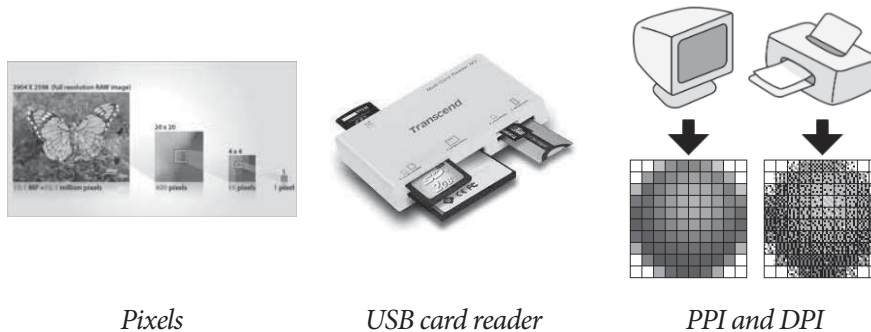
Parts of the CCD sensor

Digital cameras create an image by electronic sensors. Instead of film, photographic image is stored on a magnetic device (media). Light passing through the lens falls on a chip that is sensitive to light. In most cases, this is CCD (charge-coupled device) chip and in small number of cameras that is CMOS (complementary metal-oxide-semiconductor) chip.



Digital camera

The principle of their work is almost the same. Sensor (chip) contains millions of photosensitive diodes, each of which measures the intensity of light. Diodes in the same way produce information of the color. This information is, true digital recording, based on the numbers – zero and one. This information or digital recording is recorded on the recording medium. The medium may be a memory card, disk, magnetic tape. Digital recording is one of the formats that are easy to read on a computer. Usually this is a RAW format. The quality and size of digital images depend on the physical properties of the camera. The size is measured in memory by bytes and by number of pixels on a monitor. Some cameras, after taking a picture continue processing it by enhancing the sharpness and perform its compression. After processing, the image is stored on the medium. This process takes much more time than the process of recording image by a sensor. To speed up the processing and storage and not to interfere with taking the next image, i.e. not to be a large time gap between taking two photographs, many cameras have large RAM memory for temporary storage. To transfer images from the camera to a computer, the card reader is used. It has a USB port and can be connected to any computer. An important feature of the card reader is the possibility of reading many different models of cards.

*Pixels**USB card reader**PPI and DPI*

In other words, all the phases of making photography (capture, processing and storage) are available in a digital camera. Today, digital photography can also be recorded by a mobile phone, so it is available to millions of users.

Digital photography requires:

- digital camera (with the interchangeable lenses and accessories),
- medium (memory card, floppy disk, disk, magnetic tape),
- personal computer (with attachments),
- scanner,
- photo quality printer.

Digital images are reviewed on a PC monitor and can be significantly increased, reduced, combined with text, lighten and darken (even certain parts of the recording) and retouched. Color can be changed, backgrounds removed and so on. The desired image is printed by the printer and can be in black and white and in color. From the same image a large number of photographs can be obtained. Images can have encoded protection and can be immediately and quickly transferred to a long distance via modem. Recorded and selected digital photos are stored in a selected folder, which represents the equivalent of a photo album. The folder is stored in a personal computer. Images can also be incorporated into the report.

In addition to recording by digital camera, digital images can come from other sources, such as:

- analog photography and scanners,
- video camera,
- generated in the computer.

By scanning (copying) recorded material (photographs, negatives and slides) can be transmitted on the media in the PC.

Freezing images of video cameras recording and by their capturing, a digital photo can also be made.

The obtained digital images, by scanning with a scanner or video and their recording to the media in a personal computer, can be immediately printed by the printer. If it is necessary, certain improvement can be made before printing.

Nothing is more easily damaged, corrupted, or erased than electronic data. Therefore, it is incumbent upon you to prove beyond a reasonable doubt that the digital image is true, accurate, and reliable, and that it has not been significantly altered, manipulated, or modified in any way.

TECHNOLOGICAL INNOVATION

There are many reasons why digital photography has become so popular. The main reasons are technological innovations introduced in this type of photography. Time for the images to be available has been greatly reduced – almost to the seconds. Previously, it took even a few days to print images of violence. With a digital camera, images recorded on the media (memory card, magnetic tape, disk) are available almost immediately - at the same moment when recorded. Digital photography is easier to handle and it is more accessible. It allows the verification process at the very camera immediately after the shooting, a quick connection of a camera to a computer, working in various ways, easy sending and receiving (exchange) by electronic means of communication, and also fits easily into presentation. With digital photography we do not care for ill-lit film. There are no hard sluggish and long lasting process of the development and no costs for chemicals and films. It is easy to delete unwanted images and store large amounts of files on a small area. There is no need for creating a photo album (photo documentation) in the manner as there is with analog photography which depends on the technical quality of images. There are no need to save contact copies (prints) and negatives.

Images from video surveillance cameras as well as pictures of random observers' mobile phones are increasingly being used as evidence in court. The authenticity of digital images can be determined because they have automatically printed date and time of recording. In conventional photographs, in the absence of such data, the authenticity of the images is determined by the statements of witnesses, usually the photographer who has shot the photo.

Digital camera is the first, basic and major technological innovation. It can be seen everywhere around us. Digital "point and shoot" cameras have become a widespread consumer product. They have surpassed the sales of analog cameras and include many new features. A digital camera is used by officers capturing images of improperly parked vehicles before issuing the right penalty. It does many things that an analog camera cannot do. This device uses an electronic chip instead of a film to capture images and makes it more efficient than an analog (traditional) camera. In this way the chemical process of making photographs is avoided and that process is converted into electronic one. There is no need to buy a film. In addition to the capturing individual (fixed) images, most digital cameras can record short movies with sound. It is possible to internally connect the images and thus make a panoramic shot.

The resolution of a camera is measured in pixels; the resolution of a printer is measured in dots: "pixels per inch (ppi)" and "dots per inch (dpi)". Pixels are square; they appear as a continuous tone; and each pixel represents a unique color value (theoretically, a pixel can be one of 16,777,216 different colors). Dots, on the other hand, are irregular in shape (the degree to which the dot bleeds or is absorbed into the paper depends on the quality and thickness of the paper as well as the absorption rate of the paper). Multiple dots are used together to represent a single pixel color value.



Nikon photography kit

Data on the display

Crime Scene Virtual Tour
3.00

On the digital photography the date and time of making are recorded. Some digital cameras are built-in in the global positioning system (GPS) and can produce a photo in which the data show the latitude and longitude where the picture is taken. As part of the image, i.e. file that is digital photography, most digital cameras have recently produced recording data related to the pixel, the time and date of recording as well as information on the shooting conditions and camera, the so-called metadata (model, serial number of the camera, aperture, shutter speed, ISO, flash settings, exposure, lens, focus, distance, etc.). The data is stored as part of the image file in the so-called file headers.

The most common used header format is the exchangeable image file format (EXIF) header. This format has become the standard for storing camera information. Most image editing and viewing programs allow displaying of the EXIF data.

In analog photography, when making a photo album, these data are the data which are necessary for registering a person who has taken pictures.

The forensic watermark is also added (embedded) in the digital photography. Some call it a digital watermark. This is a series (sequences) of characters to uniquely identify its creator and an authorized user. The information about the date, time and geographical location of the recorded digital photography, the metadata and digital image watermark protect the photography against manipulation. Digital cameras have a built-in flash and most of them do not need interchangeable lenses because they have automatic zoom (optical and digital). Silent operation allows discreet photography. Numbers of functions that can be manually adjusted are constantly growing so they are very impressive today.

The first models of digital cameras had almost entirely automatic functions, while the manual controls on modern models are comparable to those of analog cameras. Optical system used in digital cameras is of high quality. To meet the demands of electronic sensors (CCD and CMOS chips), the lens must have resolutions that are superior to those that are made for models that use a film. During the shooting creative effects may be applied. Technology is changing faster than we can keep up with it. Each day more and more sophisticated digital cameras are produced and they provide more expanding range of options. At the beginning of the 21st century, most cameras are digital and will soon become the only ones.

In addition to the optical viewfinder, which is built-in in all analog cameras, a digital camera has a small screen, the so-called *display* that has a dual function. It also serves as a viewfinder which shows the greater surface² of what is being re-

² An optical viewfinder shows what is recorded on an area of 1 square centimeter while the surface of display is more than 50 times greater and it is around 6 to 7.5 inches in width with a ratio of 16:9. Display surface is more over 30 square inches.

corded and can be used for previewing images which have been taken. With this display, immediately after the shooting, on site, one can see what is recorded, i.e. recording is available immediately for further use. After the overview of the images, the ones that do not meet the quality can be deleted. The images which are taken twice can also be deleted.

Technological innovation is also a medium on which the image is recorded (*memory card, disk/floppy disk or magnetic tape*). It is a substitute or successor to the film strip. Storage media can be used again. On a small memory device thousands of images can be stored. By deleting the files that are unnecessary or do not match the quality, the storage for new images are made. Because of this possibility, there is the discussion about how many images of the crime scene should be captured. This question has no simple answer but it is considered that it is better to take more images. A large number of technicians (photographers at the scene) make up to 70% more pictures because there is no money is spent for films and storage. However, from that standpoint the IT department has major problems because they handle a very large number of images of different formats and sizes.

Format for saving (storing)

Most digital cameras use imaging sensors that have a 10-, 12-, or 14-bit dynamic range level of sensitivity. If the camera is set to save the digital image using a JPG format, the bit depth is automatically down-sampled to only 8 bits per color channel. If the camera is set to save the digital image using a RAW format, the actual sensor value is saved. Capturing images with a greater bit depth not only optimizes image quality, but also optimizes the ability to eliminate backgrounds and so forth during image processing. For example, having an image with a higher bit depth often can help you identify separate color values that are very similar, such as a ninhydrin print on a check that uses a similar color value for the check background.

Most digital cameras store images in one or more of three primary image file formats:

- JPG (Joint Photographic Expert Group)
- RAW (camera raw [read unprocessed] sensor data)
- TIF (Tagged Image File)

JPG files

Advantages of a JPG format

JPG images require less space for storage, they are processed inside the camera, and they do not have to be converted to be viewed or opened, they are faster processed, they are compatible and can be shared easily.

Disadvantages

JPG images have a lower dynamic range (only 8 bits per color channel or 256 shades per color channel) images are compressed by discarding actual sensor data. Each time a JPG file is resaved, the image is recompressed, which causes even more data loss.

RAW files

Advantages

RAW files are smaller (in size) than TIF, yet they do not discard any of the actual light values captured by the imaging sensor. They are stored in their native 12- or 14-bit grayscale mode (4,096 tonal range values and 16,384 tonal range values, respectively) compared with only 8-bit grayscale values (256 tonal range values) used to store JPG files. RAW files are not processed within the camera; all processing is deferred until the file is opened on the computer. They are read only.

Original RAW file cannot be altered.

Disadvantages of using RAW files include the following:

RAW files cannot be shared easily because RAW file formats are not standardized but Adobe Photoshop CS and later have seamless, integrated RAW file converters for most digital camera manufacturers. The computer does all the processing rather than the camera.

The true nature of the picture has the potential of being compromised when the person processing the file may not have been the person taking the pictures. Because they handle adjustments such as temperature, hue, saturation, lens aberration, and so forth differently, the color values, contrast, and sharpness potentially may be processed differently by the different software applications.

TIFF files

Advantages of a TIFF format

TIFF is the most accurate and reliable method for storing processed images that were captured as either RAW or JPG. It can have multiple layers such as Adjustment Layers that are now available in Adobe Photoshop CS3 and later. It is the most reliable format when forensic analysis of the images is required.

Disadvantages

TIFF files require vast amounts of storage space and significantly more time to be downloaded, shared or printed.

Personal computer (PC) is the technological innovation that has enabled the development of digital photography. Its technical progress (achievements) and innovation has enabled photography to advance from the chemical processes into the one that requires only the bytes of information. That kind of process is necessary for transferring photos from digital media which is in digital camera, and is used by it to the medium on which they can be stored for longer time. If a digital camera uses a memory card, the transfer is made by a memory card reader that is connected via USB with a PC. By transferring images from a memory card, digital photography (i.e. digital data in the form of the file) is stored on the hard disk of personal computers. This transfer of data does not lead to loss of quality. The images can be displayed on the monitor (screen) of the computer. After necessary processing, digital images can be stored in the personal computers and/or on CD and DVD disks, magnetic tape and the like.

Traditionally, not long ago police forces around the world were using the classic card files with personal information, fingerprints, and photographs, etc. In a similar way, the data and findings regarding the crime scene evidence were organized in laboratories. Using these conventional files, a simple comparison task with an unknown fingerprint found on the scene of criminal events with fingerprints of a known person who could be a potential offender pretended to be a time consuming and laborious task. Every day, files kept by the police, were becoming more and more extensive. On the other hand, the need for rapid information became more urgent. An old method could not meet modern needs and challenges of increasing volume and complexity of crime. It was inevitable that computers take over some jobs. Computers with new software took many investigations and other procedures previously performed by the police officers, such as the analysis of fingerprints and DNA data, the base of stolen vehicles, ballistic weapons profile, the detection of vehicle license plates, automatic identification of people and many others. The most important thing is that these tasks are performed more quickly and more accurately by computers than by humans. Information is available immediately or within a few hours depending on the case.

Another technological innovation arising from the development of personal computer is the *software* for photography processing.

We must often process the image for better visualization. There are several image editing software available. They are widely accepted and have been used for many years to process and prepare latent prints for submission to Automated Fingerprint Identification Systems (AFIS), perform crime scene analysis, create mug shot line-ups, create facial composite drawings, perform facial reconstruction of unidentified victims, prepare court exhibits, and much more. In the digital photography much more can be achieved by using imaging software for editing. The subsequent editing is much easier.



Viewing images from folder

Adobe suite

Photoshop options

While taking images, it is difficult if not impossible, to separate the important facts from those that are unimportant. It is because the camera records all that is visible. The important from the unimportant can be separated by editing. External parts of the image can be cut or removed and a certain object can be emphasized. After that it is much easier to create photo documentation. The photography can be assembled by combining multiple images. Today the best known software for post-processing images are Adobe Photoshop and Adobe After Effects. They are used for better visualization and police forces have been using them for more than 15 years. There is also the software for creating photo robots and many others. For a variety of presentations Microsoft PowerPoint is used. With the some software the other technological innovations in digital photography are possible such as three-

dimensional (3D) and spherical images that represent the future. With spherical photography, space is shown in three dimensions and the observer is watching the scene on the monitor as if he was in its center. The space is seen in all directions and provides a virtual reality. This is just one of the "high-tech" innovations which will greatly facilitate the study of criminal events.

One of the modules of personal computers is a *modem*. It is used to send digital photos over the Internet.

The *scanner* is also an essential part of digital photography. This is an input device that analyzes a physical image as a photograph, text, handwriting, negative film, slide or an object and then it turns a physical image into a digital image. Today's scanners are usually desktop scanners. They are necessary to digitize old archives.

The *printer* is also a required part of the digital photography system. It is peripheral output device that produces text and graphics (images) of documents stored in electronic form in the computer. It prints images on a medium such as paper or transparencies. According to the method of printing they may be dot matrix, ink jet, laser, etc. They may affect the picture quality depending on the print mode and type of paper on which it is printed. The printer (inkjet, laser, or dye sublimation) can affect the quality of the image because of the different types of inks (dye versus pigment) and the different types of paper (plain, matte, and glossy). Because of these different printing techniques, the same image printed from the different computers can appear different simply because of different output devices.

While today's digital cameras match the performance of analog ones, printers still do not provide the same level of image quality. Not all types of printers work the same way, and they do not provide the same image quality. The best output quality for forensic digital imaging is: the Epson Stylus Photo R1900, the Epson Stylus 1400, and the Canon i9900.

Displayed on a monitor or printed on a page, digital image, plays the most crucial role in how we perceive the use of digital imaging technologies. Because of that, it is important to understand the difference between a **lossy compression** (JPG) capture format and a **lossless compression** (RAW or TIF) capture format. Certainly, in some instances, such as traffic accidents and general crime scene photographs, the effects of a lossy compression will not have a significant effect on the content of the image. But any image that requires analysis should be captured by the use of a lossless compression scheme.

The biggest casualty of these technological innovations is photo laboratory. For making an analog photograph, the photo laboratory with running water is needed while for making digital images a printer is required only. By inventing digital images, the need for a photo lab (chemicals, equipment and running water) disappeared. Until that innovation, photographers had problems when working in remote areas or outside the place where the photo laboratory was. The pictures were saved on the film but there was not the possibility of making photographs before the photographer returned to places that had the necessary equipment for this work.

In the United States of America there is The Scientific Working Group on Imaging Technology (SWGIT). That Group defines two categories of digital images that are commonly used in the criminal justice system. These categories are:

Category 1 (Documentation images used to record the time, place, or event)

- General crime scene or investigative images, including images of the actual physical evidence collected at the crime scene
- Surveillance images
- Autopsy images
- Documentation of items of evidence in a laboratory
- Arrest photographs, such as mug shots

Category 2 (Evidentiary images used for scientific analysis and comparison)

- Latent prints (including latent finger prints, palm prints, etc.)
- Bloodstain pattern images
- Questioned documents
- Tool mark images
- Gunshot residue images
- Impression evidence (such as footwear and tire tread) images
- Other images to be subject to analysis

(For more information, refer to SWGIT Guidelines for the Forensic Imaging Practitioner at www.swgit.org.)

The manner in which Category 1 images are captured, stored, and processed is different than the way Category 2 images are captured, stored, and processed.

The goal of forensic digital photography is to ensure maximum image quality when possible, from input to output. You should consider not only what camera you are using has recorded but also:

- Image size based on camera resolution and capture format, which affects the number of images that can be stored.
- Image quality based on type of lens used, such as macro lens or wide-angle lens.
- Processing speed and storage requirements of your PC, including impacts on network performance.
- Backup and archiving routines.
- Output requirements that include life-size (1:1) images.

Permissible digital image processing involves those techniques that enable you to visualize the image more clearly. The core of permissible processing is that

1. nothing has been added to the original image; and
2. nothing essential has been removed from the original image. It still comes down to the ethics and integrity of the witness offering the image in court as evidence.

Written standard operating procedures must be in place, which spell out what is and is not permissible. It is necessary to limit the access of personnel and trained persons with access to this technology. Passwords must be issued to selected personnel, and restricted access is recommended. Digital authentication software should be used to ensure that images are authentic and uncompromised.

The original should be archived to a secure storage. The original image is considered the equivalent of the film negative. A detailed enhancement history must be maintained.

The integrity of these images is insured to some degree by the chain of custody, but the most important requirement is the ability to verify that the image is genuine and valid.

The foundation for this concern is that image storage and management are the least standardized. There are solutions available: such as Foray Technologies' Authenticated Digital Asset Management System [ADAMS], Linear Systems' Digital Image Management System [DIMS], and Data Works Plus' Digital Crime Scene products that can eliminate many of the problems shared by the IT department and the digital imaging end users.

CONCLUSION

Police forces of different countries have different views on the analog (35mm) and digital photography. Each kind of photography has its advantages and disadvantages (flaws). Many people refuse to use digital images saying that they require expensive technology which is rapidly changing almost daily. They worry about system modernization (the upgrading), replacement of technology and reliable way to store documents for a long time.

Traditional silver halide-based negatives of the past 50 to 75 years have also begun to fade. The effects of heat and humidity, light and level of care affect the quality of the images. The good news is that images taken with a digital camera will last a lifetime if the images are not lost or deleted. When an image is viewed or printed from an electronic file, the actual data bits used for the print process do not change.

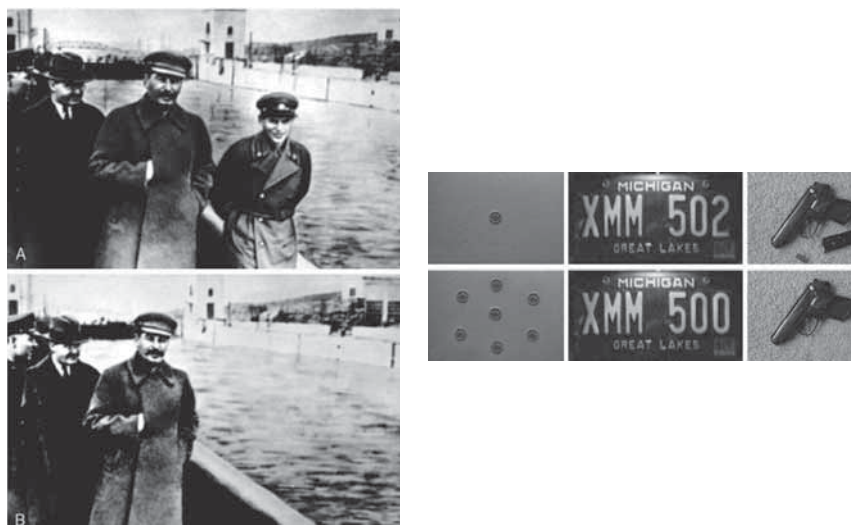
Many believe that conventional photography is harder to manipulate because manipulation must be made both on the film and on the photographs, while digital photography is very manipulative medium. They believe that traditional film provides a higher level of image integrity and provides a more secure method for storing images.

The truth is that photographs have been retouched since the 1800s. For example, **airbrushing** was developed in 1879 by Abner Peeler. In 1929, after the first commercially available cameras, Joseph Stalin had his enemies airbrushed out of photographs.

The use of scanners has made it extremely easy to digitize a photograph. And with the image editing tools, they can perform merging images and changing the contents of those images, changing colors, restoring. Then, they can output their "new" image to film once again with a laser projection device called a **film recorder**.

Unlike traditional film cameras, digital cameras provide the ability to identify whether an original image has been altered. Most digital cameras manufactured within the past few years capture information known as **metadata** in the file header.

However, recent changes in post-processing of captured images in the camera allow the detection of unauthorized work on forensic photography, the so-called "digital fingerprint images".



Stalin – analog photography manipulation

Manipulations: digital images

This is specialized software that decodes video data and algorithms used to extract unique features from the image. These “fingerprints” are highly compressed compared to the original source file, as they represent only its extract and therefore can be easily stored in databases for later comparison. Because of its content it cannot be used later to reconstruct the original video. Both video and audio “fingerprints” can be extracted from the video footage separately and each of them individually can be compared. The “digital fingerprints images” cannot be compared with “digital watermark” on the digital photography because they are two completely different things.

The reality is that digital imaging provides a faster, more secure imaging solution than a film, and digital imaging provides the best line of defense for proving image integrity.

In considering and opting pro and con digital photography, it can be concluded that digital technology allows faster processing, instant access to information, reduces procedure time, reduce costs and enables immediate transfer (sharing) of data electronically and facilitates the training of staff to handle it. The main advantage of the digital camera is the memory card that can fit many more images than a traditional film. A very important thing is the ability to immediately review and select recorded images and the ability for their direct editing. Digital cameras, next to the image, record many other data and often provide the possibility of recording sound and short films. To print images only, a printer is needed. For making photography from the film, an entire photo laboratory is necessary.

In the first place a disadvantage of the digital photography is the price. Digital cameras are more expensive than analog ones, but, slowly, prices are becoming more acceptable. Just now digital cameras do not have a range of accessories available to analog cameras. They use batteries that are quickly worn-out when in use. The biggest problem of the digital cameras is their great sensitivity to the viruses and bad storage conditions.

In recent years, the prices of digital cameras have gone down and the quality has improved. Today the prices of digital cameras are comparable with 35 mm cameras and they have almost comparative resolution. When considering this, digital pho-

tography, is a better choice in the field of price/performance. Digital photography is a technology that is developing very rapidly and will ultimately defeat the traditional (analog) photography. The reason why this would happen and why digital images today must be accepted in a very short time, regardless of all the virtues and flaws, is quite prosaic. All around the world the production of analog cameras are stopped and the factories that produced films are closed.

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THE APPLICATION OF THE INSTRUMENTAL METHODS: ICP-OES AND SEM-EDS IN FORENSIC ANALYSES OF TEETH MINERAL TISSUE

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Abstract: Mineral tissues are potentially interesting forensic material which gradually alters under the influence of the outer mediums. The paper describes the changes of the teeth mineral tissue which was exposed to the influence of the natural mediums-soil and water, detected by the use of ICP-OES and SEM-EDS instrumental methods. The migration of biometal ions Ca, Mg, Fe, Cu, Zn in the systems teeth-soil and teeth-water mediums was observed. The study has shown that changes in the biometal content has happened. The Ca and Mg ions content in mineral tissue increase while the Cu ion content decreases. The Fe and Zn ions migration depends on the type of medium and is different for soil and water medium. The adsorption of Na ions on the mineral tissue from the surrounding environment is also noticed. The changes detected by the above mentioned instrumental methods are potentially interesting in forensic researches, because they move toward the kind of medium in which forensic material was put off.

Keywords: teeth, soil, water, biometals, forensic examination, ICP-OES, SEM-EDS.

INTRODUCTION

Hard mineral tissues, bones and teeth, are readily available biopsy material which is relatively easily analyzed and applied in the forensic researches, especially bones. It is potentially interesting and convenient in the cases when it is exposed to the influence of different outer mediums¹. The basic structure unit of bones and teeth is hydroxyapatite $\text{Ca}_{10}(\text{PO}_4)_6(\text{OH})_2$ (HAp). The teeth enamel consists of 96 % HAp². In the contact of teeth with environment medium and in natural HAp tissue, the processes of substitution, diffusion, ionic exchange and others are on going, during which the Ca^{2+} ions are altered by cations of other M^{2+} metals. Also, the sorption of the ions from the surrounding environment on HAp of the natural teeth is possible. This processes happen in the living organisms during the teeth contact with food, water and oral fluids³. Similar processes happen in bones exposed to the natural environment influences, and probably in teeth, but there are no literature data⁴ about it. There are multiple possibilities (adsorption, desorption, diffusion, ionic exchange, precipitation, coprecipitation) in the natural environment for ionic exchange in the system soils-exposed antropogenic material. This has already been applied in practice for the determination of time after death^{2,5}. The ionic migration intensity into or out of the mineral tissue, can be an indicator of the tissue exposure time to some environment and to the kind of environment. According to the literature data, the current examination in the forensic practice was focused on the examination of the content of the hard mineral bones tissue that was exposed to the

soils⁶. There is no examination into details of hard mineral teeth tissue reactions in the natural environment and in different types of soils. According to the qualitative and quantitative alterations that occurred in the mineral teeth tissue after it had been exposed to different mediums^{7,8}, the aim of the research was to obtain the information potentially useful for forensic expertise. Hard mineral teeth tissue alterations, the changes of biometal Ca, Mg, Fe, Cu and Zn content in teeth were researched as well as the migration trend of those metals in the system teeth-natural environment. The calcium was chosen as the basic constituent of the HAp, Fe and Mg as the metals present in soils in high concentrations and Zn and Cu as the biometal whose M^{2+} are easily mobile. The data about the mineral tissue alterations are obtained by the characterization of the mineral tissue by the Inductively Coupled Plasma connected with the Optical Emission Spectroscopy (ICP-OES) and Scanning Electron Microscopy (SEM-EDS).

EXPERIMENT

Model system

The model systems for the research of the interactions occurring in outer mediums-antropogenic material were human teeth exposed to the influence of different natural environment mediums (soil and water). The soil medium of the natural environment was soil of mostly clay content (medium I)^{9,10}. As the water medium of the natural environment, the solution of "rainwater model system" was used (medium II). Antriogenic materials exposed to the influence of the mentioned mediums were humic teeth extracted due to the healthy and ortodonic reasons in the Dental Hospital of the Medical Faculty of the University of Niš.

The teeth were exposed to the mentioned mediums in the mass ratio 100:1 and left for three months at room temperature ($t=22-25$ °C).

Inductively coupled plasma connected-Optical Emission Spectroscopy (ICP-OES).

The biometal content in the solutions of the mediums and in the samples of potential forensic material was determined by the Spectroflame ICP-OES device in the plasma of argon. Both teeth samples – control one and the group of samples that was exposed to the influence of mediums, were transferred into the liquid, soluble phase in the same way and under the same conditions^{11,12}. The biometal content was determined from the solutions. In the same way and according to the same procedure the soil medium was treated and prepared for metal content determination. The same determination was done also for the water medium.

Scanning Electron Microscopy (SEM-EDS).

The characterization of the mineral teeth matrix, teeth tissue vapoured by the colloidal gold, was done by the „FEI QUANTA 200“ in the National Crime-Technical Centre of the Ministry of Interior in Belgrade.

Statistical analysis

For statistical interpretation of results, the method Student's t-test (Microsoft Office Excel) was applied. The results of the chosen biometal content measuring are shown as the mean value \pm SD. Statistically important results are shown as $p < 0.01$, $p < 0.05$ i $p < 0.1$.

RESULTS AND DISCUSSION

The results of the organic matter (OM) content determination, shown as the content of organic carbon, results of biometals determination and the pH results in mediums, clay reach soil and rainwater, which were used for the exposure of the mineral teeth tissue, are shown in the Table 1.

Table 1. The content of OM, biometals and pH of mediums in which the forensic material was stored

| | Organic C | Ca | Mg | Cu | Fe | Zn | pH |
|-------------------------|------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| <i>Medium I [mg/g]</i> | 59.58 | 0.21 | 0.54 | 0.04 | 0.26 | 0.03 | 4.55 |
| <i>Medium II [mg/L]</i> | / | 1.20 | 0.43 | n.d. | n.d. | n.d. | 6.13 |

These results explained that the soil enriched with clay is acidic (pH=4,55) and contains the high content of the organic matter, whereas rainwater model system has pure metal content.

The results of the interaction and the change of biometal ions content in the system "medium-antropogenic material" during the three months period are shown in the Table 2. The results represent the mean value \pm SD (n=5, n-number of measurements).

Table 2. The content of biometals in the teeth samples that were exposed to the influence of different mediums

| | Ca [mg/g] | Mg [mg/g] | Cu [µg/g] | Fe [µg/g] | Zn [µg/g] |
|------------------|----------------------|--------------------|---------------------|--------------------|---------------------|
| <i>Control</i> | 293.94 \pm 34.47 | 5.50 \pm 1.20 | 37.93 \pm 5.96 | 36.52 \pm 6.05 | 0.53 \pm 0.08 |
| <i>Medium I</i> | 327.5 \pm 11.55*** | 8.74 \pm 1.09* | 31.56 \pm 4.41*** | 21.52 \pm 2.55* | 0.55 \pm 0.02** |
| <i>Medium II</i> | 401.78 \pm 1164* | 6.00 \pm 0.46*** | 11.98 \pm 2.28* | 33.26 \pm 3.09** | 0.053 \pm 0.004** |

* p<0.01, **p<0.05, ***p<0.1

According to the shown results, it is to conclude that the Ca and Mg content increases after the teeth were exposed to the influence of soil and water mediums. Thus, Ca and Mg have the same, statistically important, tendency of migration from the soil (p<0,01) and water medium (p<0,1) into teeth, as the potentially forensic dental material. This probably happens because the analysed model mediums in this experiment contains relatively high concentrations and higher quantity of these two metals (mass ratio of medium:teeth=100:1). A number of factors affect the migration of the calcium and magnesium ions from soil: acidity of the medium, concentration of other present ions, present organic material, mineral matrix of soil, temperature etc.

The results of copper content measurement in the samples of mineral teeth tissue exposed to the outer environment indicate that its content decreases (p<0.01), in other words it migrates from the teeth to the outer environment regardless of the subjected medium. This migration tendency of copper happens because of the equilibrium constitution in both mediums and due to potential interreactions and complex reactions of copper ions with soils components and due to the possible exchangeable adsorption of this metal¹².

The content of the clay mineral caolinite and smectite beside feldspar and other minerals in soil is convenient for bounding of the higher charged ions due to the special structure of the aluminosilicates. Thus, it brings to the decrease of the iron content in mineral matrix of the analysed biomaterial and probably to formation of the more stable aluminosilicate matrix^{9,10}. During the three months period of exposure to the influence of the rainwater medium, the content of the iron ions decreases in the mineral tissue due to the diffusion of the metal into surrounding medium.

The researches presented in this paper have shown that zinc ions migrate into mineral teeth tissue from the clay mineral enriched soil with the higher content of the organic matter and lower pH value, ($p < 0,05$), probably due to the acidity conditions in which zinc ions are present in the form of soluble compounds and thus able to migrate. In other researched model system, the leaching of zinc ions from the mineral teeth tissue into the outer water medium performs ($p < 0,01$) due to the established equilibrium.

The results of SEM-EDS analyses of the untreated and the samples of teeth that were exposed to the soil and rainwater mediums influence are shown in the Figure 1 and Figure 2.

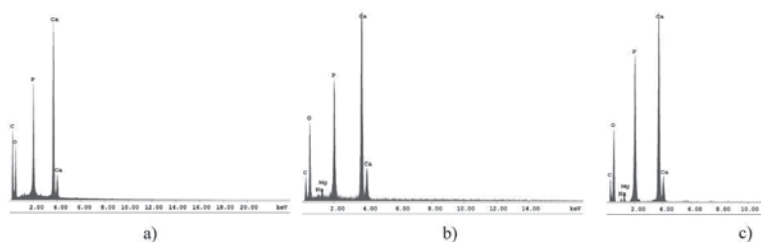


Figure 1. EDS spectra for a) untreated teeth, b) teeth exposed to the medium I, c) teeth exposed to the medium II

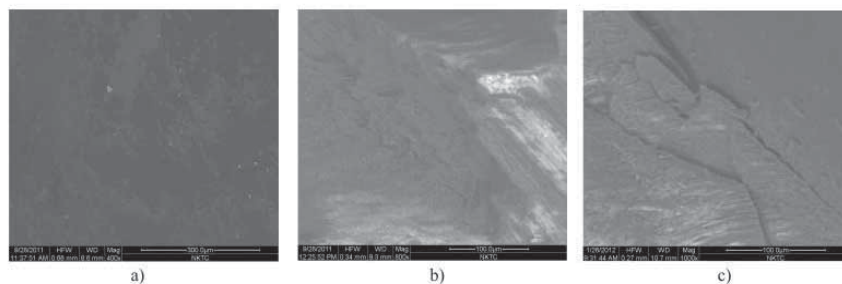


Figure 2. SEM micrographs spectra a) untreated teeth, b) teeth exposed to the medium I, c) teeth exposed to the medium II

On the basis of SEM-EDS analyses results comparison of untreated and treated samples that were exposed to the mediums, the alterations in the appearance of surface of the hard mineral teeth tissue were observed¹². EDS spectra directs to the local change of biometal in the researched mineral tissue that occurs due to the adsorption. The adsorption of Mg and Na is performed from both mediums (Fig.1). The cracks on the teeth surface were noticed, originated from the interaction with the surrounding environment and are of different appearance for the each medium (Fig. 2).

CONCLUSIONS

The ICP-OES analysis of biometals contents in the mineral teeth tissue, which are exposed to the influence of clay reach soil and rainwater in the period of three months, show that the statistically significant alterations have occurred. The intensity and direction of alterations in the biometals (Ca, Mg, Cu, Fe, Zn) content can be of great importance in forensic researches because they can influence the type of medium in which the dental, potentially forensic, material was buried. The altera-

tions on mineral teeth tissue can also be noticed by the use of SEM-EDS method and this technique can be utilized for preliminary observation of the teeth surface during the forensic research.

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GENDER DIFFERENCES IN POLYGRAPH EXAMINATION

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Abstract: The goal of research was to examine if gender affects reactions in psycho-physiological detection of deceit. In a mock crime situation, experimental group was instructed to “steal” a wallet from office, while control group was sent just to get a book from the same office. Finally, the sample of 188 participants (126 male and 62 female) was examined by experienced polygraphist which did not know who had actually stolen the wallet. In this research average reactions at relevant questions have been analyzed (for instance, “Did you steal the wallet from the bag?”). Four standard polygraph channels were used – electro-dermal reactions, cardiovascular activity, thoracic and abdominal respiration. They were analyzed by analysis of variance with two fixed factors, gender and group membership (experimental and control). Statistically significant differences were found on both factors, but there were not any significant interactions between gender and group membership.

Key words: polygraph, gender, mock crime situation.

INTRODUCTION

Polygraphy, the attempt of truth verification based upon psycho-physiological measures, is barely 100 years old.

In 1730, British novelist Daniel Defoe wrote an essay entitled “An Effectual Scheme for the Immediate Preventing of Street Robberies and Suppressing All Other Disorders of the Night”. In this text he recommended that taking the pulse of a suspicious fellow was a practical and effective method for distinguishing truthfulness from lying. It was fruitful idea to use medical science in fight against crime.

In 1878 Italian physiologist Angelo Mosso used an instrument called a plethysmograph in his research on emotion and fear in subjects undergoing questioning and he studied the effects of these variables on their cardiovascular and respiratory activity. Mosso studied how blood circulation and breathing patterns changed under certain stimuli. He reported about experiments in which he observed that a person’s breathing pattern changed under certain stimuli, and that this change, in turn, caused variations in their blood pressure and pulse rate.

In 1895 Cesare Lombroso modified an existing instrument called a hydrosphygmograph and used this modified device in his experiments to measure the physiological changes that occurred in a crime suspect’s blood pressure and pulse rate during a police interrogation.

In 1906, Sir James Mackenzie made his clinical polygraph. This instrument produced ink recordings of physiological functions.

In 1914, Italian psychologist Vittorio Benussi worked with instrument that was called pneumograph. He conducted experiments regarding the respiratory symptoms of lying and concluded that lying causes an emotional change within a subject which results in detectable respiratory changes that were indicators of deception.

In 1915 American attorney and psychologist William Moulton Marston developed the discontinuous systolic blood pressure test. Dr. Marston's technique used a standard blood pressure cuff and a stethoscope to take blood pressure readings of a suspect during questioning for the purpose of detecting deception.

In 1921, John A. Larson, a Canadian psychologist who worked in the Berkeley Police Department, in California, developed what many consider to be the original lie detector. He added the item of respiration rate to that of blood pressure and named this instrument the polygraph. Using polygraph, Larson was the first person to measure changes in a subject's pulse rate, blood pressure and respiratory rate during an interrogation.

In 1925, Leonarde Keeler, who worked with John A. Larson at the Berkeley Police Department improved the way of recording the changes in a subject's blood pressure, pulse rate and respiratory patterns. Next year, 1926, the Keeler Polygraph came on the market.

In 1938, Leonarde Keeler further refined the polygraph when he added a third physiological measuring component, the psychogalvanometer. This component measured changes in a subject's galvanic skin resistance during questioning.

During next several decades, different techniques have been developed: Reid's Control Question Technique (1947), Backster Zone Comparison Technique (1960), computerized scoring systems (Cubis, Raskin, Olsen and Harris...).

In this part of the world (former Yugoslav republics) polygraph examination is accepted as valuable tool in investigative practice. Although accepted by the crime-investigation police, efficiency and other aspects of psycho-physiological detection of deception have not been the area of scientific interest here. In order to examine and improve practice of using polygraph as an important and valuable part of criminal investigations, Academy of Criminalistic and Police Studies (KPA) and the Ministry of Interior started a scientific project a few years ago. First part of this project is to examine various aspects of polygraph examinations in laboratory situation. At this conference last year, Kolarević et al. (2011) have given the first results about polygraph efficiency. It was about 75% correctly classified cases from laboratory situation. Next step in joint efforts of the KPA and the Ministry of Interior is to analyze cases from investigative practice.

Basic idea of investigative polygraphy is to detect deception in person suspected of having committed a crime. It is done by the use of special instrument, polygraph that records several physiological reactions of a suspect. It is assumed that those reactions are in some way connected with his/her knowledge of offence. The broader assumption is that high suspect's motivation to hide a crime brings about certain amounts of stress that can be more or less easily measured by polygraph. Questions of polygraph (polygraph tests) are arranged in such a way that suspects reactions could be compared and assessed. There are different kinds of questions: irrelevant, relevant and control questions. Irrelevant questions are used to elicit basic, "normal" reactions – they have nothing to do with a crime itself. On the other side, relevant questions are questions about crime. It is expected that on this very questions suspect's reactions would be stronger, if suspect had really committed the crime. Control questions are about past moral behaviour and they are meant to elicit reactions of innocent people. For instance, question "Have you ever wished to steal something valuable" should bring about stronger polygraph reactions of an innocent person; a guilty suspect should not bother about his immoral wishes from past; such a person is only interested in crime he/she is suspected of.

In their investigative work, Serbian polygraphists use two basic polygraph tests: The *Zone Comparison Test* (ZCT) and *Guilty Knowledge Test* (GKT). ZCT is a variant of well known *Control Question Test*. It basically consists of relevant questions that relate to committed crime and control questions that relate to moral aspects of an examinee's past life, for instance whether he has ever done something wrong. It is assumed that truthful examinees will react on this kind of questions, contrary to guilty subject for whom the reaction on relevant question is expected (for instance, "Have you robbed the bank yesterday"). GKT is regarded more reliable and efficient test by vast majority of polygraphists. It consists of important details of crime that are presented to the examinee along with alternative choices. It is expected that a guilty subject will react on details related to crimes and not to false alternatives (for instance, the murder victim wore white shirt, so the question would be: Did the victim wear blue, red, white, yellow or black shirt?). The differences between those two tests are related with important practical implications. In order to administer GKT suspect must claim that he or she is completely ignorant of every aspect of crime. Only in such a situation the suspect is suitable for that test. If the suspect knows the details about the crime he or she could react because of his knowledge that is not repercussion of crime itself but the implication of the fact that the suspect is informed about crime. In that case, and that is the problem of every polygraphist, an alternative test (ZCT) should be used. Questions about scientific basis and efficiency of polygraph are still raised. In some countries, like Great Britain for example, polygraph is not used in police investigations. Moreover, a group of influenced scientists from British Psychological Society (Bull et al., 2003) concluded that "research on the polygraph has not progressed over time in the manner of a typical scientific field" and that "error rates in polygraph deception detection can be high". On the other hand, polygraph examinations in Japan under proper circumstances are accepted as evidence in court (Nakayama, 2002).

There is large number of field and experimental studies about efficiency of polygraph examinations. Field studies are very important since those results may have direct implications for further utilisation of the method. However, field studies are faced with the lack of adequate criteria about deception or truthfulness of the subjects. Main reasons for that are the lack of communication between courts and police and time period between investigation and conviction. On the other hand, laboratory studies of deception are very far from real life situations. The worst thing that can happen to experimental subject caught in lie is not to accept bonus money if the experiment is paid at all. In other words, experimental subjects will not suffer from any consequence, but the real suspect if caught in lie can go in prison for a very long time and somewhere even loose life. Short review of validity of polygraph results were started by Ansley (1990) who analyzed 12 field studies with 2,174 polygraph examinations. The average value was 98% of correctly classified subjects. Same author analyzed 41 experimental studies with 1,787 examinations. Average value of correctly classified examinees was 82%.

MacLaren (2001) conducted meta-analysis of 50 treatment groups drawn from 22 laboratory simulation studies (total N = 1,247) in order to provide comprehensive estimate of GKT validity. Total percent of correctly classified subjects from mock crime experiment was 82%.

Since polygraphy has been recognized by the Serbian police so far, there is a need to scientifically examine its efficiency and not to rely solely on growing body of knowledge about it in other countries that use it in police work. In order to fulfil this task, cooperation was established between polygraphists from Criminalistic police and Academy for Criminalistic and Police Studies. First step in examination of efficiency of polygraph methods was conducting of series of experiments that involved typical "mock crime" situation.

This research is about gender differences and their relation to polygraph examinations. There is a lack of thorough analysis of relation of socio-demographic variables and polygraph reactions. To our knowledge, there are just a few such attempts. Probable reasons for that are characteristics of samples, first of all, samples are often small and they consist of male participants.

According to the National Research Council in their report on the Polygraph, (2003, p. 137), some studies have found gender differences on the intensity of physiological responses and it appears that this has been ignored in the rest of the research literature and the practice of polygraph testing. There are three studies (Matte & Reuss, 1992; Bradley & Cullen, 1993; Staunton and Hammond, 2011) that have found gender differences in physiological responses during polygraph tests.

On the other hand, it can be heard from polygraphists who work in police that there are certain gender differences in the sense that women's deception is harder to detect. The question remains whether this opinion is based on experience objectively considered or it is just a prejudice. Also, women are less involved in crime than man; consequently, fewer women are subjected to polygraph examination.

It is well known that there are many biological and psychological differences between men and women. The problem of this research is whether such differences exist in psycho-physiological reactions when subject attempts to deceive, to give false statement. Second important question is if such differences exist, whether they are connected with efficiency of polygraph examinations. These questions have practical importance and it should point out certain directions in interpreting results in polygraph examinations.

POLYGRAPH EVALUATIONS

Polygraph evaluations are based on systematic process in which certain decision rules are applied regarding diagnostic features and other data from polygraph examination. There are three types of outcome of polygraph examination:

- Deception indicated
- No deception indicated
- Inconclusive.

Physiological data are visually presented in polygraph charts. In their work, polygraphists first conduct holistic analysis of charts. Later on, they seek for spots - specific locations that carry diagnostic features. They are also aware that there are certain physiological changes that cannot be understood as indicators of false statement. Those are so called artefacts (for example, examinee coughs). In polygraph examinations, period of time between the stimulus onset (question) and the response onset is called latency. Any physiological response after the stimulus onset is considered to display response. Diagnostic features are physiological phenomena that are used in chart evaluations. Evaluations are conducted clinically (holistic approach), or, more often, numerically. The goal of holistic assessment is to identify trends in the examinee's physiological data. When global assessment is made, and trends and deviations have been identified, scoring rules may be applied to the diagnostic features within each channel.

Spot Analysis is another fundamental concept for assigning weighted values (when using numerical scoring system), by individual recording channel, based on comparisons between relevant and applicable comparison question.

In numerical scoring system, basic rules are to assign positive numbers when the responses to the comparison questions are more significant; negative numbers are assigned when the responses to the relevant questions are more significant. Zero scores are assigned when there is no response or the difference is indiscernible. A zero value is assigned if a channel is unable to be evaluated due to excessive noise or an artefact.

Basic diagnostic features will be shown shortly. Those features of respiratory channel are:

- Apnoea-blocking (suppression)
- Decrease in amplitude (suppression)
- Progressive decrease in amplitude (suppression)
- Decrease in rate
- Inhalation/Exhalation ratio change
- Temporary baseline change.

Many factors affect breathing like age or health. The average person takes 12 to 18 breaths per minute. In polygraph examinations, particular attention should be paid to a subject's breathing patterns because it is the area where a subject has the greatest degree of conscious control.

Basic electro-dermal features are:

- Amplitude
- Complex Response
- Duration

Electro-dermal waveform is a reflection of the conductivity changes in the human skin. Deviations from the skin's conductance level is referred to as phasic activity. This is related to sweat gland activity.

Basic cardiovascular features are:

- Phasic Response (rapid rise from baseline)
- Duration of Response
- Decrease in heart rate.

Those features are blood pressure changes at the arterial monitoring site. The average human heart rate is 70 beats per minute.

Besides basic principles and diagnostic features, there are two more important components in polygraph examinations. First, it is interview. Polygraph examination in its narrow sense is structured interview with closed questions (mostly, "yes" and "no" answers). But, there are also pre-test and post-test interviews. In pre-test interview, subject's physical and mental health is examined – his/hers fitness for examination should be confirmed. Then, polygraphist attempts to gather information about subject's past life and value system because that is important for question construction. Open questions are used. In post-test polygraph interview, polygraphist talk with examinee about his/hers test behaviour. Examinee's reactions could be used as tools for producing confession. Examinee is confronted with reactions that indicate false answers. In this interview certain coincidental reasons for deceptive reactions are eliminated. For instance, examinee strongly reacts on relevant questions about place where murder happened. In interview is discovered that suspect had had sexual relations with victim in that very place so that was the reason of such strong reactions.

This last example shows that interview with suspect in polygraph examination has also investigative importance. Perhaps new details about crime or complete/partial ignorance about the case should be verified. Suspect's knowledge about the case is of crucial importance regarding choice of polygraph technique.

THE ROLE OF AUTONOMIC NERVOUS SYSTEM

This part of nervous system is of utmost importance for polygraph reactions. The autonomic nervous system is divided into the sympathetic nervous system and the parasympathetic nervous system. Both of these systems can stimulate and inhibit effectors. These two systems work in opposition. When one system stimulates an organ, the other inhibits. Working in this way, each system prepares the body for a different kind of situation. The **sympathetic nervous system** prepares the body for situations requiring alertness or strength, or situations that arouse fear, anger and excitement ("fight-or-flight" situations). In these kinds of situations, the sympathetic nervous system stimulates cardiac muscles to increase the heart rate, causes dilation of the bronchioles of the lungs (increasing oxygen intake), and causes dilation of blood vessels that supply the heart and skeletal muscles (increasing blood supply). The adrenal medulla is stimulated to release epinephrine (adrenalin) and norepinephrine (noradrenalin), which in turn increases the metabolic rate of cells and stimulates the liver to release glucose into the blood. Sweat glands are stimulated to produce sweat. In addition, the sympathetic nervous system reduces the activity of various "tranquil" body functions, such as digestion and kidney functioning. The **parasympathetic nervous system** is active during periods of rest and digestion. It stimulates the production of digestive enzymes and stimulates the processes of digestion, urination, and defecation. It reduces blood pressure and heart and respiratory rates and conserves energy through relaxation and rest.

A psychological phenomenon that is a bridge between the role of autonomic nervous system and polygraph situation is stress. It is sufficient to say that police interrogation of a suspect and even witnesses or victims is stressful. Person convicted of a crime is faced with sentence, loss of reputation and other unpleasant things. Most often such persons tend to hide their misdeeds. And this situation is stressful. One of the usual assumptions of many polygraphists is that stress could be detected by the use of polygraph and carefully designed set of questions.

Stress response involves a complex interaction of many body systems, mainly to make the body work more effectively and to minimise all unnecessary functions. It is as if the body switches on a survival mode, where all the energy and functions are directed to fighting a threat.

It is achieved via the autonomic nervous system (ANS), which creates a non-conscious automatic response, preparing to fight and survive. The response is controlled by the hypothalamus region in the brain, which initiates the release of corticosteroid hormones from adrenal glands into the bloodstream (epinephrine, norepinephrine and cortisol). The chain is followed by:

- Increased activity in central nervous system mental activity
- Increase in heart rate
- Dilation of airways and increased inhalation
- Dilation of pupils (allowing light, to sharpen eyesight)
- Regulation of body temperature.
- The work of other body systems is temporarily minimised, which includes:
 - Reproduction system
 - Immune system
 - Digestive system
 - Decreased functioning of intestinal tract and kidneys.

As a result, a person achieves a survival state— speed, alertness, strength, emotional sharpness. This response survival happens automatically in seconds. Usually, when the stressor disappears, the reaction is soon brought down by the parasympathetic nervous system which returns things to normal.

The first stage of the fight or flight response is activation of the sympathetic nervous system. This causes a system-wide response. Adrenaline and noradrenaline are released leading to increased alertness. Blood is diverted from the internal organs and the skin to skeletal muscles. The heart-rate, force of heart contractions, and respiratory rate are increased. The body begins to convert stored glycogen into glucose. All of these changes allow the body to exert a large amount of energy over a short period of time so that the individual may either fight effectively, or run away effectively. The fight or flight response is designed for response to acute (or short-term) stressors, however many of the stressors that affect modern man may be chronic in nature. The first stage of stress is the alarm phase. This is where the fight or flight response is activated causing the organism's ability to resist the stressor to increase. In the resistance phase, the body starts to adapt to the existence of a chronic stressor. In the exhaustion phase the body's resources become depleted, and body systems start to deteriorate. But, for polygraph situation it is the first phase of stress, alarm phase that is most crucial. Elements of alarm phase reactions are provoked by the use of properly designed set of questions. Exactly the relevant questions, those that focus on key element of crime should provoke stress reactions. Other forms of questions, like irrelevant questions, should bring about weaker reactions. Although things are never that simple, this is one of the basic ideas of polygraph examination.

In experiment with mock crime, researchers attempt to imitate those threatening situations, and one should know that they can never be equal to real life situation. Nevertheless, this should help in polygraph efficiency research since this is notable part of police tactic in this part of the world.

METHOD

Participants

The sample of 188 participants (126 male and 62 female) were recruited for the study. They were 1st year students of Academy of Criminalistic and Police Studies in Belgrade, where the study took place. Age of participants was 19 years and they had no previous experience of a polygraph examination.

Instruments

The questioning technique administered was Zone Comparison Test (ZCT). In this test psycho-physiological activity is registered during series of different questions. There are irrelevant, control and direct questions. Generally speaking, irrelevant questions serve as way of "normalizing" reactions – these questions have nothing to do with the crime. Direct questions are those that relate to the specific crime which is under investigation. Control questions are about past moral behaviour of examinee and their goal is to elicit reactions from the innocent people.

The basic assumption of ZCT is that in a case of guilty subjects there will be differences in reactions between direct and control questions. It is expected that reactions at direct questions will be stronger than reactions at control questions.

Polygraph recorded respiration, galvanic skin response (GSR), and cardiovascular activity. Lafayette polygraph model LX 3000 was used in the experiment.

Design

A mock crime procedure was used. Participants were randomly assigned to experimental and control group. Male and female participants were assigned in both groups in approximately equal number. Participants in the experimental group which was involved in mock crime situation were promised 10 Euros if they qualified innocent by polygraph examiner.

Procedure

The first step was to introduce subjects with the goals of research. The subjects were individually informed that they were going to participate in a simulated crime situation and that they were going to be questioned by polygraph examiner. After that they gave their written consent to participate in the experiment. Then they were assigned to experimental or control group and given detailed instructions about actions they should perform. Experimental subjects were instructed to go to certain office in the building and borrow a book from one of the employee (who participated in research). They were told that the employee would go out of office for a short time. Experimental subjects were told to "steal" the wallet from the employee's bag during her absence. When the employee came back, the experimental subjects were to take book and bring it to instructor along with the "stolen" wallet. Every experimental subject was asked to open the wallet and examine what was in it. They could see that wallet contained money – 4,000 dinars (40 Euros) and one aspirin. Experimental subjects were instructed to remember those articles and not to mention them when examined by polygraphist. In other words, they were instructed to lie in polygraph situation. They were instructed to tell the truth about going to borrow the book but they were instructed to try to conceal that the wallet was stolen. If they succeed to "convince" polygraph examiner of their 'innocence', experimental subjects were promised to get the reward of 10 Euros. On the other hand, the control subjects had to borrow a book only. They did not know that someone else would steal a wallet from the employee's office. They were instructed to tell everything they did in the employee's office, when examined by the polygraphist.

At the end the subjects were scheduled to polygraph examination that took place a few days after instruction.

Administration of Zone Comparison Test

Examinations were conducted by three experienced polygraphist from Criminalistic Department of the Ministry of Interior of the Republic Serbia. They had equal number of subjects and conducted examinations in uniform way. Complete experimental setting was created to resemble real polygraph situation. Polygraph examiners did not possess any knowledge about whether their subjects were experimental or control subjects. The test was administered twice and consisted of ten questions:

ZCT consisted of the following questions:

1. Are you a KPA student?
2. Are you going to lie on any of the following questions?
3. Did you make false statements on psychological entry exam?
4. Did you take the wallet from the handbag?
5. Did you graduate at high school?
6. Did you ever steal something from a close person?
7. Did you take out the wallet from office?
8. Do you study in Belgrade?
9. Have you ever wished to steal something valuable?
10. Are you involved in the stealing of wallet?

Relevant questions were 4, 7 and 10. Questions 3, 6 and 9 are control questions. Other questions were irrelevant. Duration of test was 3 minutes and 20 seconds. That means that time for recording reactions was 20 seconds for each question.

Data analysis

The data from polygraph examination were digitally recorded. Software attached to Lafayette polygraph gives opportunity to record 30 samples per second for each channel. So, there were approximately 6,000 values for every participant. In this research, general index of arousal at relevant questions – maximum value in four polygraph channels (electro-dermal response, cardiovascular activity, thoracic and abdominal respiration) was used as dependent variable. Since the test was administered twice, it was taken bigger maximum value for further analysis. And since there were three relevant questions, their average value was taken. Maximum values of mean of reactions at relevant questions were compared in experimental and control groups, where gender was an independent variable. In order to examine the influence of gender in polygraph reactions, general linear model was used where group membership (experimental or control) and gender (male or female) were fixed factors.

There is one important notation regarding data analysis in this study. When using CQT, polygraphists basically compare relevant and control questions reactions. In this study such attempt did not bring any results. That was the reason why only composite relevant questions reactions were used. Furthermore, the authors are aware that there are many other characteristics of polygraph record that contain important information. In this research relevant questions reactions are taken as a general index of arousal and it was expected that this basic reactions would show any difference between experimental and control group and/or between males and females.

Results

In Table 1, the descriptive statistics is shown. This table consists of mean and standard deviations of males and females in both experimental and control group, for every polygraph channel.

Table 1 - Descriptive statistics

| Polygraph channel | Gender | Group | Mean | Std. Deviation | N |
|-------------------------|--------|--------------|---------|----------------|-----|
| Electro-dermal response | Male | Control | 117,762 | 20,677 | 64 |
| | | Experimental | 121,435 | 20,402 | 62 |
| | | Total | 119,569 | 20,542 | 126 |
| | Female | Control | 107,200 | 19,190 | 29 |
| | | Experimental | 107,381 | 21,800 | 33 |
| | | Total | 107,296 | 20,454 | 62 |
| Cardiovascular activity | Male | Control | 70,996 | 7,220 | 64 |
| | | Experimental | 69,747 | 9,472 | 62 |
| | | Total | 70,381 | 8,393 | 126 |
| | Female | Control | 72,455 | 5,948 | 29 |
| | | Experimental | 69,311 | 10,394 | 33 |
| | | Total | 70,781 | 8,684 | 62 |
| Thoracic respiration | Male | Control | 119,983 | 20,666 | 64 |
| | | Experimental | 118,056 | 20,228 | 62 |
| | | Total | 119,034 | 20,392 | 126 |
| | Female | Control | 113,683 | 21,489 | 29 |
| | | Experimental | 116,042 | 20,672 | 33 |
| | | Total | 114,939 | 20,918 | 62 |
| Abdominal respiration | Male | Control | 125,154 | 27,931 | 64 |
| | | Experimental | 115,700 | 19,679 | 62 |
| | | Total | 120,502 | 24,591 | 126 |
| | Female | Control | 114,001 | 15,232 | 29 |
| | | Experimental | 109,089 | 15,737 | 33 |
| | | Total | 111,386 | 15,573 | 62 |

There are certain differences between males and females, but also between experimental and control group.

In electro-dermal response, male controls have stronger reactions than female controls. Male experimental subjects have also stronger reactions than females.

Cardiovascular activity of male controls is weaker than female's activity. But, male experimental subjects show stronger cardiovascular activity.

Thoracic respiration of male controls is stronger than female. That is also the case with experimental subjects.

Finally, abdominal respiration in both control and experimental male subjects are stronger than in female subjects.

The next table will show exactly which of these differences are statistically significant and that will help in answering basic question of this research: does gender affect polygraph results. It can be seen that experimental group has a bit lower reactions than control group. Also, female's reactions are generally lower than male's reactions.

Table 2 - Tests of Between-Subjects Effects

| Source | Dependent Variable | F | Sig. |
|-------------------------------|------------------------|--------|-------------|
| Gender | Electro-dermalresponse | 14.836 | .000 |
| | Cardiovascularactivity | .151 | .698 |
| | Thoracicrespiration | 1.679 | .197 |
| | Abdominalrespiration | 6.898 | .009 |
| Group (Exp. or control) | Electro-dermalresponse | .364 | .547 |
| | Cardiovascularactivity | 2.784 | .097 |
| | Thoracicrespiration | .005 | .946 |
| | Abdominalrespiration | 4.511 | .035 |
| Gender*group | Electro-dermalresponse | .299 | .585 |
| | Cardiovascularactivity | .518 | .472 |
| | Thoracicrespiration | .446 | .505 |
| | Abdominalrespiration | .451 | .503 |

There are some gender differences which are statistically significant. Electro-dermal response and thoracic respiration in women are smaller (table 1.). Polygraph examination in artificial conditions is efficient, because there are statistically significant differences between experimental and control group. In men and women, cardiovascular activity and abdominal respiration is lower in experimental than in control group. Key question of this research is whether gender differences contribute to results of polygraph examination. The answer is negative. There is no statistically significant interaction between gender and group membership (experimental or control). In other words, gender differences are not related to group differences.

Discussion

Not just gender, but other socio-demographic variables could have impact on polygraph examinations. For instance, Reid and Inbau (1996), refer to the presence of some reactivity differences dependent on the educational level. They have shown that psycho-physiological reactivity is stronger in the cardiovascular paths for those subjects with a lower intellectual level, and for the subjects with a higher intellectual level, the psycho-physiological reactivity is more pronounced at the level of respiratory paths. Pasca (2011) finds stronger polygraph reactions in suspects with higher education than in suspect with low education level. These results are in contradiction with the former (Reid and Inbau, 1996).

This research has shown that there are some differences in polygraph reactions between truthful and deceptive people in experimental conditions. There were some gender differences as well.

In electro-dermal response, male controls have stronger reactions than female controls. Male experimental subjects have also stronger reactions than females.

Cardiovascular activity of male controls is weaker than female's activity. But, male experimental subjects show stronger cardiovascular activity.

Thoracic respiration of male controls is stronger than female. That is also in a case of experimental subjects.

Finally, abdominal respiration in both control and experimental male subjects is stronger than in female subjects.

It should be noted that usual analysis in Control Question Tests, like ZCT utilized in this research is comparison of relevant and control question reactions. However, such analyses have not shown any effect. In this sample there were not any differences between relevant and control questions. That is the reason that only relevant questions were used. Differences between experimental and control group was found, and also the differences between male and female participants. It has also been found that gender and group membership are not in interaction. Therefore, this research has shown that gender does not affect psycho-physiological reactions in deceitful behaviour. Although reactions of male and female participants shown certain differences, there is no significance when they attempted to deceive polygraphist. The results from this research are in accordance with those of Reed (1999), who has shown that there are no statistically significant differences regarding the accuracy of diagnosis in polygraph tests for both female and male subjects and also in accordance with the results of Honts, Amato, and Gordon (2004), who reported that sex did not produce any main or significant interactions. These authors have used the Control Question Test.

On the other hand, by using another kind of polygraph test (Guilty Knowledge Test) Staunton and Hammond (2011) found the higher skin conductance and respiration responding among male participants, while heart-rate responsiveness was greater among females. Having those differences in mind, it can be concluded that further exploration of the gender differences in psychophysiology of deception is needed.

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OBLAST IV
RAZVOJ POLICIJSKOG OBRAZOVANJA

**PROFESSIONAL DEVELOPMENT OF THE TRAFFIC POLICE
IN THE FIELD OF SECURING THE SCENE
OF A ROAD TRAFFIC ACCIDENT
AND ROAD TRAFFIC ACCIDENT SCENE INVESTIGATIONS
CASE STUDY – SERBIA**

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Abstract: Road traffic accident scene investigations belong to the group of highly qualified jobs and therefore a particular specialization, but also a permanent professional development, are needed for the performance of these tasks. These tasks are carried out by police officers from the Ministry of the Interior of the Republic of Serbia, who have completed a specialized course for work at the traffic police department, as well as by police officers with a completed course for forensic work. During the courses, they have studied in details the tasks concerning the road traffic accidents scene investigations. Nevertheless, apart from this basic knowledge from the area of road traffic accident scene investigations, refreshment and acquisition of new knowledge is made possible through professional development programs. The project named: “The advancement of jobs of securing the road traffic accident scene and conduct of road traffic accident scene investigations”, was carried out in Serbia, in 2007. Within this project, the following has been done: procurement of the equipment for securing the road traffic accident scene and conduct of road traffic accident scene investigations has been realized; appropriate training of the educators-senior staff of the traffic police was carried out; a draft of the text concerning the Mandatory instructions governing the securing of the road traffic accident scene and conduct of road traffic accident scene investigations, as well as the supporting Manual for the training and preparation of training programs in the traffic police branches were prepared. This work gives an overview of the project in question, focusing on the educational part.

INTRODUCTION

The frequency of occurrence of road traffic accidents, the volume of their consequences and complexity of circumstances under which they happen pose special requirements for police reaction. The occurrence of these accidents sets the following goals before police officers: prevention of enhancement of occurred consequences, provision of assistance to the participants in road traffic accidents, resolution of traffic disturbances, detection of causes of road traffic accidents, documenting and offering reliable data for the purposes of court proceedings, execution of certain rights of indemnity, etc. All these goals have pointed out the responsibility of the police in terms of a timely, expert and efficient action in cases when road traffic accidents have occurred. In order to achieve these goals, expert staff and adequate equipment are needed.

Expertise of the staff is provided through a selection of human resources with a demanded educational profile and level of education, and through the process of qualification and permanent professional development. Provision of equipment is carried out through a permanent process of research of needs within work and characteristics of the modern equipment and its procurement. Having in mind the need of putting the execution of jobs related to the proceeding in road traffic accidents to a higher level, the project named: "THE ADVANCEMENT OF JOBS OF SECURING THE ROAD TRAFFIC ACCIDENT SCENE AND CONDUCT OF INVESTIGATIONS OF ROAD TRAFFIC ACCIDENTS", was carried out in Serbia, in 2007, and included the training and provision of equipment for the traffic police. This paper has given a description of this project.

REALIZATION OF ROAD TRAFFIC ACCIDENT RELATED JOBS IN THE PREVIOUS PERIOD

Periodic analyses of the performance of works in the previous period gave the overview of the capacities and the scope of works. The execution of the intervening regulations and immediate control of traffic on the roads in the Republic of Serbia were carried out by traffic police officers, organized in 49 traffic police branches, and included 49.820 km of public roads, out of which 457 km of highways, 4.840 km of main roads (State roads of category I), 10.197 km of regional roads (State roads of category II), 20.177 km of local roads and 14.149 km of streets in urban areas.

Road safety indicators in the Republic of Serbia in previous years showed that, on a yearly basis, there were around 60.000 road traffic accidents with the number of fatalities ranging between 850 and 1.200 persons, and between 16.000 and 19.000 injured persons. Enormous material damage, costs and losses also make part of these accidents.

Traffic police is obliged to secure the scene of each registered road traffic accident with at least one injured persons or a material damage bigger than 200.000 RSD, to conduct the investigation or participate with the court organs in the execution of this investigation, to process and prosecute the investigation documentation and enclose it to the competent justice authorities for further proceeding.

The analysis of the performance of tasks of securing the scene of a road traffic accident and carrying out road traffic accident investigation in the previous period revealed the following problems:

- lack of appropriate vehicles;
- inadequate or damaged equipment (for photographing and measurement in particular);
- lack of modern measuring equipment (laser distance meters, vanity cases, i.e. appropriate handbags with the equipment for processing of traces);
- unsorted rules concerning takeover of the existing equipment among the investigation teams;
- incomplete control of work by certain senior staff;
- insufficient training of certain senior staff in the traffic police department;
- non-observance of the investigation rules;
- superficial and insufficiently professional work of certain police officers;
- unsorted rules of deployment of the criminal techniques and criminal police;
- untimely and inappropriate securing of the road traffic accident site;

- slow resolution of traffic disorders;
- taking too long to organize the investigation team to attend the scene of a road accident;
- transfer of incomplete data by the road patrol in charge of the road traffic accident scene the police officer on duty at the operations center;
- untimely reporting by the investigative judge on the severity of injuries sustained in a road traffic accident;
- insufficiently professional making of the investigation documents by individuals;
- unsafe packing, storage and securing of exceptional traces;
- absence of drawings of junctions and irregular, scaled curves, prepared in advance, on which road traffic accidents happen more often;
- overloading by the number of investigations or other tasks, etc.

In order to reduce the existing consequences of road traffic accidents and prevent new ones, as well as to make the investigation and provide quality evidences for the further proceedings, traffic police must be appropriately organized and equipped with purposeful vehicles, equipment and devices for the securing the scene of road traffic accident, and also with the equipment and devices for the conduct of investigation of road traffic accidents. Apart from that, traffic police must be professionally trained for the innovated procedures and usage of modern technical means, devices and equipment.

REALIZATION OF THE PROJECT

In order to overcome the observed deficiencies in the work related to the improvement of tasks intended for the securing of the scenes of road traffic accidents, and conduct of investigations of road traffic accidents, the project named "The advancement of jobs of securing the road traffic accident scene and conduct of road traffic accident scene investigations" was launched and funded from the funds of the National Investment Plan (NIP), with its total budget being 139.216.025,00 RSD, ie some 1.500.000 EUR.

The project included the realization of the following activities:

1. Purchase of 12 vans for special tasks (investigation of road traffic accidents);
2. Purchase of 33 passenger motor vehicles – caravans for special tasks (investigation of road traffic accidents);
3. Purchase of devices and equipment for the securing of the scene of road traffic accidents, for 45 traffic police branches;
4. Purchase of devices and equipment for the conduct of road traffic accident investigations, for 45 traffic police branches;
5. Purchase of necessary additional equipment for the mentioned vehicles for special tasks;
6. Installation of the necessary equipment into vehicles;
7. Making of the "Mandatory instructions for securing of the scene of road traffic accident and conduct of road traffic accident scene investigations on roads";
8. Training of 50 senior staff from the traffic police department aimed at teaching them how to handle new devices and equipment for the securing of the road traffic accident scene and conduct of road traffic accident scene investigations, as well as the examination of their capabilities acquired during the training;

9. Training of 960 traffic police officers aimed at teaching them how to handle new devices and equipment for the securing of the road traffic accident scene and conduct of road traffic accident scene investigations, as well as the examination of their capabilities acquired during the training;
10. Organization of a seminar of experts focusing on the securing of road traffic accident scenes and conduct of road traffic accident scene investigations;
11. Organization of a round table with the representatives of other ministries and expert public;
12. Evaluation of the project and in-the-field control;
13. Making of the periodical and final reports, and of the financial reports.



Picture 1. Training at field during night conditions.

Implementation of the project has brought about direct benefits, including:

1. Completed and up-dated equipment of the Traffic police in Serbia with 45 modern and functional vehicles for the securing of the scene of a road accident and conduct of road traffic accident scene investigations;
2. Total number of 1010 police officers of the Traffic police in Serbia trained for the proper and efficient usage of the purchased vehicles, devices and equipment in their daily activities;
3. Enabled faster attendance to the scenes of road traffic accidents.

These benefits allow for the improvement of the conduct of tasks and include:

1. Quality investigation documents that enable a faster, more efficient and more objective imposing of sanctions in proceedings concerning offenses and criminal acts, a higher degree of legal protection of the participants in road accidents and reduction of costs and time of conducting court proceedings;
2. A faster attendance to the scene of road traffic accidents that enables reduction of the number of subsequent (secondary) road traffic accidents, number of killed and number of seriously injured in road traffic accidents, increase of safety of persons conducting investigations and other participants in traffic who have approached the zone of a road traffic accident;
3. A better flow of traffic and reduction of traffic halts in the zone of a road traffic accident that reduces time losses and ensures savings in economic terms.

The project has been carried out through the cooperation with the Traffic Police Administration, with the assistance of the Faculty of Transport and Traffic Engineering of the University of Belgrade, and The Academy of Criminalistic and Police Studies from Belgrade. Procurements in question have been executed according to the procedures of the Ministry of the Interior.

Procurement of the equipment for the securing of the scene of road traffic accident and road traffic accident scene investigations

Existing police practice, burdened by the budgetary restrictions, allowed to the police in the previous period for the distribution of only indispensable equipment for the conduct of road traffic accident scene investigations, without considerable investments into modernizing and procurement of the equipment intended for the securing of scenes of road traffic accidents. The necessity to observe as an integral part the realization of tasks incurred due to road traffic accidents has been recognized, so that the activities commence with the securing of the scene of a road accident. Given the special requirements that exist in certain areas (work on the highways or in larger cities); the need to determine two different packages has arisen. One is intended for the work on the highways and in larger cities, and the other for work on other roads. On the basis of the previously conducted researches, a selection of optimal vehicles, devices and equipment for both packages has been made, after which their procurement has been carried out.

The following has been procured:

1. 12 larger vehicles with the equipment package – for conduct of the tasks of 8 traffic police branches covering highways on the corridors 10 and 4 traffic police branches for the cities: Belgrade, Novi Sad, Nis and Kragujevac.
2. 33 passenger vehicles with the equipment package – for the remaining part of the traffic police branches.

Larger vehicles (so called vans) represent at the same time mobile offices with mini laboratories and complete equipment, devices and means for the securing of the road traffic accident scenes on fast roads, conduct of road traffic accident scene investigations and processing of supporting files and making of the documentation. Smaller vehicles (passenger vehicles) contain only the mobile laboratory with devices and equipment for the securing of the road traffic accident scenes on other roads and streets, and the conduct of road traffic accident scene investigations.



Picture 2. Large traffic accident securing and scene investigation vehicle.



Picture 3. Passenger vehicle for traffic accident securing and scene investigation.

Professional qualification and development

Specialized tasks of securing of the scenes of road traffic accidents and conduct of the road traffic accident investigation are integral police tasks that can be successfully done only by the specialized staff. Specialized staff is ensured through the process of qualification and development.

In order to become qualified, traffic police officers had to attend a specialized course - the course for control and regulation of traffic where they had to negotiate the contents related to the performance of tasks of securing of the scene of road traffic accidents and conduct of road traffic accident scene investigations. This training represents one of the prerequisites for the work at the traffic police department, and therefore all the traffic policemen and senior staff have to fulfill this requirement, i.e. that they have to pass successfully this specialized course.

Acquisition of new and refreshment of existing knowledge is carried out through the realization of programs of professional development. The training held within the project belongs to the professional development program as all the trainees have previously gathered knowledge at the specialized course intended for the work at the traffic police department.

The training held within the project is of specific type. Apart from the refreshment and acquisition of new knowledge related to the modern equipment, it also includes the preparation of a smaller number of educators and senior staff of the traffic police for the realization of training in branch offices of the traffic police. The preparation phase contains the lectures of a demonstration type and it represents to the trainees a model for implementation in the later phases of the training.

50 senior staff of the traffic police have been trained in this way and prepared to carry out trainings of 960 traffic police officers, in the later phases of the project realization, in the units they have originally come from. This has had as a result a total number of 1.010 police officers trained for a successful work with new vehicles, devices and equipment.

During the realization of the training, the following principles have been implemented:

- Work in smaller groups of people (10-15);
- Lectures are given through the implementation of different educational means

(PowerPoint presentations, flip charts, white tables, and other available lecturing means);

- During the lectures, trainees had to acquire necessary skills related to the driving of a vehicle with its equipment and the use of this equipment, using at the same time the equipment procured within the project (the training has been carried out on vehicles, equipment and devices that were procured and allocated to the organizational units from which the trainee have come);
- Training is carried out in conditions corresponding to the real situations, with the demonstrations in the conditions of visibility during the night;
- During the lectures it has been necessary to make the investigation documentation corresponding in its form and contents to the real one.



Picture 4. Training in small groups (10 higher rank police officers).



Picture 5. Field training during Daylight.

Having in mind the specific situation in which new vehicles, devices and equipment have been used in the training, their preparation for work needed to be done before the start of the training, and accompanied by the supervision of the trainer. Therefore, the preparation work had been done one day before the training started (getting familiar with the vehicles, equipment and devices and their tuning; getting to know the portable computers and their preparation for work; charging and formatting of batteries and preparation of other devices and equipment for operation).

The training has been organized during the 5 working (lecturing) days, according to the following framework program:

- State of road safety in the Republic of Serbia in the previous period;
- Function of the Police in road safety with a special overview of the securing of the scene of a road traffic accident and conduct of the road traffic accident investigation;
- Presentation of the “The advancement of jobs of securing the road traffic accident scene and conduct of road traffic accident scene investigations”
- Presentation of the draft text of the “Mandatory instructions for the securing of the scene of a road traffic accident and conduct of road traffic accident scene investigations on roads” and panel discussion;
- Organization and conduct of road traffic accident scene investigations in Serbia – The Analysis of the current situation;
- Definition of a road traffic accident and a road traffic accident investigation;
- Elements of the investigation documentation;
- The use of a special vehicle and equipment for securing of the scene of a road traffic accident and conduct of the road traffic accident scene investigations;
- Definition of the securing of a road traffic accident scene;
- Offense proceedings incurred from road traffic accidents;
- Criminal proceedings incurred from road traffic accidents;
- The importance of investigations for quality analyses of road traffic accidents in the court proceedings – case studies;
- Securing of the road traffic accident scenes and conduct of a road traffic accident investigation – making of the investigation documentation: the report, drawing (sketch) and photo-documentation of the road traffic accident with the characteristics of an offense;
- Securing of the road traffic accident scene and conduct of road traffic accident investigation in conditions of night visibility; the report, drawing (sketch), situation plan and photo-documentation of the road traffic accident characterized as a criminal act;
- Specific features and methods of the specialized training of police officers – compulsory knowledge of educators.

Working materials of the lecturers have been collected in an internal publication “A training practicum” that has been used in the further text as a guideline for the realization of lectures in the later phases of training, in the traffic police branches.

Mandatory instructions for the securing of the road traffic accident scene and conduct of road traffic accident scene investigations on roads” – a draft text

Tasks related to the securing of the road traffic accident scene and the conduct of road traffic accident scene investigations are governed by the set of regulations, including: the *Law on Road Safety*, *Law on Police*, *Law on Offenses*, *Criminal Law*, *the Law on Criminal Proceedings*, and other regulations. However, these regulations govern only the types of jobs, but not the concrete tasks, i.e. the way in which they are carried out. Therefore the Project has foreseen additional documents in the form of the Mandatory instructions and the supporting Manual.

Within the Project realization, a draft of the agreed text has been prepared (the text has been agreed on with all the trainees, heads of traffic police departments in Serbia, representatives of the justice system and representatives of the scientific-educational institutions). The draft text of the Mandatory instructions consists of 6 chapters and 6 appendices:

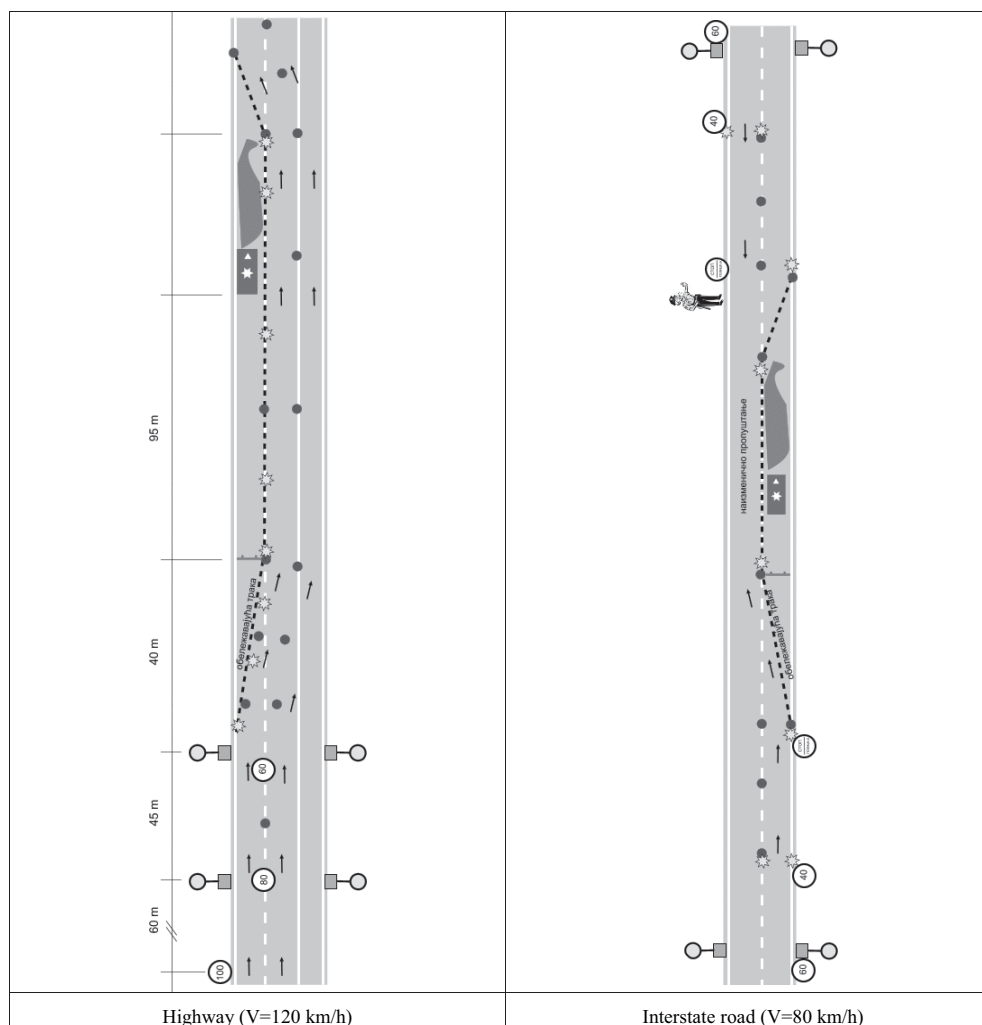
- I. The subject of the document
- II. Action followed by the receipt of the information on the road traffic accident and sending of police officers to the scene of road traffic accident
- III. Securing of the scene of road traffic
- IV. Conduct of the road traffic accident investigation
- V. Maintenance, servicing, and usage of vehicles and equipment for securing the scene of road traffic accident and conduct of road traffic accident investigation
- VI. Final clauses

Appendices contain working forms, including: Report on the securing of the scene of a road traffic accident; Official note concerning the exclusion of objects and traces; Report on the inventory of property; Confirmation of damage occurred on a vehicle with foreign registration plates; Official note on the road traffic accident without injured persons, with a smaller material damage only, for which the investigation is not being conducted; Minutes concerning takeover of vehicles and equipment for road accident scene investigations.

As a result of the Project realization, Mandatory instructions became applicable as from November 23, 2007. They govern concrete tasks, i.e. give a closer explanation of the ways in which police officers (and other staff of the Ministry of the Interior) act during the organization and execution of measures and tasks of securing the scene of a road traffic accident and conduct of the road traffic accident investigation on the roads in the Republic of Serbia.

The Manual “Processing of road traffic accidents by the Police – Securing of the scene of a road traffic accident and conduct of a road traffic accident investigation”

Mandatory instructions regulate the actions in a road traffic accident in such a way that the execution of tasks related to the securing of the road traffic accident scene and conduct of the road traffic accident investigation are adjusted not only to the regulations, but also to the rules of the profession and science and the real possibilities as well. In order to provide that, the manual “*PROCESSING OF ROAD TRAFFIC ACCIDENTS BY THE POLICE – Securing of the scene of a road traffic accident and conduct of the road traffic accident investigation*” is used as an accompanying document to the Mandatory instructions, giving additional explanations thereto.



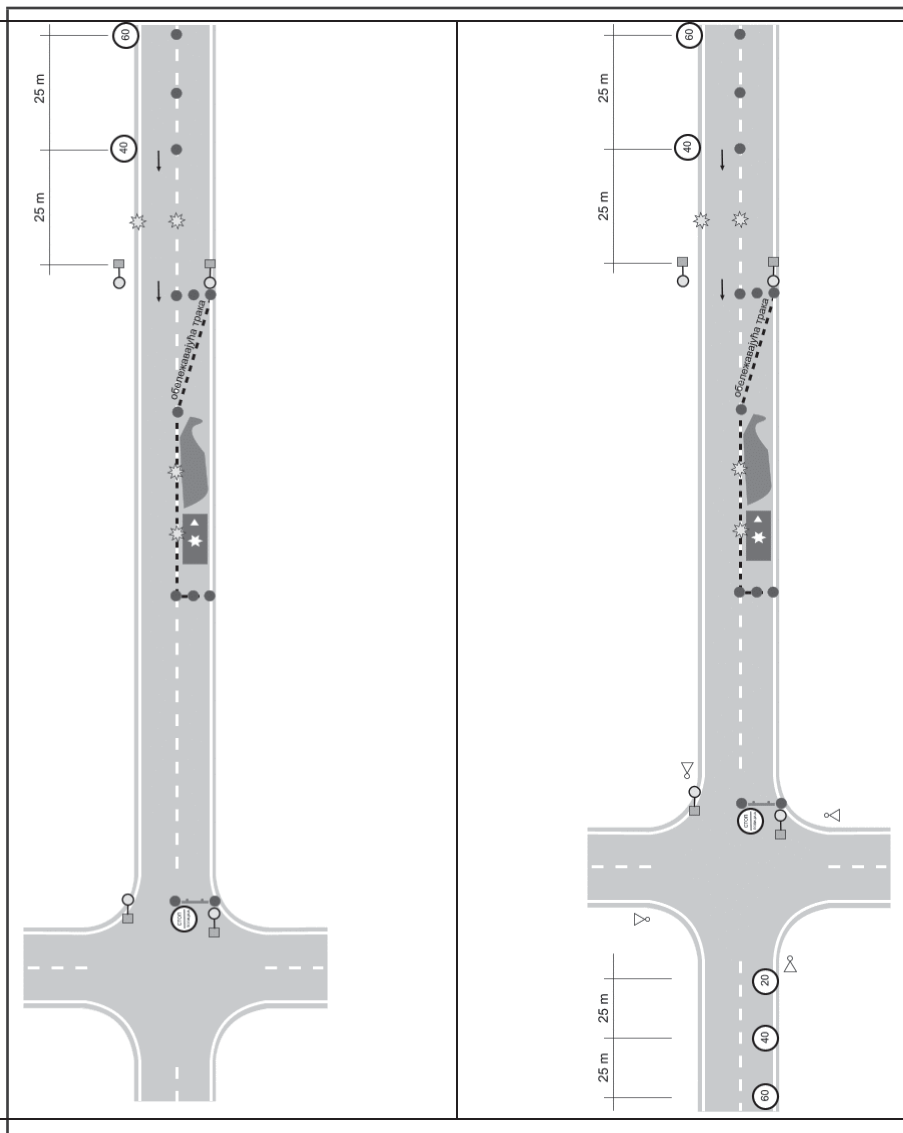
Picture 6. Typical examples of road traffic accident scene securing on a state roads shown in Manual.

The preparation and publishing of this Manual has been undertaken as one of the tasks incurring from the Project. It consists of 4 chapters and 11 appendices.

They are as follows:

1) INTRODUCTION

- a. Definition of a road traffic accident and road traffic accident scene investigations;
- b. Legislation;
- c. Features and classification of road traffic accidents;
- d. Most important obligations of certain stakeholders in road traffic accidents;
- e. Procedure in case of a road traffic accident with offense features;
- f. Standards applicable to the investigation documentation concerning road traffic accidents in the criminal proceedings);

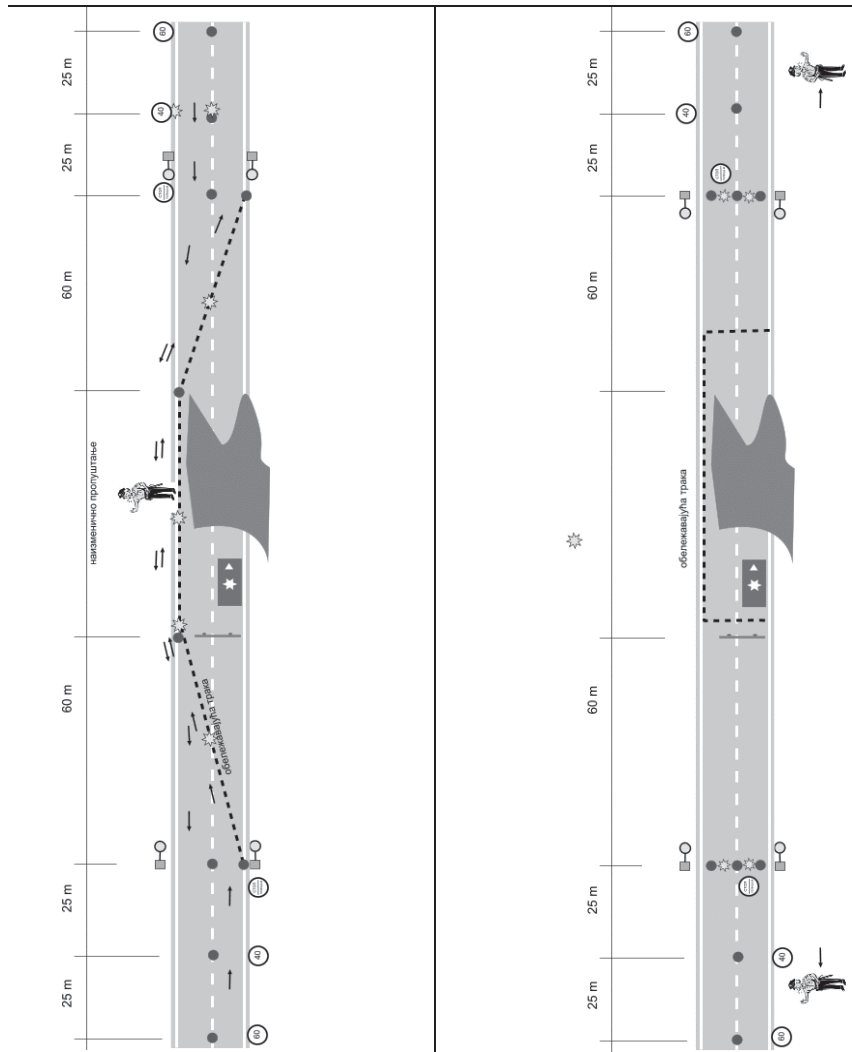


Picture 7. Typical examples of alternate running and using alternate directions during road traffic accident scene securing.

2) POLICE PROCEDURES IN CASES OF ROAD ACCIDENTS

- a. Actions undertaken by the officers on duty in cases of road traffic accidents;
- b. Actions of police officers who have been the first to arrive to the scene of a road traffic accident;
- c. Securing of the scene of road traffic accident;
- d. Actions of the investigation team;
- e. Actions undertaken after the road traffic accident investigation has been completed;
- f. Specific actions in certain situations with special participants in road traffic accidents;
- g. Actions undertaken in cases of a hit-and-run road traffic accident;

- 3) VEHICLES AND EQUIPMENT
 - a. Contents of the equipment in a vehicle for the securing of the road traffic accident scene and conduct of the road traffic accident investigation;
 - b. Specific features of the equipment;
 - c. Checks and maintenance of vehicles and equipment;
 - d. Registering of the usage of vehicle and equipment;
- 4) PUBLIC RELATIONS during the investigation



Picture 8. Typical examples of alternate running using roadside and complete blockage of the road during road traffic accident scene securing.

Appendices contain supporting bibliography (excerpts from the important regulations) and recommended working forms. The Manual, together with the text of the Mandatory instructions, belongs to the compulsory equipment of the vehicle intended for the securing of the road traffic accident scene and conduct of the road traffic accident investigation.

CONCLUSION

Realization of the project "The advancement of jobs of securing the road traffic accident scene and conduct of road traffic accident scene investigations" has made essential prerequisites for a more expert and more efficient work and procedures of the traffic police in cases of road traffic accidents. Implementation of modern technologies allow for the police to respond to the growing and more complex road safety challenges. Thus the overall road safety situation becomes improved to a considerable extent.

Timely attendance by the police of the road traffic accident scene and its adequate securing contribute to the making of conditions for prevention of secondary road traffic accidents and lessening of consequences of these accidents, but also for the reduction of economic losses due to reduced halts in traffic. More qualitative processing of the scenes of road traffic accidents and making of the investigation documentation provide possibilities for a more qualitative analysis of road traffic accidents, and also ensure a bigger legal protection of the participants in road traffic accidents, reduction of costs and time of conducted court proceedings.

Realization of this project generates conditions for the saving of a larger number of fatalities, reduction of severity of injuries, overall reduction of the losses (costs) that the society is sustaining due to road traffic accidents, and a better traffic flow. Setting up a higher level of confidence of the expert and general public in the work of the traffic police is also anticipated.

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APPLYING THE PRINCIPLE OF OBVIOUSNESS IN TEACHING AND ITS SIGNIFICANCE FOR THE DEVELOPMENT OF HIGHER POLICE EDUCATION

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Abstract: Everyday performance of police tasks, demands the police officers in charge, regardless of the level of hierarchy, to possess an adequate quantity of broad general knowledge, but also to be trained for a lawful use of a wide range of skills which represent 'the tools of their trade'. Higher police education provided by the Academy of Criminalistic and Police Studies comprises all essential features of education in general, but also certain specific features regarding contents, training technology, organization, and its realization. Starting from the defined profile of the professional employees, specific conditions of realization and common pedagogical demands, it is necessary to define the didactic and methodological standard of every individual teaching subject in order to achieve optimization of the teaching process. These standards apply to selection, identification, and specification of the scope of instruction, organizational forms, educational principles, methods, objects, evaluation, and requirements regarding educational literature.

At that, the effectiveness and efficiency of the process of contemporary higher police education call for permanent innovation of the syllabus, teaching methods, teaching materials, organizational structures involved in the process of teaching, and educational principles. It is therefore important in terms of the said process to find out possibilities for more extensive use of problem teaching, cybernetic teaching (programmed and computer-based instruction), exemplary teaching (synthesis-analogous individual student work) and mentor-guided instruction in specially designed classrooms with modern educational technology, polygon conditions, and training centres of the Ministry of the Interior of the R Serbia (within the regular instruction and in specific forms of instruction in realistic working conditions wherein police officers perform their everyday tasks). This means that conditions should be created for the stepped-up use of up-to-date teaching methods characteristic of higher police education in order to ensure that the instruction is more obvious, functional, and interesting for students. In that respect, the paper presents the authors' attempt to determine the significance of the principle of obviousness in the teaching process at the Academy of Criminalistic and Police Studies by presenting the specific traits of didactic and methodological standards of the subjects of Police Topography and English Language and pointing out the contribution of these two subjects to achieving the goals of educating managing police personnel and further development of higher police education.

Key words: didactic principles, the principle of obviousness, police topography, English language, higher police education.

¹ The research was conducted within the project "Effects of physical activity applied to locomotion, metabolic, psychosocial and educational status of the population of the Republic of Serbia" under number III47015, as part of a sub-project "Effects of physical activity applied to locomotion, metabolic, psychosocial and educational status population of police of the Republic of Serbia"; funded by the Ministry of Science and Technological Development of the Republic of Serbia - the cycle of research projects 2011-2014.

INTRODUCTION

The conceptual definition and classification of didactic principles (from Lat. *principium* = guiding idea, basic rules of behaviour, proposition, basis, foundation) differs according to various approaches of different authors. Bakovljević finds that the didactic principles include “managerial guidelines of teaching activities, the principles that one does not depart from when teaching.” The same author adds that, besides this, the principles are derived from the goal and task of teaching, the principles of the teaching process and the laws of psycho-physical development of the students involved, constituting a constantly changing category, which implies that the didactic principles are also subject to constant changes in accordance with this - some cease to be valid, others change their purpose, and some entirely new principles appear.²

Vilotijević defines the teaching principles as “the basic, universal, legally binding principles directing the teacher in planning, organizing, performing, and evaluating the teaching process. They comprise the interpretation of education and its contents, the work of teachers and organizational forms of education.” These are the basic tenets which determine the nature of teaching and which express the internal laws of the teaching process. They were formed and developed in the historical development of teaching by being generalized from practice.³

The first comprehensive explanations of didactic principles were given by both former and contemporary progressive-minded educators, foreign and Serbian: Comenius, Rousseau, Pestalozzi, Disterveg, Jesipov, Danilov, Poljak, Prodanović, Bakovljević, Djordjević, etc. They introduced a varying number of didactic principles (more than 25), differently named and defined (Table 1).

Table 1 - An Overview of Basic Didactic Principles

| Principle | EDUCATORS | | | | | | | |
|--|-----------|-----------|---------|---------|--------|------------|-------------|----------|
| | Comenius | Disterveg | Jesipov | Danilov | Poljak | Prodanović | Bakovljević | Dorđević |
| 1. Obviousness | | | | | | | | |
| 2. Systematic and gradual approach | | | | | | | | |
| 3. Compatibility with students' nature | | | | | | | | |
| 4. Students' activities | | | | | | | | |
| 5. Scientific | | | | | | | | |
| 7. Educational / upbringing | | | | | | | | |
| 6. Corelation between theory and practice | | | | | | | | |
| 7. Retention of knowledge, skills and habits | | | | | | | | |
| 8. Historical and contemporary approach | | | | | | | | |
| 10. Rationalization and economy | | | | | | | | |

(The authors' interpretation)

The above table shows that there is no unified position regarding the meaning, names, and the number of didactic principles. It is also evident that some educators tend to combine a few principles into a single one, whereas others tend to break them down into more constituents.

2 Bakovljević, M., (1992). *Didaktika*, Beograd: Naučna knjiga, p. 26.

3 Vilotijević, M., (2000), *Didaktika I – predmet didaktike*, Beograd: Naučna knjiga, Učiteljski fakultet, p. 379.

The didactic principles are of a multifunctional character: they are at the same time norms, regulations, correlates and integrative elements of teaching. Resulting from the didactic laws, they have socio-historical dependence, and need to be subjected to multi-disciplinary research and discussed in a certain dialectical relationship and interdependence, systematically and in keeping with the requirements of modern educational processes.

The versatile application of new principles makes it possible to specifically identify the essential features of future school and above all point to the conditions of the formation of means of theoretical-scientific thinking that will become the norm rather than the exception. Some experiences suggest that the application of new principles is possible in organized experimental teaching.⁴

High police education has its peculiarities.⁵ In this regard, there is a need to meet these special features in the teaching process. This implies a need to define specific educational principles such as: **the principle of approaching the real conditions of performing police actions and interventions, the principle of independence and group work, psycho-physical principle, special form of teaching and the principle of linking teaching with experience from past actions and police interventions.**

The principle of instruction which approaches the real conditions in which police actions and interventions are performed means an introduction of complex teaching situations, increasing demands for mental, and moral-psychological and physical, compliance with tactical and technical standards arising from the nature and needs of modern tactics of police actions and interventions, including analysis of opportunities, skills and respect for the opposing party.

The principle of independent and group work involves training students to be operational in applying theoretical knowledge in solving practical problems and to search for new knowledge in both curricular and extracurricular activities, as well as creating the conditions for group and team work. These principles entail special engagement of teachers and providing certain material prerequisites.

The principle of psycho-physical effort in the special form of teaching involves gradual, varied, practical and balanced psychological, physical, and moral burden willingly accepted by the participants in the execution of training at different times, day and night, in a complex setting with regard to security, geospatial and meteorological conditions.

The principle of linking teaching with experience from past actions and interventions of the police stems from the nature of the general teaching experience, the essence of legal actions taken by the police or police powers which are to be exercised, and it involves giving examples which adhere to the rules and suggesting possible solutions. This requires great methodological skill on the part of the teacher to find appropriate resources and educational contents, which are to be applied timely, ensuring at the same time instruction provided by the experienced teachers employed by the police service.

These principles are specifically represented within the special didactic and methodological standards that are implemented in higher police education at the Academy of Criminalistic and Police Studies in Belgrade. They are based on the

⁴ Davidov, V. V., (1987). Analiza didaktičkih principa tradicionalne škole i mogući principi nastave budućnosti, *Zbornik radova Instituta za pedagoška istraživanja*, 20 (1), p. 59.

⁵ Milojković, B., (2011). CONTRIBUTION OF POLICE TOPOGRAPHY TO DEVELOPMENT OF HIGHER POLICE EDUCATION IN SERBIA, U *Zbornik radova, Međunarodni naučni skup "Dani Arčibalda Rajsa"*, Beograd, Kriminalističko-policijska akademija, p. 89.

general principles of teaching that apply to higher-level education^{6,7}, in the context of need for a dialectical unity of the *general-particular-individual*. The concretization of the general principles of teaching by meeting some special conditions required by the police milieu does not affect the general nature of the principles, but rather enriches higher police education with some specific features.

Given the importance of the general didactic principles of teaching and the fact that Table 1 shows that the most frequent one is the principle of self-evidence, the authors have opted for its theoretical and practical elaboration in the context of special presentations and didactic-methodological standards⁸ of teaching the subjects of Police Topography and English. When teaching these disciplines, the principle of obviousness or self-evidence is applied in a modern way, which means that the higher police education can and should follow this principle and thus contribute to the process of discovering the essence of knowledge, as well as to the development of higher police education.

A modern approach to defining the principle of obviousness in higher police education

Immediate sensory experience is the main source of learning; it is a necessary and sufficient condition of acquiring knowledge about nature, society and man. This is completely true for high school students in the process of learning and acquiring skills and habits. The basis of knowledge makes sense of knowledge and experience gained through fundamental observations and perceptions of external and internal features of objects and structures, then their models, pictures, schematic representations, and other modes of graphic visualization, and then understanding the logics and all the features or experienced phenomena and processes and their interrelationships and causality. The acquisition of deeper, theoretical knowledge, concepts, inferences, and the principles, as well as the development of thinking and other intellectual skills all depend, and to a great extent, on how the sensory perception is varied and rich. The essence of the principle is obvious in the application to the teaching process, using all resources, buildings and roads that allow direct observation of living and perception in order to obtain more complete and clearer concepts, in order to better understand and facilitate memorizing of the learned material.⁹

Obviousness in teaching, which should be related to sensory experience, cannot be reduced to the observation in the class, but the process of gaining knowledge directly or indirectly based on the student's sensory experience. Intuition can be realized by direct observation of subjects, objects, phenomena, and processes, or their images, models or other didactic materials, reliance on the representations of memory, imagination, and building performance by deductive reasoning based on generalized sensory experiences that are performed by students under the teacher's direction. Classes may be obvious, and use no obvious means, on the one hand, whereas on the other they may not be apparent even with a multitude of modern teaching aids. Classes in which students watch a lot, but do not judge, where there is no thought-processing of acquired empirical data (activation of students' thoughts),

6 Curzon, L. B., (1996). *Teaching in further education: An outline of principles and practice*, London: Cassell Educational limited, p. 5.

7 Kolar, Z., (1984). *Metodika vaspitanja i obrazovanja za opštenarodnu odbranu i društvenu samozaštitu*, Beograd: Vojnoizdavački zavod, p. 63.

8 Milojković, B., (2001). Didactical and methodical standard of teaching topography at Police Academy in Belgrade. *Science-security-police*, Vol. VII, No.2, p. 83.

9 Lazović, M., (1987). *Didaktičko-metodički standard visokoškolske nastave za ONO i DSZ*, Beograd: Vojnoizdavački i novinski centar, p. 117.

the identification of their causal relations and connections, where the teacher rather explains the general ideas - is not obvious. Intuition in teaching must be a means, not an end.¹⁰

Inadequate implementation of new models of intuition in the classroom, no matter how modern they may be felt to be, will not have much impact on increasing levels of efficiency and effectiveness of classes as defined by the acquisition of knowledge or achieving other educational or developmental effects of teaching.¹¹

Intuition may be **objective, visual and verbal-visual**.¹² Underlying intuition in higher education of police is present when the teacher uses items or items comprising such obvious teaching tools or weapons, protective equipment, special police vehicles, law enforcement offices, houses, tactical and situational shooting ranges, forensic technical means, the execution and observation of biochemical, psycho-chemical, and other processes in forensic laboratories and elsewhere. Similarly, certain actions of the police, such as tactical actions, can be clearly shown (search of persons, facilities and geographic space, storming of the buildings, raids, ambushes, apprehension of dangerous criminals and other). But instead of real objects and phenomena, the teachers and instructors can use their representations, models, paintings, drawings, schematic representations, slides, films, etc. It is a fine evidence of how the teaching practice confirms the thought of Confucius that in teaching (e.g. criminology, police tactics and topography) one picture is worth more than a thousand words. Verbal-visual evidence is scaled down to picturesque talking about things and phenomena, so that students can use imagination to really grasp what they hear as if they have experienced it, or it can involve the performance of the existing plays and generating new ones. Such evidence is particularly exemplified in the processing of certain material objects from teaching criminalistics and police subjects that cannot be displayed using the subject or the art of intuition (describe the tactical actions of special police units in high-risk security situations - civil unrest, sporting events, hostage situations, counter-terrorism, and counter-insurgency effects, etc.).

There are a number of rules¹³ that should be followed in applying the principles of obviousness. V. Pomagajov defines the following rules which apply to the principle of the obvious: 1) teach so that what is learned is learned through multiple senses, 2) try to use different forms of evidence, because it provides a means of abstract knowledge, 3) attend to every aspect of the obvious explanations, 4) use visual aids so that students perceive the subject matter as a whole, although it is important to perceive the sideline in the case of observation, and finally, again perceive the whole of teaching materials taught as object-lessons, 5) do not overload the learning process because a large number of teaching aids tends to stretch the students' attention and prevents conception of the most important ideas, 6) try to provide object lessons, 7) never show what we ourselves do not know, 8) using the obvious teaching resources to capture the students' attention.¹⁴

10 Bakovljević, M., (1992). *Didaktika*, Beograd: Naučna knjiga, p. 56.

11 Janković, A., (2005). Očigledna nastava u teoriji i savremenoj praksi, *Nastava i vaspitanje*, 58(4), p. 509.

12 Lazović, M., (1987). *Didaktičko-metodički standard visokoškolske nastave za ONO i DSZ*, Beograd: Vojnoizdavački i novinski centar, p. 118.

13 Besides the educational principles, there are rules which establish the activities aimed at achieving the educational goals. There are no exceptions in applying the principles, whereas there are some exceptions in the application of the rules. The principles are derived from more profound philosophical and theoretical views, whereas the rules can stem from experience. They are phrased concisely, as specific activities frequently taking the form of imperative. The rules help the teacher comply with the educational principles, which are more older and broader than the rules.

14 Vilotjević, M., (2000). *Didaktika I - predmet didaktike*, Beograd: Naučna knjiga, Učiteljski fakultet, p. 387.

However, it is not enough to ensure the presence of teaching aids necessary for giving object lessons to the students in higher police education to make the instruction truly obvious. It is also necessary that the teacher knows how to use them correctly. A superficial observation of things or their characteristics will lead to inefficient and weak results of teaching performance. Also, it would be wrong if the teacher first told the students some of the facts, and then showed them the objects in question, so that sensory experience would serve only to illustrate the teacher's words. It is therefore essential that the observation is planned systematically, starting from the goals of teaching and making an assessment of how appropriate the use of didactic rules may be, and only then moving on towards engaging the students under the guidance of teachers. It is also important to assess the justification of the use of specially selected real objects, their number and timing of use, and the adequacy of their replacement models, schematic representations of the cross sections, as well as the need for teaching aids and facilities placed so that they can be used by teachers and students. In certain situations it is important to engage students in the preparation of certain teaching aids. Instruction in some police discipline may make it necessary to strive for practicing impeccable handling, assembly, dismantling, removing technical anomalies, and unification of the police formation equipment ("drill") in order to, among other things, develop awareness about the possibilities of activation and the degree of reliability when using these resources in real situations.

THE PRINCIPLE OF OBVIOUSNESS IN TEACHING POLICE TOPOGRAPHY

Police Topography is very characteristic, because the object lessons supporting the teaching are mostly done on the original objects (organizational resources), using the geospatial facilities in educational centers and on training grounds. In teaching, the didactic rule applies to all real objects, objects, phenomena, and processes occurring in geo-space, which are first perceived by engaging as many senses as possible, and only then we move on to illustrate, demonstrate, and manipulate the models, images, cartographic representations, films, and other didactic-methodical aids and equipment. For example, if the focus is on modern processing systems and devices for positioning and orientation, the teacher shows the first GPS device or a hand compass, allows the students to see them, or just observe, and then asks them to detect the obvious external sensory properties of objects, with his help, so that they can form representations of external features of the used teaching resources as well as mental images in their minds of the observed object's properties, with its main outlines and contours (Fig. 1).

Directed by teachers, students make the next step in learning the observed physical objects for positioning and orientation, which implies that the observed and the observed properties of the outer set aside those that are relatively common and equal to the observed properties of the group of subjects (the possibility of positioning, movement along given direction, etc.). After that, the teacher realizes the essential process of applying the principle of obviousness which implies the transfer of knowledge of general and abstract, in terms of lack of fragmentation and connection with the particular individual within the system, knowing the deeper maze of internal connections and relationships with discovered special and individual as well as making connections between the inner and outer manifestation the essence studied as a system that is the subject of knowledge (terms of positioning, selective availability of satellite signals, magnetic anomalies and the like).



Figure 1 – Didactic and methodological materials used in object lessons

This means that the teacher seeks to make the students understand the essence, the role and importance of the case as a whole or its individual parts, their relationship of mutual dependence and interdependence and their possibilities and limitations in the use of the geographic orientation in the unknown space. In doing so, the teacher takes into account the effects of modern information and telecommunication technologies to raise the level students' awareness, i.e. to enhance their prior knowledge of the explored cases, or formational equipment that is used by the police and the application of other rules related to the didactic principles discussed, with particular concern to ensure that almost always each student has his tool.

Visual intuition in teaching police topography is also very strong, which confirms the idea of Confucius that, in teaching, one picture is worth more than a thousand words. The police continue to use the 3D topography of embossed and pictorial models, Clips geo-topographic materials, and electronic graphic visualization using electronic boards, Proxima video projectors (video-beam), overhead and slide projectors. The particularity of teaching police topography is the visual obviousness in the simultaneous use of electronic graphics and visualization whiteboard in the realization of subject of chartometry, presentation of contents on the geospace surveying plans, topographic and thematic maps, and especially in understanding how the study of elements and how to solve the geospatial topographical tasks in the police topography workbook which, together with the textbook, contains over 300

graphic visualizations (Figure 2). In these conditions, the teacher uses group work and ensures direct involvement of students in independent problem-solving tasks, in keeping with didactic and methodological tools and aids, which provide for the monitoring, assessment and students' achievements. Having recently equipped the classroom with an electronic board and other modern educational technology, the Academy has provided significantly better conditions, more appropriate to continuing higher police education.



Figure 2 – Didactic and methodological material used in artistic obviousness

Verbal-graphic evidence is one of the inevitable characteristics of the applied principles of teaching police topography in a self-evident way. In applying this type of object instruction, the teacher addresses the students in order to conjure the importance of knowledge, assessment, and research in urban and rural geographic space with security aspect, analyzing the experiences and lessons learned from the bad and the uncertain orientation, as well as to indicate the causes and consequences of principles of unimplemented orientation, accuracy and graphic culture in working with geo-topographic materials. However, the most important application of verbal art is obvious in the effort of teachers to develop their students' skills of proper operation of the devices for orientation, keeping the topographic map, the understanding of regularities in the previously introduced, immanent and productive way of studying the content of cartographic means of expression. The concept of substance-exposed topographic map is in showing the trains, drawing and identifying topographic signs in their mutual relations and respect of signs which represent the other elements of the contents of geo-space (immanent content). That part of teaching is followed by elaborate explanations that the teachers give in order to engage the students in reflective activities in the actual performance of identifying facilities in the geographic space that are shown on the map, which may be "supported" by a photograph of the actual object in geographic space (Fig. 3).

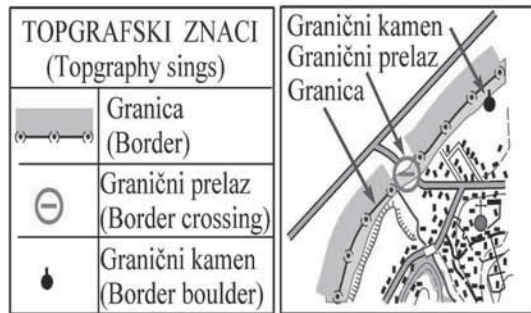


Figure 3 - Didactic and methodological means of verbal and artistic obviousness

At the end of the cycle of teaching, the teacher shall, in the course of practical work on the training grounds for orientation, instruct students using the actually existing geo-topographic materials which have been studied and which are given in the form of maps modeled for a specific tactical situation (observation scheme, the firing scheme, the decision to break up the crowd in the square, working map, coded map, sector record, forensic documentation, etc.). The students are to evaluate the geographic space, safely and accurately navigate through unknown geographical space, which can address not only the educational but also the functional aspects of the studying the subject in terms of the requirements of the preparation, organization and execution of various police actions and interventions. In these conditions, the teacher combines all forms of intuition (Figure 4).



Figure 4 - Combined use of different forms of obvious instruction in practical training

The police continue to process the field topography measurements on geo-topographic materials by applying the principle of obviousness within the concept of the theory of developmental education. Namely, when it comes to the process of mastering cartometric actions, the teacher engages students in making chartometric aids and models the correct and safe procedures for measuring and determining the size of the topographic features (height, coordinates, length, area, vertical and horizontal angles, etc.) Within the permitted tolerances, this ensures that students understand and practice comparison of the results obtained by the measurement and calculation using topographical formulas and of the measured values taken from the map, the identification of multiple possibilities of relations between them, showing these relationships in the form of different abstract mathematical models and graphical visualization which must be precise and consistent regarding the textual and numerical content (Figure 5). Very pronounced precision, accuracy, and graphic culture in the implementation of these tasks in the application of this type of intuition among students contributes to the acquisition of knowledge and acquiring and developing the necessary skills, habits, and other competencies necessary for carrying out police duties, which are based on the law, systematically organized, responsible, and highly dangerous.

The presented means of obvious teaching of the subject police topography, the use of which is based on didactic and methodological standards, as well as on the general and special didactic principles, can contribute significantly to the development of higher police education.

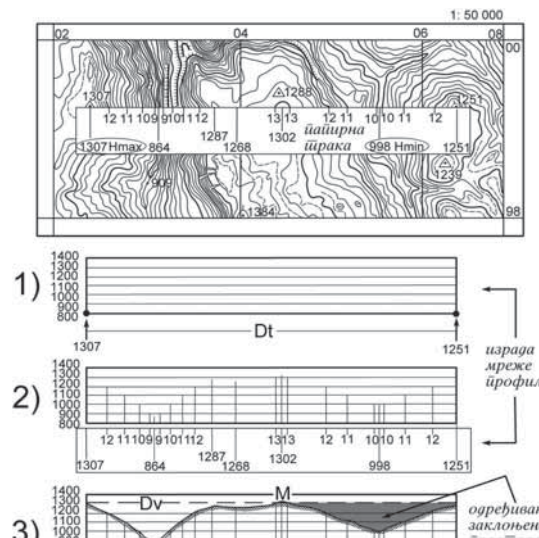


Figure 5 - Educational material used for the purpose of object lessons within the concept of developmental teaching

THE PRINCIPLE OF OBVIOUSNESS IN TEACHING ENGLISH

The principle of obviousness in foreign language teaching is somewhat easier to apply than teaching any other subject, because one is naturally equipped with everything one needs to communicate. However, teaching that is focused on the adoption of the LSP requires a very precise direction of communication, so that students have mastered the productive and reproductive language skills necessary for coping in specific professional situations.

Specially designed classrooms for teaching foreign languages are of paramount importance (Figure 6). Although students are given skillful guidance through the learning process by a competent teacher who can motivate the use of imagination, an environment rich in audio-visual effects will certainly contribute to faster and more complete knowledge acquiring. Just as a small child needs a wealth of stimuli at a time when learning its mother tongue, so the student learning a foreign language necessary needs an enabling environment.

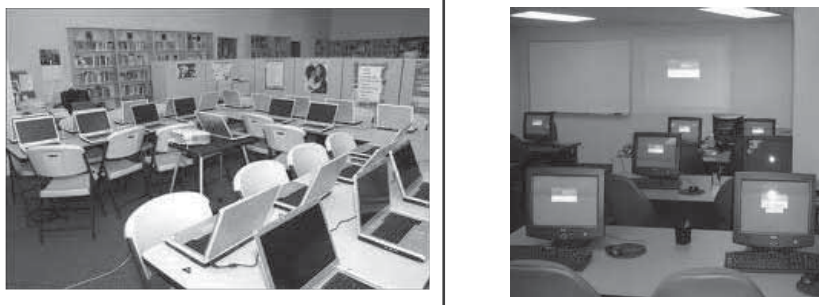


Figure 6 - *The methodological standard for a classroom designed for teaching foreign languages*

Although the ability of the instantaneous “zapping” (code switching), that is, switching from one language to another in communication, is very valuable, it is unrealistic to expect that students entering into any classroom, usually faceless, to automatically feel the need to start communicating in a foreign language. If, however, on entering the language classroom they can see, for example, posters that put the language you studied the language or culture of a given area, they will spontaneously engage in communication in a foreign language or at least some attempt will be made to express ideas or emotions in this language, combining it with the students’ mother tongue (L1).

The situation is even better if, when entering the language classroom, the students can see the products of their work or work of their colleagues from some of the earlier classes, teaching materials resulting from what is in the contemporary literature known as the task-based language teaching (TBLT) or task-supported language teaching (TSLT).¹⁵ The essence of this method is to give concrete tasks to particular groups of students or individual students in order to carry out the preparation in the form of a small-scale research, so that during the next lesson they could shape the collected information into a poster or a power point presentation which they have to present other colleagues. The task may be to explore the most common manifestations of crime in the place they come from, to present certain police actions and procedures, describe the suspect, traffic ac-

15 V. Samuda and M. Bygate., (2008). TASKS IN SECOND LANGUAGE LEARNING. Palgrave Macmillan.

cident, an interior or exterior, or the cultural specificities of a particular ethnic group or members of certain religions.

Each entry in a specialized English classroom is likely to refresh the memory of the vocabulary and linguistic structures with which they are encountered during the development and presentation of tasks and repetitiveness is more than likely to ensure better knowledge retention.

Adequately equipped classroom would also enable the teacher to achieve a better correlation with other, vocational subjects that are studied at the Academy, using a process known as immersion, and complete “submersion” of the students into the target language (L2) so that his teaching of the language is not the sole purpose of instruction, but the foreign language is also used as a vehicular language to acquire knowledge from other educational and scientific fields. This approach is valuable as a preparation of students for self-improvement and use of literature from the police and law enforcement disciplines, and it experienced a very dynamic development in the English-speaking countries.

It would be easier for students to relax in the specially-designed classroom and to enjoy the playing roles assigned by the teacher for practicing situations typical of their profession (stopping and identifying a person; taking of personal data; stopping a driver who has committed a violation, asking and giving information, etc.). Also, the very seating arrangement in the classroom should contribute to more spontaneous communication, so it should not suggest a classical distribution of power,¹⁶ granting teachers a favored role and placing students in inferior positions. Such an atmosphere would further contribute to the important function of teaching foreign languages, which is recognized as one of the most suitable subjects for raising awareness on human rights¹⁷ and intercultural competences.¹⁸

CONCLUSION

The immediate sensory perception is the basic principle underlying the request for obviousness. However, the contemporary work of teaching students at the higher police educational institutions requires a much broader concept and realization of this principle. Even the famous Russian scientist Ushicky argued that the evidence in the classroom is not just a mere sensuality, but any specificity which extends to the broader theory of cognition and thought, and it is not always based on the immediate or early sensory experiences and direct experience. On this basis of this we can conclude that every clear, direct, and concrete explication and exploration in the process of higher education has the value of object lesson.¹⁹

As regards the teaching practices of higher police education, one needs to keep in mind that the obvious means of developing reflective activities, if they are used to encourage and enable independent conclusions, arouse intense interest, should be used timely and in the right way, so that the participants' attention should be properly directed, and that they should realize what is clearly important to observe and detect. This can be achieved by performing instruction in the specially designed and equipped classrooms. Object lessons will

16 *Language and the Law* ed. by John Gibbons., (1994). Longman, London and New York.

17 *RECOMMENDATION NO. R (85) 7 OF THE COMMITTEE OF MINISTERS TO MEMBER STATES ON TEACHING AND LEARNING ABOUT HUMAN RIGHTS IN SCHOOLS* (Adopted by the Committee of Ministers on 14 May 1985 at the 385th meeting of the Ministers' Deputies)

18 H. Spencer-Oatey and P. Franklin., (2009). *INTERCULTURAL INTERACTION: A MULTIDISCIPLINARY APPROACH TO INTERCULTURAL COMMUNICATION*. Palgrave Macmillan.

19 Lazović, M., (1987). *Didaktičko-metodički standard visokoškolske nastave za ONO i DSZ*, Beograd: Vojnoizdavački i novinski centar, p. 117.

enhance attention, providing more active participation of students and helping them in the process of gaining clearer and more firmly founded police tactical knowledge, at the same time increasing the durability of memory, learning, and facilitating repetition that will reinforce the learning. The retention of acquired knowledge²⁰ is ensured by applying this principle in teaching, which also contributes to the successful implementation of a range of acquired skills as “professional tools”²¹ that the police personnel may need in future for the performance of security tasks in complex security, geospatial and weather conditions.

The didactic and methodological standards of the subjects of Police Topography and English, conditioned by the requirements of the principle of obviousness in the curriculum of higher education at the Academy of Criminalistic and Police Studies are realized in two teaching areas that are characterized by specific features. Police Topography belongs to a group of subjects whose purpose is the application of all the teaching materials used, and above all of original tools, equipment, facilities, and methods that allow direct observation for easier, more effective and efficient learning, as well as lasting memory ensured by learning in environment as close to the realistic one. In other words, the principle of intuition in teaching police topography must be designed in such a way to provide conditions that are in the process of discovery, in the process of discovering the essential internal properties of objects, phenomena and processes of objective reality using geospatial teaching resources which provide students with an effect on physical objects, their substantial transformation, changing, disassembly, assembly, changing certain dimensions, bringing objects and their component parts in different relationships and analyzing their properties.

As regards teaching the subject of English or any other foreign language, the requirements are the same the standard ones that apply to any other theoretical, social and humanistic teaching discipline. In such a case, a language teacher is usually the best ‘means’ of ensuring understanding of the abstract and essential contents, whereas other resources, numerous and diverse - if available – present a valuable aid in terms of motivation and inspiration to students. Therefore, in case of English it is extremely important to define the role of the teacher as the initiator and facilitator of communication, whose task is to maintain contact with students verbally, as well as through written, audio-visual and graphic didactic materials in the classroom, preferably a specially equipped one.

The two above presented examples of the modern concept of teaching in accordance with the principles of obviousness contribute to the continued improvement and optimization of the educational processes and allow for shortening the duration of the instruction period spent in the higher education institutions for police. Among other things, the paper points out to one the necessary, sufficient, and justified conditions in the preparation and implementation of this principle, and that is the modern educational technology placed in specially designed classrooms. For this reason, the Academy of Criminalistic and Police Studies strives to equip its classrooms with modern didactic-methodical means and thus directly contribute to the development of higher police education, founded in the beginning of last century by Dr Archibald Reiss.

20 Damljanović, P., Gojković, V., (2002). Uticaj očiglednosti na zadržavanje usvojenih znanja, *Nauka – Bezbednost – Policija*, 7(1), p. 35.

21 Milojević, S., (2010). Optimizacija modela posebnih oblika nastave na Kriminističko-policijskoj akademiji, *Bezbednost*, 52(3), p. 24.

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STRATEGIES FOR TEACHING LANGUAGE FUNCTIONS TO STUDENTS OF ENGLISH FOR LAW ENFORCEMENT

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Abstract: The specific nature of the work of law enforcement officers implies a great number of situations which require the use of English in specific contexts with a strictly defined purpose. This functional use of the English language is of great importance particularly for law enforcement officers in their daily interaction with citizens and colleagues, due to the necessity for achieving specific goals by means of communication: expressing opinions, arguments, requests, giving talks and presentations etc.

Bearing this in mind, the paper deals with the different ways of integrating the segment of language functions in the English language curriculum for law enforcement students. It offers a variety of strategies for their integration in different types of exercises within the communicative teaching approach, aimed at fostering students' motivation for learning and practically using the English language. This can be achieved solely by teaching language functions through a contextualized setting that will encourage students' involvement in interactive, real-life activities and tasks with increased authenticity.

Key words: language functions, communicative language teaching, English for law enforcement.

INTRODUCTION

Communication plays a central role in police work. Irrespective of the work position, the accomplishment of daily tasks of police officers implies the use of language, which requires highly developed communicative skills. Depending on the department for which they work, police officers often find themselves in various communicative situations where they have to deal with different people, adapting to the specific setting in which communication occurs. They may have to issue orders, identify people, examine people and vehicles, interview suspects, negotiate with hostages, hold press conferences, present results from investigations, and perform a wide range of other activities, all of them centered around their competence for oral interaction in different contexts. In other words, they should be "equipped" with the necessary communicative skills so as to be able to functionally use the language in authentic, real-life situations. These communicative skills are necessary for oral interaction with ordinary citizens as well, due to the nature of their profession which implies direct contact with citizens and conversation about various issues which are often not related to crimes. In various situations, they may be asked for specific information, directions, rules, obligations, instructions etc. and it is necessary for them to be able to lead a conversation and respond to requests and questions of this type.

Taking into account all these issues, it becomes clear that fostering communicative competence must become a cornerstone of the language curriculum of prospective law enforcement officers. Apart from the native language instruction, this can also be considered as an important segment of foreign language teaching. Foreign language communicative skills are particularly important for those learners who will potentially be deployed in foreign missions, where they will be required

to communicate effectively in English with people of different origin, as well as to communicate with the local population in various situations. On the other hand, English communicative skills will also be necessary for prospective police officers whose job would require cooperation with international bodies and participation in a wide range of activities at international level, where communication is done exclusively in English.

AN OVERVIEW OF LANGUAGE TEACHING APPROACHES

The origins of English language teaching could be traced back to the eighteenth century - a period which coincides with the introduction of the study of modern foreign languages into the curricula worldwide. Before that, foreign language instruction had exclusively been reserved for Latin, due to the great influence of the church and the status of Latin as the "official" language of education and science.

The new "era" was accompanied by the change in the global hierarchy of languages, but it didn't bring any novelties as far as the methods for language instruction were concerned. This was the reason why the earliest approaches to teaching languages other than Latin (including English) were identical to the ones which used to be used in the "Latin" period. They were referred to as "traditional approaches" and were designed according to the Latin model. Textbooks consisted of lessons full of abstract presentation of grammar rules, long lists of vocabulary items and sentences which were supposed to be translated. Hence, it is not surprising that the earliest known method for teaching English based on the traditional approach was the so called *grammar-translation method*. The principal idea behind this approach was the assumption that language learning was "an intellectual activity involving rule learning, the memorization of rules and facts related to first language meanings by means of massive translation practice." (Stern, 1983: 455). The strict adherence to grammar and translation as its key elements, and its failure to recognize and meet the needs of the learners' led to strong criticism against this method, which, in the 19th century was replaced by other, more "modern" approaches reflecting the developments in foreign language teaching at the time.

Theoreticians of foreign language teaching methodology in the 19th century came up with fresh and "revolutionary" ideas based on the perceived practical and communicative needs of the learners. Their views were incarnated, inter alia, by the introduction of the *direct approach*. Instruction carried out in the target language, teaching of everyday vocabulary, progressive inclusion of grammar contents, inductive teaching of grammar, oral introduction of new points, and the emphasis on both speaking and listening skills were the key aspects which made this approach more interesting and acceptable for learners compared to the traditional method.

The evolution of foreign language teaching was further developed in the 20th century with the introduction of *situational approach*. Its main focus was on spoken language, and its main feature was the situational practicing of new language points, which was based on the expectations that learners will apply the knowledge acquired in the classroom to concrete, real life situations. The period after the Second World War was marked by the introduction of *audio-lingual method*, and the development of oral proficiency at its core. Dialogues and drills formed the basis of audio-lingual instruction, but exercises were mainly oriented towards memorizations and sheer repetitions.

The period from the 1970s onwards was marked by the major shift in language teaching methodology. The greatest invention of that time was the introduction of

communicative language teaching (CLT). It arose from the observations of theoreticians that “being able to communicate required more than mastering linguistic structures.” (Larsen Freeman, 2000:121). Communicative, rather than linguistic competence became the cornerstone of foreign language instruction, and communication was perceived as a synonym for language. CLT put the issue of meaning as its core principle, as opposed to linguistic structure as the central element of previous approaches. According to Richards (2001:161) CLT was based on the following premises:

1. Language is a system for the expression of meaning;
2. The primary function of language is to allow interaction and communication;
3. The structure of language reflects its functional and communicative uses;
4. The primary units of language are not merely its grammatical and structural features, but categories of functional and communicative meaning as exemplified in discourse.

These features of CLT made it clear that it would be necessary to reform the whole process of foreign language instruction and progress towards designing textbooks that would incorporate activities aimed at developing learners' communicative competence, based on previous assessment of their specific needs. One of the ways to achieve this competence was to introduce the teaching of various language functions into the curriculum, thus providing the learners with opportunities to practice the functional use of language in numerous different contexts and situations. The exercises that formed the essence of CLT involved learners' participation in interactive activities based on specific tasks which would require information sharing and negotiation of meaning. This approach contributed to the shift in the role of students who became active participants in the process of the acquisition of linguistic knowledge. On the other hand, ESP teachers and course designers were faced with a new challenge - how to develop syllabuses and create teaching materials which would satisfy both learners' specific needs and the demands of CLT approach which required their full engagement in the creative process of designing interactive, challenging and stimulating activities aimed at developing students competence for functionally using the language.

THE APPLICATION OF COMMUNICATIVE LANGUAGE TEACHING IN THE ESP CLASSROOM

Communicative language teaching can be implemented through the use of several different methods of language instruction. For the purpose of this paper we will specifically focus on content based instruction and its application in the ESP classroom, with specific emphasis on English for law enforcement.

One of the main features of content based instruction is its holistic nature, which means that language knowledge is acquired through activities and tasks which aim to improve learners' language skills (listening, speaking, reading and writing), functional skills (the functional use of language in specific contexts), while focusing on a specific topic relevant to the learners' area of study. The development of content-based teaching was closely related to the development of ESP (English for Specific Purposes) teaching, which occurred as a response to the increased number of learners of English with specific reasons for learning the language in the post-war period. These learners were motivated by the language requirements “imposed” on them by their specific professions. As a result, the teaching of English had to be adapted

to the specific needs of their respective professions, and it became necessary for the teaching materials to incorporate texts, tasks and activities centered around concrete topics relevant to the specific field of interest of the target learners. The methodology for the organization of learners' activities and the design of the syllabus follows the tenets of previously elaborated communicative language approach with the overall goal of both improving learners' communicative competence in English, as well as broadening their knowledge of topics which are important for their professional area of interest.

Bearing in mind the importance of all the above mentioned segments that need to be taken into consideration in the process of communicative language teaching in the ESP contexts, a logical conclusion may be drawn that ESP teachers are faced with a serious challenge in satisfying these numerous aspects as they carry out language instruction. Hence, ESP course designers should be very skillful in selecting appropriate contents supported by appropriate activities that would be in accordance with the principles of communicative language teaching. The contents must be selected from the "ocean" of authentic documents, and it is necessary for the ESP teacher to possess sufficient knowledge in the specific subject area so as to be able to match students' interests and needs with corresponding topics. In this quest for perfectly matching the two aspects of ESP teaching, they often resemble "reluctant dwellers in a strange and uncharted land" (Hutchinson and Waters, 1987:158), who must use their own intuition and experience so as to select topics relevant to the subject area. It is a tedious and time consuming process in which authentic texts, which are often complex lengthy, should be converted into "student-friendly" lessons in compliance with didactic principles of modern foreign language teaching.

INTEGRATING LANGUAGE FUNCTIONS IN COURSE MATERIALS FOR ENGLISH FOR LAW ENFORCEMENT

As we have previously stated, the key change that marked the shift towards communicative language teaching was the change of focus regarding the central issue in language instruction. The rationale behind this approach was the necessity for satisfying the needs of the learners of the new era for functional use of the language. This is why course materials had to include activities that would convince the learners that they were being prepared for the practical use of language outside the classroom. One of the ways to achieve this feeling of "usefulness" of course instruction is through the emphasis on teaching language functions. This is equally true both for general courses and ESP courses, and ESP course designers have even a greater challenge in integrating such activities within a specifically defined context.

In this section, we will present some of the numerous alternatives for the integration of language functions specifically in English for law enforcement context. We have already mentioned some of the contexts that are most typical for law enforcement officers, and through the exercises that will be presented here, we will try to offer some solutions that would raise and keep students' interest and will foster their interaction, as well as pair and group work.

Sample exercise 1- Interviewing suspects and victims¹

Interviews play a very important role in police work. This is an inevitable segment of the daily duties of a great portion of police officers, which makes its inclusion in the English course book mandatory. Here, we propose an activity which consists of a listening exercise where students are given segments from three different types of police interviews. In the first interview, the police officer interviews a suspect in a case of sexual attack, in the second one the interviewed person is a victim of battery, and in the third one the police officer interviews a witness of a bank robbery. Students have the task to listen carefully and try to identify the specific crime in question and the person being interviewed. After they finish, they have instruction on the distinction in terms of form and use of *wh-questions* and *yes/no-questions* and using the given clues they are asked to role-play dialogues for one the following topics: blackmail of a famous businessman, kidnapping passengers on a train and murder of a schoolgirl.

The following are excerpts from the three interviews presented to the students:

Sexual Attack Suspect

- Police Officer: Sir, do you know this person?
 Suspect: No, I don't. **(No)**
 Police Officer: Are you telling me this is the first time you are seeing this woman in the photo?
 Suspect: I'm afraid so. **(Yes)**
 Police Officer: **Where** were you last night between 8 p.m. and 1 a.m.?
 Suspect: With my friends, hanging out at the Sailor's.
 Police Officer: The whole time?
 Suspect: Exactly. **(Yes)**
 Police Officer: And **when** did you leave the bar?
 Suspect: I think it was around 2 a.m.
 Police Officer: Did you go straight home?
 Suspect: Sure. **(Yes)**
 Police Officer: And **how** did you get home? By car?
 Suspect: No, I decided to leave the car behind.
 Police Officer: **Why** would anyone leave their car unattended?
 Suspect: I had to, I knew I was too drunk to drive.
 Police Officer: **What** was your reaction when you heard a woman was raped inside your car?
 Suspect: I thought you were kidding me...
 Police Officer: Do you think any of your drink buddies could have taken advantage of your unattended car?
 Suspect: Never! **(No)**

¹ All situations described in this paper for the purpose of exercise are entirely designed by the authors

Victim of a Battery

- Police Officer: *I'm dreadfully sorry you have to go through this again, but please understand that it is essential that we collect as detailed information from you as possible concerning the event of this morning.*
- Victim: *Of course. Go ahead.*
- Police Officer: **What time** did your husband leave the house?
- Victim: *9 a.m., as usual.*
- Police Officer: **And your children? When** did they leave for school?
- Victim: *5-10 minutes before that.*
- Police Officer: **How long** was it before your husband returned?
- Victim: *An hour, I guess.*
- Police Officer: **Where** were you at that time? And **what** were you doing?
- Victim: *In the back yard, watering the roses.*
- Police Officer: *Did you hear your husband rush in?*
- Victim: **No**, I wish I did. I just felt a strong thump on the back of my head.
- Police Officer: *It is then that you lost your consciousness?*
- Victim: *Precisely. (Yes)*
- Police Officer: *But you regained it soon after?*
- Victim: *Aham, (Yes) just after few second. It was actually his kicks in my stomach that made me come around.*
- Police Officer: **How long** was he beating you?
- Victim: *2 or 3 minutes. Every time I tried to fight back he would get even more furious.*
- Police Officer: **What** made him stop?
- Victim: *Mrs. Larson next door shouted out loud that she had called the police. And I think she was throwing object at him, too. Poor Mrs. Larson, to have to witness that...*
- Police Officer: **Why** do you think he did this?
- Victim: *My secret bank account. He had found about it.*
- Police Officer: *Are you sure?*
- Victim: *Pretty much. (Yes) "No wife of mine is going to stash money away from me," he kept yelling.*
- Police Officer: *Are you absolutely sure that would be the sole motive?*
- It seems to me he overreacted a bit.*
- Victim: *Nope. (No) In his place, Sir, I would have done exactly the same.*

Witness of a Bank Robbery

- Police Officer: Now, are you positive that you could clearly see the face of the robber?
 Witness: But of course, (**Yes**) he passed right next to me, twice!
 Police Officer: And he wasn't wearing a mask or anything?
 Witness: Nah. (**No**) That you can see only in the movies.
 Police Officer: **Where** were you standing when he took out the gun?
 Witness: Right there, officer, behind that counter.
 Police Officer: And **how far** was the robber from you?
 Witness: 10 metres. Maybe even less. He pulled out the gun, waved it around so everybody could see it, and hollered at the teller.
 Police Officer: Can you remember the exact words? **What** did he say?
 Witness: "Give me the money, now!" "I ain't afraid to use this!"
 Police Officer: Did the teller give him any money?
 Witness: He sure did! (**Yes**) He stuffed his bag full.
 Police Officer: **When** did you get the chance to see him closely, as you said you did?
 Witness: Right after that, when he rushed out. He ran past me. Here, right here!...
 Police Officer: And **when** did you see him for the second time?
 Witness: Just a few seconds later, when he came back in.
 Police Officer: **Why** would a robber come back to the bank he had just robbed?
 Witness: 'Cause he'd dropped his loot, that's why.
 Police Officer: And weren't you, perhaps, scared, and actually looked away?
 Or maybe too agitated to be able to remember all the details of his features?
 Witness: Me? Not in a million years! (**No**). I quite enjoyed it, actually.

Apart from developing their listening skills, this exercise will have the following benefits for the students:

- a) They will acquire language structures used for conducting police interviews and will practice how to make *wh-* and *yes/no* questions correctly and how to use them appropriately in the context of police work.
- b) They will be able to distinguish between different approaches in interviewing different categories of people and the types of questions used for this purpose.
- c) They will develop their communicative skills by role-playing interviews on a given topic.
- d) They will be able to distinguish between different ways for expressing approval and negation, other than yes/no answers (e.g. "I'm afraid so", "Sure", "Precisely", "Nah" etc.)

Sample exercise 2 - Giving oral presentations

As far as oral presentations are concerned, they should be included in all types of ESP syllabuses, since they cover an aspect that is important for all learners, irrespective of their profession or field of work. It is necessary that law enforcement students are equipped with knowledge related to presentation skills, due to the fact that very often they will find themselves in situations when they will have to describe trends related to specific types of crime, statistics, research reports etc.

In the sample exercise illustrated below, we will give an example of a type of activity that may be used for teaching presentation techniques. The exercise is pre-

sented in the form of video recorded oral presentation provided by an expert in cyber crime. The expert presents the latest tendencies and trends related to this specific type of crime, and the presentation is supported by visual materials - graphs and charts. Students are given basic instructions about the use of specific phrases for making presentations, and the information that should be included in each section. After the expert finishes his presentations, the students have the task to put the different parts of the presentation given in the book under the appropriate heading. After they finish with this task, they are asked to work in groups and do research on the Internet. They should find information about statistics related to cyber crime in their country/region/town and present the results of their work in front of the other students in the class. They are encouraged to use the phrases presented in the course book.

The following are the headings given in the book:

Introducing the topic

Referring to questions

Introducing each section

Summarizing a section

Referring backwards and forwards

Checking understanding

Referring to visual information

Referring to common knowledge

Concluding

The excerpts from the presentation are given below:

a) So, the first slide here divides the reported phishing incidents in four typical categories, depending on what the “phishers” were “phishing” for: usernames... here; passwords... here; bank account details... over here; and credit card details... right here. The table below gives the exact figures, let me not read them out to you. What is obvious from this chart is that all forms of phishing are marking a clear increase over the past five years. This is so because, on the one hand, the number of people sufficiently knowledgeable of electronic communication so as to perform such a crime has significantly increased over the last five years; not only can everyone obtain a personal computer nowadays, but also everyone can receive a solid education on the subject, frequently for very small charges or even free of charge, by relatives, peers and so on. On the other hand, the number of people who use computers for personal needs, such as entertainment or procurement, has also tremendously increased. However, what may not be so obvious to the naked eye here, on this chart, is that the trends seem to have shifted. In the earlier days hackers were predominantly phishing for usernames and passwords, probably to log in your Facebook page and have some fun. But in the last couple of years hacker mean business, and they prefer breaking into your bank account details and credit card details, and making pure profits out of it, rather than having fun... (Key: Referring to visual information)

b) Ladies... and the few gentlemen over there... As you must have heard by now, my name is Oscar Waltz, and I'm representing the Computer Crime Unit of the Scotland Yard. I'm here today with you to share a few thoughts on this subject. Computer crime, I mean.

Before I start my presentation, let me thank you for inviting me to your Monthly Empowerment Meeting and giving me the opportunity to warn you against the ever increasing danger of becoming a computer crime victim. I must say that I have always

been a true supporter of the women's movements across the country, and it was exceptionally pleasing to see that the women's organization of even such a small community as is the town of Green Hills has taken this decisive step to make its members aware of internet fraud, or more precisely, the forms it takes and the way it works.

For today's meeting I've decided to talk about one particular form of cyber-crime – phishing. We've prepared folders for you, with information materials on all forms of computer crime, so if you find another topic interesting, I think we can make arrangements for another meeting and discuss other topics, too... (Key: Introducing the topic)

c) But for today, our objective is to raise your awareness about phishing and indicate to possible ways in which you can protect yourselves against it. I will first explain what phishing is, and then I would like to attract your attention to a 5-year overview of the evident trends in this form of crime. After that – and this is very important – we will try, by working in groups on few case studies, to learn how to actually recognize whether we're being under immediate threat of phishing or not. Finally, I will briefly explain which is the fastest and simplest way for you to report even the slightest suspicion of such incidents, should you ever get involved in one... (Key: Introducing each section)

This exercise has the following objectives:

1. It exposes students to an authentic context in which presentations occur, with a native speaker acting as the presenter.
2. Students have the opportunity to acquire the specific phrases related to introducing different stages of the presentation procedure, as well as the vocabulary used for describing specific trends (e.g. *increase, decrease, rise, fall* etc.).
3. The follow-up activity helps students develop their skills for searching for relevant data on the Internet, and improves their ability for group work and exchange of information.

Sample exercise 3 - Participation in a meeting

Another function that should be developed among ESP learners is the presentation of arguments and opinions. One of the strategies for integrating both functions is to teach them as a component of the wider concept of meetings, since they encompass presentation of arguments and opinions in the function of reaching a solution to a particular problem.

For the purpose of this paper, we chose an activity where students listen to a meeting of a group of people discussing the problem of child pornography. The participants in the meeting are representatives of several categories of people: a local government representative, a school director, a parent, a school psychologist, a school pedagogue, a teacher, a deputy mayor and two police inspectors specialized for this type of crime. The students are given the transcript of the meeting, and as they are listening to the discussion, they have the task to complete the sentences uttered by the participants in the meeting with the missing expressions. After they finish, they are asked to act out a similar meeting on the topic of bullying among school children. They should use the phrases given in the book.

The following is the extract from the meeting on child pornography:

School Director: Right, (1).....?(Key: shall we get started?) Ok....Ladies and gentlemen, thank you for arriving on such a short notice (2)....., (Key: I declare the meeting open) at exactly 14 hrs. Just for the record, let me verify that the meeting is attended by the

director, the secretary, the pedagogue, and the psychologist of this school; we have two teachers and two parents here with us today; two police inspectors are representing the local law enforcement agency, and, if I got it right, one is specialized in computer crime, and the other in child abuse; and the Deputy Mayor has also honoured us with her presence.

Ok, our pedagogue was in charge of organizing the meeting, so(3)..... (Key: I now give the floor to her), for a brief introduction. Ms Jankovska?

School Pedagogue: Thank you, Mr Director. I, too, am glad to see that you have all showed up. In the invitation letters I had sent out, you could see that (4)..... (Key: we have a single item on the agenda for today): to see what we can do about the... well, there is no other way to put this... about the pornographic material that has been produced in our school... apparently, by our own students.

We were alarmed to this problem by the local police... So, maybe they can tell us more about it? Mr Stojanov? Can you, in just few words, introduce us to the problem?

Inspector 1: Sure. Well, hmm... As part of our regular monitoring activities relating to detection and interceptions of child pornography production and dissemination, we came across a number of video clips that were taken in this school... by students from here.

Teacher 1: Wait a minute. Was the school under your surveillance? How did you get hold of these video clips? Who made them, anyway?

Inspector 1: No, by no means! The police did not subject the school to any form of secret surveillance. Like I said, we're talking about video clips that the students themselves have taken using their mobile phones. And they have personally posted them on the internet. Some of the clips have been circulating for more than 3 months.

Parent 2: But who are these children?

Teacher 1: Are you positive these are our students? Can you tell us who?

Inspector 1: Well, yes, we have identified them, but...

Inspector 2: (5)..... (Key: Could I say something here, please)?

Pedagogue: Of course, please do.

Inspector 2: I really don't see the relevance of discussing the events in so many details. We're slowing drifting from the subject. Let us, please, return to discussing the greater risk the children are taking here.

Local Government Rep.: Now, what would that be?

Inspector 2: Paedophiles, ma'am.

Local Government Rep.: Oh, God!

Inspector 2: I'm sorry, but I have to be open. There is no other way to deal with this. The video clips have been circulating on the internet for month now. Some have even been embedded in popular pornographic web-sites. Our experience tells us that pornographic industry and child abusers will not hesitate long before approaching such... frivolous children, putting forward quite indecent, but to children of that age – quite luring – proposals.

Psychologist: Exactly my point! I mean – (6)..... (Key: sorry to interrupt you) – but these children, and actually their parents must be informed as soon as possible...

Inspector 2: Rest assured, Sir, that, by way of our professional duty, we have contacted the parents concerned, and clearly instructed them on how to protect their children.

Psychologist: But it is crucial that I and my colleague, the pedagogue, work closely with these children on daily basis. Have they stopped attending lessons? After this it is essential that they don't get the feeling of being socially excluded...

Inspector 1: That's exactly what we thought should be the right course of action, specifically concerning the children who appear in the video clips in question.

School Director: So, it has been moved by Mr Spasic, and seconded by the police inspector, that the police reveal the identity of the students in question to the school management so that the specialized school services may immediately commence additional pedagogical and psychological work with these students.

(7) (Key: May I suggest that we take a vote on this?)

Those in favour? All? We seem to have a consensus. I hereby conclude that the motion has been unanimously adopted.

Ok, now I see Ms Deputy Mayor wants to take the floor?

Deputy Mayor: Yes, thank you. I believe that we should take immediate actions to prevent such scandals from repeating ever again. I don't think that we should stick to working with this school alone, or all schools for that matter, but instead we should work with the entire local community. Once I report this problem to the Mayor and the Municipal Council, I'm sure they will be willing to allocate funds from the municipal budget to eradicating any form of child pornography production, commercial or non-commercial alike....

This type of activity is useful for students, since it helps them in the following ways:

1. They learn and practice various phrases and language structures which characterize the language of meetings.
2. They have an opportunity to participate in an oral exercise which requires participation of a larger group, which helps in the development and improvement of their interaction skills within group work.
3. They acquire knowledge about the procedures related to chairing and participating in meetings in English,

Sample exercise 4 - Expressing polite requests while performing police duties

Politeness is a very important aspect of every profession, and needs to be addressed as a high priority in the process of educating professional in all areas. This is also true for law enforcement officers whose duties and tasks involve interaction and communication with citizens on a daily basis. Bearing this in mind, in this section we propose an exercise where students listen to a dialogue between a traffic warden and a driver. As a pre-listening activity, students are introduced to the grammatical forms used for expressing polite requests with modal verbs *could*, *would*, *may* etc. After their acquisition, students try to guess the questions asked by the traffic warden, based on the previous instructions. In the course of the conversation, the traffic has several requests for the driver, and all the time he uses various forms containing modal verbs in order to express his requests in a polite manner. As students are listening, they check their guesses and correct the wrong ones. The driver's answers are given in the book.

The following is the excerpt from the interview:

Traffic warden: Good morning, Sir.

Driver: Good morning, officer. Is there a problem?

Traffic warden: No, not really. We're running some routine checks.

Driver: Sure, I understand.

Traffic warden: ?

(Key: May I see your driving license and registration, please?)

Driver: Just a second. Here you are.

Traffic warden: Thank you.

?(Key: Would please give me a minute to review these documents?)

Driver: No problem, officer. Take your time.

Traffic warden: Well, Mr Stefkovski, your registration seems to have expired.

Driver: I really don't believe that, officer. (Key: Can I see it please?)

Oh no, I'm afraid it has completely slipped off my mind.

Traffic warden: ?

(Key: Could you please step out of the vehicle, Sir, and open the trunk for me?)

Driver: Yeah, I don't see why not. ... There you go.

Traffic warden: Ok, you can now close the trunk.

Driver: Of course.

Traffic warden: Now sir, for both your safety and mine, please get back into the car.

Driver: Sure... Will you write me a ticket?

Traffic warden: I'm afraid I have to, Sir. I will have to issue you a citation for expired registration...

What are the advantages of this type of exercise?

1. Students will learn about the use of appropriate modal verbs expressing polite requests. This is a very good way of integrating grammar content into an exercise primarily aimed at practicing functional language use.
2. It will contribute to raising students' awareness of the importance of being polite in interaction with citizens while they are performing their daily duties working as law enforcement officers.
3. Students will get familiar with some of the tasks of traffic wardens and the language structures they use for initiating conversation with drivers.

Sample exercise 5 – Asking for/ Giving directions and instructions

Police profession often requires interaction with ordinary citizens who are usually either perpetrators, victims or witnesses of specific crimes. However, working as a police officer does not necessarily mean dealing with “problematic” citizens and solving crime-related issues. They are sometimes addressed even by “ordinary” citizens for various reasons. They may stop a police officer in order to ask for specific information, direction, instructions etc.

Taking into account this aspect of police profession, in this section we will present an exercise where police officers use the English language in a functional manner, dealing with citizens' queries. Actually, we divided this sample exercise into

two parts. In the first part, the “protagonists” are a police officer who is patrolling in front of a museum and a visitor to the museum. The visitor has some problems with the camera and asks for help from the police officer. As students are listening to their conversation, they should fill in the gaps with the missing words. In this case, functional language is taught together with the use of the imperative as the typical English form for giving instructions and describing procedures. As a post-listening activity, students are asked to work in groups and role-play similar dialogues, this time on different topics.

In the second part, students are given a dialogue between a police officer patrolling in the city center and a foreign tourist. The tourist has some problems trying to get to the Cathedral Church, and he stops a police officer in order to ask for directions. This exercise combines both the use of functional English, i.e. the words and phrases used for asking for and giving directions, as well as the use of prepositions of movement. Before listening to the dialogue between the tourist and the police officers, students are asked to work in groups and each group is given a city map. On the basis of the instructions given by the police officer, the task of the students is to follow the path on the map and mark the final destination, i.e. the church, in the appropriate place on the map. After they finish, they work in pairs and role-play similar dialogues. They should select a specific point on the map and practice asking for and giving directions using the appropriate prepositions expressing movement (e.g. *straight, across, above, under* etc.)

The following are the transcripts of the dialogues:

Situation 1: Asking for/ Giving Instructions

(An old lady asking for instructions)

Lady: Good evening, Mr. Officer. I'm not sure you're the right person to ask...

Officer: By all means, please do ask! I might be able to help you anyway.

Lady: Well, see, I was told flash was not allowed in here.

Officer: I'm afraid so. Those are the rules!

Lady: Yes, certainly. But I would very much like to take few photos in here.

And I can't seem to be able to find how to turn the flash off on my camera.

Officer: Oh, well... Let me see what I can do. Please show it to me.

Lady: Certainly, have a look at it. I'm not sure if you're familiar with this model.

Officer: All these digital gadgets look alike, once you learn how to operate one, you've mastered them all! Ha-ha...

Let me see, I would suppose all settings appear interchangeably on the display, isn't that so?

Lady: Yes, you're right.

Officer: Can you tap on the display for me, to see if anything happens?

Lady: Like so?

Officer: Yes, there you go. See, something showed up. Try and find the thunderbolt symbol somewhere on the display.

Lady: I don't have my glasses on me. Could you please read what it says?

Officer: Oh, dear, it's recording! You've been recording a video all these time! Ha-ha...

Lady: Oh, my...

Officer: That's why you weren't able to see the flash sign.

Lady: What am I to do now?

Officer: First, tap on the red button symbol to stop recording. Now, make sure you have selected the right mode. Tap the video recorder symbol, to switch between modes.

Keep tapping slowly until the video recorder symbol disappears and the camera symbol appears instead. There you go. Now, you've selected the still photography mode. Next step is to set the flash option. Look for the thunderbolt symbol. Here it is. Again, the trick is to keep tapping the symbol until the desired option appears. This way you can choose between "on", "off" and "auto" modes for the flash. If you select "off", the flash is turned off... Now you're safe to use your camera here.

Lady: Oh, thanks a million, Mr. Officer. Thank you very much.

Officer: But please do hurry! The museum closes in 30 minutes!

Situation 2: Asking for/ Giving directions

(A tourist asking for directions)

Tourist: Mr. Officer, can you please tell me how to get to the Cathedral Church?

Officer: Certainly. But tell me first, are you interested in visiting the Orthodox or the Catholic Cathedral Church?

Tourist: I was going to see the Orthodox one.

Officer: Right, then. From here, go straight on until you come to a newsstand to your right.

Tourist: A newsstand?

Officer: Yes. The newsstand will be on your right. And just in front of the newsstand you'll be able to see a zebra crossing. Cross the street there. Be careful though, there are no traffic lights there.

Tourist: Oh, thanks for the warning.

Officer: Once you cross the street, turn left and keep walking until you come across multi-floor parking deck to your right. Turn right there into a narrow alley.

Tourist: Oh, a narrow alley? Is it safe?

Officer: But of course! No worries! Nothing can happen to you in this town in broad daylight.

Tourist: If you say so.

Officer: After all, it is quite short. Walk down that alley, and after a minute or so you'll come across a signpost. There you turn left.

Tourist: All right.

Officer: Actually, if you take a look to your left from there, you will be able to see the Cathedral Church already.

Tourist: I guess I can manage on my own from there.

Officer: I think so. Just make sure you don't cross the street there.

Tourist: No?

Officer: There is no pedestrian crossing there.

Tourist: I see.

Officer: As you turn left, keep walking down the street facing towards the Cathedral Church. At one point you'll be walking past a confectionary shop. You won't miss it, because of the inviting smell! Right there you have a pedestrian crossing and it's safe for you to cross the street. Once you cross the street, you'll find yourself practically in front of the Cathedral Church.

Tourist: Ok. I think I got it right. Thank you very much Mr. Officer.
Officer: Not at all.

This type of exercise is useful for the students for the following reasons:

1. They become aware of the multitude of situations where law enforcement officers use the English language expressing a variety of functions.
2. They acquire the phrases used when asking for and giving specific instructions
3. They practise the use of the imperative form as the essence of the language of instructions
4. They learn the phrases used for asking for and giving directions
5. They practice the use of preposition expressing movements
6. They practice the use of maps for reaching a specific destination and for giving appropriate directions.

Sample activity 6- Delivering speeches

Participation in conferences, trainings and seminars is another important aspect of police profession. Events of this kind provide numerous opportunities for interaction with foreign colleagues, exchange of experiences, knowledge or ideas. Police officers may find themselves both in the roles of guests and hosts of such events, and sometimes they will have the honour to participate in the opening/closing ceremonies delivering various types of speeches. In this section we focus specifically on delivering two types of speeches. The students are given a set of expressions used for: a) opening a conference and welcoming visitors, and c) closing a conference and thanking for a visit. They have to identify the type of speech each set of expressions refers to, and then they should work in groups and try to prepare short speeches of both types related to different events, such as a conference on terrorism, child abuse, organ trafficking, illegal migration etc.

Some of the expressions used for opening/ closing speeches are presented below:

1. Opening speech

Good morning Ladies and Gentlemen.

On behalf of *(the Minister of Interior/ the members of the organizing committee...)* may I welcome you to *(our Third International Conference on terrorism/child abuse/ cyber crime etc. which has recently become a serious issue in our region...)*

I wish to extend a warm welcome to *(our guests from the various countries...)*

It is a great pleasure to have you with us today.

I hope you enjoy *(the Conference and your stay in Ohrid/ Macedonia...)*...

2. Closing speech

Distinguished guests and participants,

On behalf of *(the Minister of Interior/ the members of the organizing committee...)* and myself may I express our warmest thanks for *(your kind presence and active participation in the International Conference...)*

I would also like to express my thanks to *(all the participants, moderators, experts, and journalists for their role to make the conference a success...)*

I hope that you have found the Conference very interesting and useful.

I wish all the participants *(a safe journey home...)*...

This type of exercise has the following benefits for the students:

1. It provides students with the opportunity to learn the expressions which are used for delivering speeches
2. It helps students distinguish between different types of speeches
3. It fosters students' creativity in the process of preparing speeches for various events

CONCLUSION

In this paper we tried to present some of the possible strategies for integrating the teaching of various functions to students of English for law enforcement. There are numerous different ways in which this aspect of the English language can be included in the syllabus and these were only a few that we selected as possible options that may be applied in teaching specifically English for law enforcement. It is only through this type of exercises and tasks that students of English for law enforcement may improve their communicative skills and the functional use of the language as the leading principle of communicative language teaching approach. Adherence to content based course instruction through tasks integrating the four language skills and grammar will undoubtedly contribute to educating law enforcement professionals who will be able to effectively communicate in English in various contexts specific to their profession.

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THE NEW CONCEPT OF THE MACEDONIAN LAW ON CRIMINAL PROCEDURE AND THE NEED TO TRAIN THE EMPLOYEES OF THE MINISTRY OF INTERNAL AFFAIRS

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Abstract: The Strategic Plan of the Macedonian Ministry of Internal Affairs (MOI) clearly states that its mission is to create a legislative, professional, transparent, responsible and democratic oriented organization that is dedicated to serve the citizens, to protect their freedoms and rights, to deal effectively with the crime and to provide internal security and safety of the state. This statement, together with the new Law on Criminal Procedure (LCP), can only impose a necessity to conduct a thorough training of the MOI's employees by which they will be get acquainted with the new system.

Having in mind that LCP was adopted in November 2010 and has two years *vacatio legis*, it is important to determine the training needs and to define its priorities. The training final goal will be for the MOI's employees to acquire adequate knowledge and skills for more efficient execution of the police work, for proper use of their powers, and to pay a special attention to the new legal provisions defined in LCP, especially in the segment of the pre-trial procedure.

Key words: training; employees of the Ministry of Internal Affairs; law on Criminal Procedure; Republic of Macedonia.

INTRODUCTION

The slow procedures and inaccessibility to justice, difficult and prolonged execution of final decisions, overburdened judicial institutions with minor cases and unorganized case management, are the four basic weaknesses of the Macedonian judicial system noted since 2004 in the Strategy for Reform of the Judicial System.¹ According to the Strategy, a general goal of the reform is to establish a functional and efficient judicial system based on the European legal standards. As a result of the individual goal determined in this Strategy or reforming criminal procedure legislation, in 2007 a Strategy for Reform of the Criminal Law was adopted,² which among other things determines the following basic benchmarks:

- To extend the application of the opportunity principle of criminal prosecution;
- To provide active and managerial role of the Public Prosecution Office (PPO) in the pre-trial procedure, which includes efficient control over the police;
- To revoke the court investigation and PPO to take over the conduction of pre-trial procedure;
- To implement the recommendations of the European Union and the Council of Europe regarding the criminal procedure;
- To create an efficient PPO and to establish a new operational and managerial structure, as well as management and cooperation with the police, other law enforcement bodies and foreign prosecution offices.³

¹ See: Министерство за правда: *Стратегија за реформа на правосудниот систем*, 2004, page 3.

² See: Министерство за правда: *Стратегија за реформа на казненото право*, 2007, page 8.

³ The other basic benchmarks of the reform are:

THE NEW LAW ON CRIMINAL PROCEDURE – RESTRUCTURING THE PRE-TRIAL PROCEDURE

An important year for the Macedonian criminal procedure legislation is 2010, when the new Law on Criminal Procedure was adopted.⁴ This Law stipulates a significant changes related to the restructuring of the entire criminal procedure, especially in the section of the pre-trial procedure (pre-investigative and investigative procedure),⁵ and redefining of the role of the subjects that participate in the procedure, more precisely redefinition of their rights and obligations.⁶ Namely, the Strategy for Reform of the Criminal Law notes that although theoretically PPO should dominate in the pre-trial procedure in practice police enjoy a great autonomy. Even though the police is functionally (procedurally) subordinated to the PPO, which has an authority to direct the police investigations, the factual autonomy is partly due to several factors.⁷ This hierarchical dualism prevents PPO to gain greater operational power, and that is the reason why the Strategy proposes particular police forces in the future to be placed under a more immediate control of the PPO, which in essence is realized in the new LCP.⁸

In addition, it should be noted that the new LCP is systematized into three parts: Part One introduces the general provisions (Section A “Principles and legal terms”, Section B “Subjects”, Section C “Procedural actions”, Section D “Procedural measures and actions for securing persons and evidence”), Part Two is dedicated to the course of the procedure (Section A “Pre-trial procedure”, Section B “Accusation”, Section C “Main hearing and judgment”, Section D “Legal remedies”, Section E “Accelerated procedures”), and Part Three contains the special procedures.⁹

To promote off-court settlement and simplified procedures;

To abandon the judicial paternalism by transferring the burden of proof to the parties;

To reduce the participation of jury-judges;

To introduce a system of preclusions for certain procedural activities and measures against the abuse of procedural authorities of the parties;

To reach and write down the court decisions in strict deadlines;

To rationalize the system of legal remedies.

4 Law on Criminal Procedure (“Official Gazette of the Republic of Macedonia” No. 150/2010).

With the start of application of the new LCP, the current LCP (“Official Gazette of the Republic of Macedonia” No. 15/1997, 44/2002, 74/2004, 15/2005 - consolidated text, 83/2008, 67/2009, 51/2011) shall cease to be valid, except for the procedures that are conducted according to Article 556 of the new LCP (the procedures initiated prior to the application of this Law shall be completed according to the provisions of the current LCP).

5 About the need to restructure the pre-trial procedure in the Republic of Macedonia, see in: Г. КАЛАЈЦИЈЕВ / Т. ВИТЛАРОВ / М. ТРОМБЕВА / Д. ИЛИК / К. КРСТЕВСКА: Преуредување на претходната постапка во Република Македонија, *Македонска ревија за казнено право и криминологија*, год. 15, бр. 2-3, Скопје, 2008, page 79-120.

6 Comparative comments on specific issues of pre-trial procedure, see in: J. ХЕРМАН: Реформа на претходната постапка во споредбеното право, *Македонска ревија за казнено право и криминологија*, год. 15, бр. 1, Скопје, 2008, page 57-76.

More about the reform of the pre-trial procedure in certain European countries, as well as in former Yugoslav countries, see in: A. BOŠKOVIĆ: Reforma prethodnog krivičnog postupka i evropski standardi, *Zbornik radova sa Naučno-stručnog skupa sa međunarodnim učešćem „Suzbijanje kriminala u okviru međunarodne policijske saradnje“* (28.-30.06.2011, Tara), Kriminalističko-policijska akademija - Beograd, Beograd, 2011, page 371-382.

7 The following factors are mentioned:

The police are more operational,

The passivity of the PPO,

The PPO is not informed by the police and the other law enforcement bodies until the criminal report is prepared, The administrative subordination of these organs to the Ministry of Internal Affairs (MOI) and Ministry of Finance, upon which depends the career of the civil servants that enforce the law, and

Lack of personal staff in the PPO, which should be firstly educated to implement the law.

8 See: Министерство за правда: *Стратегија за реформа на казнено право*, 2007, page 18-19.

9 A brief review of the criminal procedure law under the new LCP, see in: Н. МАТОВСКИ / Г. ЛАЖЕТИК-БУЖАРОВСКА / Г. КАЛАЈЦИЈЕВ: *Казнено процесно право (второ изменето и дополнето издание)*, Скопје, 2011, page 393-448.

The Need to Train MOI's Employees about the New Concept of LCP

From the aspect of performing the basic tasks of the Macedonian MOI,¹⁰ the reorganization of the criminal prosecution and investigation in the pre-trial procedure brought several novelties concerning the police work. Having in mind that LCP has two years *vacatio legis*,¹¹ according to the Strategy for Reform of the Criminal Law in the period between the adoption of the LCP and its entry into force, it will be necessary to conduct a thorough training of police officers,¹² by which they will get familiar with the new system.

Considering the MOI's Strategic Plan for the period 2010-2012, which clearly states that its mission is to create a legislative, professional, transparent, responsible and democratic oriented organization dedicated to serve the citizens, to protect their freedoms and rights, to deal effectively with the crime and to provide internal security and safety of the state,¹³ the MOI's employees have a right and an obligation to be trained according to the needs of MOI. One of the cases when training is conducted is so called "continuous training" in order to have more successful performance of the working assignments by the employee on the working position which he/she is assigned to, actually to provide efficient performance of the MOI's function. In this way, MOI's employees will be trained and professionally skilled for successful performance of the police work.¹⁴

According to the Action Plan for LCP's implementation,¹⁵ in the scope of the 5th Activity "Basic training for the MOI's police officers" within the 2nd Sub-goal "Conducting the basic training" of the Specific goal "Conducting Training", this training will address the representatives of the Judicial Police of MOI and will encompass 1000 participants (trainees) under a specialized training programs.¹⁶ Furthermore, the Action Plan prescribes three additional activities included in the 4th Sub-goal "Specific modules for training of the MOI's police officers":

- Activity 1: Pre-investigative procedure (January - March 2012),
- Activity 2: Authorities and competences of police officers in securing evidence and procedural actions (March - April 2012), and
- Activity 3: Training of the custody officers (May 2012).¹⁷

10 See: Article 2 of the Law on Internal Affairs ("Official Gazette of the Republic of Macedonia" No. 92/2009, 118/2009, 35/2010, 36/2011), and Articles 3 and 5 of the Law on Police ("Official Gazette of the Republic of Macedonia" No. 114/2006, 6/2009).

11 According to the Article 568 of the new LCP, adopted by the Macedonian Assembly on November 17, 2010, the law is enforced on the eighth day from the day of its announcement in the "Official Gazette of the Republic of Macedonia", and will begin to be applied after expiration of two years from the date of its entry into force. However, the provisions concerning the execution of the electronic delivery will begin to apply after the expiry of one year from the date of its entry into force.

12 See: Министерство за правда: *Стратегија за реформа на казненото право*, 2007, page 65.

13 See: Министерство за внатрешни работи: *Стратешки план на Министерството за внатрешни работи за периодот 2010-2012 година*, 2010, page 4.

14 According to Article 72 of the Law on Internal Affairs; Regulations on the Training in the Ministry of Internal Affairs ("Official Gazette of the Republic of Macedonia" No. 120/2009).

15 See: Министерство за правда: *Акционен план за спроведување на Законот за кривичната постапка*, 2010, that distinguishes the activities into:

Conducting trainings for LCP's implementation, as one of the conditions for strengthening the capabilities of the subjects involved in the LCP's realization. For this purpose, the target groups are determined, also the thematic contents, the working methodologies with a special focus on the preparation of the training materials, as well as on the preparation of manuals that will be used by all involved subjects in their everyday practice.

Strengthening of the capacities of all involved subjects and institutions in the LCP's implementation from the aspect of human resources, spatial capacities and material-technical equipment.

16 The Action Plan for LCP's implementation, based on the profile and hierarchical level of their working positions, categorizes into three groups the police officers for which the basic training is meant:

Police officers - operational employees of the Criminal Police and managerial employees of the police and of the Department for Crime Technique,
Police officers of the Center for Suppression of Organized and Serious Crime, and
Police officers - senior managerial employees.

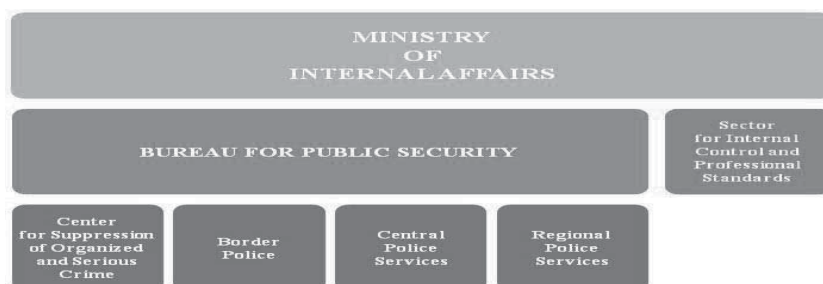
17 Namely, on May 13, 2011, the Minister of Justice and the Minister of Internal Affairs signed a Memo-

DETERMINATION OF THE TRAINING NEEDS AND DEFINING ITS PRIORITIES

According to Article 7 of the Code of Police Ethics, the police are one of the four components of the criminal justice system, with clearly defined competences in relation to the functions of PPO, Court and Correctional institutions.¹⁸ Hence, the training final goal is for the MOI's employees to acquire knowledge and skills for more efficient execution of the duties at the working positions where they have been deployed, for proper use of police authorities, and at the same time to pay attention to the new legal provisions defined in LCP and especially to the new relations established between police, PPO and Court. Therefore, it is important to determine the training needs and to define its priorities.¹⁹

These were the reasons why at the beginning of 2011, big efforts were made in order to prepare a special document titled "Plan for Implementation of the Law on Criminal Procedure for the Needs of Ministry of Internal Affairs - Training of the Employees"²⁰ under which the trainings shall be realized in two phases:

- 1st Phase - Training for the trainers, and
- 2nd Phase - Training of the rest of the MOI's employees.



MOI's units whose employees will be engaged in the training

A several MOI's organizational units will be engaged by the 1st Phase: Center for Suppression of Organized and Serious Crime, Border Police, Central Police Services, Regional Police Services (Sectors for Internal Affairs), as well as Sector for Internal Control and Professional Standards. On the other hand, the realization of the 2nd Phase of the training will be under the authority of the employees who have attended the training for the trainers. At the end of each month, these employees are obliged to prepare a report by which the degree of the successfulness of the whole "Plan for Implementation of the LCP for the Needs of MOI - Training of the Employees" will be monitored and evaluated. This will not only detect the problems and ambiguities in the realization of the trainings, but also the positive practices and experiences, i.e. the results and the benefits of the conducted trainings will be evaluated. In essence, these persons should transfer the knowledge gained by the 1st Phase training to the lower - local level.

randum of cooperation, by which they determined the forms and the manner of cooperation during the implementation of the activities prescribed in the Program for conducting the Action Plan for LCP's implementation in the part of the trainings, as well as in the part of the trainings relevant to the implementation of the Criminal Code and other laws in the area of the Criminal Law, with a special emphasis on the fight against organized crime and corruption. See: Министерство за правда и Министерство за внатрешни работи: Меморандум за соработка, 2011.

18 See: Code of Police Ethics ("Official Gazette of the Republic of Macedonia" No. 72/2007).

19 It should be noted that the Academy for training of the Judges and the Public Prosecutors organizes so-called "Basic trainings for the implementation of the new Law on Criminal Procedure". The target groups of these trainings are Judges, Public Prosecutors, MOI's employees and Attorneys.

20 See: Министерство за внатрешни работи: План за имплементација на Законот за кривичната постапка за потребите на Министерството за внатрешни работи - обука на работниците, 2011.

TEAM FOR REALIZATION OF THE TRAINING - TRAINERS

In order to conduct the training in the most efficient manner, MOI in cooperation with OSCE Mission to Skopje formed a Team for realization of the "Plan for Implementation of the LCP for Needs of MOI - Training of the Employees", with a task to coordinate the activities related to the preparation, implementation, management, monitoring and evaluation of the trainings. As members of this Team, as well as trainers (national consultants / experts), are appointed:

- MOI's employees on a high managerial positions,
- Judges,
- Public Prosecutors,
- Attorneys, and
- Representative of the academic community.

When selecting the above mentioned persons, a special attention was given for the purpose of fulfilling the following criteria: to have appropriate education and working experience in the field of criminal and procedural law, as well as skills and abilities for transferring it to the training participants (trainees). Furthermore, the carefully selected Team of trainers is a combination of practitioners, experts and theoreticians who have excellent knowledge of a training subject. In addition to these individuals, according to the Regulations on the Training in the MOI, the following persons may be involved in the training, if needed:

- Regular trainers - MOI's employees that are deployed at the working positions in the Training Center according to the Act on systematization of the working positions in the MOI, and
- External (associate) trainers - experts in certain fields of MOI, other ministries, state organs, institutions, judges, public prosecutors, as well as representatives of non-governmental and private sector.

AGENDA, TRAINING SYLLABI AND TEACHING MATERIALS

Bearing in mind the complexity of the question - the new LCP's concept, the training is conducted in four days:

- Thursday - from 16:00 to 20:15,
- Friday - from 16:00 to 20:15,
- Saturday - from 09:00 to 17:20, and
- Sunday - from 09:00 to 17:20.

The reason why the Agenda has this structure is to enable MOI's employees during the working day not to be interrupted while performing their duties, and afterwards to be fully committed to the training.

It is evident from the Agenda that priority is given to the topics of interest to the police officers, i.e. the topics related to the police work have a dominant position. Thematic units contain theoretical and practical part in order for the training syllabi to be mastered in a most efficient way. The theoretical part is consisted of trainer's address on a specific theme, which is supported by an adequate PowerPoint presentation. The practical part is mostly performed by working in groups - the trainees are divided into small groups up to five persons, to whom a case for review (case

study) is given previously. The group has a task to analyze the case, offer an adequate solution or what actions should be taken under the new LCP, to give a briefing to the other trainees, who can give their views of the case and the proposed solution.²¹ Also, during the presentations of the trainers, and especially after they finish, a discussion follows i.e. the trainees can give their opinions, ask questions, etc.

Additionally, the Training Center prepared a teaching material that will be used by the MOI's employees. The teaching material is prepared according to the thematic units covered by the training, i.e. two types of manuals are prepared - Manual for the trainers and Manual for trainees that contain specific tasks to learn. The Manual for trainees is distributed to the trainees prior to the start of the training, which enables them to get familiar with the thematic units included in the Agenda.

It should be pointed out that the spatial and material capacities of the Training Center are used for the realization of the training (located in Idrizovo b.b., Skopje), and if necessary - other facilities disposable to the MOI will be used especially for the realization of the 2nd Phase of the training (headquarters of the MOI's organizational units for whose employees the training will be conducted).²² Considering that duration of one training is four days, the 1st Phase of the training is planned to be finished till July 2012.

²¹ Three of the case studies, prepared by the Training Center, are the following ones:

Case No. 1 titled "Deprivation of liberty/Holding in custody" - refers to the measures for securing the presence of persons and uninterrupted conduction of the criminal procedure: On July 20, 2011, around 16 o'clock, a person reports to the police officer on duty that he can hear noises coming out from the apartment of his neighbors, even though they have gone on vacation and that is why he thinks that there are burglars in the apartment. The police officer on duty sends a group for intervention to the scene of the event. When the police officers arrive at the scene, they notice two persons coming out of the apartment with bags in their hands.

Task: Please describe the procedure that should be followed according to the provisions of the new LCP.

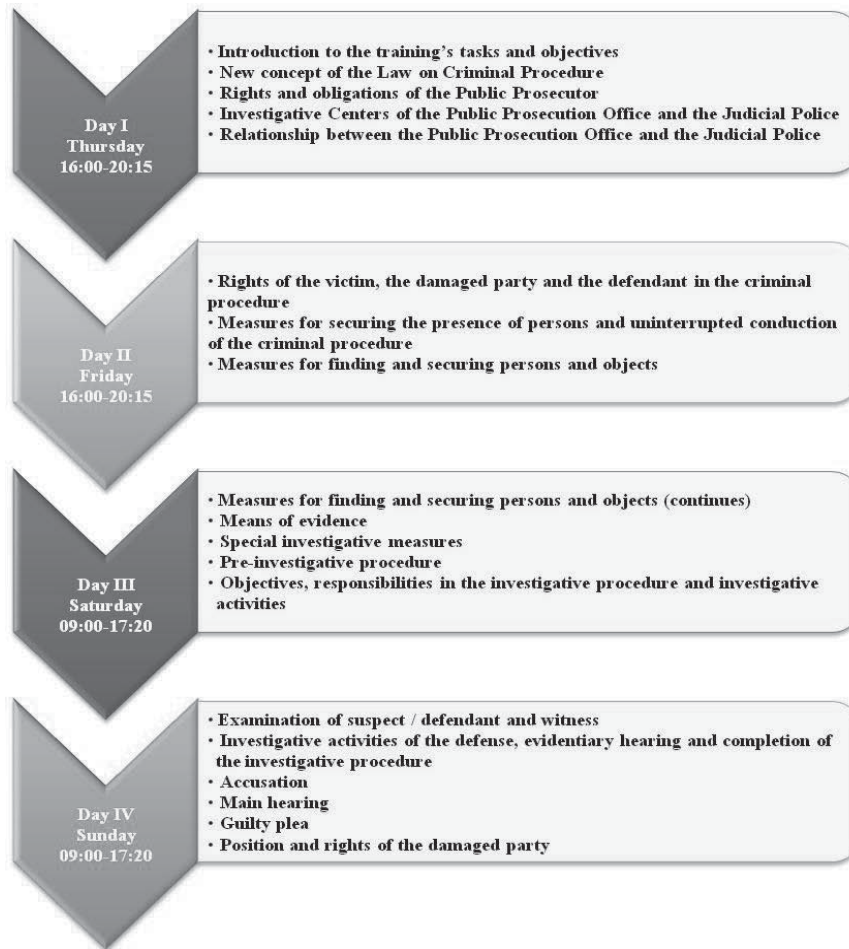
Case No. 2 titled "Search" - refers to the measures for finding and securing persons and objects: The Criminal Police within the scope of their operational performance receive an operational data that a certain person in his apartment in Skopje possesses a significant number of weapons (automatic rifles and pistols) and ammunition. This information is confirmed and based on the authorities a search is being planned to be conducted in his apartment.

Task: Please specify the procedure for obtaining a search warrant according to the provisions of the new LCP.

Case No. 3 titled "Special investigative measures" - refers to the procedural measures and actions for securing persons and evidence: MOI has indications that the police officers AA - Commander, and BB - Head of the External office for Criminal Affairs, of the Police Station K, misusing their official position and authority, have been asking and receiving a bribe (money) from the citizens - owners of legal entities registered in the area of the city K, in order within their official authorities to perform activities that should not have been performed or not to perform activities that they had to perform. Namely, AA and BB from the beginning of 2008 continuously and on several occasions directly or through middlemen asked for a bribe in amount of 2.000.000 denars from CC, and afterwards they decreased the amount to 1.000.000 denars, in order for CC to have "a complete peace" in operating his business. Otherwise, they will not leave him alone and will submit a criminal report for alleged illegal activities of his company. As middlemen in their criminal activities, AA and BB were using DD - Attorney, EE - Mayor of the city K, and FF - Director of primary school in the city K. CC reported the event to the Police, where Minutes for receiving a criminal report were composed.

Task: Please answer the following questions having in mind the provisions of the new LCP: Against how many people Special investigative measures will be required? For which criminal acts? What type of Special investigative measures will be ordered? Who has the competence for issuing an order for implementation of the Special investigative measures?

²² The premises in which the trainings will be organized must meet the needs for holding training, and also to have adequate equipment in order for the training to be performed in a modern and efficient manner.



Agenda of the training

EVALUATION OF THE TRAININGS REALIZED SO FAR

A probationary training (simulation) was carried out in November 2011, that gave a great contribution to develop a quality training syllabi acceptable for the trainees, and also for successful process of organizing, preparing, conducting and managing the trainings. Besides this pilot training, that identified the problems that might occur in the future four trainings were conducted in December 2011.

It should be noted that 88 trainees participated at five trainings (one pilot and four follow-ups):

1. Pilot training: 19 trainees,
2. First training: 17 trainees,
3. Second training: 19 trainees,
4. Third training: 17 trainees, and
5. Forth training: 16 trainees.

| MOI's organizational units | | Trainees |
|----------------------------|---|-----------|
| 1. | Center for Suppression of Organized and Serious Crime | 38 |
| 2. | Sector for Internal Affairs - Skopje | 16 |
| 3. | Training Center | 13 |
| 4. | Department for Border Issues and Migration | 11 |
| 5. | Department for Crime Technique | 10 |
| Total | | 88 |

Trainees differentiated by MOI's organizational units

Considering the organizational unit to which the trainee belongs, it can be established that from the total number of 88 trainees most of them come from the Center for Suppression of Organized and Serious Crime (43%), followed by the Sector for Internal Affairs - Skopje (18%), Training Center (15%), Department for Border Issues and Migration (13%) and Department for Crime Technique (11%). Increased participation of the trainees employed in the Center for Suppression of Organized and Serious Crime has proved to be a good solution having in mind the unofficial information that the Macedonian Government has decided to postpone the implementation of the new LCP for two additional years, except for the criminal acts for which the Basic PPO for prosecution of organized crime and corruption is competent.²³

²³ The daily newspaper "Vest" on February 28, 2012, published an article titled "MOI will still be boss to Prosecutors", according to which the new method of investigation, under the leadership of the Public Prosecutor, will be applied only to the area of organized crime. Thus: <http://www.vest.com.mk>.

This piece of information was also published in the daily newspaper "Nova Makedonija" on February 29, 2012, within the article titled "The Academy trains the judges, the Council does not elect them", where it was pointed out that the implementation of the new LCP will be postponed until 2014. Thus: <http://www.novamakedonija.com.mk>.

The Law on Public Prosecution Office ("Official Gazette of the Republic of Macedonia" No. 150/2007, 111/2008) prescribes that the Basic PPO for prosecution of organized crime and corruption is established for the entire territory of the Republic of Macedonia with a headquarters in Skopje (Article 12 paragraph 4), and that it acts before the Basic court having a specialized court division competent for judging criminal acts in the area of organized crime (Article 29 paragraph 4). Under the Article 31, this PPO is authorized to act upon:

Criminal acts committed by a structured group of three or more persons, that exists for a certain period of time and acts for the purpose of perpetrating one or more criminal acts for which at least four years of imprisonment is prescribed, with an intent of direct or indirect gain of financial or other benefit,

Criminal acts committed by a structured group or criminal organization at the territory of the Republic of Macedonia or in other countries or when the criminal act is prepared or planned in the Republic of Macedonia or in other country,

Criminal acts of Misuse of official position and authority (Article 353 paragraph 5), Receiving a bribe of significant value (Article 357) and Unlawful mediation (Article 359) all from the Criminal Code, committed by elected or appointed functionary, official or responsible person in the legal entity,

Criminal acts of Unauthorized production and release for trade of narcotic drugs, psychotropic substances and precursors (Article 215 paragraphs 2), Money laundering and other criminal proceeds of considerable value (Article 273), Terrorist threat to the Constitutional order and security (Article 313), Giving a bribe of considerable value (Article 358), Unlawful influence on witnesses (Article 368-a paragraph 3), Criminal association (Article 394), Terrorist organization (Article 394-a), Terrorism (Article 394-b), Illegal trafficking of human beings (Article 418-a), Smuggling of migrants (Article 418-b), Trafficking a minor (Article 418-d) and other criminal acts against the humanity and the international law of the Criminal Code, regardless to the number of the perpetrators.

Following the logic of the Law on PPO, in 2008 the Law on Courts ("Official Gazette of the Republic of Macedonia" No. 58/2006, 62/2006, 35/2008, 150/2010) was changed and amended. Namely, by changing Article 32 paragraph 1 in the scope of the Basic Court Skopje I - Skopje a specialized court division competent for judging criminal acts in the area of organized crime for the entire territory of the Republic of Macedonia was established. The criminal acts listed in the Article 32 paragraph 1 indent 1 to 4 of the Law on Courts are taken over from the Article 31 paragraph 1 indent 1 to 4 of the Law on PPO.

More about these criminal acts, see in: Criminal Code ("Official Gazette of the Republic of Macedonia" No. 37/1996, 80/1999, 04/2002, 43/2003, 19/2004, 81/2005, 60/2006, 73/2006, 07/2008, 139/2008, 114/2009,



Trainees differentiated by MOI's organizational units given in percentage

After each training, the trainees were asked to fill in an Evaluation questionnaire by circling the relevant answer from 1 to 5 to the following questions:

1. The training met my expectations;
2. I can apply the knowledge and the skills that I have gained;
3. The learning materials are good and useful to me;
4. The trainers conducted the training in a professional and practical manner;
5. The training will improve my work;
6. The trainees demonstrated interest and interactivity,

with a remark that answers from 1 to 3 are low grades, and from 4 to 5 are high grades.

From the table below, it can be established that the trainees gave high grades to the questions asked, which indicates that the training met the expected results of the learning process, and that the training is pragmatically designed - applicable and adapted to the trainees' needs.

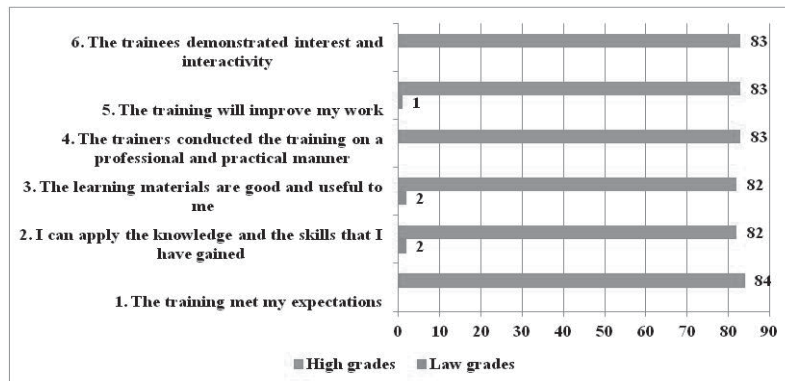
Results of the Evaluation questionnaires for five conducted trainings²⁴

| Question | Grades for the five conducted trainings (Training 0-4) | | | | | | | | | |
|---|--|---|---|---|---|-------------|----|----|----|----|
| | Low grades | | | | | High grades | | | | |
| | 0 | 1 | 2 | 3 | 4 | 0 | 1 | 2 | 3 | 4 |
| 1. The training met my expectations | 0 | 0 | 0 | 0 | 0 | 19 | 17 | 19 | 14 | 15 |
| 2. I can apply the knowledge and the skills that I have gained | 0 | 1 | 1 | 0 | 0 | 19 | 16 | 18 | 14 | 15 |
| 3. The learning materials are good and useful to me | 0 | 1 | 0 | 0 | 1 | 19 | 16 | 19 | 14 | 14 |
| 4. The trainers conducted the training on a professional and practical manner | 0 | 0 | 0 | 0 | 0 | 19 | 16 | 19 | 14 | 15 |
| 5. The training will improve my work | 0 | 1 | 0 | 0 | 0 | 19 | 16 | 19 | 14 | 15 |
| 6. The trainees demonstrated interest and interactivity | 0 | 0 | 0 | 0 | 0 | 19 | 16 | 19 | 14 | 15 |

In essence, from the graphic presentation it can be seen that the percentage of the trainees that gave low grade (grade 3) to the 2nd (2 trainees), 3rd (2 trainees) and 5th question (1 trainee) is negligible.

51/2011 - two changes and amendments, 135/2011, 185/2011); В. КАМБОВСКИ: Казнено право - посебен дел (четврто, дополнето издание), Скопје, 2003.

24 Although 88 trainees attended the trainings, not all of them filled in the Evaluation questionnaires or have circled an appropriate answer (insignificant number is missing).



Grades given by the trainees to the questions of the Evaluation questionnaires

ISSUES THAT RAISED MAJOR DISCUSSIONS AMONG THE TRAINEES

The main goal of the training is for the MOI's employees to get acquainted with the new system of the LCP, especially about the pre-trial procedure. Therefore, dominant topics in the Agenda are the ones that relate to this part of the procedure, but this does not mean that the remaining course of criminal procedure has been neglected. The group of issues that raised major discussions between the trainees, among others, is the following one:

Public Prosecutor, Judicial Police, Investigative Centers

- Which officers will be included in the term Judicial Police?
- How will the selection process of officers in the Investigative Centers be conducted?
- What will be the number of the members of Judicial Police in the Investigative Centers?
- For how long the members of the Judicial Police will be selected to work in the Investigative Centers (two, three, four... years)?
- Who will have the authority to conduct the internal announcement for their selection and will the competent Public Prosecutor take part in the selection procedure?
- How will these officers be paid? Will they have a salary increase?
- What will happen to their working position in the state organ where they have come from?
- How will they have a career development in the state organ where they have come from?
- For all measures and activities taken by the police officers, do they have to obtain a previous order from the Public Prosecutor?
- How will the rights of the damaged party be protected considering that the new LCP does not provide a subsidiary lawsuit?

Procedural measures and actions for securing persons and evidence

- Do the police officers have a right to apprehend persons without an order issued by the organ that conducts the procedure?
- How will the police enforce the precaution measures?
- Since the LCP prescribes that anyone may deprive of liberty a person that is caught while committing a criminal act that is prosecuted *ex officio*, how can the ordinary citizen know which criminal act is prosecuted *ex officio*?
- What will happen if the Judicial Police cannot bring the person before the competent judge of the pre-trial procedure within the period of six hours from the deprivation of his/her liberty?
- This question also refers to the person deprived of his/her liberty that has to be brought before the custody officer in the specially arranged police stations?
- Since the custody officer, according to the current Act on systematization of the working positions in MOI, does not have an authority to make decisions, does this mean that the Act will be amended?
- What will happen if the custody officer refuses to make a decision for holding a person in police custody?
- How will the medical examination on the detained person be conducted?
- Who will bear the expenses of the conducted medical examination on the detained person?
- What are the authorities of the external controlling mechanisms regarding the detained persons? (it refers to the Court, Ombudsperson, European Committee for the Prevention of Torture and Inhuman or Degrading Treatment or Punishment of the Council of Europe, Subcommittee on Prevention of Torture and other Cruel, Inhuman or Degrading Treatment or Punishment of the Committee against Torture of the United Nations)
- How will the police perform the supervision over the home detention?
- What are the differences between the new LCP and the current LCP regarding the grounds for detention and duration of detention?
- What is the basic difference between the examination (inspection) and the search?
- Why is the examination (inspection) limited only to external checks by using the senses of sight, hearing and smell? Why is the sense of touch excluded?
- Does a search of a person require a court order?
- What will happen if the person that the search warrant refers to asks for a presence of a defense council, who does not arrive within the period of two hours? Is the search going to be postponed for another two hours if the person asks to choose a defense council from the List of attorneys on call?
- What are the differences between the new LCP and the current LCP regarding the grounds for ordering the special investigative measures, their type and duration?
- Must the employees of the Department for Crime Technique within MOI be registered in the Register of Expert Witnesses?

Course of the procedure

- Are detailed regulations going to be prepared for the methods of identification by the witnesses of the suspect whose identity is known?

- How is the summoning of the citizens going to be done by the police in order to collect information on the criminal act?
- Given that the summoned citizen cannot be examined as defendant, witness or expert witness, does this provision restrict the authorities of the police?
- Can problems occur considering the initiation of the criminal procedure since the new LCP defines that the procedure, *inter alia*, starts with the first conducted investigative action prior to the issuance of an order for conducting an investigative procedure by the Public Prosecutor?
- If the Public Prosecutor conducts the investigative procedure, why is it necessary that he/she issue an order for its conduction, i.e. he/she give an order to him/herself?
- What is the purpose of the evidentiary hearing?
- What are the benefits of the plea-bargaining?
- In order to prevent the possible abuses, are control mechanisms of the plea-agreement going to be prescribed?
- What are the differences between the main hearing in the new LCP and the main trial in the current LCP?
- What is direct examination, cross-examination and additional (re-direct) examination?
- Are the police officers going to be examined as witnesses at the main hearing?
- If the police officer is summoned as a witness to the prosecution, is the Public Prosecutor going to prepare him/her how to testify?
- What are the differences between the new LCP and the current LCP regarding the legal remedies?
- What are the differences between the new LCP and the current LCP regarding the confiscation of property and crime proceeds?

In fact, from the trainings realized so far it can be noted that the above mentioned issues raised a particular interest among the trainees, they initiated a fruitful discussion in which views and opinions were exchanged, ambiguities in certain legal provisions were noted, proposals for correction of certain provisions were given, etc.

Also, the trainees were asked in the Evaluation questionnaires to give their remarks about the conducted training. Some of them gave the following suggestions and comments:

- It is a positive thing to organize trainings for the new laws,
- There should be joint training between the Judicial Police and the PPO,
- The training should be repeated,
- The training should last longer,
- A separate training should be organized that shall be thoroughly dedicated to the LCP's parts related to the police work,
- More practical case studies should be prepared,
- Audio and video presentations should be prepared regarding the case studies,
- The other legislation must be harmonized with the new LCP, as well as
- Before the new LCP was adopted, concerning some of its solutions the practitioners should have been consulted.²⁵

²⁵ The trainees also gave remarks that during the training there was a positive energy and that the training was successfully completed; the training produced discussions and interactive approach; the trainers have manifested professional competence, etc.

CONCLUSION

The need to train the MOI's employees about the new LCP's concept is of great importance and is an issue that must be given a priority because through it the fundamental goals defined in the strategies for reform of the criminal legislation are achieved. Essentially, this represents the largest reform of the legal system of the Republic of Macedonia since its independence in 1991. The conducted trainings allow the trainees' interest to be recognized about the training subject, which is manifested by their active participation in solving the assigned tasks, by discussing and exchanging views and opinions on certain issues, by identifying the ambiguities in certain legal provisions and by giving concrete proposals for their correction.

All of this implies that the training, the Agenda and the teaching materials are pragmatically designed - applicable and adapted to the trainees' needs. Therefore, the request stands - the training should continue in the following period with the same enthusiasm and intensity, which will allow the MOI's employees to gain a fundamental knowledge of new criminal procedure system and to be prepared for the application of the new procedure provisions, that is to acquire a knowledge and skills for more efficient execution of the duties at the working positions where they have been deployed, for proper use of police authorities, and at the same time to pay attention to the new legal provisions defined in LCP, especially to the new relations established between police, PPO and Court.

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MORPHOLOGICAL MODEL OF MEMBERS OF THE COMMUNAL POLICE OF BELGRADE¹

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Abstract: Communal Police of Belgrade was founded in 2010. The specific tasks of communal police officers define their professional and work profile, health status, relevant personality traits, the appropriate level of general and special physical fitness, and morphological characteristics. The aim of this study was to define the current state of basic morphological characteristics of uniformed structure of Communal Police of Belgrade. The sample consisted of 182 male communal police officers aged 31.1 ± 6.6 years. All measurements were made during 2011 at the Motor Research Laboratory (MRL), Faculty of Sport and Physical Education, University of Belgrade. Measurements were carried out by a standardized procedure using the newest generation analyser of body structure: InBody 720. The obtained values of all variables were processed using basic descriptive statistics. The results showed that the average body weight (BW) of the subjects was 88.1 ± 12.4 kg, body height (BH) 183 ± 7.0 cm, body mass index (BMI) 26.2 ± 3.1 kg/m² and the average structure of body composition as follows: 32.8 ± 3.9 L of intracellular fluid (ICW), 19.8 ± 2.4 L of extracellular fluid (ECW), 14.2 ± 1.7 kg of proteins, 4.9 ± 1.0 kg of minerals, 4.0 ± 0.9 kg of bone tissue mass, 16.4 ± 7.0 kg of body fat mass (BFM), $18.2\% \pm 6.0$ percentage of body fat (PBF), visceral fat index was 82.1 ± 29.8 arbitrary units, fitness score of 83.8 ± 7.6 index points, 47.2 ± 6.7 kg of living cells mass in the body, while the level of the basal metabolism was 1918.2 ± 184.7 kcal. The results lead us to conclude that the current morphological status of communal police officers belongs to the category of the population with normal anthropo-morphological status of citizens of the Republic of Serbia.

Keywords: Communal Police, morphological status, condition analysis.

INTRODUCTION

Communal Police of Belgrade (CPB) was established in 2010. Work of community police members falls into the category of very hard, responsible and stressful professions. For these reasons, it is necessary that members of the Communal Police are properly selected, skilled and professionally trained in order to perform their job at the required level of work efficiency. Morphological characteristics belong to a very important area in addition to the different areas that define the professional and work profile of the Communal Police, like the necessary theoretical knowledge of police work (criminology, legal grounds for actions, action tactics,

¹ The work is part of the project «Effects of applied physical activity to locomotive, metabolic, psychosocial and educational status of the population of the Republic of Serbia» under the number III47015, as part of a sub-project «Effects of physical activity applied to the locomotive, metabolic, psychosocial and educational status of the police population of the Republic of Serbia» funded by the Ministry of Education and Science of the Republic of Serbia - Research Projects Cycle 2011-2014.

etc.), health status, relevant personality traits (general intelligence, emotional stability, communication skills, resistance to stress, etc.), the appropriate level of general and special physical fitness, functional characteristics, and so on.

Due to the characteristics of Communal Police work (administrative and office work, continuous variable work dynamics, exposure to stressful situations, permanent exposure to different types of socio-professional pressures that may have undesirable cumulative, and even residual negative effect, the effect on physical and psycho-social health status), it is necessary to define the initial conditions of the service workers. On the basis of the initial condition, it is possible to determine the standards under which the effect of professional work environment on the changes of monitored morphological characteristics will be constantly monitored. Also, the standards given in parallel can serve as the basis of the methodology for the selection of new staff, evaluation of the status of the current condition as well as for the system of continuous monitoring of the morphological standards of service.

An increase in body weight on account of fat mass leads to the increased risk of compromising health status, conditions for reducing the level of basic motor skills are acquired, where consequently summarized influence is aimed at reducing the impact of professional and work efficiency of police officers (Dopsaj et al., 2009; Glaner et al., 2010). By using the system for defining reliable normative parameters and by continuous monitoring of the changes occurring in the morphological space, one can provide the conditions for early preventive planning processes and procedures to correct dietary habits and define appropriate models of programmed exercise training (Dopsaj et al., 2005; Dopsaj et al., 2006; Okecka-Szymanska et al., 2011).

The goal of the initial measurement was to define the current condition of basic morphological characteristics of uniformed members of the Communal Police of Belgrade. Diagnostics of these results will indicate the current level of quantitative characteristics of the observed physical space as follows: the volume of intracellular and extracellular fluid, the amount of muscles in the body, the amount of fat and lean tissue, body mass index, percentage of body fat, basal metabolic status, the level of general fitness score and the mass of living cells in the body.

METHODS

Subjects

According to the type of work they perform, the employees of the Communal Police of Belgrade may be divided into two groups: the first group consists of uniformed members of the CPB, while the second group consists of workers in administration. The sample consisted of 182 uniformed male members of the Communal Police. The sample of subjects is representative because it is defined as a whole (general) population of uniformed members of the CPB in 2011.

Measuring methods

Measurements of morphological characteristics of the CPB were carried out at the Faculty of Sport and Physical Education, University of Belgrade in the Motor Research Laboratory (MRL) during September 2011. Measurements were carried out in the morning hours (8 a. m.), the subjects were instructed not to consume food or liquids before the measurements, and also to avoid long and difficult physical and sports activities during the day preceding the measurements. Measurements of up to 20 members of the CPB were organized during one day.

All measurements were carried out according to standardized procedures using the newest generation analyser of body structure: InBody 720 (Figure 1) operated by experienced professionals trained for operating the mentioned measuring instrument.

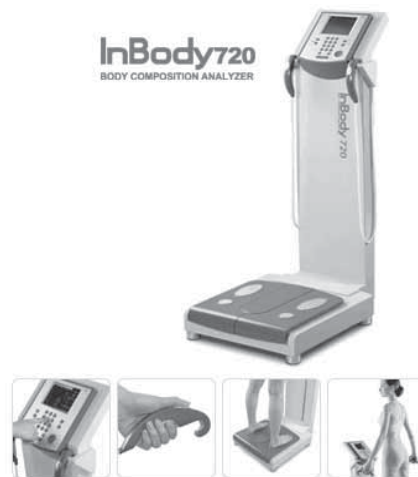


Figure 1 – Bioelectric impedance (Inbody 720)

The procedure of using the InBody 720 instrument demanded the subjects to be only in their underwear during the test, with no jewellery and watches on their bodies. The subjects would step on the marked places on the platform, take moving handles in their hands and stand quietly with their arms straight down beside the body, elbows locked, until the sound signal that would mark the end of the measurement. For the measurement of variables, bioelectric impedance uses electrical waves of different frequency levels, where each individual frequency corresponds to the values of an appropriate - target variable.

The measured variables that were used in the diagnostics of body structure were the following:

- body mass – BM (kg),
- body height – BH (cm),
- body mass index – BMI (kg/m²),
- volume of intracellular fluid (fluid within the cell) – ICW (L),
- volume of extracellular fluid (fluid outside the cell) – ECW (L),
- protein mass (kg),
- mineral mass (kg),
- status of bone tissue – Osseous (kg),
- body fat mass – BFM (kg),
- percentage of body fat – PBF (%),
- visceral fat index (arbitrary units),
- fitness score (index points),
- body cell mass (kg), and
- basal metabolic rate (kcal).

Further analysis processed the variables that are most representative in terms of an indication of health risks. They were analysed in the function of occurrence distribution (relatively - the percentage of subjects) and those were: body mass (BM), body mass index (BMI), percentage of body fat (PBF).

According to the variable BM, subjects were classified into clusters defined by group intervals of 10 kg. According to the variable BMI, all subjects were divided into 7 groups according to the standards used within the World Health Organization - WHO (by reference 18). This ensured the classification of the test population into the following subclasses:

| | | |
|----|--|---------------|
| 1. | Excessively underweight (excessively thin) | < 18.49 |
| 2. | Underweight (thin) | 18.50 – 21.49 |
| 3. | Normal weight | 21.50 – 24.99 |
| 4. | Pre-overweight or muscular (persons with higher body weight) | 25.00 – 27.49 |
| 5. | Slightly overweight (lower degree of overweight) | 27.50-29.99 |
| 6. | Overweight (medium degree of overweight) | 30.00-34.99 |
| 7. | Excessively overweight (higher degree of overweight) | 35.00 > |

In relation to the variable PBF (%), all tested members of the CPB were divided into 4 groups according to the standards used in the World Health Organization - WHO (according to reference 19). This ensured the classification of the test population into the following subclasses:

| | | |
|----|--|----------------|
| 1. | Standard of athletes | < 12.99% |
| 2. | Standard of physically well prepared persons | 13.00 – 17.99% |
| 3. | Average values | 18.00 – 23.99% |
| 4. | Overweight | 24.00 > |

STATISTICAL ANALYSIS

The obtained values of all variables were processed using the basic descriptive statistics: the basic measure of central tendency (arithmetic mean - MEAN) and the basic measures of dispersion: standard deviation - SD, coefficient of variation - cV%, minimum value - Min, maximum value - Max.

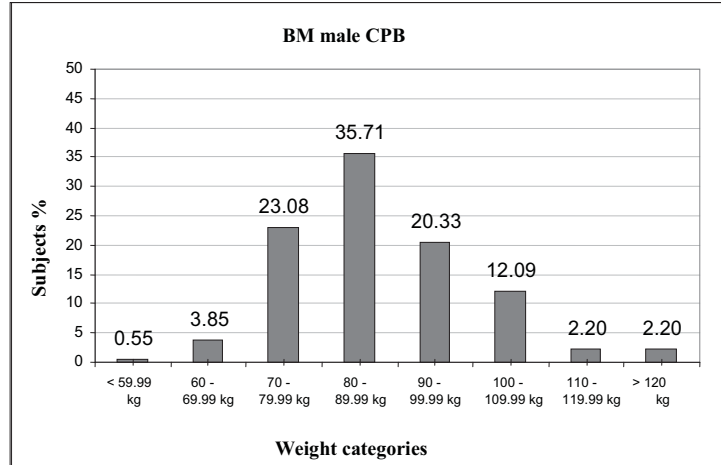
RESULTS

Table 1 shows basic descriptive parameters of all variables monitored in the tested population of the CPB.

Table 1 - Presentation of descriptive statistics

| | Males of the CPB (N=182) | | | |
|------------------------------------|--------------------------|-------|---------|---------|
| | Mean±Sd | cV% | Min | Max |
| Age (years) | 31.1±6.6 | 21.36 | 20 | 51 |
| BH (cm) | 183.3±7.0 | 3.79 | 167.50 | 206.80 |
| BM (kg) | 88.1±12.4 | 14.07 | 57.00 | 133.20 |
| BMI (kg/m²) | 26.2±3.1 | 11.81 | 18.19 | 34.06 |
| ICW (L) | 32.8±3.9 | 11.79 | 24.50 | 45.20 |
| ECW (L) | 19.8±2.4 | 12.22 | 14.60 | 28.40 |
| Proteins (kg) | 14.2±1.7 | 11.80 | 10.60 | 19.50 |
| Minerals (kg) | 4.9±1.0 | 19.82 | 3.44 | 14.75 |
| Osseous (kg) | 4.0±0.9 | 22.09 | 2.80 | 13.65 |
| BFM (kg) | 16.4±7.0 | 42.30 | 3.80 | 37.20 |
| PBF (%) | 18.2±6.0 | 33.03 | 4.86 | 32.83 |
| Visceral Fat Area | 82.1±29.8 | 35.86 | 13.60 | 177.20 |
| Fitness Score | 83.8±7.6 | 9.07 | 65.00 | 108.00 |
| Body Cell Mass (kg) | 47.2±6.7 | 14.11 | 28.50 | 94.50 |
| Basal Metabolic Rate (kcal) | 1918.2±184.7 | 9.63 | 1527.00 | 2537.00 |

Graph 1 shows the results of the relative distribution of the subjects in the function of BM criterion clusters. From the total of 182 male subjects 0.55% were in the first cluster, 3.85% in the second, 23.08% in the third, 35.71% in the fourth, 20.33% in the fifth, 12.09% in the sixth cluster, 2.20% of the subjects were in the seventh and eighth cluster.

Graph 1 – Percentage display of BM distribution in relation to the clusters

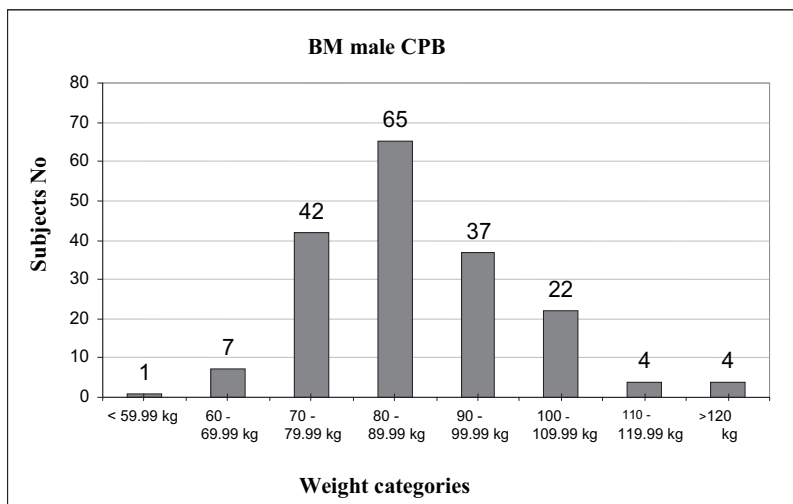
Subjects' percentage

Weight categories

BM male CPB 2011

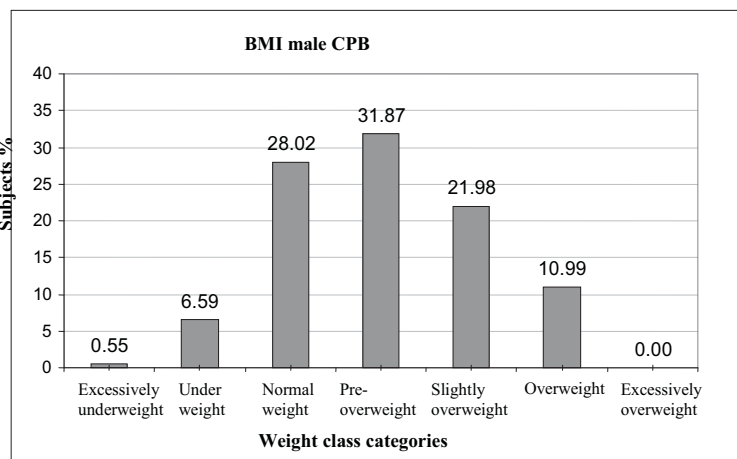
Male BM (%)

Graph 2 shows the results of the absolute distribution of subjects in the function of BM criterion clusters. From the total of 182 male subjects 1 subject belonged to the first cluster, 7 to the second, 42 to the third cluster, 65 to the fourth, 37 to the fifth cluster, 22 to the sixth cluster, 4 to the seventh and 4 subjects to the eighth cluster.

Graph 2 – Absolute display of BM distribution in relation to the clusters

Subjects' number
 Weight categories
 BM male CPB 2011
 Male BM (%)

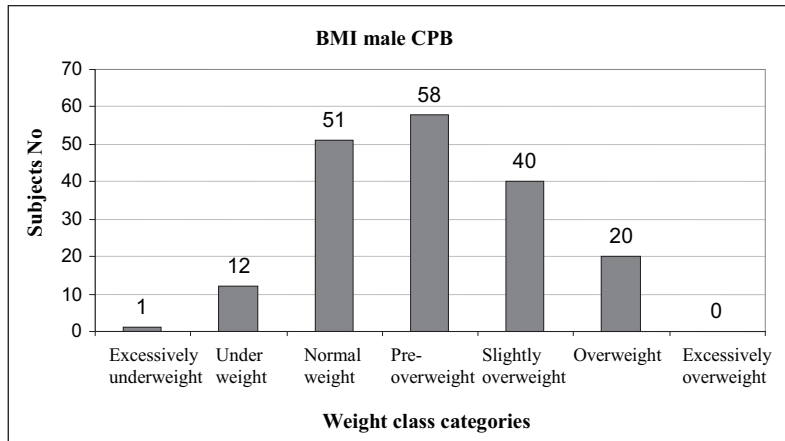
Graph 3 shows the results of the distribution of subjects according to BMI criterion clusters. From the total of 182 of subjects 0.55% belonged to the first cluster, 6.59% to the second cluster, 28.2% to the third cluster, 31.87% to the fourth cluster, 21.98% belonged to the fifth cluster, 10.99% to the sixth cluster while the seventh cluster did not include any of the subjects.

Graph 3 - Percentage display of BMI distribution in relation to the clusters

Subjects' percentage
 Weight class categories
 BMI male CPB 2011
 Male BMI (%)

Graph 4 shows the results of the distribution of the subjects' number according to the total number of BMI. From the total of 182 subjects 1 subject belonged to the first cluster, 12 to the second, 51 to the third cluster, 58 to the fourth, 40 to the fifth cluster, 20 to the sixth cluster, while the seventh cluster did not include any of the subjects.

Graph 4 - Absolute display of BM Index distribution in relation to the clusters



Subjects' number

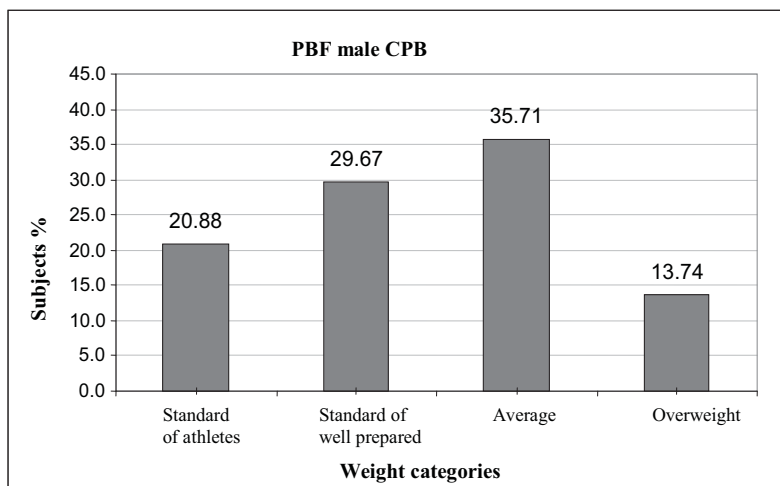
Weight class categories

BM male CPB 2011

Male BM (%)

Graph 5 shows the results of the relative distribution of subjects according to PBF (%). From a total of 182 male subjects 20.88% of subjects belonged to the first cluster, 29.67% of subjects to the second, 35.71% of subjects to the third and 13.74% of subjects to the fourth cluster.

Graph 5 - Display of relative distribution of Percentage of Body Fat in relation to the clusters (WHO criterion)



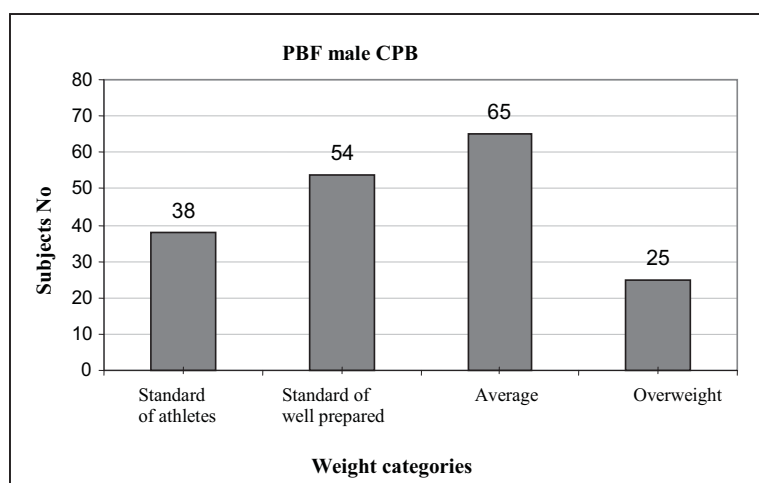
Subjects' percentage

Weight categories

PBF male CPB 2011

Graph 6 shows the results of the absolute distribution of subjects according to PBF. From the total of 182 male subjects 38 subjects belonged to the first cluster, 54 subjects to the second cluster, 65 subjects to the third cluster and 25 subjects to the fourth cluster.

Graph 6 - Display of absolute distribution of Percentage of Body Fat in relation to the clusters (WHO criterion)



Morphological space conceptually refers to an area which defines the shape and composition of the body, and basic dimensions that the given shape and structure describe (Heyword & Stolarczyk, 1996). Basic physical dimensions for the assessment of that space, which are very reliable and practical for use, and which are used by police with a professionally-health aspect are: body weight (BW) and height (BH). Based on these two body measures, the third derived value was calculated using standardized mathematical formulas. This value is made to assess and control body status and weight status and it is body mass index (BMI). The use of the measuring instrument described in this study allows measurement of large number of variables, where the procedure for calculating the BMI is done with software, and requires no additional application of mathematical models. In relation to the system, all three anthropo-morphological measures of body volume (BM) and physical status, i.e. weight status (BMI) are highly adaptable features, and are directly subject to changes that depend on lifestyle and various forms of physical exercise, both in positive and negative sense (Bonneau & Brown, 1995; Jukic et al., 2007).

Studies of the morphological space, in most cases, are longitudinal, where the results of the measured variables of subjects were monitored and compared for a longer period of time, and according to the obtained differences in the values of variables, the relevant data were acquired. The study of morphological space of CPB members had a transverse character, and it represents an identification of current - initial physical state of the communal police members. Therefore in this study, for the purpose of defining the basic anthropo-morphological space, special attention in the processing of results was on the variables broadly used in previous studies - body weight (expressed in kg, as a basic measure of body volume), body-mass index (expressed in kg/m², as a basic measure to assess physical status, weight and

body) and percentage of body fat (PBF expressed in %). Also, in the following studies related to CPB population, these three indicators are comparable in scientific methods as generally accepted measuring indicators (Nakamura et al., 1998; Miljuš and Dopsaj, 2003, Haight et al., 2005).

The remaining variables obtained in this measurement were not subjects of research to the same extent in the same or similar populations. For this reason there was not the possibility for their current comparison and therefore no need for further statistical analysis. As the testing was of initial character, the measured values of these variables represent the basis for the creation of databases, from which the monitoring and control of morphological space of communal police officers may be performed in the future period.

On the basis of the average BH of the subjects - 183.3 ± 7.0 cm with a range of 167.5 to 206.8 cm, compared with model characteristics of basic anthropometric parameters and basic motor skills of trained and healthy young adults of both sexes - population indicators of the Republic of Serbia (Dopsaj et al., 2010), according to the BH criterion, CPB members belong to the 65 percent of the population of the Republic of Serbia. BH average value of CPB members is in accordance with the same variable monitored in similar populations, which is on average 182 ± 8.0 cm among members of the Canadian police (Jamnik et al., 2010).

Average body weight of the subjects is 88.1 ± 12.4 kg (minimum 57 kg, maximum 133.2 kg), 92.21% of which is within a range from 70 to 109.99 kg, 4.40% is lighter than 69.99 kg, while 4.40% is heavier than 110 kg. Compared to the model characteristics of basic anthropometric parameters and basic motor skills of trained and healthy young adults of both sexes (Dopsaj et al., 2010), according to the BM criterion, the subjects belong to 85 percent of the population of the Republic of Serbia. The average value of BM of subjects is slightly lower than the average BM values measured in similar populations, in the US Police was 93.2 ± 16.2 kg, while among the Fire Department it was 91.5 ± 14.8 kg (Boyce et al., 2008), and among the members of the Police of Finland 90.3 ± 13.0 kg (Sorensen et al., 2000).

Average body mass index of the subjects is 26.2 ± 3.1 kg/m², with a range from 18.19 to 34.06 kg/m². According to the World Health Organization criteria, subjects are divided into seven groups: 7.14% is in the groups excessively thin and thin, 28.02% in the group of normal weight, while 64.84% subjects are in groups pre-overweight muscular, slightly overweight and overweight. The group of excessively overweight does not have a single subject. Compared to the model characteristics of basic anthropometric parameters and basic motor skills of trained and healthy young adults of both sexes (Dopsaj et al., 2010), according to the BMI criterion, the subjects belong to 85 percent of the population of the Republic of Serbia. Compared to the results obtained in measurements of similar populations, the results of BMI of CPB members are slightly lower - Police of Finland 27.3 ± 3.7 kg/m² (Sorensen et al., 2000), Police of Canada 28.7 ± 4.0 kg/m² (Jamnik et al. 2010).

The average percentage of fat in the body of the subjects was $18.2 \pm 6.0\%$, ranging from 4.86 to 32.83% of BM. According to the World Health Organization criteria subjects are divided into four groups: 50.55% is in groups with the standard of athletes and of physically well-prepared people, 35.71% in the group with the average standard and 13.74% is in the overweight group. Compared to the similar populations of PBF, the results of the CPB members are at a similar level - the US Police: 18.5 ± 6.2 , $17.8 \pm$], the US Fire Department 5.7% of BM (Boyce et al., 2008).

Police work falls under the category of occupations in which long-term effect of a large number of risk factors can have cumulative and negative effect on general health and condition of professional working capacity (Bonneau & Brown, 1995,

Sorensen et al., 2000; Sorensen, 2005). The first stage of the given cumulative and negative impact of work environment can be precisely diagnosed using morphological space, where the intensity and direction of changes in body volume and body status directly points to the given effect (Jankovic et al., 2008).

CONCLUSION

The diagnosis of primary morphological characteristics was carried out on the sample of 182 uniformed male members of the CPB using the transverse method of research. Basic morphological characteristics of the subjects were presented by measures: body height - BH expressed in cm, as the basic measure of longitudinally of the body, body mass - BM expressed in kg, as the basic measure of body volume; body mass index - BMI expressed in kg/m², as the basic measure to assess the physical status and weight status, and body fat percentage of the subjects - PBF expressed in % of BM. Besides the basic morphological characteristic, the paper presents other measured variables: the volume of intracellular fluid - ICW expressed in L, the volume of extracellular fluid - ECW expressed in L, protein mass expressed in kg, mineral mass expressed in kg, bone status - osseous expressed in kg, body fat mass - BFM expressed in kg, an index of visceral fat expressed in arbitrary units, fitness scores expressed in index points, body cell weight expressed in kg, visceral fat - VFA expressed in index numbers and basal metabolism rate expressed in kcal. Accompanied by morphological characteristics they are very reliable and practical for use, can be used with professional-health aspects, as well as systems for monitoring the effectiveness of educational areas of Special physical education. BMI has a positive linear correlation with the level of blood pressure, blood cholesterol, triglycerides and serum parameters that predispose diabetes. Higher levels of BMI also indicates a worse health status, lower levels of physical, i.e. working abilities, as well as increasing the risk of cardiovascular diseases (Lord, 1998; Australian Federal Police, 2004).

From the results, it can be seen that a number of respondents per variable BM is located in a cluster 1 (excessively underweight) and 2 (underweight) - 4.40%, as in cluster 5 (slightly overweight), 6 (overweight) and 7 (excessively overweight) - 16.49%. Also, per variable of PBF certain percentage of respondents is classified in cluster 3 (average value) - 35.71%, and cluster 4 (overweight) - 13.74%. In future work with members of the uniformed police community composition within their training to develop basic motor-skills to the Special physical education, emphasis must be placed precisely on the afore-mentioned subjects, or their dislocation to the cluster 3 (normal weight) and 4 (pre-overweight or muscular) per BM variables, and cluster 1 (standard athletes) and 2 (standard of physically well prepared persons) variables by PBF. Special physical education is engaged in general and directional-specific professional job preparation, physical characteristics and physical abilities of individuals and special working groups and teams. Generally, the area of Special physical education with its contents and objectives is directly related to the development of skills and knowledge that are used by the application of logical and analytical and practical treatment of Communal Police officers in relation to official authority, from the point of application of physical force and coercion. As an educational and training system, Special physical education deals with the transformation of man - a police officer, member services, bio-psycho-social being, from the initial status, the initial state of knowledge and well trained to the level defined by the needs of professional skills and competence to carry out tasks (Knapik

et al, 1996; Dopsaj et al. 1997). In relation to a given multivariate space, there are five sub-areas in which Special physical education with its educational and training programs directly affect: positive effects on the anthropological, or social adaptation of social services, preventive and positive effect on the health status of the service, a positive effect on the development of required professional characteristics, a positive effect on the development of special skills, abilities and skills of service and positive action in terms of prevention of social security component of society as a whole. The first subfield means the process of positive transformation for all service members in relation to the social adaptation that should be in the service of civil society as a whole. The second subfield means the process of positive transformation for all service members in relation to health status in clinical and psycho-physical function, without being given the degree of psycho-sensorimotor fatigue to affect negatively the efficiency of work. The third subfield means the process of positive transformation for all service members in relation to education and work experience and occupational work, ethical and moral codes in a direct function of increasing efficiency and promotion services. The fourth subfield means the process of positive transformation for all service members in relation to the level of special knowledge in the field of Special physical education, and defined the techniques and procedures for the application of physical force or power and the means of coercion. The fifth subfield includes the positive processes of transformation of consciousness on the obligation of professional conduct and of practice, which in terms of prevention has the greatest impact on the social security component as a whole (Blagojevic et al. 2006).

The most important characteristic of an effective system of doing job is the proper personality, with the appropriate skills and knowledge. The character of communal police work requires full professional personal engagement, which in the long term conditions, as a result of adjustments, can cause some changes in different organ systems or body as a whole. Persistent uncertainty about the course of events in work tasks, responsible and very stressful job, and a constant pressure within the work environment, may also cause organic changes within the physiological, endocrine, musculoskeletal and psychological systems of the body of communal officers. Also, exposure to occupational stress factor may cause disruption of compliance of various organs. Possible consequences of the whole situation can be expressed by the changes in officer relations, as an integral anthropological system and its working, professional and socio-civic center (Dopsaj et al. 2002).

Great motor complexity of performing professional duties and defined tasks of the Communal Police, directly depends on the possibility of Communal Police officers to be physically capable of actual movement or perform the actual movement of the right speed, the appropriate intensity, proper use of force or power, proper coordination, and required aerobic endurance capacity. All this should be implemented in a variety of conceptual and situational conditions of professional activity - treatment. From the given settings of Special physical education, the domain of its influence on the composition of uniformed members of Communal Police can be defined: development and maintenance of morphological status target population; optimal alignment motor level skills with individual characteristics in accordance with job requirements, development of regulatory and other mechanisms which depend on the functional abilities of the body, improving and maintaining health status, increasing the volume and quality of required knowledge and professional level of its usefulness; development of systems for receiving, processing and analysis of informa-

tion for solving daily duties, development of mechanisms for channeling and compensation of pathological stressful stimuli, mechanisms for building a personality that would provide the necessary resistance to stressful situations and enhance recovery, development of mechanisms for channeling and compensation of pathological social agents, in order to build mechanisms to ensure the personal skills necessary to create a favorable change in the micro and macro social status, system of values, work habits and social attitudes of flexibility, without impact on professional effectiveness.

In general, the members of the CPB can be classified to the population of people with normal morphological status in relation to the population of citizens of the Republic of Serbia. The determined overweight rate among men for the given testing - October 2011 is at the level of 19.23% (according to reference 18) which is in the absolute amount 3.87% less than in relation to the population of male citizens of the Republic of Serbia (Dopsaj et al., 2010). The obtained results represent the initial state of the morphological model of uniformed structure of the Communal Police of Belgrade. Monitoring the measured variables in the following period may provide an insight into the changes in the morphological space of Communal Police officers, regularities and irregularities of these changes, provide data for the recommendations in terms of intensity and extent of physical activity, general recommendations for reducing body mass and indications associated to disrupted health status. At the initial level of morphological, biomechanical, basic and special motor potentials, it is necessary to influence positively the appropriate educational and training stimuli, using the profession adequately modeled means and processes. In that way, it is possible to get the appropriate level and structure of knowledge that enable individuals to effectively and rationally solve professional tasks and security issues, a clear anticipation of security concerns, their quick and simple solution in accordance with the legislation, training and increase efficiency, light and adequate application of professional knowledge, professional development ability, quick and easy positive civil and professional communication and social relationships, a positive incentive effect on colleagues and professional preventive effect on the environment as a whole.

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ANTI-FRAUD PROBLEMS IN VEHICLES INSURANCE

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ANNOTATION

One of the most important conditions for the establishment of market economy is the development of the insurance market. A number of factors prevent the creation of modern insurance industry, one of which is the criminalization of the insurance market. The increase of financial resources of the insurance business makes the examined segment very attractive for criminal offenses. The conducted research deals with specifics of identifying and combating crime in the insurance business.

The development of the insurance market is one of the most important conditions for a sustainable market economy. However, a number of factors hinder the creation of a modern insurance industry, among which we can single out the ones such as the critical state of economy, imperfect tax legislation and several others. One of the most destructive factors is the criminalization of the insurance market. The development of insurance business, its financial resources increasing, makes it a very attractive area for criminal offense.

Crimes in the insurance area bear a high social risk by their nature, since they complicate or block the realization of the main tasks connected with the formation of insurance trust fund by way of monetary contributions for compensation of possible damage, and loss in family income due to the consequences of occurring insured events covering. Also, the criminalization of the insurance market impedes the implementation of some of important functions of insurance such as the increased stability of economic relations, the restriction of economic risks, and the entrepreneurial initiative encouraging.

Understanding the crime mechanism and identification of the specific features of certain criminal offenses facilitates the identification of crime in the insurance sphere. Crimes in the insurance sphere can be classified on various bases depending:

- on the insurance form and subject;
- on the persons responsible for the offense;
- on the people, whose rights are being violated by the offense.

As the international experience shows, vehicle insurance is one of the most vulnerable areas. For example, in Germany, the USA, and France, the most typical examples of vehicle insurance fraud are: burning the car insured on a sum larger than its price, provoking crashing the car into a dummy car or an already damaged car, and accident simulation with the help of false witnesses. Special Commission of Criminal Police Office in North Rhine - Westphalia has identified about 50 groups that have professional "emergency" drivers. These groups have underground workshops where they restore cars, some of which get involved in car accidents up to ten times a year. It should be emphasized that the problem of car insurance fraud is relevant for the Republic of Belarus.

Criminal offenses of car policy holders can be divided into three groups:

A. Obtaining insurance reimbursement higher than the sum to which the vehicle is insured;

- B. Illegal receipt of insurance reimbursement with the insurance fraud case;**
- C. Illegal increasing of the insurance reimbursement amount.**

Let us look at the most common pattern of committing such crimes.

Insurance reimbursement larger than the insurance sum obtaining. In accordance with the law, the insurance amount (liability limit) is set by the law, the act of the President of the Republic of Belarus or contract of insurance money, within which, unless otherwise provided by the law, or the act of the President, the insurer is obliged to pay the insurance when the insured event occurs. In property insurance, insurance amount cannot exceed the actual value of the property at the moment of the contract signing. Illegal acts can involve overestimation of the insurance amount by way of providing false information about its value. One of the methods is the distortion of information about the car that is supposed to be insured (a change of release year, or upping the class of the vehicle (eg. by changing the model)). This leads to an overestimation of the insurance sum, because in the insurance contract vehicles are estimated according to the catalog, in which the main parameters are: brand, model and year of release. These methods can be used simultaneously.

These actions are performed by means of fictitious documents (vehicle registration, etc.) and are accompanied by other insurance offenses (false car theft, arson, etc.). In identifying such cases of fraud in the insurance field it should be taken into account the possible presence of accomplices representing the insurance company (agents, brokers and evaluators). For a reward from the insured, they do not pay attention to the discrepancy between the car and its presented documentation.

One of the ways of making such an offense is false car theft. At the preparatory stage the insurance contract is made. As a rule, an expensive car is insured with various illegal methods to increase the insurance sum.

The next stage is staging the theft. The fraudster hides the car first, and reports the hijacking to the police. Then, he or she notifies the insurance company about the theft. The insurance case is usually staged at the beginning of the insurance term or before its completion. The offenders engaging in insurance fraud at the beginning of the insurance term seek to get insurance money and continue their criminal activity. Those criminals, who have criminal intent at the termination of the insurance, choose the second option. The third stage involves illegal receipt of the insurance reimbursement. The fraudster fills the papers of requirement to get the insurance and provides the necessary documents, and the insurance company analyzes them and makes a decision on the payment. From a legal point of view, from that moment the fraudster actions may qualify as a consummated fraud (Art. 209 of Penal Code of Belarus). The previous steps are considered as a preparation to commit a crime.

The fourth stage is characterized by acts aimed at concealing the traces of the crime. At this stage, the car is sold with forged documents (often in the Russian Federation), or sold for parts. According to the necessity of vehicle re-use for criminal purposes, the fraudster modifies the serial number of engine and body, and gets fake documents. After that, the criminal scheme can be repeated in another insurance company.

In conclusion, it should be stressed that in the first place it is the insurance companies that sustain the losses from fraud in the insurance sphere. Regarding to this, insurance companies should act as the main initiators on counteracting with respect to such kind of crimes. At the same time, the bodies of internal affairs in charge are summoned to protect the interests of the state and citizens in the insurance sphere as well as to assist the security services of insurance companies in bringing fraudsters to justice.

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