dialogues
Security

Security
dialogues

Costas DANOPOULOS, PhD, USA - danopoulos@comcast.net

Ljubica JELUŠIČ, PhD, Slovenia - ljubica.jelusic@fdv.uni-lj.si

Emanuela C. DEL RE, PhD, Italy - ecdelre@gmail.com

Jennifer TODD, PhD, Republic of Ireland – jennifer.todd@ucd.ie

Žarko PUHOVSKI, PhD, Croatia - zpuhov@zamir.net

Mirko BILANDZIĆ, PhD, Croatia - mbilandz@ffzg.hr

Želimir KEŠETOVIĆ, PhD, Serbia - zelimir.kesetovic@gmail.com

Yu-Chin CHENG, PhD, Czech Republic - 76616152@fsv.cuni.cz

TECHNICAL SECRETARY
Tanja MILOSHEVSKA, PhD, Institute of security, defence and peace

dialogues
Security

Original scientific articles

Scientific articles

Short Scientific Work

Review Scientific Articles

Review

351.74-048.42:005.96(497.6) Original scientific article

HUMAN RESOURCES POLICY IN POLICE ORGANIZATION AS A NEW SECURITY CHALLENGE – STUDY OF CANTON TUZLA/ BOSNIA AND HERZEGOVINA

Jasmin Ahić, PhD
Faculty of Criminalistics, Criminology and Security Studies,
University of Sarajevo
E-mail: jahic@fkn.unsa.ba

Admir Hadžikadunić, PHD
Faculty of Criminalistics, Criminology and Security Studies,
University of Sarajevo
E-mail: ahadzikadunic@fkn.unsa.ba

Fadil Šljivić. MA
Ministry of Interior, Bosnia and Herzegovina, Tuzla

Abstract:

Personnel is an essential prerequisite for any organization. Hence proper analysis and review of this issue cannot is of utmost importance for a particular organization. Staff may be a great value and wealth of a company. Personnel cannot be seen exclusively through numbers and statistical data because it represents an important productive force. Especially, police force success is increasingly dependent on the ability, responsibility, and professional morale of the staff. The structure of human resources is extremely important in the study and in the analysis of the phenomena of human resources management (HRM), since it signifies the way in which parts of a whole organization are connected and mutually arranged. The relationships that exist between the parts of a coherent whole form are the basis of the very term "structure". The structure of HR (bosn. kadar) encompasses the composition of experts, their role, and characteristics within a particular organization. Identification of the basic characteristics of the staff that determine the personnel structure, as well as the interrelationships between them, is a very complex task in the study of the personnel structure.

The authors present an analysis of the human resources function of the police structure in the Ministry of Internal Affairs of Tuzla Canton of FBiH (BiH). The article aims to give a scholarly and practical contribution towards further development of personnel planning and establishment of an adequate structure and staff dynamics, i.e. provision of required staff profiles and qualification levels of police officers and employees in the Ministry of the Interior Affairs of Tuzla Canton.

Key words: HRM, police work, basic capabilities, Tuzla Canton BiH, analysis.

INTRODUCTORY NOTES

The structure of personnel and the analysis of personnel is an extremely important part of the study phenomena. Structure signifies the way in which parts of a whole are connected and mutually arranged. The relationships that exist between the parts of a coherent whole form the basis of the term "structure". The structure of cadres (kadar in Bosnian) represents the composition of employees, their role and characteristics within one observed entity.

Determining the basic characteristics and characteristics of staff that characterize the personnel structure as well as the interrelationships between them is a very complex task in the study of the personnel structure.

There are a large number of factors that affect the human structure, its sustainability and internal cohesion. There is an increasing interest in science to study the issues related to the change of staff structure (Stanković, 2007).

The personnel structure analysis can be quantitative and qualitative. The greatest number of personnel features requires qualitative analysis. The most important study of the personnel structure is based on two principles: micro and macro. Micro human resource research today is carried out in a number of organizations. It deals with experts from staffing departments, and sometimes by some theorists with a practical purpose. These are studies at the level of empirical studies. Macro expert staff structure is tied to the country as a whole. Macroplanning provides the ability to look at staff (structures) through a wider and more complete picture of staff development.

Job analysis is defined as the process of collecting, studying and evaluating all relevant job-related data: the nature and content of the work, the working conditions, the requirements regarding the position of executors and the psychophysical characteristics that the job requires of them. There are more job demands in each business. There are and are distinct four sets of demands: knowledge and ability, responsibility, strain

and working conditions (Appleby, Hunt and Jacob, 1994). The job analysis includes two groups of information. The first relates to the nature and content of the work, the way it is performed, and the other to the perpetrators, ie the knowledge and abilities needed to perform the job. Job analysis is important for other human resource management activities: recruitment, selection and socialization, advancement, training and employee development, performance assessment and security gains, employee protection, employment relationships, etc. Job Analysis provides the necessary information for:

- Human Resource Planning
- Attracting candidates
- Selections and Socialization of Candidates
- Training of employees
- Development of employees

The recruitment process is closely related to job analysis processes, human resource planning and selection as well as rewarding and motivating activities of employees. Recruitment is a complex process whose basic task is to provide a sufficient number of qualified candidates, from which the most suitable to the organization will be chosen. Attracting qualified workforce needs to fulfill vacancies. Human resource needs can be met in two ways: employment of new people and the development of potential already employed. Meeting the needs for human resources depends on several factors:

- Change of organizational structure
- Changes in structure of employees
- Technical - technological advancement of the organization
- Fluctuations of employees
- Organization management estimates and the like.

Internal recruitment is the finding of qualified candidates in the organization itself, and is external to finding potential candidates outside the organization. The best solution is to combine internal and external recourse sources to maximize the benefits and minimize the disadvantages of both recruiting. After the candidate has been admitted, evaluation of the recruitment process is required. At this stage, it is necessary to: analyze the costs, the number of applications, the source having the greatest effect, and the success rate of the recruitment process, and the data obtained will improve the next recruitment process.

1.1. Human Resource Management

Human Resources Management or HRM, as a term and work on new scientific discipline, has appeared in the United States. The first name of this new discipline was "Personal Management". By the end of the seventies the term "Human Resource Management" appeared. The development of this scientific discipline has been strongly influenced by scientific management with emphasis on the study of movement and time, as well as the more pronounced social aspect of the organization. There was also a Behavioral Science with emphasis on individual attitudes, needs and motivations.

Human resources are a constrained active population, and in the broader sense this term encompasses the entire population. In the beginnings of capitalism, instead of human resources, the term Labor Force was used, in France, they are staffs, and in America the term personal is used. Human resources management appears as a management function, and then as part of the organization's science, to be later excelled in a special scientific discipline. This organizational science deals with human resources with a special emphasis on managing these resources.

1.2 Significance of human resources

Personnel and human resources are synonyms, so they will be used in further exposition in conjunction with these two concepts. Personnel are an essential prerequisite for any organization and that without analysis and testing this issue cannot be conceived or implemented by a particular organization. Staff is the great value and wealth possessed by the company. Personnel cannot be seen only through numbers and statistical data. Personnel represent an important productive force. Business success is increasingly dependent on the ability, responsibility, and business morale of the staff.

Human resources influence the changing of production relationships, working conditions and mutual economic relations. Personnel and staffing have been studied from various aspects to find out that the work organization and the efficiency of work depend on staff. Personnel function should contribute to the development of personnel planning and the establishment of adequate structure and staff dynamics, i.e. provision of required staff profiles and level of qualifications.

1.3 Job Analysis

Job analysis is defined as the process of collecting, studying and evaluating all relevant job-related data: the nature and content of the work, the working conditions, the requirements regarding the position of executors and the psychophysical characteristics

that the job requires of them. There are more job demands in each business. There are and are distinct four sets of demands: knowledge and ability, responsibility, strain and working conditions (Appleby, Hunt and Jacob, 1994). The job analysis includes two groups of information:

1. The first concerns the nature and content of the work, the manner of its performance,

2. The second refers to the perpetrator, the knowledge and abilities needed to perform the job.

One of the most important job analysis results is the standard level of performance or performance of employees on the basis of which basic earnings are determined. Job analysis is important for other human resources management activities:

1. Recruitment,

2. Selections and Socialization,

3. Maintaining progress,

4. Training and development of employees,

5. Estimates of performance and earnings of security and protection of employees,

6. Labor Relations,

Job Analysis provides the necessary information for:

1. Human resource planning, 2. Attracting candidates, 3.Selections and socialization of candidates, 4.Training of employees, 5.Development of employees.

1.3.1 Recruitment

The recruitment process is closely related to job analysis processes, human resource planning and selection as well as rewarding and motivating activities of employees. Recruitment is a complex process whose basic task is to provide a sufficient number of qualified candidates, from which the most suitable to the organization will be chosen. Attracting qualified workforce should fulfill vacancies. Human resources "needs" can be met in two ways, namely:

- Employment of new and developing the potential of employees already.

Meeting the needs for human resources depends on several factors:

1. Changes in organizational structure,

2. Changes in the structure of employees,

3. Technical-technological advancements of the organization,

4. Fluctuations of employees,

5. Organizational leadership estimates and the like.

Internal recruitment is the finding of qualified candidates in the organization itself, and is external to finding potential candidates outside the organization. The best solution is to combine internal and external recourse sources to maximize the benefits and minimize the disadvantages of both recruiting. After the candidate has been admitted, evaluation of the recruitment process is required. At this stage it is necessary to:

1. Analyze costs,
2. Number of applications,
3. The sources that had the greatest effect,
4. The success rate of the recruitment process, and the data obtained will improve the next recruitment process.

1.3.2 Selection

According to predefined and standardized methods and techniques, selection is made between multiple qualified candidates in order to get the best candidates to work. The quality of employees is essential for all activities in the human resource management process, and therefore the importance of selection is reflected. Selecting candidates to hire: hire those who have the best qualifications. Selection has two basic goals:

1. Forecasting and maximizing the performance of the candidate and their impact on the organization,
2. Avoiding and minimizing mistakes in deciding on a candidate's choice.

The selection process must be fully aligned with other human resources management activities. In order to choose the right candidate, basic assumptions of successful selection must be met[1]:

1. Job Requirements (required knowledge, skills and personalities),
2. Determining the difference between candidates,
3. Considering the candidate's development potential.

The basic phases of the selection process are:
1. Analysis of submitted applications and supporting documentation,
2. Preliminary interview,
3. Testing,
4. Diagnostic Interview,
5. Verification of references,
6. Job Offer and Medical Examination.

---

[1] Evaluation of the selection process takes at least 3 months. Confirmation of a good candidate choice is only good.

2. SELECTION OF HUMAN RESOURCES FOR POLICE

2.1 Police

Police forces are state administration bodies responsible for maintaining law and order. Police is a word that comes from a French language and less directly from Greek, as a "politei", which refers to government or administration. The word "police" originated in France in the 18th century. The police may also refer to the guard service. The reason for this is the guards who were an early form of police officers.

In most western legal systems, the main role of the police is to discourage and investigate crime, with particular emphasis on crime against persons or property. The police have the ability to drop the freedoms, keep them in detention, and to notify the appropriate authorities.

Police are regularly used as services in various sudden emergency situations, emergency situations, emergency situations, emergency response interventions, emergency services, alarms, medical and fire services, emergency call services. The police may be responsible for reporting minor offenses, e.g. traffic offense violations.

2.2.1 Structural Analysis of Individual Police Officers' Operations

Police officers handle situations such as harboring situations, the heaviest forms of public order disturbance, the arrest of armed individuals and groups, the provision of persons in special conditions, the fight against organized crime and terrorism, the fight against the external and internal enemy, the rescue of people affected by natural disasters.

Based on the tasks performed by police officers, a plan and program of their specialization is formed.

Structural analysis serves to identify typical structures, substructures and structural units of some activity. Structural analysis can give an answer to the question of characteristics of typical phases and sub-stages of business (Milanović, 1997). Structural analysis of the work of police officers in special conditions can be put into complex polystructural activities. Activities can have a large part of monostructural cyclic and acyclic activities. The work of police officers is team work. Everyone in this team has a specific task that leads to reaching the goal. Cooperation within this team is indispensable. Teamwork and teamwork are achieved through tactical training.

3. PSYCHO - PHYSICAL SELECTION

3.1. Psychological assessment in the selection of police officers

Psychological assessment, in the broader sense, is the process of obtaining information about a particular person from a variety of sources and integrating this information into meaningful interpretation. Clinical evaluation refers to fossil in the psychotherapeutic process. The term "psychological assessment" is different from the term "psychological testing" because testing is a more specific process in which one type of measuring instrument is used - psychological tests (Domino and Domino, 2006; Wright, 2011).

Characteristics of psychological assessment for police needs, through four interrelated questions: when, why, what and how? There is a police officer's assessment before hiring and assessing a police officer who has a working relationship. The second relates to work ability, which can eventually become endangered. The basic purpose of assessing work ability is to determine whether an employee can safely and effectively perform the most important duties within his / her own work (International Association of Chiefs of Police, 2009).

Psychological assessment for police needs has already emerged in the 19th century, indicating a relatively long history of practice. From that time to the present, psychological assessment has become more sophisticated, thanks to progress in the field of psychometrics, psychology, and changes in the demands for police work. The most important change is the development of a community policing paradigm, which made the police job more demanding and more complex (Frank, Henson, Reyns and Klahm, 2008). The work of the community police, apart from keeping the law, needs to focus on counseling, support, and leadership in new initiatives. Thus, they set out the principles of police work (Kastrelar and Gaines, 2011). Inappropriate and unprofessional police behavior can lead to poor publicity, as well as losing citizens' trust in the police. To restore the trust of citizens, sometimes they need years (Lee, 2007). The individual goals of the evaluation in the selection can be divided into two broad categories:

1. Excluding or identifying individuals mentally unstable,
2. Inclusion, i.e. finding individuals who have desirable traits
for a police officer (Toldson, 2006).

The exclusion model has been a dominant model for the selection of candidates for police work (Comeau and Klofas, 2010) for almost two centuries, and today serves as the basis for the selection of future policemen. Psychological assessment, with police officers, can be done after the event that has led to a very stressful situation: fellow

murder, shooting, testimony to crimes against children, brutal murder (Amendola, 2007). Stress is the most important factor that can lead to reduced work ability. According to Anshel (Anshel, 2000), continued stress weakens the power of judgment, leads to anxiety and depression, and a lack of self-confidence and self-control in life.

Psychological assessment before employment is a specialized examination of the psychological fitness of a candidate. Psychological fitness implies the absence of mental and emotional states that may adversely affect work and effectiveness. Exclusion model, or negative selection, is not an ideal model of human resource selection and police potentials. One of the reasons is precisely that it is not only important to identify cops who might behave problematic behavior, but to identify those who are most qualified to perform their duties. The exclusion model is, however, the most common because there is no unified view of the profile of an ideal policeman, although as desirable characteristics it is mentioned: good personality, incorruptibility, orientation to people, emotional stability, dedication to work, discipline, logical thinking, etc. (Green and Heilburn, 2011).

3.2 Physical assessment

In the selection of police officers, the selection of human resources and potentials, using motor tests as a selection tool, is the procedure for selecting certain candidates for a certain police activity, with an assessment of the possibilities of achieving candidate achievements in the exercise of police duties through four equal factors: 1. The well-being of the final goal Selection of candidates, i.e. model of police activities, 2. Assessment of the renown of motor skills and candidate skills, 3. Assessment of the renown of the process of transformation of the motor skills and 4. Skills of the future candidate and evaluation of the candidate's performance over which the selection was made.

The model of police activities is essential to the applicability of motor tests. Without it, motor tests would be insignificant. In order to successfully complete the selection of personnel for police purposes, a structural analysis of the motions of police officers must be carried out and, on that basis, a model for individual police organizational structures.

The selection of human resources for police needs should be dominated by tests that evaluate motor skills, skills (motor habits), or motor behavior of candidates. Motional testing estimates the very complex human abilities. The results of measuring the manifestation of motor abilities are quantitative data. Motor skills are latent and can therefore be measured. There is a need to have more indicators (motor instruments, tests) on some motor skills (Malacko and Rađo, 2004).

Motor measurement often refers to motor tests. The division of motor tests is often based on the basic and specific motor of a man. Basic motor implies the presence of those motor skills that each person has, and specific ability is the result of longer dealing with some kinesiology activities.

Upon completion of the general police training, the period of candidate classification in the individual police specialties occurs. This is a case of kinesiology but not isolated, because this is an interdisciplinary procedure, requires inclusion of other scientific disciplines.

4. OVERVIEW OF THE ORGANIZATION OF THE MINISTRY OF INTERNAL AFFAIRS OF TUZLA CANTON

4.1. Basic information on the Ministry of Interior and Police of Tuzla Canton

The Ministry of the Interior of Tuzla Canton (in text MUP TK), carries out tasks and tasks in the territory of this Canton, as defined in the Constitutions of BiH, FBiH, Tuzla Canton, and by laws and other regulations and acts of this government institutions. All the regulations issued by the Ministry, as well as all the activities of the Ministry employees, are aligned with the internationally accepted principles of the police service provided for in the Agreement on Reorganization of the Police of the Federation of Bosnia and Herzegovina, signed by the Federation of BiH authorities in Bonn-Petersberg on 25 April 1996th. Potentials of the Ministry derive from established partnerships with all segments of the community, which requires the development of an organizational structure that is matched to the changing needs and requirements of citizens and professions.

The Ministry of the Interior of Tuzla Canton seeks to provide an optimal level of public safety and protection in the function of improving the quality of life of the community. The Ministry and the Police Administration continually promote cooperation with the community in all its diversity, based on mutual trust and concern; Enhancing internal and external communication, advocating professional and professional human resource development with the efficient, rational and responsible use of available resources. The basic values that the Ministry consistently follows in its work are: legality, professional impartiality, expertise, accountability, efficiency, economy, publicity and transparency.

The goals set by the Ministry have been achieved through the maximum engagement of available resources to prevent, suppress and detect all forms of crime and other unlawful behavior of individuals and groups, including maintaining a favorable public order and peace in society, continuous improvement of traffic safety and

undertaking the legally envisaged measures Actions in other security areas within the scope of the Ministry. These activities represent the priority tasks of the Tuzla Canton Police and are implemented through the permanent preventive work of police services and the application of repressive measures and activities within the framework provided by the Law.

4.2. Organizational structure of the Ministry of the Interior Affairs of the Canton Tuzla

The activities of the Ministry of the Interior of Tuzla Canton are carried out within the following basic organizational units:
1. Cabinet of Minister;
2. Sector for administrative and personnel affairs;
3. Sector for material-financial and general affairs;
4. Fire Protection Inspectorate;
5. Police Administration.

4.3 Police Administration

Performs administrative, professional and other tasks and tasks in the Canton area, in particular regarding: protection of life and personal safety of people, protection of property, prevention and detection of criminal offenses, detection and capture of perpetrators of criminal offenses and their access to competent authorities in cases when Is not under the jurisdiction of the judicial police, maintaining public order and peace, conducting criminal-technical works, controlling and regulating traffic on the roads, protecting certain persons, controlling traffic of explosive materials, inflammable liquids and gases and providing assistance in order to eliminate the consequences in case of hazards caused by elemental disadvantages And epidemics. The Police Administration consists of:
1. The Police Commissioner's Office, 2. The Uniform Police Department, 3. Criminalistic Police Sector, 4. Sector for Informatics, Telecommunication and Analytics and Police Administrations.

4.3.1. Police Commissioner's Office

Immediately helps the police commissar in carrying out the duties outlined in the TK's Internal Affairs Act and the Law on Police Officers of the CC.

4.3.2. Division of Uniformed Police of the MUP TK

It is responsible for monitoring, directing and coordinating the work of police administrations and police stations in the territory of Tuzla Canton in the execution of police affairs, in particular: protection of life, personal and property security of citizens, as well as providing expert assistance to police administrations and police stations while simultaneously exercising control over its work. Officers of this Sector are working on the tasks and tasks of preventing the commission of criminal offenses and the capture of their perpetrators, preventing the disturbance of the public order and peace, the security of traffic affairs as well as other tasks within the competence of the uniformed police. The Sector organizes protection activities against terrorist and violent acts, i.e. armed rebellion, securing certain personalities in accordance with the law and decisions of the Government of the Republic of Croatia, and participates in the provision of significant events, cultural and sporting events as well as a number of other police affairs. Uniformed police work:

1. Department for Coordination, Education and Guidance,
2. Special Police Support Unit and OBL as well as the Operational Center.

4.3.3 Sector of Criminalistic Police of the MUP TK

It immediately follows the situation, trends and incidents of crime in the territory of Tuzla Canton and accordingly organizes plans, directs and coordinates the work of the organizational units in order to undertake operational and other measures to prevent, suppress and detect serious criminal offenses, especially serious property delinquents. Sexual crimes, serious crimes of organized crime, heavy crime in the field of narcotic drug abuse, war crimes and serious criminal offenses against the economy, as well as criminal intelligence, criminal investigation work and KDZ screening. One of the basic tasks of this Sector is to prevent any form of violation of human rights and freedoms through preventive and operational work, to ensure full personal and property protection of every citizen and to achieve cooperation and assistance to domestic and international human rights institutions. The Criminal Police Sector is composed of:

1. General Crime Departments,
2. War Crimes Investigation Departments,
3. Divisions for Juvenile Delinquency and Domestic Violence,
4. Department for Combating Organized Crime,
5. Offices for Combating Economic Crime and Corruption,
6. The Department for Combating Abuse of Narcotic / Drugs,
7. Criminal-Intelligence Support Departments, Criminal Offices and Protection

5. THE RESEARCH SUBJECT AND PROBLEM

The subject of this paper is the structure, profile and levels of qualifications of police officers employed in the Police Administration of the Ministry of Interior of the Tuzla Canton. The subject of this paper is an analysis of the staffing function of the police structure of employees in the police administration of the Ministry of Interior of the Tuzla Canton, which should contribute to the development of personnel planning and establishment of adequate structure and staff dynamics in the Tuzla Cantonal Police Administration.

6. RESEARCH OBJECTIVES

The objectives of this study were set based on the subject and the problem of work. The main objective of this paper is to analyze the structure of employees in the police administration of the Ministry of Internal Affairs of Tuzla Canton. According to the basic objective of this paper, individual goals have been set:

1. Analysis of the Rules of Procedure in the allocation of jobs in the Police Administration of the Ministry of Internal Affairs of Tuzla Canton,

2. An analysis of the age structure of the employees in the Police Administration of the Ministry of Internal Affairs of Tuzla Canton,

3. Analysis of the gender structure of employees in the Police Directorate of the Ministry of Internal Affairs of Tuzla Canton,

4. Analysis of the employees of the Police Directorate of the Ministry of Internal Affairs of Tuzla Canton according to the act,

5. Analysis of the qualifications of employees in the Police Directorate of the Ministry of Internal Affairs of Tuzla Canton,

6. Analysis of the number of employees in the organizational units of the Police Administration of the Ministry of Interior of the Tuzla Canton.

7. Analysis of the performance of police tasks in relation to available human resources in the field of operation of the Ministry of Internal Affairs of Tuzla Canton.

7. METHODOLOGY

For the purposes of this paper, the data from the Tuzla Canton Ministry of Internal Affairs were used. The analysis of the structure of the employees implies an analysis of the number of employees by: analysis of the procedures according to the Ordinance on distribution of workplaces, analysis of age structure, analysis of pole structure, analysis

of employees by the rank of employees, analysis of professional qualifications, analysis of the number of employees in the organizational units in the Police Administration of the Ministry of Internal Affairs of Tuzla Canton.

8. DATA ANALYSIS

8.1. Analysis of the structure of employees in the Police Administration of the Ministry of Internal Affairs of Tuzla Canton (by age/under law of systematization)
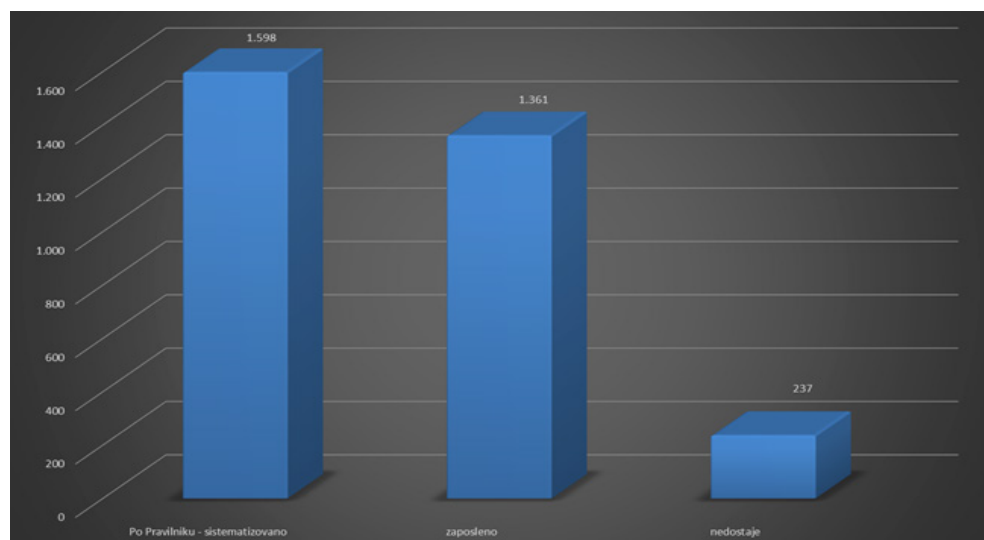
8.2 Analysis of gender structure of employees in the Police Administration of the Tuzla Canton Ministry of Interior (by rank-čin, by education)

Struktura uposlenih po činu

Struktura uposlenih po stručnoj spremi

8.3 Analysis of the structure according to the number of employees in the organizational units of the Police Administration of the MUP Tuzla Canton (systematization, education-rank inspector)

SISTEMATIZACIJA ZAPOSLENIH OVLAŠTENIH SLUŽBENIH LICA U UPRAVI POLICIJE MINISTARSTVA UNUTRAŠNJIH POSLOVA TUZLANSKOG KANTONA

STRUČNA SPREMA U ČINU INSPEKTOR
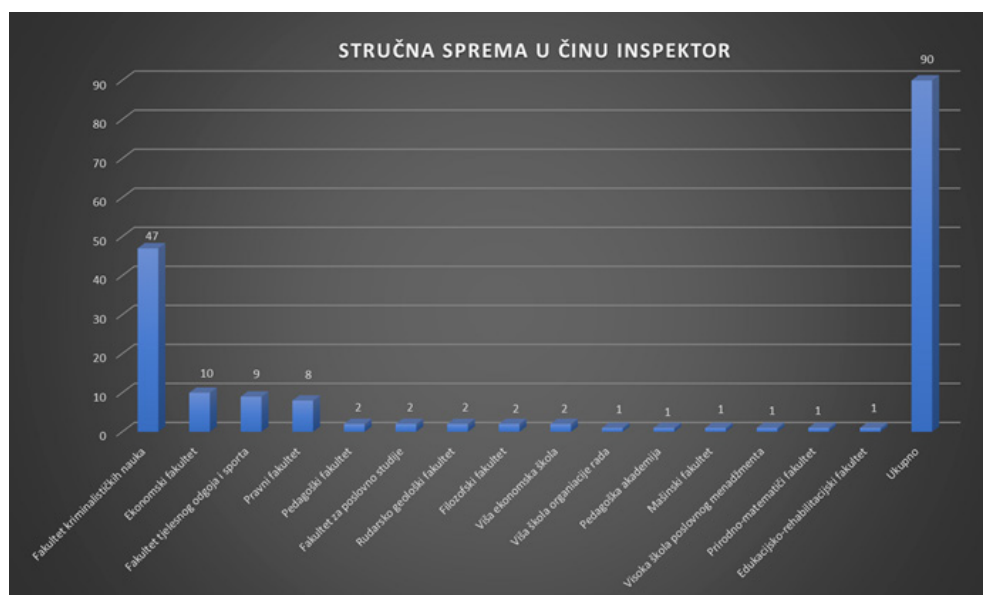
8.4 Analysis of the structure of employees in the police administration of the Tuzla Canton Ministry of the Interior (according to the expert qualification rank "Young Inspector")

Stučna sprema u činu Mlađi inspektor
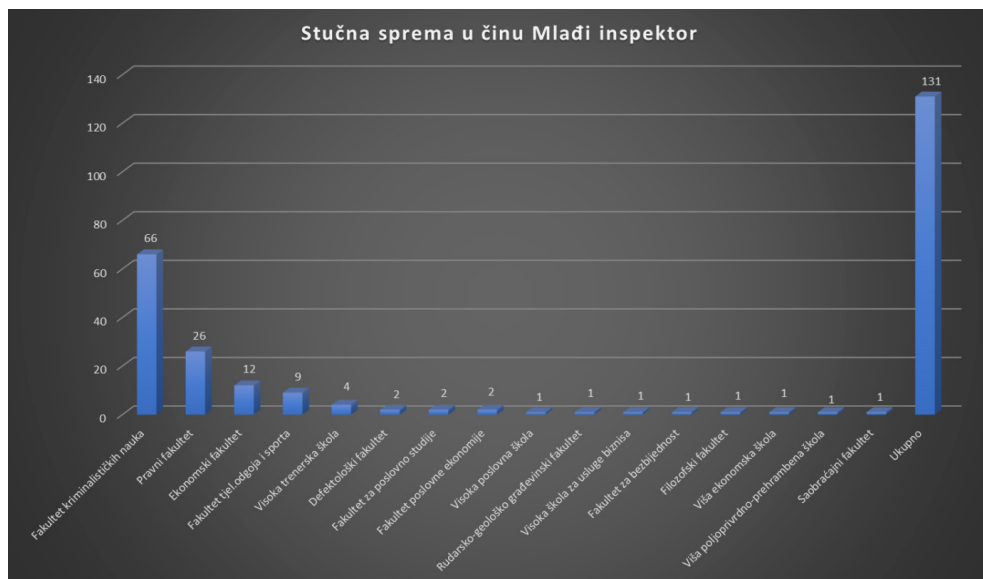
CONCLUDING DISCUSSION

Analysis of the obtained data related to human resources of the police administration within the Ministry of Internal Affairs of Tuzla Canton (MUP TK) has confirmed the general hypothesis we set at the onset of this research. Namely, the research study entitled "Analysis of Human Resources in the Police Administration of the Ministry of Internal Affairs of Tuzla Canton" has identified the disadvantages of the engaged human resources in performing the jobs and affairs of MoI TK police officers. Nevertheless, despite these shortcomings, the police forces have fulfilled their duties in a relatively effectual manner. The analysis of the efficiency and organization of the police structures of the Ministry of Internal Affairs confirms the thesis that actual crime rate in the area Tuzla Canton in 2016 compared to the previous year displays the following state of affairs:

1. Reduction of the number of serious criminal offenses
(in total 361 criminal offenses or 6.79%);
2. Decreased number of reported perpetrators (107 or 2.65%);
3. The percentage of detected criminal offenses reported by an
unknown offender is 40.65%;
4. The percentage of total illumination of crime is 64.31%;
5. 4.492 reports of the perpetration of the criminal offense were filed
with the competent prosecutors' offices.

Based on data analysis, we have also come to confirmation of the other hypotheses. The research study "Analysis of Human Resources Resources in the Police Administration of the Ministry of Interior of Tuzla Canton" detect ed a negative trend in terms of the age structure of the police officers employed in the Police Directorate of the Ministry of Internal Affairs of Tuzla Canton. This study also identify a negative trend when it comes to gender balance in the police forces of the MUP TK.

The overal analysis of human resources showes that Ministry did not establish negative trend with regard to the police officers employment in the police of MUP TK in terms of the type of qualification, indicating the non-confirmation placed under the hypothesis of the research. This study found a negative trend of employment of police officers according to the type of qualification.

The human resources analysis at the police administration of the MUP TK could not establish a significant number of police officers with inadequate higher education qualifications compared to the general and special tasks being carried out of their working hours, indicating that the research hypothesis that assumed a significant number of police officers with inadequate education qualifications has not been confirmed. In fact, with this non-affirmation of the auxiliary hypothesis concerning the human resources and their fundamental vocational education (adequate professional qualifications), we point out the necessity of further improvement of the bylaws, i.e. Internal Systematization and the organization of the MUP TK as the most important act governing this very important area for efficient and effective professional functioning of both the MUP, and in particular the MUP Police Administration, as its operative work.

Based on the findings of our research we conclude that the Police Administration of the Ministry of Internal Affairs of Tuzla Canton is on a good way to develop new and more efficient mechanisms and instruments that would improve employees work performances through the mechanisms of recording, resolving and documenting the reported cases as well as through the implementation of the program of training of police officers, civil servants and employees for more efficient job performance. Bearing in mind the identified shortcomings, the system of internal control and auditing has been improved in the function of suppressing corruption in the Ministry of Internal Affairs.

REFERENCES:

1. Amendola, K. L. (2007), "Psychological Fitness for Duty", in: Greene, J. R., The Encyclopedia of Police Science, 3rd ed, New York: Routledge.
2. Appleby J., Hunt, L., Jacob, M. (1994). Telling the Truth about History, New York.
3. Comeau, M. i Klofas, J. (2010). "The Police Recruitment Process", Rochester, NY. (CPSI Working Paper # 2010-06). Accessed on: http://www.rit.edu/cla/cpsi/WorkingPapers/2010/2010-06.pdf
4. Davorin-J., Zidar, D. (2012), "Evaulacija primjenjene kineziologije u policiji", Policijska sigurnost, vol. 21, no. 2.
5. Domino, G. and Domino, M. L. (2006), Psychological Testing: An Introduction, Cambridge: Cambridge University Press.
6. Forero C. G., Gallardo - Puyol, D., Maydeu - Olivares, A. and Andres - Pueyo, A. (2009), "A Longitudinal Model for Predicting Performance of Police Officers Using Personality and Behavioral Data", Criminal Justice and Behavior, 36 (6).
7. Frank, J., Henson, B., Reyns, B. i Klahm, C. (2008). "Selection and Hiring of Quality Police Officers", Office of Criminal Justice Services, accessed on: http://www.ocjs.ohio.gov/Hiring_Quality_Officers.pdf
8. Fulero, S. M. and Wrightsman L. S. (2009), Forensic psychology (3rd ed.) Belmont, CA: Wadsworth, Cengage Learning.
9. Greene, E. and Heilburn, K. (2011), Wrightsman's Psychology and the Legal System (7th ed.). Belmont, CA: Wadsworth, Cengage Learning.
10. Hadžikadunić, A. and Turković, S. (2013), "Selekcija ljudskih resursa za potrebe policije primjenom bazično motoričkih testova", conference paper presented at Third International Conference "Sportske nauke i zdravlje", Panevropski Univerzitet 15.03.2013, Banjaluka.
11. Kastrelar V. E. and Gaines L. K. (2011), Community Policing: A Contemporary Perspective. Waltham, MA: Elsevier.
12. Kulić Ž. (2005), Upravljanje ljudskim potencijalima, Beograd: Radnička štampa.
13. Lee, T. L. (2007), "Psychological Standards", in: Greene, J. R., The Encyclopedia of Police Science (3rd ed.), New York: Routledge.
14. Malacko, J., Rađo, I. (2004), Nove tehnologije u sportu, Sarajevo: Fakultet sporta i tjelesnog odgoja.
15. Milanović, D. (1997), "Osnove teorija treninga" in: Priručnik za sportske trenere, Zagreb: Fakultet fizičke kulture.

16. Ono, M. et al. (2011), "Cognitive Ability, Emotional Intelligence, and the Big Five Personality Dimensions as Predictors of Criminal Investigator Performance", Criminal Justice and Behavior, 38 (5).

17. Orlić R. (2005), Kadrovski menadžment, Beograd: Zoran Damjanović i sinovi.

18. Stanković, M. (2007), Menadžment ljudskih resursa u procesu transformacije, Beograd: VIPOS.

19. Šopar, J. (2004). Specifična i situacijska kondicijska priprema specijalnih postrojbi vojske i policije. (Graduate thesis). Zagreb: Kineziološki fakultet Sveučilišta u Zagrebu.

20. Toldson, I. A. (2006), Profiling Police: Evaluating the Predictive and Structural Validity of an Actuarial Method for Screening Civil Liabilities among Police Officer Candidates, National Criminal Justice Reference Service, accessed on https://www.ncjrs.gov/pdffiles1/nij/grants/214121.pdf.

21. Zaciorski (1975), Fizička svojstva sportiste, Beograd: Savez za fizičku kulturu Jugoslavije.

22. Wright, A. J. (2011). Conducting Psychological Assessment: A Guide for Practitioners. Hoboken, NJ: John Wiley & Sons.

CHALLENGES OF USING INFORMATION TECHNOLOGIES IN POLICING

Bogdancho Gogov, PhD
Faculty of Security-Skopje,
Email: bgogov@t.mk

Abstract:

Crime is perceived as symbolic as well as a real threat to human security. Hence a growing number of different institutions take part in crime control. At the same time, due to greater security needs, public and private organizations increasingly cooperate in building a multi-agency partnership. It creates a situation in which by implementing the partnership projects for crime control and public order, they put individuals in position of being subjected to control, but at the same time to participate in the implementation of the control of others and of themselves.

Relatively new technical means such as digital video cameras and audio systems, an analysis of genetic material are introduced in the police and policing for the purpose of better control of the various forms of criminal behavior. It is interesting that these new forms of criminal control do not replace the old ones, but only complement them. Continuous and comprehensive control is established as an explicit function in many areas of social life, and it is explained as a result of the situation with crime and the associated phenomenon of fear of crime.

The opportunities that are offered by information technology to monitor various segments of private and public life sharpen the relationship between the need of security and privacy protection. Obviously, the monitoring and surveillance will increase in use along the future development of science and technology, and will develop from routine in regular investigative measure in the criminal and legal events.

In this paper we consider the possibilities of new technologies and their use in policing, as well as the dangers of violation of human rights and freedoms, and especially the right to privacy.

Key words: Information technology, policing, ambient intelligence and privacy.

Introduction

Contemporary society develops in a complex manner, where the individual behavior becomes a subject of interest for many different forms of social control. We live in a historical period in which the control mechanisms are reshaping, and they involve several governmental, private and public-private agencies that apply numerous techniques and strategies which lead towards a more systematic and more intense control (Clegg and Courpasson, 2006). The sense of an increased control and its expansion can be attributed to the fact that certain technologies have become more sophisticated, providing facilitated insight in what we consider to be a private sphere. The contemporary technological development assists and continues the long-lasting trend of practicing social control where the differences in the techniques and methods create new possibilities. This development carries the risk every our activity to be controlled. As a matter of fact, the possibilities offered by the modern information and communication technology are great and their implementation is limited only by the financial recourses that are at disposal of the control agencies.

Some basic social structures, institutional and organizational establishments are subject of in-depth revision regarding the manner in which we understand both, who we are and the world around us. In this context, first of all we think about the transformation of the capitalist paradigm, about the changes in the role of the state and its institutions, about the speed and development of the network forms of social organization, about the expandable and fluid sense of the identity and, at last, about the changes in daily exchange and interpretation of information through the media for interpersonal and mass communication.

The traditional stratification system has broken down and the traditional moral (norms) are less compulsory than they used to be. People become more mobile, which have increased the feeling of mutual connection, but, at the same time lots of people feel unprotected and look for a sense of security (Giddens, 1991). Giddens calls this a diffused insecurity and it constrains significant changes in the logic and practice of social control.

Contemporary crime and changes in policing

The presence of fear and insecurity is the primary incentive for articulation of the demands for a better and greater control. The numerous forms of risk allow a specific way of considering the potential problems, for which, state control is required. It is revealed that the risk is a very important element of the social control transformation (Stern and Fienberg, 1996).

Because the crime is perceived as a symbolic, as well as a real threat for the human security, the number of different institutions which take part in crime control has increased. For example, the changes in architecture and the new designs have accepted the idea of natural monitoring in order to detect crime. Social welfare institutions nowadays have more legal authority to reveal false requests for social protection, and their function is more focused on detecting false requests than on real protection (Cohen, 1985). Public and private organizations are mutually connecting in order to establish multi-organizational partnership that often goes beyond the already established mutual scopes and legal activities. Introducing a model of policing, in which, the police and other public and private institutions would participate (such as banks, hospitals, trade associations, etc.) creates a situation in which by conducting partner projects for crime control, put the people in situation of both, to be subject of control and to control the others. Video cameras, audio systems, genetic material analysis were introduced to provide a better control of the different types of deviant behavior. It is typical that the new forms of control do not substitute the previous ones, they only supplement and amplify them. The control is established as an explicit function in many areas of society, with an explanation that it is a result of the dark figure of crime, as well as with the fear of crime, as a consequence. .

When the crime rates increase, the government usually takes intensive repressive measures, which, if they are not conducted in accordance with the law, become a serious threat for the human rights and freedoms. Threats, mostly private threats are proportional to the seriousness of the crime because in such cases the police dispose of intrusive measures and techniques. Governmental activities that are undertaken for protection of the inherent right to life, property and other aspects must be restricted and to respect other rights and freedoms. The application of military rhetoric as a tool for fighting against terrorism, against organized crime, corruption and similar activities do not deter criminals or terrorists from their intentions, but it can increase the fear among citizens. One of the most common paradoxes nowadays is the constant disrespect of the human rights (for example, the right to clean water and sanitation, health care, elementary existence) and at the same time, as never before, the existence of international and national legal documents, strategies and debates about the human rights and freedoms. Numerous wars have been waged and are still going on in 'defense' of the human rights (in Iraq, Afghanistan, Syria, Mali, the Balkans...), peace corps (aside from the military corps) are engaged in order to help the establishment of democratic societies, while the United Nations as a body for resolution of conflicts and problems is avoided. We can get an impression that the Clausewitz's belief, according to which, war is continuation of politics by other means is abandon, and that Foucault is right by saying that 'War is

probably the continuation of politics". However, we should not forget that 'politics' is perceived as continuation, if not directly to the war, then to the military model as the most common method to prevent civil rebellions (Foucault, 2004).

New technologies and their influence on policing

As a result of the almost limitless possibilities of the information technologies, especially delicate is their application in observing different aspects of the private and public life as well. Video camera surveillance is more frequently being used in public areas. It has become impossible for people in the cities across the Western world to move without being monitored every step they make. It can be expected that this type of surveillance and monitoring would develop with the expansion of technology, surveillance centralization and with the widespread but unproven belief that surveillance (with video cameras) leads to a greater security. The closed-circuit television (CCTV) or video surveillance market constantly develop, furthermore, it easily integrates with other technologies such as the internet, the face recognition software, the fingerprint databases and other bases which are at disposal of the police and other public institutions. The video camera's abilities are essentially improved with the upgrade of the night vision equipment, the motion sensor etc. Other similar technologies that can easily track the location and motion of the people (Global Positioning System-GPS), access control systems, record of presence, mass motion software and systems are also being developed.

All these and other similar technologies make possible for the police to have a documentation of the everyday behavior and normal activities of the people. The police stores the data in big 'depositories' called data warehouse, and its value i.e. helpfulness is evaluated when needed. These technologies can help in analyzing the past behavior of the individual and to determine their habits and choices in the everyday life. The above mentioned, as well as many other methods and techniques (such as the profiling) are very useful for analyzing different manifestations. But their excessive and illegal use, mostly in the police work causes a well-founded concern regarding possible malpractice in the surveillance process of the majority of citizens and disruption invasion of the privacy caused by the presumption that every individual can be suspect until the opposite is not proven.

The police in their duties rely more and more on the information technologies neglecting the contact with the citizens, its presence in public spaces, preventive activities in different institutions such as schools, local administration, and citizens associations. The possible benefits of using video surveillance and global positioning system (GPS) in policing will not show better results if the police made distance from citizens and from their daily, sometimes even banal problems related to their safety.

Video surveillance, Global Positioning System (GPS) and Radio-frequency identification

Video surveillance conducted with the help of video cameras is more frequently used in public spaces. It has become almost impossible for people in all cities in the Western world to move without being located and kept under surveillance almost every step they make. It can be expected that this type of surveillance will increase, with the development of the technology, with the centralization of the surveillance, and with the common belief that surveillance (with video cameras) leads to a greater security. In some countries, video cameras are inseparable part of the urban life, similarly to the electrical grid and water supply network in the beginning of the previous century. The video surveillance market, or close-circuit television (CCTV) is constantly developing, and what is more important, it easily integrates with other technologies such as the internet, the face recognitions systems, the fingerprint identification database and other databases which are at the disposal of the police and other governmental institutions. The capacity of the surveillance cameras is significantly expanded with the upgrade of the night vision options, the devices for monitoring of the movement, and other technological gadgets.

The governments and the science are, for a longer period of time, trying to determine the real effect of the video surveillance in the public spaces upon crime reduction. Apart from the numerous research and studies on this topic, there are no results which would indisputably confirm the effect of prevention. In our country, in my opinion, no similar studies have been conducted, but there are numerous studies around the world, more or less relevant. We will mention some of them.

In 2001, the Interdepartmental Committee on Closed Circuit Television of New South Wales in Australia published a Final report about the evaluation of closed circuit television (CCTV) in public places. The committee concluded that certain reports and statistics (which are not completely accurate) show that video surveillance can be effective in certain situations and has a high level of support. However, the committee also noticed that their assessments can be considered as systematic evaluation of the technology.

The University of Ottawa, for the needs of the Canadian police, made an evaluation (Wade, 2003) which showed that 'the effects of the video surveillance upon the crime are inconsistent and can change, and to a great extent are unpredictable' and that the preventive dimension of the video surveillance can vary in different periods of time and among different types of criminal activities. It was determined that video surveillance systems have the smallest effect on crimes against public order. The magnitudes of the preventive effect of video surveillance on criminal activities depend on the location, and the car-parking places have most benefit from this system. The study also determined

that there was preventive effect even when the surveillance cameras were off. The best preventive effect was noticed in cases when video surveillance was combined with other methods of crime prevention even in cases when it was adjusted to the local conditions. After the implementation of the video surveillance system, no evidence was found about increased crime rates.

The Home Office of UK published a report about the crime prevention effects of closed- circuit television (Welsh and David, 2002). The report is an analysis of 22 studies which were done in Britain and USA and which were selected according to rigorous and strict methodological criteria. According to these studies, it can be concluded that the closed-circuit television, also known as video surveillance, reduces, to a small extent, criminal activities, and it is the most efficient in preventing motor vehicle theft from parking places. It was determined that the video surveillance has small or no effect in the public transport or in the city centers.

The results of these studies do not answer completely the questions about the level of influence which the video surveillance has on crime reduction. This is, mainly as a result of the influence of other criminogenic factors that are inconsistent and is difficult to separate them. However, the studies show that this method of crime control should be neither rejected nor given too much significance, but to be carefully analyzed and designed in accordance with every individual case and location.

The Global Positioning System (GPS) is a space-based radio navigation system, which, 24 hours of the day covers the space with satellites that circle around the earth and provide information about the geographic location of people and other objects. When these objects are owned by a certain individual, his or her locations can be easily discovered (most frequently, the GPS equipment determines the location of the individual in a range of 10 to 100 meters) and the direction of movement. For example, when the individual uses a mobile phone, from the moment he/she turns the phone on, bidirectional connection is established between the phone and the location of the mobile network operator, which provides constant observance of the phone's user.

Radio Frequency Identification (RFID) is a technolgy which which uses a detector of electromagnetic waves (antenna) on one side, and an object which radiate (respond) on the other side. The detector emitts radio waves to one or more sides or more frequencies, while the "tag" (transponder) or the sign of the item 'dismisses' by sending collected information. The RFID tags can be passive RFID (can be read-only) or active RFID (can be read-write), and it is not necessary to be 'visible' for the detector. Also, more than one can be read simoultaneously.

Nowadays, RFID are successfully used in admission control, information about presence, information about mass motion (motorways, ski centers), information about animals, and is widely applied in production processes and in the store activities. RFID devices can be easily integrated and even hidden in different items, mostly due to their miniature size. The miniaturization of electronic technologies is one of the prerequisites that provide the feasibility of the RFID devices. For example, in 2009, researchers from the University of Bristol successfully attached RFID micro-transponder to the live ants in order to analyze their behavior. This tendency towards even greater miniaturization of the RFID devices will most probably continue with the technological development. For example, in 2007 the company Hitachi designed the smallest RFID chip with dimensions 0.05 mm × 0.05 mm. Nowadays, the chips are dust-sized and therefore they are called dust chips. The RFID technology is also used in the production of biometric passports, in other words, tags (smartcards) are being embedded in the passports, in which, biometric data about the owner are inscribed and this data can be read by the electronic passport control even at a distance from 10 cm to a few meters away. Furthermore, all information about the time and location of the entrance and exit of the country by the individual are inscribed in the tag. The danger seams to appear when those who want to steal the data are able to do it from the same distance. As a result of this, different technologies for protection of the e-passports are part of the standards for designing biometric or e-passports, but, however, complete security of the e-passports is still not possible.

Due to the constant innovations and unlimited possibilities of the information technologies, especially delicate is their application and usage in the process of monitoring different aspects of the private, as well as the public life. Therefore, data collection via technical observation and other automatic devices shall be regulated by special legal provisions[2]. Such specific regulations for conducting video surveillance are included in the last part of the Law on Personal Data Protection, more precisely, in the articles 9-a, 9-b и 9-v. The Law on Police also contains provisions about video surveillance. According to article 65, from the Law on Police, under recording in public places can be understood permanent audio and video surveillance in public places where crimes and other offences occur more frequently, in order to prevent such activities.

Nevertheless, if we take into consideration the fact that the video bases of the cameras which are located in different institutions (companies, banks, governmental institutions, public spaces,) might be connected soon in our country, and that the police can use and compare these data, than the current legal provisions are not a sufficient protection. Therefore, there is a need to develop further procedures and mechanisms that will guarantee the protection of the personal data which can be revealed and used.

---

[2] Principle 2.3 ofrom the Recommendation (87)15

Moreover, in order to use the surveillance in accordance to the real needs without being unnecessarily intrusive and invasive, we should consult the studies and best practices which will scientifically determine the positive impact of the video surveillance upon crime prevention and community safety. This refers to the data collected from the GPS systems and RFID devices, as well.

Smart Environment and Internet of Things

In the past decade, the development of technologies, particularly their speed, power, networking capacity and physical minimization of machines, have aroused the interest of researchers and scientists for a new way of using profiling which, it is almost certain, will be all-encompassing in the future and will hardly have any visible consequences. This is Ambient Intelligence. Apart from science, the concept of smart environment was dealt with by the European Commission as well. It is upon its request that in 2001 the Information Society Technologies Advisory Group – ISTAG published a Report titled "Scenarios for Ambient Intelligence" where a team of scientists and experts elaborately examined this issue and prepared several scenarios or examples on its future operation. The 2001 ISTAG Report placed this future in 2010. From today's perspective we see that technologies are already here, are completely developed and accessible, and their all-encompassing application is on the verge of becoming a reality.

The concept of ambient intelligence creates a vision of an information society where the focus of interest is on the simple use of technologies, on more efficient supplementary services and support of human interaction. People are surrounded by an intelligent intuitive interface incorporated in all kinds of possible objects and environments which are capable of recognizing and responding to the presence of various individuals in a concealed, non-invasive and often invisible manner.

How exactly will these technologies influence police work in the near future is still unknown, but there's no doubt that they lend a possibility to observe all details of the personal life of an individual as well as psychological features which sometimes even the person in question is not aware of. They will be able to provide police intelligence databases with an enormous amount of data. There is no doubt that the police will take advantage of those possibilities. The question is: to which extent and in which limits? Protective mechanisms drawing necessary boundaries need to be incorporated into the respective technologies and that needs to be done even in the process of designing them. Dilemmas particularly arise in the direction of automatic decisions made without the human factor, which are a feature of the very operation of ambient intelligence. Responding to those challenges will take time, practice and interdisciplinary scientific and technical solutions.

Ambient intelligence is defined by its key elements: 1) integration, meaning networked machines are integrated in the environment; 2) awareness of context, because machines can recognize both us and the context of our current situation; 3) personalization, because they can be tailored according to our needs; adaptability, which means they can modify the environment as a response to our behavior; and 5) anticipation, because they need to anticipate our priorities without our deliberate request and influence (Hildebrandt, 2008).

Smart environment technologies available are sensor technologies, RFID systems used for radio-frequency identification, nanotechnologies and miniaturization. Together, they compose the "Internet of things" which is supposed to put the real world online. The internet of things consists of small devices tags) built into objects, people, animals being constantly monitored and exchanging data through the network connecting them (Aarts and Marzano, 2003).

All those technologies generate an enormous amount of data, however they will not reveal any knowledge until profiling techniques are applied on those data. Profiling technologies are the essential connection between the excessively trivial data of our movement, temperature, interaction with other people or things and the applicable knowledge of our habits, needs and the state of our environment (Gubbi,, Buyya, Marusic, and Palaniswami, 2013). Only after identification techniques are applied on models through mutually connected data bases, the things in our environment can become smart and start acting on our behalf as our agents in the multi-agent network. Thus, profiling creates an added value to the mass of data.

In our country, such technologies are still not available in practice, and in the rest of the world we can see them only in the richest countries and even there they still seem largely futuristic. In order to make the abstract terms of ambient intelligence clearer, we are going to explain them through an example. In the future, people are going to carry in them a small, inconspicuous communication device – part of a network which through profiling will know all of the habits and needs of its owner. When the device detects, according to the model of behavior and schedule of the owner, that he is at a meeting, it will lower the level of incoming phone calls and limit it only to the necessary ones. The device will further "negotiate" with the devices of people calling its owner in order to establish the level of emergency of the phone call. This "negotiation" is in fact profiling of the future needs of the owner in view of his device, based on databases on his behavior in the past and data of past behavior of other people trying to reach him for the purpose of evaluating the necessity or emergency of contact. In that manner, the device acts as a representative, an agent of its owner (Ja¨rventausta, Repo, Rautiainen, Partanen, (2010)

The vision of ambience intelligence depends on its imperceptible adaptation, modification of the environment of our conditioned habits and needs. The idea is not for us to give a deliberate, conscious signal, but for the environment monitoring our behavior to be able to "predict" what it needs to do and what the change is that it needs to make. It envisages a proactive instead an interactive use of computers, putting human intelligence as further possible. Supporters of the development and application of these technologies point out that we need to conform the environment according to our needs, "we cannot afford to wait for a human interpreter but need profiling machines that draw their own conclusions about what we prefer when and where, hoping we can thus solve the problem of endless choice and deliberation"(Hildebrandt 2008).

Conclusion

The information technologies are widely applied in policing. They, however, bring certain positive and negative aspects, mostly related to the privacy of citizens. The possible gains and advantages of the application of video surveillance and global positioning system (GPS) in policing will not show better results if the police keep away from the citizens and from their daily problems related to security. On the other hand, a constant reassessment and amendments of the legal framework regarding the application of information technologies is crucial in order to achieve balance between greater security and protection of human rights and freedoms.

Ambient intelligence is exceptionally complex, but its complexity is hidden, without monitors and keyboards which is why the environment itself becomes interface. Particularly significant is its ability to perform surveillance in real time. Due to the fact that the environment will always be one step ahead of us, the concept of intelligent environments poses many questions and maybe the biggest challenges so far regarding privacy as a basic human right, indispensable to sustaining democracy and the rule of law.

Bibliography:

1. Aarts E, Marzano S (eds.) (2003), The New Everyday: Views on Ambient Intelligence, Rotterdam: 010 Publishers.
2. Budapest Declaration on Machine Readable Travel Documents (MRTDs), 2006, available at: http://www.fidis.net/press-events/press-releases/budapest-declaration/
3. Clegg S.R., Courpasson, Phillips, (2006), Power and Organizations, SAGE Publications, London

4. Clegg Stewart R., David Courpasson, Nelson Phillips (2006), Power and Organizations, London: Sage Publications.

5. Cohen, S. (1985) Visions of Social Control, во Martin Innes, Understanding social control Deviance, crime and social order, Open University Press, 2003

6. Dilemmas Of Privacy And Surveillance, Challenges Of Technological Change (2007) The Royal Academy of Engineering, London

7. Final report Evaluation of the NSW government policy statement & guidelines for closed circuit television (CCTV) in public places, (2001) prepared for the Inter-Departmental Committee on CCTV c/o Crime Prevention Division, Attorney General's Department, accessed on: www.dlg.nsw.gov.au/dlg/dlghome/documents/Information/CCTV%20final%20reportPDF available on 18.02.2015tp://

8. Geradts Zeno and Sommer, Peter (2008), " D6.7c: Forensic Profiling", Future of Identity in the Information Society (FIDIS), accessed on: http://www.fidis.net/fileadmin/fidis/deliverables/fidis-wp6-del6.7c.Forensic_Profiling.pdf.

9. Innes Martin (2003), Understanding social control deviance, crime and social order, Open University Press.

10. Gubbi J et al. (2013), Internet of Things (IoT): A vision, architectural elements, and future directions. Future generation computer systems, 29 (7).

11. Hildebrandt Mireille (2008), Profiling and the rule of law, Identity in the Information Society, vol. 1, no. 1.

12. Järventausta P. et al. (2010), "Smart grid power system control in distributed generation environment", Annual Reviews in Control, 34(2).

13. Petersen, Julie K. (2007), Understanding surveillance technologies: spy devices, privacy, history & applications, 2nd ed., New York: Auerbach Publications, Taylor & Francis Group.

14. Scenarios for Ambient Intelligence in 2010, (2001), Information Society Technology Advisory Group; ISTAG.

15. Stern Paul C. and Harvey V. Fineberg (eds.) (1996), Understanding Risk, Informing Decisions in a Democratic Society, Washington: National academy press.

16. Wade Deisman, (2003),"CCTV: literature review and bibliography", Research and Evaluation Branch, Community, Contract amd Aboriginal Policing Services Directorate, Royal Canadian Mounted Police, accessed on: http://publications.gc.ca/collections/Collection/JS62-108-2003E.pdf

17. Welsh, Brandon C. and Farrington, David P. (2010) "Crime prevention effects of closed circuit television: a systematic review", Home Office Research Study 252, accessed on: http://www.chs.ubc.ca/archives/?q=node/655

NATO AND WESTERN BALKANS: STILL UNFINISHED BUSINESS

Stojan Slaveski, PhD
European Universiity, Skopje
E-mail: sslaveski@hotmail.com

Stefanija Agrotova, MA
European Universiity, Skopje
E-mail: stefanija.agrotova@eurm.edu.mk

Abstract:

Instability in Southeastern Europe, and especially in the Balkans as its most vulnerable part, is primarily a European problem, but also a problem for NATO. These countries were included in the regional stabilization program from the very beginning. Twenty-five years later, the truth is that there is no open or visible threat of war and ethnic conflict. However, some security challenges still exist as a seed for a potential crisis. There is still unfinished business in Bosnia and Herzegovina, which threatens to shake ethnic stability. Kosovo struggles for its full independence and promotion as a sovereign state and faces a strong Serbian diplomatic action to oppose the unilaterally proclaimed independence of Kosovo. Macedonia has a name dispute with Greece and waits too long for NATO membership and to begin the negotiation process for EU membership. Serbia as a country is important from many perspectives that are related to regional stability. During the Warhaw Summit it was noted that the Western Balkans is a region that is of strategic importance to which the alliance pays proper attention. Democracy values, the rule of law, domestic reforms and good neighborly relations are of vital importance to regional cooperation. Euro-Atlantic integration of the region was also emphasized in the final communique of the summit. NATO stressed that decisions on enlargement will depend solely on NATO and that each aspirant will be evaluated based on its achievements. In our paper we will analyze regional security challenges and NATO role.

Key words: Western Balkans, regional security, enlargment, NATO

Introduction

Today's security challenges include a plethora of complex and evolving dangers, including international terrorism, the proliferation of weapons of mass destruction (WMDs), failed states, stalemated but unremitting conflicts, organised crime, cyber-threats, energy shortages, environmental degradation and its associated security risks, natural and man-made disasters, pandemics and many others. Facing these threats effectively will require wide-ranging partnership and strong synergy between NATO and the European Union (EU). The two organisations should take a holistic approach to security issues and work together in the defence domain. Although neither a geographic nor a functional division of labour is a feasible option, it is now accepted in many circles that some forms of outreach, for example peacekeeping in Africa and the Balkans.

The Euro-Atlantic perspective for certain Western Balkan countries has never been more ambiguous since the end of the Cold War. The integration into security organizations, notably into the North Atlantic Treaty Organization (NATO), of the region is a necessity not only for these countries and the promotion of good neighborly relations amongst each other but also for the alliance. The risks and threats that have emerged in the past few years will be a challenge for the Western Europe and the common values they share in the years to come. It is evident that the NATO Alliance has recognized the contemporary threats. Indeed Heads of the States and Governments of the NATO member states had a full agenda of topics for conversation during the Summit in Warsaw on 8-9 July 2016.[3] The focus was on reviewing the accomplishments of the NATO Strategic Concept adopted in 2010 and the decision for strengthening the defense dimension of NATO decided during the last summit in Cardiff in 2014. However, during the Summit, the leaders noted that the security environment changed since the last high-level meeting. Thus, it necessitated additional measures to ensure the security of the Allies.[4]

NATO asked the Member States during the Welsh Summit to invest in defense at least 2% of their national budgets. However, what matters for the Alliance was also how the money allocated for defense would be provided; i.e., at least 20 percent of the defense budget to be for the procurement of new equipment, including funds for research

[3] Warsaw Summit Communiqué Press Release (2016) 100 Issued on 09 Jul. 2016. http://www. nato.int/cps/en/natohq/official_texts_133169.htm#piracy (accessed: 15.11.2016).
[4] For example, even if France did not invoke Article 5 of the Washington Treaty, there was a consensus among the members that the terrorist attacks in Paris in November 2015 were acts of armed aggression. Since 2010, the terrorist group Islamic State (IS), along with al-Qaeda, is considered a NATO enemy. Moreover, NATO agreed that hackers' attacks could, under certain conditions, be considered as an act of aggression to be followed by a response under Article 5 of the Washington Treaty.

and development. So, a number of Member States halted the subsequent reductions in military expenditures that were made in the years before the Welsh Summit and, in some cases, the process of increasing military spending started. It is too early to say how increased funds for defense will be used. This debate is one of the most contentious within NATO. There are complaints that Europe spends too little on defense and is protected at the expense of the taxpayers of the United States. However, the imbalance is not as great as it is sometimes suggested. The Warsaw Summit concluded that military spending by European members of NATO is no longer declining, but it is actually increasing. Nevertheless, convincing the taxpayers of Europe to make significant increases in defense spending remains a serious challenge. In addition, in light of the complex security challenges that need to be resolved, whether increasing military spending is always the most appropriate response to the threats remains as open question.

NATO – Russia Relations

The current NATO Strategic Concept of 2010 emphasized that there were low attack threats against NATO but highlighted the strategic importance of cooperation with Russia. However, NATO today, no longer sees Moscow as a partner. Relations between Russia, NATO and the West have generally deteriorated. Since the illegal Russia annexation of Crimea, NATO has suspended all practical, civilian and military forms of cooperation with Russia, leaving only some channels open for dialogue. In a television interview in Poland in May 2016, NATO Secretary General, Jan Stoltenberg said that the best option for NATO is to avoid the escalation of bad relations with Moscow and to try to establish an open dialogue. NATO-Russia Council met in April 2016, but Stoltenberg pointed out that this encounter had been only due to the existence of deep disagreements.[5]

In accordance with the prevailing activities, NATO and Russia agreed in 1997 that a permanent stationing of substantial combat forces in Central and Eastern Europe was not necessary. Some NATO members now believe that the security environment has significantly changed, and this agreement should no longer be in force. In addition, during the Welsh summit, it was decided to increase the number of military exercises conducted each year and new military exercises with scenarios of collective defense to be designed.[6] The United States were undertaking measures to strengthen the forces of the NATO eastern wing by maintaining significant rotational forces with wider members' participation.

---

[5] Relations with Russia 27 Oct. 2016 NATO. http://www.nato.int/cps/en/natolive/topics_50090.htm (accessed: 08.10.2016).

[6] In 2016 there were 23 military exercises with these scenarios that involved 20 different nations. For example, in March 2014, Poland requested 10,000 troops from NATO to be deployed at military bases in its territory, but the Alliance did not respond positively to this request.

Implementation of a number of measures related to strengthening of the common collective defense, which has been agreed by the leaders during the previous summit in Wales in 2014, have been discussed at the Warsaw Summit. Many so called "security measures" were agreed at the Summit, including the continued air, land and sea presence, as well as the conduct of significant military activities in the eastern part of the Alliance. Plans were made to ensure that about 4,000 soldiers from NATO countries, on a rotational basis, will be deployed in the Baltic States and Poland. These forces were created to respond immediately and wherever Alliance finds there is a need. In addition it was agreed that the NATO response would be doubled, to 40,000 soldiers.

An important segment of the discussions between the NATO leaders was how to respond to Russian tactics pointing to how this is closely linked to national perceptions about security problems and which military response is appropriate. The model of the nuclear deterrent is becoming more popular in European security and was part of the leaders' discussion. Statements by some senior Russian leaders have focused the attention of the Alliance to how Russia will use its nuclear weapons, which according to the military doctrine is part of all scenarios of Russian military exercises. NATO did not make significant modifications to nuclear policies at the Warsaw summit, but agreed specific solutions for better integration of conventional and nuclear forces of the Alliance. Russia has already carried out military exercises in which nuclear forces were closely integrated with conventional ones. In addition to the USA, NATO, France and the UK also have nuclear facilities, and in the Communiqué they reminded Russia that, if needed, their facilities would be available to NATO.

In 2010, NATO was given powers by the governments of Member States to organize the antimissile defense of their territory; i.e., for equal protection of the European countries of the Alliance in case of attack from short or medium range ballistic missiles. Implementation of the decisions from 2010 was also reviewed during the Warsaw Summit. Until now the US and NATO have developed missile defense programs that are not directed against Russia, but such an option is not excluded in the future.

NATO and EU cooperation in the Western Balkans

The enlargement of the European Union and the North Atlantic Treaty Organization are seen as beneficial both by bringing stability and security and introducing democratic and economic reforms. Both organisations have supported the Western Balkan countries in their respective processes of post-authoritarian democratisation, transition to market economies, and of post-conflict reconstruction. The enlargement perspective has played and continues to play a crucial role in the regional stabilisation and pacification processes.

One example of successful security-related cooperation between NATO and the European Union was the Ohrid Framework Agreement to prevent war in the Republic of Macedonia. In February 2001, at the height of inter-ethnic strife between the country's security forces and armed Albanian insurgents, NATO and the European Union coordinated the negotiations that led to the Ohrid Agreement in August of that year. Then, to reduce the possibility of backsliding, NATO agreed to continue its support with Operation Allied Harmony, conducted from December 2002 to March the next year, at which point the operation was handed over to the European Union. In late March 2003, the European Union launched its first-ever peacekeeping mission, Operation Concordia, which was also the first implementation of the Berlin Plus agreement. A small NATO headquarters remained in Skopje to assist the country's authorities in the development of security-sector reform and adaptation to NATO standards. The European Union maintained Operation Concordia until December 2003, and followed up with a civilian police mission, Operation Proxima, which continued through the end of 2005.

Another positive example is Bosnia and Herzegovina. In December 2004, NATO terminated its nine-year Implementation Force (IFOR)/Stabilisation Force (SFOR) operation, and handed it over to the European Union, which immediately began its 6000-strong Operation Althea. As in the operations in the Republic of Macedonia, NATO's Deputy Supreme Allied Commander Europe (DSACEUR) was named Operational Commander, acting under political guidance and direction of the European Union's Political and Security Committee (PSC). NATO maintains a modest headquarters in Sarajevo to assist Bosnia and Herzegovina's authorities with defence reform, handle certain operational tasks involving counter-terrorism and detention of persons indicted for war crimes, as well as intelligence-coordination with the EU Force (EUFOR).

NATO should consider a more flexible policy and strive to deter prospective adversaries with a wide range of instruments. By partnering with the EU and expanding its set of instruments, the Alliance will be able to tackle the threat from multiple angles. What is more, it may be even able to prevent it. The EU seems the organisation best suited to complement NATO's crisis management efforts, as it offers a diversity of instruments that can be employed in hybrid warfare. NATO and the EU could create an effective institutional tandem that has a wide range of both political and military instruments at its disposal.[7] The NATO Summit in Warshaw acknowledged the EU as a strategic partner of the Alliance. And the common threat of hybrid warfare within the Euro-Atlantic area presents a solid opportunity to develop this partnership even further. NATO and the EU should intensify consultations and engage in joint planning and inter-institutional cooperation should become more systematic and pragmatic.

[7] European Neighbourhood Policy and Enlargement Negotiations. December 6, 2016 https://ec.europa.eu/neighbourhood-enlargement/ (accessed: 02.01. 2017).

NATO and the Western Balkans

The political and the security environment in the Western Balkans is an issue that will be of concern for Europe as a whole but also for NATO. The Balkan countries have been impacted by the consequences of the end of the Cold War with the dissolution of Yugoslavia. Although war broke out and the former Republics gained independence from Yugoslavia, there still is an unfinished business in the region.

Instability in Southeastern Europe, and especially in the Balkan as the most vulnerable part, is primarily a European problem, but also a problem for NATO and the United States. These countries were included in regional stabilization from the very beginning. Twenty-five years later, the truth is that there is no open or visible threat of war and ethnic conflict. However, some security challenges still exist as a seed for a potential crisis. There is still unfinished business in Bosnia and Herzegovina, which threatens to shake ethnic stability. Kosovo struggles for its full independence and promotion as a sovereign state and faces a strong Serbian diplomatic action to oppose the unilaterally proclaimed independence of Kosovo. Macedonia has a name dispute with Greece and waits too long for NATO membership and to begin the negotiation process for EU membership. Serbia as a country is important from many perspectives that are related to regional stability.

For many years, it also appeared that progress was being made. All countries in the region had become members of the Alliance's Partnership for Peace (PfP) after Bosnia and Herzegovina, Montenegro and Serbia joined in December 2006. However, Kosovo, which had not declared independence at the time, is still not a member of PfP. Albania and Croatia joined NATO in 2009 and Montenegro was invited to join in December 2015. Republic of Macedonia has been part of NATO's Membership Action Plan (MAP) since 1999. And Bosnia and Herzegovina was invited to join the MAP in 2010, though its activation was made conditional on the resolution of a key issue concerning immovable defence property (this is still pending though progress has been made).[8]

The processes of European and Euro-Atlantic integration certainly contributed greatly to supporting reforms and building stability in countries that joined the European Union and NATO from Central and Eastern Europe. However, they were designed to assist accession to international institutions, not to manage conflict. Whereas the European Union and the United States kept a tight control on developments in South Eastern Europe in the second half of the 1990s and the early years of the new millennium,

---

[8] Croatia joined the European Union in 2013. Albania, Republic of Macedonia, Montenegro and Serbia are EU candidate states. Bosnia and Herzegovina and Kosovo have both signed Stabilisation and Association Agreements with the European Union. And Bosnia and Herzegovina formally submitted an EU membership application in February 2016.

they subsequently downgraded their engagement to focus on more pressing conflicts elsewhere in the world. Moreover, the chances of leveraging the desire of the majority of the region's population for closer links to Western Europe to fundamental change depend, above all, on the prospect of eventual membership being real. As the European Union has become increasingly embroiled in internal matters – the sovereign debt crisis, responding to an unprecedented influx of migrants and Brexit – that prospect has also faded. As a result, reform processes have stalled, increasingly authoritarian elites have entrenched themselves in power, and irredentism has returned to the political agenda.[9]

During the Summit in Warhaw it was noted that the Western Balkans is a region that is of strategic importance to which the alliance pays proper attention. Democracy values, the rule of law, domestic reforms and good neighborly relations are of vital importance to regional cooperation. Euro-Atlantic integration of the region was also emphasized in the final communique of the summit. NATO stressed that decisions on enlargement will depend solely on NATO and that each aspirant will be evaluated based on its achievements.

With regard to Serbia which though with no aspirations for membership, is a partner country, NATO has stressed the importance of "dialogue between Pristina and Belgrade" that EU facilitates and has encouraged both countries to implement agreements. On 24 January 2016, the European Union convened a meeting of Prime Ministers and Presidents in the framework of its Belgrade-Pristina Dialogue to try and rebuild confidence in the EU-led process aimed at normalising relations between Serbia and Kosovo.[10]

In this respect, the efforts of the Kosovo authorities to provide "safety and security for all its citizens" were welcomed. A new Kosovo Court, the Specialist Chambers and Specialist Prosecutor's Office, with jurisdiction over certain crimes against humanity, war crimes and other crimes, which allegedly occurred between 1 January 1998 and 31 December 2000, became operational on 1 January. However Kosovo has no contractual relationship with NATO mainly due to four NATO member states that are non- recognizers (Spain, Rumania, Slovakia, and Greece).

Relations between Bosnia and Herzegovina (BiH) and NATO have a very interesting history since the end of the Cold War which includes the NATO intervention through post-Dayton "to impose peace," "missions to maintain peace," defense reform and assisting BiH's aspirations for NATO membership. The complex internal structure and political system burdens the processes between BiH and NATO. As a country it has two distinct

---

[9] Christopher Bennett, (2017) "Backsliding in the Western Balkans" in NATO Review Magazine.
[10] "Serbian train sparks escalation in tensions with Kosovo". BBC News Services. January 14, 2017. http://www.bbc.com/news/world-europe-38625872 (accessed: 02.02.2017).

entities that reflect the different strategic approaches from interested international actors in the region. Since 2008, there have been new policies and the impact of global actors has become more visible and has led to a change in the relations among the internal actors in BiH. However, according to an official standpoint, the strategic goals for NATO membership have not changed. On the one hand, internally, the components of the Federation define their strategies, which express their varying interests. On the other hand, the institutional, international community exists as the strongest actor in the internal processes as part of the peace process in BiH. However, the real impact of 1995 and the beginning of the peace process have changed, reflecting the ambiguity in the relationships between local players. Because of unresolved key internal relations, the process of democratization and efficiency of institutions in BiH are at stake. All this produces an uncertain atmosphere that is not an appropriate environment to a strategic approach to NATO.[11] The problem of Bosnia and Herzegovina is that the Serbian entity in the state is skeptical of NATO membership.[12] In this context, political will by the leaders in Bosnia and Herzegovina is required to demonstrate support for NATO membership. Hence, the progress made for the registration of real military property of the state to allow the country to deliver the promise made at the meeting of the foreign ministers of NATO member states held in Tallinn in April 2010 is welcomed, which is to activate the first cycle of the Membership Action Plan.

Bosnia and Herzegovina has to face painful reforms in the defense sector. Macedonia has met the criteria for membership since 2008. The only problem then was the resolution of the "name dispute" with Greece. Meanwhile Macedonia has received two additional conditions. Albania imposed the issue of "full implementation of the Framework agreement", whatever that means, and Bulgaria the signing of the agreement on "good neighborly relations".[13] During the Warsaw Summit, Macedonia received another condition, resolving the political crisis and the rule of law as a condition for integration in the Alliance. As things stand, Macedonia, rather than closer to NATO, is getting farther away from NATO membership and has been reflected in the decrease of public support for NATO membership. In addition, it has been reiterated that the invitation will be delivered to the Republic of Macedonia as soon as a mutually acceptable solution with Greece over

---

[11] The United States imposed sanctions on Dodik on 17 January for obstructing the Dayton Peace Agreement.

[12] "Dodik accuses NATO of interfering in Bosnia's internal matters" Europe Balkan News. January 08, 2017. https://eblnews.com/news/balkan/dodik-accuses-nato-interfering-bosnias-internal-matters-51198 (accessed: 02.03.2017).

[13] Warsaw Summit Communiqué Press Release (2016) 100 Issued on 09 Jul. 2016. http://www.nato.int/cps/en/natohq/official_texts_133169.htm#piracy (accessed: 15.11.2016).

the "name issue" within the UN is reached. In addition to requiring an early solution to the dispute with Greece, further efforts to develop good neighborly relations are required. Macedonia should also build a functional multi-ethnic society and fully implement the Ohrid Framework Agreement. What is new is that the Alliance is concerned about political developments that further push the country away from NATO values. In this sense a full implementation of the Przino's Treaty is necessary as a framework for a sustainable solution to the political crisis in the country.[14] Now all parties involved in the process are required strengthening the rule of law, free media and an independent judiciary. Regarding the cuurent political crisis NATO Segretary General Jens Stoltenberg emphasizes that NATO has an interest in "upholding... the political values and principles upon which the alliance is based" and urged political leaders in Skopje to take the necessary steps to form a government quickly.[15]

In May 2016 Montenegro signed a protocol of accession. This protocol is being reviewed by the Member States in accordance with their national procedures after which Montenegro will become the 29th member of NATO. However, according to the Government of Montenegro data, the opinion poll towards NATO accession support is still low. The survey that took place in January 2016 notes that 47.3% of the citizens of Montenegro support the country's membership in NATO, 37.1% oppose and 15,6 of them are undecided.[16] Pending the completion of the ratification procedure Montenegro is expected to continue with the reform process and to strengthen its contribution to the security of the Alliance. After the joining of Bulgaria, Romania and Slovenia in 2004 and Albania and Croatia in 2009, the decision on NATO membership for Montenegro is a step towards the consolidation of Southeast Europe. The decision is also a signal that NATO enlargement is not frozen and that the doors are open for Macedonia and Bosnia and Herzegovina in the future. However in NATO there is a consensus that in the short term possibilities for further enlargement of the Alliance are limited.

Moreover, the international peacekeeping forces – KFOR in Kosovo, which has 4,300 troops, and EUFOR in Bosnia, which has 600 soldiers – have mandates and contingency plans to maintain a safe and secure environment. Nevertheless, an increasingly tense situation has to be monitored closely, greater diplomatic attention must be focused on

---

[14] In the Republic of Macedonia, EU and US negotiators facilitated an agreement between political parties which led to early elections in December 2016.

[15] http://balkanist.net/nato-chief-pledges-the-alliance-has-no-interest-in-macedonias-internal-political-process/

[16] Government of Montenegro. "Latest opinion poll: 47.3% of citizens support Montenegro's NATO accession" 01.02. 2016 http://www.gov.me/en/News/157178/Latest-opinion-poll-47-3-of-citizens-support-Montenegro-s-NATOaccession. html (accessed: 20.10.2016).

the region and new strategies developed to address the many outstanding issues.[17] In order to strengthen the southern flank NATO must continue with the implementation of the open door policy even after the accession of Montenegro. Macedonia and Bosnia and Herzegovina should sooner rather than later be encouraged to join the Alliance.

Conclusion

Having in mind the complex geopolitical situation in the Western Balkans, the Euro-Atlantic institutions must step in sooner rather than later in order to provide a clear strategic message and provide membership and integration prospect to those countries in the region. It would make it clear also to other actors which are interfering in every occasion and opportunity that can be found in the region. Acknowledge that closer cooperation and integration with NATO requires more research on the specific requirements on each country. Therefore, harmonize and prioritize the policies and projects with regional initiatives in regards to institutional capacity building in the Western Balkans and therefore avoid overlapping. NATO must help and fast track the integration of the remaining Western Balkan countries into its umbrella before the region slips away in dismay. Interfering right in the NATO's and EU's back yard, Russia is expanding its sphere of influence creating ambiguity amongst the countries that are already confused about their place in the midst of the global crisis.[18] A swift integration of the region into NATO means that the new members could continue their democratic reforms and economic developments while inside the realm of the Euro-Atlantic institutions as the future is clearer rather than adding more requirements to the pre-membership list which in turn would provide opportunities for other stakeholders to impact the process.

NATO should keep the enlargement policy alive by supporting the aspirant countries from the Western Balkans with concrete measures to encourage reforms in this region. In addition, a suggestion to readdress the open door policy in the Western Balkans, with an alternative decision making process, clearer provisions for Macedonia, Bosnia and Kosovo. That will give incentives to achieve successful reforms, utilize the momentum to speed up domestic reforms. On the other side politicians from the region should strengthen cooperation in political and security area. They should show more dedication to common goals and take over ownership of the processes so they are easier to implement rather than have imposed processes. In that regard set real and achievable goals, being aware that domestic reforms should be conducted for the sake of the countries, not for other's sake.

[17] Christopher Bennett, (2017) "Backsliding in the Western Balkans" in NATO Review Magazine.
[18] Pivovarenko, Alexander, "Modern Russia in the Modern Balkans: Soft Power through Investment" Russian International Affairs Council May 23, 2014. http://russiancouncil.ru/en/inner/?id_4=3744 (accessed: 02.01.2017).

References

- Bennett Christopher (2017), "Backsliding in the Western Balkans", NATO Review Magazine.
- "Dodik accuses NATO of interfering in Bosnia's internal matters", Europe Balkan News, January 08, 2017. https://eblnews.com/news/balkan/dodik-accuses-nato-interfering-bosnias-internal-matters-51198 (accessed: 02.03.2017).
- European Neighbourhood Policy and Enlargement Negotiations. December 6, 2016 accessed https://ec.europa.eu/neighbourhood-enlargement/ (: 02.01.2017).
- "Latest opinion poll: 47.3% of citizens support Montenegro's NATO accession" 01.02. 2016, accessed http://cherna.gora.me/government/latest-opinion-poll-47-3-of-citizens-support-montenegros-nato-accession/.
- Pivovarenko, Alexander. "Modern Russia in the Modern Balkans: Soft Power through Investment" Russian International Affairs Council May 23, 2014, accessed on: http://russiancouncil.ru/en/inner/?id_4=3744.
- Relations with Russia 27 Oct. 2016 NATO, accessed on: http://www.nato.int/cps/en/natolive/topics_50090.htm.
- "Serbian train sparks escalation in tensions with Kosovo". BBC News Services. January 14, 2017. http://www.bbc.com/news/world-europe-38625872 (accessed: 02.02.2017). Warsaw Summit Communiqué Press Release (2016) 100, issued on 09 Jul. 2016, accessed on: http://www.nato.int/cps/en/natohq/official_texts_133169.htm#piracy.

MACEDONIAN SECURITY CROSSROAD IN 21 CENTURY, CONTEMPORARY SECURITY CHALLENGES

Mladen Trajkov, MA
E-mail: mladen.trajkov@gmail.com

Aleksandar Nacevski, MA
E-mail: aleksandarnacevski@hotmail.com

Valentiva Vchkova, MA
E-mail: valentina_vckova@yahoo.com

ABSTRACT

The article aims at an analysis of the security challenges that the Republic of Macedonia has been facing at the end of the 20th and the beginning of the 21 century. The basic premise is that these contemporary challenges are a product of the geopolitical position of the Balkans as a crossroad between East and West and the mutual impact of the clashing interests of East and West. Starting with the analysis of the geopolitical challenges in the Balkans and Macedonia, we move towards presentation of the contemporary security challenges, such as terrorism, cyber terrorism, drugs and weapons trafficking, recruitment in foreign armies and the refugee crisis. The internal security challenges are presented in the third part of the article in more depth. Finally we present ways and possibilities for prevention and/or dealing with these contemporary challenges.

Keywords: security challenges, geopolitical crossroad, Macedonia

Introduction

In the XXI century global security trends are burdened with many security challenges among which the most remarkable ones presenting the biggest problem are: terrorism, cyber-attacks, drug trafficking, arms trade and the refugee crisis. Because the geopolitical position of the Republic of Macedonia is in the Balkan crossroads, it is expected that all of this, or at least most of these security challenges have direct impact on

the security of the state. Even greater dangers for the Balkans are the unfinished process of formation of national states, their recognition and, of course, ideas and fantasies about forming large mononational countries. In that context, the closer and wider environment, the process of development of the Republic of Macedonia is on the road to European Union (EU) and NATO while solving huge neighborhood and other obstacles.

1. Geopolitical Challenges in the Balkans and Macedonia

There has been a lot of turbulence and a tumultuous historical framework on the Balkan peninsula in the past 25-30 years, in which very unexpected and unwanted processes occurred for all open-minded citizens: the decay of Yugoslavia, flourish of nationalism, formation of small and weak nation states, wars, refugee crises, collapse and re-establishment of security systems, human suffering, destruction, economic crisis, etc. In such a small space as the Balkan Peninsula is, all these security challenges enabled fast and smooth installation of organized crime. Above all, for providing necessary weapons to conduct wars, the required drugs, the required professional fighters (Dogs of War) from around the world, especially from the Muslim world with a large penetration of religious fanatics (jihadists) which enable penetration and installing of terrorism in a front door at the gates of Europe and of course, human trafficking that is gaining momentum. Balkans was and remain a powder keg of Europe and the world, because here were the largest fights in I and II World War. Here the interests and cultures of East and West overlap, meet, clash and the Balkan region is in constant controllable or sometimes uncontrollable instability. In that kind of constellation of security challenges, field of neighborly denial, poor security cooperation, bilateral and regional, turbulent beginning of XXI century happen in the Balkans.

2. Contemporary Secuirty Challenges in the 21st Century

The general impression of the Balkans is that it was not ready to welcome the tumultuous early XXI century, in which all modern security challenges become too large, intractable problem for independent action of security structures. That security conditions, against their will forced security services to have to cooperate at the bilateral, regional and international level. Cooperation primarily refers to the exchange of security information on people and events that are a common problem of the wider community and address the challenges that will process a little wider:

- Terrorism
- Cyber attacks
- Illegal trafficking in drugs
- Illegal arms trade
- Serving in a foreign army
- Refugee Crisis

Terrorism

Terrorism, as never before, in the second half of XX and early XXI century is a world number one problem that everyday extends its tentacles and threats everywhere, like some octopus with 1000 feet and hands. Phenomenon of terrorism has changed in terms of the objective: in the beginning the intention was to show that there is an organization but today the intention is to show its power, murderous, ruthlessness and more. Initially, the target were the state security organs and their officials, some politicians and innocent citizens, but today they want to cause more casualties, material and immaterial damages which acquires and changes public opinion about an organization, condition, attract new members, financiers, blackmail governments, powerful corporations and others.

Cyberattacks

The development of new technologies and expansion and industrialization in the world, enabled rapid development in electronics, telecommunications, communication facilities, utilities. The banking sector will have to financially secure all of these technological challenges. These extra fast development processes are very positive, but on the other hand they are extremely negative because they faced with unwilling cumbersome security systems which should cope with the new modern technological challenges. Skilled users of new technologies, are striving daily to harm the national and international organizations and thereby jeopardize world safety. The most dangerous are the cyber attacks that aim breaking down the security system of the countries, financial institutions, etc., where is impossible to calculate damages. Examples of this groups are "Anonymous"[19], "Wikileaks" and other marked and named and unnamed groups and structures. The biggest cyber attacks in history are: "Titan Rain", "Moonlight Maze", "Presidential Espionage", "750.000 american zombies", "Worldwide Web Slowdown"[20]. Examples for this kind of actions can

---

[19] http://mkd-news.com/vojnata-na-idninata-veke-pochna, како и http://vistinomer.mk/neis-polneto-ne-e-vospostaven-tsert-tim-za-upravuvane-so-sajber-napadi/
[20] http://www.fakulteti.mk/news/13-07-14/najgolemite_sajber_napadi_vo_istorijata.aspx

be found in the last presidential campaign in the United States and the election of Donald Trump for president[21]. Cyber attacks against "Yahoo" affected more than 1 billion users[22]. After all, Europol and other security organizations worldwide fight against this evil and they managed to crack the largest cyber network Avalanche (Avalanche)[23]. These are new and modern challenges and the main threats to information security today, writes Bakreski, and he presented the following types of threats:

> 1. Cyber - terrorism;
> 2. Cyber - organized crime;
> 3. Information sabotage (the external and internal structures);
> 4. Cyber - Crime (external and internal structures);
> 5. Cyber - hooliganism (external and internal structures)[24].

About new and contemporary threats to Macedonia writes Mircheska, where she is presenting definitions of cyber terrorism, cyber crime, and the legal framework for the fight against this kind of threat in the Republic of Macedonia and provides an example of cyber attack called "Estonian case"[25].

Illicit trafficking in drugs

Contemporary challenge of the second half of XX and early XXI century presents the growing production, trade and use of drugs and precursors. Even more tragic is that users begin at younger age, even as pupils in primary and secondary school. The relevance of this contemporary challenge is even greater knowing that as an individual element of organized crime it operates autonomously and independently but is closely linked to other elements of organized crime, primarily because of the huge financial effects that can be achieved with it. This paper will only present effects in the fight against this modern evil in the country, which are not large, because it is assumed that the real figures are about ten or more times higher.

---

[21] http://mkd-news.com/sajber-vojna-megu-sad-i-rusija-hakerite-vlegoa-vo-kreml/

[22] http://standard.mk/sajber-napadite-protiv-yahoo-zasegnale-nad-1-milijarda-korisnici/

[23] http://radio105bombarder.com/svet/razbiena-najgolemata-svetska-sajber-mrezha/

[24] Bakreski Oliver, "New Security Challenges", Police Academy Annual , 2007, p.13

[25] Mircheska Nadica, "Cyber terrorism - a modern form of terrorism as Republic Macedonia is vulnerable to cyber terrorism", Almanac of the Faculty of Security, 2010, p.122.

Table. 1 Statistical data on criminal offenses against human health related to the unauthorized manufacture and sale of narcotic drugs, psychotropic substances, precursors and providing of their use[26].

year	2007	2008	2009	2010	2011	2012	2013	2014	2015
Crimes against public health									
Unauthorized manufacture and sale of narcotic drugs, psychotropic substances, precursors	354	317	378	522	484	437	465	443	436
Enable usage of narcotic drugs, psychotropic substances and precursors	46	50	57	78	65	74	97	87	60
Total	400	367	435	600	551	511	562	530	496

Illicit arms trade

Besides the approved and legally regulated arms trade, the danger in the modern world and in the Republic of Macedonia is illicit arms trafficking. Restless Balkans, which until about 15-20 years ago was a ground for wars, the loss of lives, property and destruction, nowadays still is a market where you can buy and sell weapons. In Albania, in 1997 there was a collapse of the state and the population stole from military warehouses large amount of any type of weapon. According to Salim Kjerimi "in Albania, aggressive masses stole from the open depots of the Armed Forces of Albania 2 million assault rifles like "AK-47" and "AK-74", including tanks, armored vehicles, cannons and other hard antiaircraft and antipersonnel weapons, 1.5 billion bullets and other munitions, 3.5 million offensive and defensive hand grenades, 1 million anti-personnel mines, 840,000 cannon ammunition of various calibres, as well as 350,000 tons of dynamite and Tritol."[27] In this context we can use Babanovski`s book, "ONA, Terrorist paramilitary in Macedonia", which has published many details of Albanian weapons warehouses and other activities on the topic of illicit arms trafficking.[28] After sedation and normalization of the situation in the Balkans, this weapon finds its way to the new crisis and war regions bringing enormous profit for traders. That the situation with the illicit arms trade flourishes show us the last

---

[26] The table is prepared according statistic data released by the State Statistical Office of the Republic of Macedonia in its Statistical reviews (Perpetrators of crimes for the years 2007-2015).
[27] The text is taken from an interview with historian and career diplomat Salim Kerim: "20 godini podocna: što se sluči vo Albanija vo 1997 godina?", Utrinski vesnik, accessed http://utrinski.mk/?ItemID=2D97BDD3C74615449EB32BF54E91C40B
[28] Ivan Babanovski, NLA Terrorist militias in Macedonia, Veda - Skopje, 2002, p.60.

coordinated police action led by Europol and conducted in 11 countries: Spain, Belgium, Britain, Bulgaria, Cyprus, Finland, Greece, Netherlands, Poland, Romania and Sweden, where 664 weapons and 34,000 pieces of ammunition, bombs and silencers were seized.[29] According to presented material, we can expect a large quantities of illegal weapons to exist in the Republic of Macedonia, presented by official statistics from the National Institute of Statistics.

Table. 2 Statistics for criminal offenses against public order, unauthorized manufacture, possession, mediation, trade with weapons or explosives[30]

year	2007	2008	2009	2010	2011	2012	2013	2014	2015
Crime against public order and peace									
Unauthorized manufacture, possession, mediation, trade with weapons or explosives	203	220	199	192	180	168	165	141	127

According to the chart review you can clearly see the downward trend of the criminal charges for trafficking in Macedonia, which could be the result of reduced police efficiency, or reduced demand and supply of weapons, or perhaps something else.

Serving in a foreign army

Open military hot spots of the Middle East in Afghanistan, Iraq, Syria and their closest surroundings and especially the activities of "Al Qaeda" and "Islamic State or ISIL or ISIS," especially on the popularization of their activities through the Internet and other mass media contributed to gaining adherents and followers around the world. This contributed to the popularization of the involvement of a growing number of foreign fighters in the lines of these terrorist organizations.

This is about a two-way process and source of radical primarily Muslim ideas from this part of the world all over the world and the second process is to find followers around the world and involvement in the activities of these terrorist organizations, whether on the battlefield, either in the process of spread of ideas or in the process of recruiting new fighters and financing activities.

---

[29] The article is entitled: 245 people across Europe arrested for trafficking in weapons, 24/01/2017, http://daily.mk/svet/uapseni-245-lica-shirum-evropa-trgovija-oruzhje
[30] The table is prepared according statistic data released by the State Statistical Office of the Republic of Macedonia in its Statistical reviews Perpetrators of crimes for the years 2007-2015

Until recently the Balkans was a military hot spot but today Balkans becomes a major exporter of fighters from the Balkan countries that are joining the ranks of "Al Qaeda" and "Islamic state." Because the problem with this activity began to concern not only the crisis region of the Middle East, but also the other parts of the world, states have attempted to address this problem by adopting appropriate legislation.

Republic of Macedonia, following the recommendations of international security organizations and their needs for changes in their own criminal legislation, made changes to the Criminal Code, where was added a new Article 322-A, entitled "Participation in a foreign army, police paramilitary or paramilition formations".[31] These legislative changes governing participation in a foreign army or police, through a basic paragraph and nine qualifier forms and in terms of penalty policy for the basic paragraph the punishment is at least 5 years in prison and for the qualifier types it changes and can be at least 4 years p. 4, 1 to 5 years in prison for p. 6, or the offender may be released provided legal solution. Legal solution which occurs as a reflection of the increased volume of outgoing Macedonian citizens to foreign battlefields was confirmed by President Gjorge Ivanov who said: "Macedonia currently has 110 fighters in Syria, 25 dead and 69 are returned to the country."[32] Precisely to prevent these persons returnees from war regions participated and returned to Republic of Macedonia, security services undertook a number of activities and brought two operating actions: Cell[33] and Cell 2[34], to find, capture and bring to court the persons who participated in various ways in foreign armies. It is expected that bringing in front the judicial bodies of the participants in such activities, can have preventive significance than people thought to go and participate in foreign battlefields, but it doesn`t solve the problem with these fighters. Another reason is the motive that forced these people to leave on foreign battlefields: ideology, money, desire to kill or something else. That elimination of these causes may contribute to a reduction in support for this kind of radicalism in the world and certainly in our country.

---

[31] The changes were made in: Law on amendments to Criminal Code, Official Gazette No.132 of 05.09.2014

[32] Available at: http://www.dw.com/mk/%D0%BC%D0%B0%D0%BA%D0%B5%D0%B4%D0%BE %D0%BD%D0%B8%D1%98%D0%B0-%D0%BD%D0%B5 %D1%81%D1%82%D1%80%- D0%B0%D0%B2%D1%83%D0%B2%D0%B0-%D0%BE%D0%B4-%D0%B1%D0%B0%D0%BB %D0%BA%D0%B0%D0%BD%D1%81%D0%BA%D0%B8-%D1%84%D1%80%D0%BE%D0%B- D%D1%82-%D0%BD%D0%B0-%D0%B8%D1%81%D0%BB%D0%B0%D0%BC%D1%81%D0%BA% D0%B0%D1%82%D0%B0-%D0%B4%D1%80%D0%B6%D0%B0%D0%B2%D0%B0/a-18887153, (accessed on 20.01.2017)

[33] http://www.akademik.mk/sluchaj-kjelija-obvinetite-za-uchestvo-vo-stranska-vojska-ja-priz-naa-vinata/, and http://revolucionermk.com/presudi-za-obvinetite-vo-sluchajot-kelija/

[34] http://kurir.mk/makedonija/vesti/uapsenite-vo-kelija-2-so-golemo-teroristichko-iskustvo/

Refugee crisis

Processes refugee crisis began with the "Arab Spring" and intensified with the appearance and activities of the terrorist organization "Islamic State" in Syria. Balkan processes of the refugee crisis enabled certain criminal structures, alter or supplement their daily activity, with, at times very useful and financially rewarding activity, human trafficking and migrant smuggling.

At the same time, this process is used by radical terrorist structures to shift their radical fighters around the world as refugees, whereas later they are able to use them for their own goals and ideas. For the presentation of the situation in this criminal activity, statistical indicators that are presented by the National Commission for Combating Human Trafficking and Illegal Migration for a period of six years, from 2010 to 2015, are used. Statistical indicators are perhaps small because "dark figure" in this activity as well as in other areas of organized crime is high, primarily because of the large amounts of funds in circulation and of course because of corruption and the involvement of representatives of the police and other state structures in these organizations, quote: "During 2014 MOI of RM has conducted 6 investigations involving 8 police officers (of which 1 deputy superintendant of SoI 1 Commander of the police station and other police officers). Criminal charges are filed to the competent public prosecutor against all 8 and 7 of them have been given detention. By the Sector for Internal Control and Professional Standards were initiated procedures for establishing disciplinary responsibility."[35] Because in addition to activities with the refugee crisis appears particularly dangerous trafficking, represented are some statistical indicators for this activity.

---

[35] National Commission for Combating Trafficking in Human Beings and Illegal Migration, Annual Report 2014, p.23

Trafficking[36]

Table. 3 Criminal charges, offenders and victims of trafficking in 2010

Criminal charges (CC)	Criminal law of RM	offenders	victims
КП со КУ бр.27/10 од 27.04.2010	Чл.418-г, par.1,2,3 and 418 –б, par.1	7	2-minors
КП со КУ бр.44/2010 од 11.06.2010	Art.418 –г	2	2- minors
КП со КУ бр.64/2010 од 16.09.2010	Art.418 –г, par.1,2	3	1- minor
Potential victims - Macedonian nationals exploited abroad (deceptive marriage)			5- minors
CC submitted by SIA Stip (under investigation)	Art.188 и Art.192		2- minors
TOTAL	3-КП по 418 – г	25	12

Table. 4 Brought criminal charges, offenders and victims of trafficking in 2011

Submitted CC	Criminal law of RM	offenders	migrants
27	Art. 418 – б	44	95
2	Art. 418 –в	8	78
TOTAL 29		52	173

Table. 5 Brought criminal charges, offenders and victims of trafficking in 2012

Submitted CC	Criminal law of RM	offenders	victims
3	Art. 418 – а	6	5
1	Art. 418 – г	1	3
TOTAL 4		7	8

Table. 6 Brought criminal charges, offenders and victims of trafficking in 2013

Submitted CC	Criminal law of RM	offenders	victims
1	Art. 418 – г	1	1
TOTAL		1	1

---

[36] Tables have been prepared according to the data presented in the 2010-2015 annual reports of the National Commission for Combating Human Trafficking and Illegal Migration

Table. 7 Brought criminal charges, offenders and victims of trafficking in 2014

Submitted CC	Criminal law of RM	offenders
2	Art. 418а	2
79	Art.418 -б	122
4	Art.418-в	23
1	Art.418 -г	2
TOTAL 86		

Table. 8 Brought criminal charges, offenders and victims of trafficking in 2015

Submitted CC	Criminal law of RM	offenders
2	Art. 418а	3
129	Art.418 -б	164
2	Art.418-в	23
1	Art.418 -г	3
25	Art.418 -д	39
Total 159		232

Smuggling of migrants[37]

The second also very profitable activity in the processes of the refugee crisis is smuggling migrants, which are billed for several hundred euros each person. Because of such easy money and poverty, a number of citizens and of course employees of customs, the police, the army, are included in this illegal activity, as direct perpetrators or as "corrupt" accomplices. In the next rows due to spatial features only one tabular statistics on this phenomenon is represented.

---

[37] The table is prepared according to the data presented in the 2010-2015 annual reports of the National Commission for Combating Human Trafficking and Illegal Migration

Table. 9 Overview of registered criminal offenses and perpetrators of migrant smuggling in the period 2010-2015.

Year	Criminal offenses	Offenders
2010	33	55
2011	8	19
2012	39	70
2013	49	97
2014	94	166
2015	120	212
TOTAL	343	619

Internal Security Challenges

Since its independence up to date, the Republic of Macedonia has continually been facing minor or major security challenges that directly affect the development and progress of this young and fragile country. Briefly here are represented the key challenges: the looting of weapons from military warehouses in Albania since 1997 as an external factor with internal influence, Kosovo refugee crisis in 1999 when in Macedonia we received 350,000 refugees (Albanians and Roma people), of which good part stayed here and remained in marriage, business interests and many other ways and reasons, the 2001 conflict, with the weapon and ideas from Albania, interests and fighters from Kosovo and beyond, continuing internal political conflicts and requirements - discontent of the Albanian population and top of which political turmoil from 2015 to 2016 with (bombs of Zoran Zaev) and everything else result thereof. Of course, no less significant and ignorable are corruption, partisation, public procurement and profits of tenders, failure of the state system and many other reasons. The problem with longer term obstruction of the parliament by SDSM, "colourful revolution" protests in 2016 and other specified events and activities. A special place in the internal challenges are several external factors: Greece does not recognize the name and directly affect the entry of Macedonia into the European Union and NATO, Bulgaria does not recognize people and language, Serbia does not recognize the church and Albania and Kosovo are initiators and external mentors of the activities of the Albanian population in Macedonia and beyond (common Albanian platform for political parties in Macedonia 2016/2017), which directly interfere in the internal affairs of the country. No less important are the burning of the Macedonian flag in Albania and Kosovo over the years, but as their reflection to Macedonia.

**Ways and possibilities for preventing and dealing
with contemporary security challenges**

Capacity-building and overall security system of the country will enable timely and above all preventive measures and actions to prevent or neutralize any terrorist activities in the country. On the other hand the growing trend of the development of telecommunications technology, opens up even greater opportunities for development and activities of organized crime, especially terrorism and certainly well thought-out and coordinated cyber attacks in the world and in the country. Because of such opportunities, there is necessity for rapid formation of an agency that would care for the protection of vital security systems, systems of government and public institutions, the banking sector and of course the citizens of the possible misuse of new technologies, that require many financial expenses, other resources and above all relevant staff.

In the area of human trafficking and illegal migration in the country, the National Commission for Combating Trafficking in Human Beings and Illegal Migration in the Republic of Macedonia, prepared during 2006: Strategy for Combating Trafficking in Human Beings in the Republic of Macedonia, National Action Plan to combat human trafficking and illegal migration in the country, the Action plan to combat child trafficking in the country. For this purpose, harmonized legislation, raised and harmonized international and regional police cooperation and certainly provided concrete steps for training staff to deal with this kind of criminal activity. In the process of education arevincluded: IOM, OSCE and the Ministry of Interior. Regarding the illicit arms trade is necessary to eliminate the reasons that cause this phenomenon and they are "socio-economic factors and political factors design, and certainly geostrategic position that can not be changed. "In terms of organized crime and its influence in the Balkans and Macedonia more can be found in Milosheska`s and Kotovcheski`s issues. Problems with veterans who served in foreign armies and police forces should primarily be addressed preventively before anyone going to the battleground and if it s not achieved, it is necessary after their return. It is important to eliminate the causes and motives that drive these people to go to the battlefield and then, of course, much easier to overcome this danger. The process with the refugee crisis we, as a small and weak state, can not resolve, but we can make a personal contribution to the allied problem solved together with larger states. In the area of the Republic of Macedonia is ours to provide normal conditions of those refugees who are stuck on our territory and their integration into modern societies in Europe. As to the overall contemporary challenge of the XXI century for Macedonia, it is necessary to strengthen the institutions of the state, their professionalism, cooperation and coordination at all levels; internally, bilateral and multiralateral, local, regional and international levels, especially in the field of security.

Conclusion

At the end, as a conclusion we can emphasize a few points. Necessity of strengthening, development, upgrading, continuous synchronization and cooperation of all security structures with other institutions that have significant meaning and all auxiliary elements of the security services (followed by joint exercises and communication activities). On the other hand, it is continuous technical and technological advancement and personnel that will be incorporated in a system of lifelong training and staff development. The third thing is the good and continuing neighboring, regional and international cooperation of state, institutions and citizens in order to increase security. Fourth, and perhaps most important is internal cohesion for overcoming and easier handling with all issues, especially for contemporary security challenges.

Bibliography
Books and articles

Бабановски И., (2002) ОНА Терористичка паравојска во Македонија, Скопје: Веда.

Бакрески О., (2007), "Нови предизвици за безбедноста", Годишник на Полициската академија, Скопје.

Велани Х. К., и Нухун Џ., (2008), Применета криминалистичка анализа, Скопје: Табернакул.

IOM the UN Migration Agency, Compilation of available data and information, reporting period 1 Dec 2016 - 11 Jan 2017

Канцеларија на Обединетите Нации за дроги и криминал (2010), INODC Трговија со луѓе и криумчарење мигранти, Упатство за меѓународна соработка.

Котовчевски М., (2007), „Организираниот криминал – најсериозна закана за националната безбедност на Република Македонија и за нејзините евроатлански интеграции", во Република Македонија помеѓу самитот во Рига и членството во НАТО, Скопје, Министерство за одбрана на Република Македонија.

Малиш Саздовска М., (2005), Прирачник за разузнавачки циклус, Скопје: Јофи-скен.

Мек-кју К., (2009) Проучување податоци и предвидувачка анализа собирање разузнавачки податоци и криминалистичка анализа, Скопје: Табернакул.

Милошевска Т., (2011) „Организираниот криминал како безбедносно-политичка и дестабилизирачки фактор за развој на општествата во транзиција (студија на случај-Република Македонија)", Безбедносни дијалози, бр.4.

Министерство за одбрана на Република Македонија, Република Македонија помеѓу самитот во Рига и членството во НАТО, Скопје

Мирческа Н., (2010) „Сајбер тероризам – современ облик на тероризмот колку Република Македонија е ранлива од сајбер тероризмот", Годишник на Факултетот за безбедност - Скопје.

Митиќ К. и Василевски Г., (2013) „Недозволена трговија со оружје – облик на организиран криминал како дестабилизирачки фактор врз безбедноста на државите во Југоисточна Европа", Современа македонска одбрана бр.25.

Мојаноски Ц., (2012) Методологија на безбедносните науки –основи- книга прва, Скопје: Факултет за безбедност.

Народен правобранител – Национален превентивен механизам, (2014) Годишен извештај 2014 година - Национален превентивен механизам, Скопје

Народен правобранител на Република Македонија, (2015) Годишен извештај за степенот на обезбедувањето почитување, унапредување и заштита на човековите слободи и права, Скопје

Трост J., (2004) Како се пишува научен труд со примена на акрибија, Скопје: Аз-Буки.

Херман М., (2009) Моќта на разузнавањето во мир и во војна, Скопје: Академски печат.

Џуклески Г., (2005) Прирачник за соработничка мрежа, Скопје: Јофи-скен.

POLITICAL WILL AS A PRECONDITION FOR EFFECTIVE PARLIAMENTARY OVERSIGHT OF THE REPUBLIC OF MACEDONIA'S SECURITY SECTOR

Sevilj Muaremoska Abduli Ph.D.
Faculty for detectives and security, FON University – Skopje
E-mail: sevil.muaremoska@fon.edu.mk

Naser Etemi Ph.D
Faculty for detectives and security, FON University – Skopje
E-mail: naser.etemi@fon.edu.mk

Abstract

The political will is an essential prerequisite for achieving effective parliamentary control. The importance of this requirement is especially emphasized in the countries with fragile democracies where the members of the parliamentary majority refer to as "party soldiers" to the interests of the mother party which is put before the social interests of the state and thus intellectually do not penetrate deep into the core of specific questions to control if they do not concern their political party. There are several factors that influence the (non) existence of political will of lawmakers to perform effective oversight of the security sector. The problem of (non) existence of the political will of lawmakers is closely connected to the (non) existence of the authority of parliament as an institution, also the (non) existence of the personal integrity of parliamentarians, and the degree of democracy and professionalism of deputies, especially with the political priorities which are put ahead by deputies and so on.

This paper will elaborate in detail the importance of the political will to implement effective parliamentary control of the security sector. At the same time we will try to propose a way to minimize partisanship, politicization and the abuse in the functioning and implementation of mechanisms of parliamentary control of the security sector in a way that political will is a prerequisite for more effective parliamentary control, not a factor in the tactics and defocus of the control function of the parliament because of various political interests.

Keywords: political will, parliament, parliamentary control, security sector.

Introduction

Parliamentarism, as a product of the new century that historically originated in the British Isles, is a form of organization of power in which the relations among the state authorities are based on the principle of flexible separation of powers, as expressed through the equality of state governments through the cooperation of the legislative and executive and by having means for their mutual influence (Klimoski, 2007:379).

Parliament as a central institution of the parliamentary system is present in all pluralistic regimes without exception. In XIX century the parliament was considered the ruler of the country, but a number of factors have caused the power of parliament to pass in pursuit. Except as representative and as a constituent and legislative body, the Assembly of the Republic Macedonia also has two very important functions, such as: choice and control function.

• The Optional feature of the Assembly derives from its constitutional options, provided in Article 68 of the Constitution of the Republic Macedonia, to choose the members of the Government, judges of the Constitutional Court, members of the Judicial Council, judges, People's Attorney, prosecutor and the election, appointment and dismissal of other public functions established by certain laws.

• Control function - this function applies to constitutional opportunity for Parliament to exercise political control and supervision over the work of the Government and other public officials that are legally responsible to the Assembly of the Republic Macedonia. The control function of the Parliament is an important cornerstone for the democratic development of the country and prevention of arbitrariness and abuse in the exercise of constitutional and legal powers by the holders of power. Here I would mention the adoption of the budget as the most efficient means to control the work of the executive. Through the establishment of the funds available to the Government for the coming year, the Parliament has insight into the work of the Government in order proper and adequate budget spending. Other means of control of Parliament over the Government: parliamentary questions, interpellations, the question of confidence in the government, inquiries and oversight hearings.

In this regard it should be highlighted the implications of the famous John Stuart Mill that the role of the Parliament does not mean he can run the country, but to insist the country to be ruled by the best individuals.

The basic question that arises in this regard is which are the necessary democratic conditions for realization of the role of Parliament in the control and supervision of the institutions of the executive.

1. Basic requirements for conducting parliamentary control

If you take into consideration that the main role of Parliament is to "pass laws, act as a representative body, to supervise and control the work of the executive, to train politicians and contributes to preserving the legitimacy of the political system (Heywood, 2012:7), then it is understandable the need for these prerequisites for effective parliamentary control of the security sector in Republic Macedonia: well-defined constitutional and legal powers, resources and expertise and the existence of political will.

• **Constitutional and legal preconditions for parliamentary control of the security sector.** The constitutional and legal powers represent the first and most important prerequisite for the exercise of parliamentary control over the operations of the institutions of the executive. They originate from the basics of constitutional provisions then make the same more precise in specific legislation which create a kind of stable and healthy basis for the exercise of parliamentary activity, because "democracy must always be constitutional, the rules of the game must not be changed by the will of any majority, but they should be set as restrictions on the opinions and decisions and should be relatively immune to change (Joung, 1990: 93-94).

• **Resources and expertise as prerequisites for parliamentary control.** The key role in the exercise of parliamentary control have democratically elected members of parliament, which to respond to the challenge of monitoring and supervision need to have the necessary knowledge, skill and experience to exercise effective parliamentary control. But because such activity is a complex and extensive effort, often the inter parliamentary expertise is facing a shortage of staff in trying to implement effective parliamentary control and is much more smaller the number of parliamentarians that Parliament can rely in implementing specific form of control since diversity of scientific and professional spheres of coming parliamentarians. These difficulties are overcome by organizing appropriate training and education on effective use of the mechanisms of parliamentary control. But it involves a series of difficulties such as: (non) existence of political will (un) timely implementation of education and training (in) separation

of funds for implementing education and training and a range of other problems that are mutually closely related considering the fact that the parliamentary mandate lasts a certain period after its completion changing and Parliament members, after which again requires political will for timely new training and thus separating new funds for its implementation. However, theory and practice are agreed in the view that effective parliamentary control is best achieved by means of additional infrastructure to include qualified professional staff that provides sound advice on government proposals and by engaging experts and independent researchers and institutions that will provide detailed and objective analysis (Lunn, 2003:36).

• **Political will as a prerequisite for parliamentary control of the security sector.** Political will is an essential prerequisite for achieving effective parliamentary control, which according to democratic rules of functioning of the legislative power is one of its basic obligations. The existence or lack of political will among parliamentarians is often tied to the party discipline of deputies - members of one or another political party that according to their party affiliation is or are not interested in performing essential control over the work of the security sector. This particularly applies to parliamentarians belonging to the ruling party that are mostly indifferent to the efforts of the opposition to trigger a control mechanism. Thus, consciously passive control function of the parliament of the interests of the party in power no matter which party thus concerned. To overcome this situation, parliaments need to find ways to make efforts to minimize partisanship, politicization and abuse in the functioning and implementation of mechanisms for parliamentary control of the institutions of the executive (including security sector institutions), more nimble and more firmly perform control function and explore ways to reform in order to strengthen this function.

2. The political will to ensure efficient parliamentary control and oversight of the security sector

Political will is an essential prerequisite for achieving effective parliamentary control, which according to democratic rules of functioning of the legislative power is one of its basic obligations. The existence or lack of political will among parliamentarians is often tied to the party discipline of deputies - members of one or another political party that according to their party affiliation is or are not interested in performing essential control over the work of the security sector. This particularly applies to parliamentarians belonging to the ruling party that are mostly indifferent to the efforts of the opposition to trigger a control mechanism. Thus, consciously passive control function of the parliament of the interests of the party in power no matter which party thus concerned.

However, if we analyze a bit beyond, we see that there are several factors that influence the (none) existence of political will of lawmakers to perform effective oversight of the security sector. The problem of (none) existence of political will of lawmakers is closely connected to the (non) existence authority of parliament as an institution (non) existence of personal integrity of parliamentarians, the degree of democracy and professionalism of the deputies, and especially with political priorities ahead lay deputies and so on. So in countries in transition and those with fragile democracies the majority of parliamentarians, especially when their party is in power, show no desire to consistently carry out their parliamentary functions. Thus, as it is pointed out by Vankovska, Macedonian parliament reacts with delay on the situation and developments in the country, and the reasons for this kind of situation gives ability to locate the following disadvantages: Most of the lawmakers into "party soldiers" who strictly observe the party line and intellectually not penetrate deep into security issues. Then there is a shortage of civilians who have enough knowledge of security and defense; especially the parliament lacks expert staff.

Hence the fundamental problem is how to ensure greater interest of parliamentarians to the problems of citizens and accordingly how to reduce the influence of the party in their operations.

The lack of political will to control and oversight of the security sector can be a result of various factors, but most important are the party discipline and having or not having an interest in the "electorate" in parliament (Bakreski, 2008). Hence the problem of political will of lawmakers requires a serious, substantive and systematic approach to its solution. In order to provide such access must be analyzed the following key aspects that affect this situation in the Republic of Macedonia, which are:

• Electoral Model of the Republic of Macedonia. "The election system is one of the most important aspects of the parliamentary system having part in enabling or disabling the tyranny of the majority. The Republic of Macedonia is represented with the Dontov proportional system of closed lists, and the Republic of Macedonia is divided into six districts. Citizens vote for parties, and the selection of candidates is carried out by the parties themselves. According to this model, the candidates or political parties that won the most votes participate in the distribution of mandates. In this case, the citizen votes for a list of candidates (list of a political party or independent candidates) in which candidates receive mandates as many as received voices for their proposed list. This electoral system favors large parties and coalitions opposed to smaller ones. Thus, the possibility of disagreement in the caucuses themselves and any non-party compromise are minimized. Since deputies are accountable to the party that has made the electoral list and not directly to voters who voted that list. "Within the European Union only in 17%

(three of 18) of the member states with a proportional electoral system by applying the so-called closed lists, as a way of selecting parliamentarians practiced in our country. In contrast to the Republic of Macedonia, in the majority of European countries practiced proportional electoral system with open lists. The system of open lists (in multiple modalities) is applied in 83% (15 of 18) European Union countries that have proportional system, this includes Sweden, Finland, Denmark, Belgium, Netherlands, Luxembourg, Austria, Czech Republic, Slovakia, Poland, Estonia, Slovenia, Greece and Cyprus. 65% (22 of 34) of European countries that have proportional system, as it applies this system of open lists, here I would mention: Switzerland, Norway, Iceland, Bosnia and Herzegovina and Kosovo, and 44% (33 of 75) of the countries in the world to have a proportional electoral system. The system of open lists, means voters to rank the candidates of their choice rather than as given by the initiator. This system allows voters, despite voting for the candidate list or the party/coalition to choose one or more candidates from the candidate list (so-called preferential voting) and thus influence the final choice. The greater the number of preferential votes has the voter, the greater the opportunity to influence the selection of candidates and greater competition among candidates for the votes of the electorate (Shishovski, Lechevska, et all, 2012). Thus reducing the influence of the party on the parliamentarians and the other by increasing their individual responsibility to the citizens who voted. Thus it is expected that between two election cycles the dominant focus of attention of the parliamentarians will be concerns and interests of citizens and they will more actively dealing with them in order to get as many votes in the next election.

• Intraparty democracy. Intraparty democracy has always been a challenge in emerging democracies (Cekov and Daskalovski, 2012), and is necessary to increase the impact and contribution of politically involved citizens in the party. Democratic state can not be governed by parties with undemocratic structures, because the parties actually mirror the situation in the system. If they lack democracy, dialogue, exchange of views and different opinions, it will definitely reflect the democratic capacity and quality of political institutions (Karakamiseva, 2008), and the democratic capacity and quality of society as a whole. In many countries there are legal directives to oblige parties to respect democratic procedures within their internal processes. In many countries, the constitution or laws oblige parties to form their internal processes according to democratic procedures. However, despite such provisions, in reality this is often overlooked and so the impact of "ordinary" party members is relatively limited circle of members who actually powerful and influential are usually very small. In Macedonia, similarly to other post-communist countries of South Eastern Europe, the legacy of the party culture in the past, such as the strong hierarchical tendencies within the party, non-competitive elections the party

leadership and access top-down decision-making, still part of the party organization. These features of the intra-organization in Macedonia have their major impact on the development of democratic processes within the parties and beyond the country. In general, political parties in Macedonia most often identify with their leaders, as a result of central distribution of power within the party. In each of these circumstances is understandable the influence of parties on one proposed parliamentarian and their particular interest to operate exclusively in the direction of the established party platform even when they themselves do not agree with it, even when it is best for the citizens by which they were selected. The arguments that are in favor of the open list system show that it will contribute to greater party democracy, given that the selection of candidates will be decentralized to a large extent. An additional advantage is that this system favors the more capable candidates to take the needs and expectations of citizens, and therefore the party becomes more effective in achieving the expectations of citizens (Hofmeister and Grabow, 2012).

• The status of parliamentarians after the completion the post of a Parliamentarian. In accordance with Article 35 of the Law on parliamentarians, the parliamentarian who was employed until the election of an parliamentarian has the right within 30 days after the termination of the mandate to return to the workplace or other work which corresponds to the type and extent of his professional education. This general legal provision means that parliamentarians after the end of their term have no certainty with regard to their future professional career (Cekov, 2012). In this respect, the existing legal solution further binds parliamentarians for the party, especially those parliamentarians who have nowhere to return after completion of the post of a Parliamentarian. This particularly applies to those lawmakers before getting tenure had based permanent employment, and all other parliamentarians depending on the duration of their mandate some time been away from his profession.

As an additional obstacle in terms of strengthening the political will to performing and functioning in their belief and not exclusively under the baton of the party leadership and allegations that circulated in public for allegedly signed promissory notes for loyalty, guarantees and blank resignations by members of the party in power as a way to control and in the mildest form were told to direct the activities of parliamentarians in the implementation of the party's platform at any price. In the Law on parliamentarians of the Republic Of Macedonia is not legally regulated and expressly prohibited the possibility of signing bills of loyalty or blank resignations by members, although some attempts that were initiated by the opposition in 2009 when the "NSDP leader Tito Petkovski proposed amendments to the Law on deputies, that the execution of the Representative shall not be limited by material or financial guarantee to the political party or coalition whose

candidate list is elected. In 2011 followed other such attempts to amend our existing legal solution, but again were not supported by the parliamentarians from the ruling party. Although such legislations are not unknown in the developed democracies, the legislature of the Republic of Macedonia did not find the strength to incorporate unambiguous statutory provision that would help protect the authority and integrity of the function as a parliamentarian.

Conclusion

In accordance with the aforementioned, we can conclude that the existence of strong political will of lawmakers to perform effective parliamentary control is the prerogative of the developed democratic societies. The problem with the political will of lawmakers requires a serious, substantive and systematic approach to its solution. The current concept of this phenomenon is a reflection of the existing democratic mechanisms and processes, such as the electoral system in the Republic of Macedonia and the need to change the existing with new proportional electoral system with open lists and single constituency on the whole territory of the Republic of Macedonia in order to reduce the impact of the party on the parliamentarians, and on the other hand to increase their individual responsibility to the citizens who voted; intraparty democracy as a prerequisite for increased influence of political involved citizens within the party and in society in general and the status of parliamentarians after the post of deputy in the direction of increased reliability of lawmaker after his tenure as indirectly produces relaxation of relations between lawmaker and the party that nominated him. Currently these are the key segments where the biggest weaknesses are detected, but also opportunities for enhancing and strengthening the political will to implement efficient and effective parliamentary control of the security sector of the Republic of Macedonia.

Bibliography

Books
1. Bakreski, O. (2008) Control of the security sector. Skopje: Faculty of Philosophy. Cekov A., Daskalovski H. (2012) Analysis of intra-party democracy in Macedonia. Skopje: Center for Research and Policy, Konrad Adenauer.
2. Heywood, A. (2004) Politic. Belgrade: CLIO.
3. Hofmeister W. Grabow K. (2012) Political parties: funktions and organization in democratic societies. Skopje: Konrad Adenauer Stiftung in Republic of Macedonia.
4. Joung, I. (1990) Justice and Politics of Difference, Princeton: Princeton University press.

5. Klimoski S. (2007) Constitutional Law and Political System. Skopje: Enlightenment.
6. Klimovski, S. (2009) Constitutional Law. Skopje: Enlightenment AD Skopje.
7. Rokvih, V. (2012) Parliamentary control of the security sector in Republic Serbia. Belgrade: Faculty of Security.

Papers, journals and sourses taken from web sides
1. Buchkoski, V. "Open List". Dnevnik. The 17th February 2012.
http://otvorenilisti.org/?p=1458, [visited on 21.08.2016]
2. Blazevska, K. "Parliamentarians of Gruevski blackmailed with draft guarantees and Blanco resign!". Deutsche Welle. The 9th March 2015.
http://dw.com/p/1EnU9, [visited on 08.18.2016]
3. Democratic Centre of Security Development and the Rule of Low. (2003) Oversight and Guidance: The Relevance of Parlamentay Oversight for the Security and its Reform, Brussels/Geneva: DCAF, NATO Parliamentary Assembly.
4. How to start functioning system of actuators and brakes in Macedonia Dialogues vision. (2016) Skopje: British Embassy.
http://www.epi.org.mk/docs/D4V_Democracy%20and%20Rule%20of%20Law_mk.pdf, [visited on 11.08.2016]
5. Karakamiseva, T. (2008) Basic records systems of organization of government and the need for reform of the political institutions in the country, reform institutions and its importance for the development of the Republic of Macedonia. Skopje: Proceedings of scientific debate, book 5.
http://www.peacepalacelibrary.nl/ebooks/files/343035197.pdf, [visited on 18.08.2016]
6. "Parliament does not approve the amendments to the lawmakers". Radio Free Europe. The 11 November 2011. http://www.slobodnaevropa.mk/a/24387553.html, [visited on 08.18.2016]
7. Shishovski J. et. al. Efficient Assembly, strong democracy - a vision to improve the system of actuators and brakes in Macedonia, Framework of public policies.
http://www.epi.org.mk/docs/EPI_Ramka%20za%20politiki%20_SSHS.pdf, [visited on: 09.08.2016]

Legal sourses
1. Constitution of the Republic Macedonia, State Journal of R. Macedonia no. 52/91.
2. Law on parliamentarians, "Public Journal of R. Macedonia "no. 84/05, 161/08, 51/11, 109/14, 35

351.74.3/.5-027.551:351.78/497)   Scientific article

THE ROLE OF THE PRIVATE SECURITY IN THE CRITICAL INFRASTRUCTURE PROTECTION IN SOME OF THE BALKAN STATES

Leta Bardzieva, MA
E-mail:lbardjieva@gmail.com

Abstract

The paper focuses on the aspect of critical infrastructure protection by the private security segment, which has an increasingly significant role in the provision of security. The critical infrastructure system is interconnected and cannot be perceived as a separate segment of security, since it is linked with the regional and global critical infrastructure systems and standards, as well as the importance of its protection and stability in obtaining the national and international security. The private security sector has a crucial role in the protection of the critical infrastructure system, which further develops and establishes its significance and competence in this specific area. More precisely, in this paper, the scope of interest is focused on the critical infrastructure protection by the private security in the Republic of Macedonia and the Balkan countries – the Republic of Croatia and the Republic of Kosovo, as a review and comparison of specific examples.

Key words: Security, private security, regional security, critical infrastructure, protection.

Introduction

According to the EU definition of the critical infrastructure, it is defined as an asset, system or part of a system which has an essential significance and vital importance for the life, security, health, economic and social welfare of the citizens, and whose interruption or disruption, or collapse during the working process of its function would lead to incapacity of the public safety and health, commercial damage and imperilment of the national security, or a combination of them.[38]

---

[38] Critical Infrastructure Council Directive. http://eur-lex.europa.eu/legal-content/EN/TX-T/?uri=uriserv:jl0013 (посетена на 28.04.2017)

Having in mind the contemporary trends in the field of security in the sphere of the protection of the critical infrastructure system, a conclusion could be met that the private sector operates with a large portion of the national network of critical infrastructure, the corporative management runs big organizations, to that, within the framework of that system, the calculation and risk taking, as well as ensuring security have a crucial significance.[39]

The focus in this paper is aimed toward examination and explication of the protection function of some of the segments of the critical infrastructure network, the regulation, the ownership and management as well as the possible threats and risks which would eventually lead toward a cessation or collapse of the production, transport and distribution of energy and resources in order to provide uninterrupted functioning of all social branches.

The methodological framework for the creation of this effort includes methods of analysis and synthesis on primary and secondary sources, internet publications from relevant institutions and bodies, announcements and decisions from competitive organs and literature for the same realm and a comparative display of the gathered information and data.

1. Critical infrastructure networks - identification and protection

Designating the objects and capacities of the critical infrastructure and their protection, according to the standpoints reflected in the official formulations of the European Union, and whose part the Western Balkan strives to be, counterpoise an obligation and responsibility of the national states.[40] Each country on its authentic way settles and prescribes the legal framework with which the function protection of the critical information systems will be achieved, in order to provide an uninterrupted and constant flow of resources and energy for the functioning of the social and the economic system.

As an explicative review the regulations for identification and protection of the critical infrastructure networks will be displayed, regarding the efforts and steps of some of the countries in the region. In some of them, the concept is in an initial phase, and in some countries the critical infrastructure does not exist as an official term used to

---

[39] International CEP Handbook. Civil Emergency Planning in the NATO/EAPC Countries. Swedish Civil Contingencies Agency. https://www.msb.se/RibData/Filer/pdf/24677.pdf (посетена на 16.04.2017)

[40] Правна рамка за обезбедување на критичната инфраструктура – со осврт на обезбедувањето на критичната инфраструктура во Република Македонија. Комора на Република Македонија за приватно обезбедување, Скопје, 2016.

define the specific system for production, transport and use of energy.[41] The threats and the risks for the survival and functioning of the critical information systems could have internal or/and external origin.[42] Internal threats and/or risks include accidents during the working process itself, natural disasters, as well as anthropogenic accidents, theft, sabotage, industrial espionage etc. The threats and risks with an external genesis include terrorist attacks, diversions, natural disasters, invasion, etc.

Picture 1 1: Risk and threats analysis on the critical infrastrucutre systems
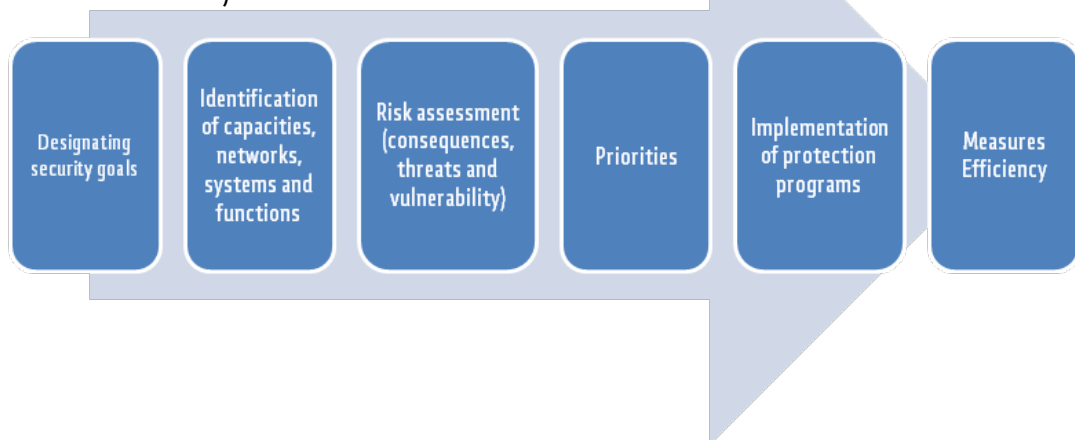
So far, there are numerous legal and institutional mechanisms designated as a response for the provision of the optimal level of security for the networks of the national, the regional, the European and the global critical infrastructure. According to the recommendations from the Strategy for the development of the private security in the Republic of Macedonia from 2016, among other forms of management with the critical infrastructure management, as one of the most efficient and most adequate in this sector are public – private partnerships, the improvement of the professionalization and standardization, designation and identification of a formal list of critical infrastructure assets on a national and international level, as well as increasing the ways and communications for cooperation on a regional level etc. [43]

---

[41] Република Црна Гора формално не го користи терминот критична инфраструктура и нема развиена политичка рамка за заштита на овој сектор. Bigović, M., Rakočević, A.: Challenges in Defining Critical Infrastructure in Montenegro, 2015.

[42] Common Threats and Vulnerabilities of Critical Infrastructures. International Journal of Control and Automation. https://pdfs.semanticscholar.org/7098/a29a404f8561c7f3c66801b6e1f-36f88b7b7.pdf (посетена на 29.04.2017)

[43] Бакрески, О., Милошевиќ, М.: Современи безбедносни системи – Компаративна анализа на земјите од Југоисточна Европа. Аутопринт Т. А., Скопје, 2010.

Creating public – private partnerships becomes an increasing priority, in order to make mutual efforts in achieving the optimal level of security on the production, transport and distribution of energy through the critical infrastructure network.[44] Combined ownerships and authorizations when appropriately regulated and controlled contribute flexibility when dealing with the threats and risks to the security on a national, local and regional level.[45] Also, standardization in the sector of critical infrastructure protection and the systems within the frameworks of the European critical infrastructure and other trans- national energy and resources networks counterpoises a mechanism which would enable increase of the level of cooperation and inter- operability among the countries in the Balkans. [46]

A comparative display on the legal framework and activities in the identification and the protection of the critical infrastructure systems in the Republic of Macedonia, the Republic of Croatia and the Republic of Kosovo

Identification and regulation of the national critical infrastructure network in the Republic of Macedonia

According to the analysis of the current situation, from the aspect of legal regulation, the critical infrastructure remains a new area, respectfully, a matter which is yet to be defined, identified and determine its protection. In the Republic of Macedonia there still is no formally designated list of critical infrastructure, but certain important leaps have been made in the creation of a regulated ambience and a clearly designated framework for diligence, activities, subjects whose responsibility and authorization is protection of the national critical infrastructure.[47] In the analysis of the situation in the Republic of Macedonia from the legal solutions aspect, the accent will be put on the Law for energetic, Law for private security and the Decision for designating legal entities which are obliged to have security for persons and property for own purposes, the Strategy for development of the private security, the Strategy for energetic development of the Republic of Macedonia and the cooperation initiative Western Balkan 6.

---

[44] http://www.securitycouncilreport.org/monthly-forecast/2017-02/counter-terrorism_protection_of_critical_infrastructure.php (посетена на 16.04.2017)
[45] Dani Kriznog Upravljavanja. Crisis Management Days. 8-ma Međunarodna Znanstveno- Stručna Konferencija. University of Applied Sciences Velika Gorica, May 2015. http://dku.hr/wp-content/uploads/2016/09/DKU-2015-VVG.pdf (посетена на 29.03.2017)
[46] Dani Kriznog Upravljavanja. Zbornik Sažetaka. http://portal.research.lu.se/portal/files/5709251/5470097.pdf (посетена на 29.03.2017)
[47] Slaveski, S., Hadji-Janev, M.: Corporate Security and Critical Infrastructure Protection in the Republic of Macedonia: Perspectives and Challenges. Security Dialogues   http://sd.fzf.ukim.edu.mk/4/gegag?start=1 (посетена на 29.03.2017)

Having in mind that the introduction of the market economy in the transition countries such as the case with the Western Balkan countries, had led to the spread of private ownership, increase of the economic and trade exchange, foreign investments increase etc, which as tendencies and occurrences had drawn a series of measures which need to be undertaken in order for the protection of the companies, their activities and employees as well as to enable protection of the economic and the political order, the environment while the conduction of the activities of the companies and finally, protecting the critical infrastructure capacities by private companies offering security services.[48]

The energy sector and the security sector, are interrelated and they are both part of the integral national security. Their efficiency, effectiveness and transparency has an essential significance for the maintenance of the energy, and internal/regional security.[49]

In the Strategy for energy development of the Republic of Macedonia till 2030 the energy security is defined as regularly satisfying regarding the demands, in sustainable natural conditions and under prices which do not slow down the economic growth and do not disorganize the living standard of the citizens.[50] In order to achieve and maintain energy security, it is necessary to utilize the domestic energy potential, and among the first are mentioned the renewable energy sources, the diversification of the energy sources, a stabile infrastructure network for energy export and import and energy efficiency measures. The listed parameters necessary to achieve energy stability have to be additionally fueled with political will and institutional capacities, expressed through the strategic plans for the energy sector and through implementation of several modes of measures for public investments realizations, tax exceptions, subventions, grants, investments in energy efficiency reforms, awareness raising campaigns, regional and international cooperation in this sphere etc.[51]

---

[48] Бакрески, Оливер et al. Корпорациски Безбедносен систем. Комора на Република Македонија за обезбедување лица и имот. Скопје, 2012.

[49] Управување со секторите енергетика и безбедност во Македонија – како да се подобри нивната ефикасност? Analytica Policy Report.

[50] Stojilovska, A.: The Role of the Private Sector in Achieving Energy Security in the Western Balkans: Macedonia as a Case Study. Политичка мисла – Стратегии за регионална безбедност. бр.36, 2011. http://www.kas.de/wf/doc/kas_29730-1522-2-30.pdf?111214082858 (посетена на 08.04.2017)

[51] Агенција за енергетика на Република Македонија. Стратешки документи. Прв акционен план за ЕЕ на РМ до 2018 година.

The Republic of Macedonia is a part of the Energy Community West Balkan 6[52] - initiative called "energy measures" signed by Serbia, Macedonia, Albania, Bosnia and Herzegovina, Montenegro and Kosovo on the Wien Summit in 2015 consisted by initiatives and measures for electricity trade, integrated markets, regional balance and regional capacity allocation, as well as overcoming the existing regulatory and legal barriers makes efforts for regional integration and market stabilization for electric energy supply, which counterpoises a fundamental segment of the critical infrastructure system.[53]

With the Law for energy from 2011 the Republic of Macedonia arranges, among other issues, the energy activities and the regulation of the energy activities, the goals of the energy policy and the methods for its realization, the building of the energy capacities, according to Article 1; Article 2 from this Law specifies the goals with which a secure, safe and quality energy supply for the consumers should be provided, as well as the creation of an efficient, competitive and financially sustainable energy sector, stimulation of concurrency on the energy markets, with the respect for the principles of non- discrimination, transparency and objectivity, integration of the Macedonian energy market in the regional and the international energy markets in accordance with the international ratified agreements, increase of the energy efficiency and instigation of the use of renewable sources of energy, as well as preservation of the environment from the negative influences during the execution of some activities in the energy sector.[54]

Article 3 defines the terms and their meaning in the same Law, in which Article 1 accounts for the meaning of the security – the ability to provide protection for the health and the lives of people, protection of the environment and the assets by undertaking technical and other kinds of security measures during the production, the transport and the distribution of energy and resources.

---

[52] Energy Community Wetsern Balkan 6: https://www.energy-community.org/portal/page/portal/ENC_HOME/AREAS_OF_WORK/WB6 (посетена на 16.04.2017)

[53] Western Balkans 6 Ministerial Meeting. Ministers of Energy and Ministers of Foreign Affairs. Joint Statement of the Ministers of Energy. Skopje, February 2017. https://www.energy-community.org/portal/page/portal/ENC_HOME/DOCS/4538397/482CA611C7BA6023E-053C92FA8C0E7B9.pdf (посетена на 16.04.2017)

[54] Службен весник на Република Македонија бр. 07-610/1. Указ за прогласување на Законот за енергетика http://www.erc.org.mk/odluki/SLUZ.VES.BR.16-10.02.2011-ZAKON%20ZA%20ENERGETIKA.pdf

The main provisions in Article 3 from the Law for energy of the Republic of Macedonia define the activities in the energy sector:

1. Production, transport and distribution of electrical energy,
2. Coal production and manufacturing,
3. Petroleum and petroleum derivate production, processing and transport,
4. Natural gas production, transport and distribution,
5. Heat and geothermal energy production, transport and distribution,
6. Production of other kinds of energy.

These activities could be performed by domestic and foreign legal entities and individuals under conditions designated by the same Law. Article 12 from the Law refers to the prescribed standards, technical norms and the norms for energy production quality, delivery and utilization by the subjects, machines and plants for production, transmission, distribution and transport and utilization of the energy, on which the accent is put on the protection of the people, material goods, environment and nature.

The Law for private security is substantially guided by the definitions from the Law for protection of persons and property, and Chapter 5 arranges the topic for Mandatory private security. It is important to remark that, beside the Law for private security[55], Chapter 6 from the Low for defense of the Republic of Macedonia, defines the subjects which have a special significance for the defense – public enterprises and companies from the energy sector, traffic, communications, communal activities, constructions whose responsibility is giving priority to the demands of the defense, the Army, the organs of state administration etc. To that, the Government of the Republic of Macedonia in 2013, with the Decision for designation of legal entities obliged to have private security, consequentially recognizes the infrastructure which needs to be a subject of protection. With this decision, the Government of the Republic of Macedonia defines three types of legal entities a) the first group legal entities conduct activities related to radioactive materials or other materials harmful for people and environment manipulation b) the second group of legal entities which performs activities related with handling items and objects with special cultural- historical significance and c) the third group of legal entities which are obligated to have private security based on a special treatment, respectfully the same are a matter of interest for the security and the defense of the Republic of Macedonia.

---

[55] Службен весник на РМ. Бр. 166/2012, 164/2013, 148/2015, 193/2015, 55/2016.

Table 2: Legal entities prescribed with the Decision for designation of legal entities obliged to have private security

1.	Legal entities whose activity is related with handling radioactive materials or other material hazardous for people and environment	468
	Legal entities registered for conducting activities in accordance with the Law for protection from ionization and radiation safety	83
	Private entities registered for wholesale production and trade of medicaments and medical equipment	273
	Health institutions for secondary and tertiary hospital health protection	70
	Legal entities for production and trade with flammable liquids and combustible gases and legal entities registered for hazardous materials transport	42
2.	Legal entities whose activity is affiliated with handling items and objects with special cultural and historical value	179
3.	Private security for legal entities in the interest of the security and defense of the Republic of Macedonia	523
	Legal entities registered for performing activities in the energy sector	171
	Legal entities registered for performing activities in the water supply sector for technical and potable water	5
	Legal entities registered for performing activities for protection and management with multipurpose areas, protection and promotion of the natural environment and natural heritage in protected areas and outside the protected areas	246
	Public Enterprise Macedonian Radio Television and other legal entities registered for performing activities with public interest (electronic and printed media)	82
	National Bank of the Republic of Macedonia and legal entities registered for performing banking matters	19

Protection of the critical infrastructure of the Republic of Croatia

The Republic of Croatia is a country from the region which has done the most steps regarding the legal regulation of the critical infrastructure. The critical infrastructure is mentioned in the 2008 Strategy for countering terrorism, where it is approached from the aspect of protection from terrorist attacks, as well as the National Strategy and Action plan for prevention of the spread of weapon of mass destruction, where as a special goal is induced the protection of the critical infrastructure. [56] The country began

---

[56] Čaleta, D., Radosevic, S.: Comprehensive Approach as "Sine Qua Non" for Critical Infrastructure Protection. Belgrade, 2015.

with identification, designation and protection of the national and the European critical infrastructure, and several years in rearwards, the importance of the critical infrastructure and its protection is emphasized in several documents.[57]

In 2013, an evaluation was conducted for the vulnerability from large scale natural and technical- technological accidents and disasters, where the critical infrastructure system is viewed from a macro aspect; the protection and rescue plan on the territory of the Republic of Croatia from 2010 treats critical infrastructure from the aspect of a display and review of the responsibilities and cooperation between the institutions in charge for enforcing the protection and rescue measures. [58] In 2013, the Republic of Croatia brought a Law for critical infrastructure as a result of the approximation with the EU legislature and the near drawing date for EU entrance. With the full membership in the EU, the private security companies in large scale and more expressive have taken the work related with the protection of the critical infrastructure, securing airports, as well as other activities with significance for the security of the persons and property, which is in the favor of the necessary level of competence, quality, responsibility which are set upon the security agencies and the conduct of their activities.[59]

Слика 2: Assessment and analysis of the security condition of the critical infrastructure

---
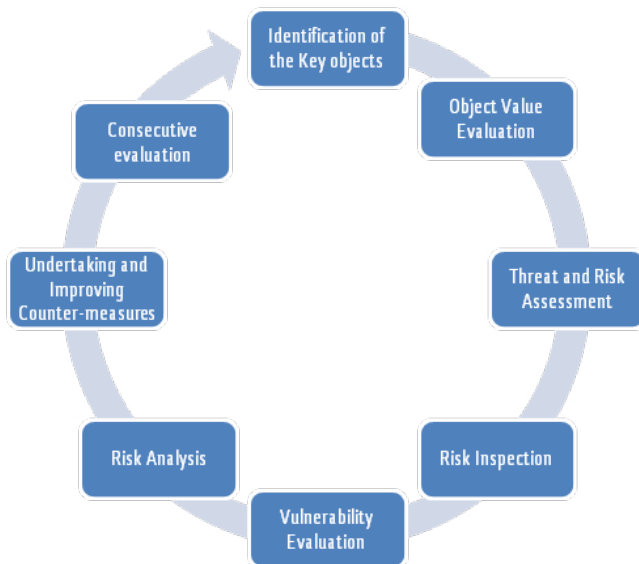
[57] Što je doista Kritična Infrastruktura? http://zastita.info/hr/novosti/sto-je-doista-kriticna-infrastruktura,16065.html (посетена на 10.04.2017)
[58] Hrvatski Ceh Zaštitara. Strukovna Zaštitarska Komora: http://hcz.hr/ (посетена на 10.04.2017)
[59] Croatia's Accession to the European Union. http://europa.eu/rapid/press-release_MEMO-13-629_en.htm (посетена на 14.04.2017)

The Law for private protection in the Republic of Croatia designated the code of conduct for the protection of persons and property activity and the sphere in which the state designates the realm of the private protection, the regulation of the conduct, the tasks and working methods, as well as the oversight of the conduct.[60] The legal entities and companies which offer private security services must not apply operative methods and means which by regulation are used by the Ministry of internal affairs in the Republic of Croatia. Article 2 from this Law defines the terms and their meaning, whereas article 11 refers to the critical infrastructure, defined in the Law of the Republic of Croatia as an activity, network, services and goods with material or informatics technology whose destruction or defect would lead to significant threat for the health and the security of the citizens, or for the unimpeded function of the state authorities.

Article 3 from the Law for private security in the Republic of Croatia arranges the manner of the conduct of the private security activity, respectfully, if a certain legal entity or company has a need for protection for its employees and assets, has to hire a legal entity or a company authorized for performing such activities, or has to establish an internal security service on its own. Article 4 refers to the subjects which perform the private security activity. Namely, they have to be registered in the authorized mercantile court, except the secret companies. According to the Croatian Law, the private protection activity could be performed by legal entities and companies that deal with technical protection, while physical protection is performed for personal needs solely, in accordance with the definitions from this Law for internal guard service. In accordance with the dispositions from this Law, the private protection activity could be performed by legal entities and companies from the European Union, as well as the Agreement for European Economic Area signatory countries.[61]

---

[60] Zakon HR. Закон за приватна заштита. https://www.zakon.hr/z/291/Zakon-o-privatnoj-za%C5%A1titi (посетена на 10.04.2017)
[61] ЕЕП –основан со цел земјите Исланд, Лихтенштајн и Норвешка и земјите од ЕФТА да учествуваат на единствениот пазар на ЕУ.

Critical Infrastructure Protection in the Republic of Kosovo

According to the Law for critical infrastructure of the Republic of Kosovo, brought by the Assembly of Kosovo, in accordance with the EU Directive 2008/114/EC, the purpose for the bringing of this draft bill is the protection of the national and the European critical infrastructure systems and incident prevention and minimizing the potential damage on the critical infrastructure systems.[62] This law enables directions for the identification of the critical infrastructure systems with national and European character; it designates the criteria, as well as the directions for its management, including risk assessments and analysis. Also, it is consisted by plans for the owners/operators of the critical information systems, their roles and responsibilities, as well as sanctions in case it is not acted in accordance with the legal regulations.

As one of the strategic goals of the Republic of Kosovo – gaining full membership in the EU, regional cooperation and good conjuncture is prescribed, which is, among others, one of the preconditions imposed for this neighboring country in order to fulfill the membership criteria. The National strategy and Action plan 2016-2019 of the Republic of Kosovo, define critical infrastructure as objects or institutions with great significance for the public wellbeing, whose failure or damage would lead to significant deficiency in the supply, a threat for the public safety or other dramatic consequences. The critical information infrastructure in the Republic of Kosovo in the National strategy is defined as systems which are critical infrastructure themselves, or as necessary for the functioning of the critical infrastructure (telecommunications, internet, satellites, etc.)

As one of the priorities for building security networks of the critical infrastructure and appropriate mechanisms and measures for their protection, in order to provide an unimpeded functioning of all social activities, the identification and the assessment of the critical infrastructure of Kosovo are identified, under previously established criteria.[63]

---

[62] Влада на Република Косово. Министерство за внатрешни работи, Нацрт- закон за критична инфраструктура: https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=3&cad =rja&uact=8&ved=0ahUKEwj0tuOumMnTAhWIHpoKHTasBigQFgg2MAI&url=http%3A%2F%2Fko nsultimet.rks-gov.net%2FStorage%2FConsultations%2F08-43-18-21032017%2FPROJEKTLIGJI%2 520PER%2520INFRASTRUKTUREN%2520KRITIKE_2017.doc&usg=AFQjCNEzCLzPebgMfw3WRhS 0dShJDpmYyw&sig2=o-4agVBHKdMLOm_7P16i8g (посетена на 28.04.2017)

[63] Baftiu, N.: Cyber Security in Kosovo. European Journal of Economics, Law and Social Sciences, Vol. 1, No. 1. IIPCCL, Publishing, Graz- Austria, January 2017. http://iipccl.org/wp-content/up-loads/2017/01/160-167.pdf (посетена на 29.04.2017)

During the identification of the critical infrastructure, these steps should be followed:

- Designation of the objects which will be treated (audio communications, data, their storage and procession)

- Identification of the infrastructure which is technically necessary for the functioning of these services

- Establishing objective criteria for the necessary level of protection for every infrastructure element, infrastructure categorization and appliance of criteria, such as the number of users which might be affected, level of vulnerability

- Investigating scenarios for development criteria which will examine the consequences of the given infrastructure as regular activities.

As one of the indispensable and essential elements for critical infrastructure protection is claimed to be the building of capacities and development of institutional mechanisms, which can be achieved primarily through cooperation between the various subjects involved in this sphere. The coordination of the relevant authorized instances is also needed, as well as taking special protection measures, among which are management expertise and knowledge for the matter, continuous simulations and training on a local, regional and international level which would lead to an increased inter- operability and experience exchange and practice, as well as enabling proper education and training for the citizens of Kosovo and involved parties.

Technical infrastructure, human resources and research and development are also listed in the mechanisms and measures which are necessary for building functional capacities for critical infrastructure protection. [64]

As one of the concrete measures induced is the information exchange, especially with the sectors:

- Internet providers
- Banking sector
- Energy sector
- Water supply
- Transport (air and land)
- Academic sector.

The Republic of Kosovo also is committed to take active participation in bilateral and multilateral agreements with key allies as well as other countries in order to strengthen the security of the cyber space and the critical infrastructure. Further, participation in regional forums, with the accent of building regional capacities, as well as

---

[64] Собрание на Република Косово. http://www.kuvendikosoves.org/?cid=2,122 (посетена на 16.04.2017)

membership in international organizations which support best practices and building a global coordinated approach in the combat against threats on the critical infrastructure security.[65]

Regarding the management with the national critical infrastructure network and the regional cooperation, the Republic of Kosovo is part of the Western Balkan 6 initiative and the Berlin process.[66]

According the European recommendations, the energy sector in particular, the Republic of Kosovo its efforts should direct toward price regulation, introduce a compatible Law on energy, finalize the negotiations with the Republic of Albania for energy exchange, as well as to finalize the technical procedures for the creation of a stabile and balanced market.

In relation to the protection of the critical infrastructure networks, the Republic of Kosovo has already made few steps when it comes to critical infrastructure protection, with the accent set on the cyber community and the protection of the critical information infrastructure.[67]

The National strategy for cyber security 2016-2019 has the following main goals:
- Protection of the critical information infrastructure
- Capacity building (legal, human and infrastructure)
- Public- private partnerships
- Incident response
- International cooperation. [68]

Conclusion

The efficient protection of the critical infrastructure prescribes mobilization of several institutions, state bodies and private entities, as well as creation of a new legal framework on a national level and adoption of international agreements and resolutions with which the protection of the critical infrastructure activity will be defined and the cooperation in the realm of production, transport and distribution of energy and resources security which counterpoises a priority activity of the authorized instances.

---

[65] Republic of Kosovo National Strategy Against Terrorism 2012-2017. https://www.mpb-ks.org/repository/docs/Strategy_for_Counter_Terrorism_2012-2017_eng.pdf (посетена на 29.04.2017)

[66] Kosovo Report. European Commission, Brussels, 2016. Commission Staff Working Document.

[67] http://www.kosovapress.com/en/news/mia-part-of-critical-infrastructure-protection-in-eu-conference-106134/ (посетена на 11.04.2017)

[68] National Cyber Security Strategy and Action Plan 2016-2019https://www.sbs.ox.ac.uk/cybersecurity-capacity/system/files/National_Cyber_Security_Strategy_and_Action_Plan_2016-2019_0.pdf

Having in mind the dynamic occurrences and the threats whose genesis varies, and their intensity and consequences have a destructive meaning for the functioning and the survival of the political and the economic order of the countries, it is necessary to engage and utilize all the means at disposal on a national and on a regional level in order to provide the optimal level of security of the critical information systems.

The necessary mechanisms and methods for cooperation on a multilateral and bilateral plan which are imposed as an imperative for the achievement of the optimal level of critical infrastructure protection must not be avoided or neglected, and the promotion of standardized and unified responses against the threats over the critical infrastructure systems should be a supplement on the already existing norms and regulations which arrange this matter.

Each country from the region is on its individual path regarding the regulation and the designation of this significant security, political and economic issue whose importance goes beyond the national borders.

This paper had the purpose to display the legal regulations and prescriptions with which the activity critical infrastructure protection is organized in the Republic of Macedonia, the Republic of Croatia and the Republic of Kosovo. Each of these countries has its own specifics, challenges which have to be overcome and processes that need to be smoothen up.

Bibliography:

1. Bourne, M. (2014) Understanding Security. London: Palgrave MacMillan.
2. Čaleta, D., Radosevic, S. (2015), Comprehensive Approach as "Sine Qua Non" for Critical Infrastructure Protection, Belgrade, 2015.
3. Gariup, M. (2013), European Security Culture: Language, Theory, Policy. Ashgate.
4. Högselius, P, et al. (2013), The Making of Europe's Critical Infrastructure: Common Connections and Shared Vulnerabilities. London: Palgrave MacMillan.
5. National Strategies and Structures for Infrastructure Protection. Report to the President's Commission on Critical Infrastructure Protection. (1997)
6. Perdikaris, J. (2014), Physical Security and Environmental Protection, NY: CRC Press, Taylor & Francis Group.
7. Rice, M., Shenoi, S.: Critical Infrastructure Protection X. Springer, 2015.
8. Бакрески, О., Триван, Д., Митевски С. (2012), Корпорациски безбедносен систем, Скопје:Комора на Република Македонија за обезбедување лица и имот.
9. Правна рамка за обезбедување на критичната инфраструктура– со осврт на обезбедувањето на критичната инфраструктура во Република Македонија. Комора на Република Македонија за приватно обезбедување. Скопје, 2016.
10. Приватната безбедност во 21 век: Искуства и предизвици. Комора на Република Македонија за приватно обезбедување. Скопје, 2016.

325.524.4: [316.356.2:159.944.4   Scientific article

REFUGEE FAMILY TRAUMA

Dragana Batic, Phd
Faculty of Security, Skopje,
Email: dbatic@yahoo.com

Abstract

The study of family crisis and the crisis in general, begins at the time of social and economic disaster in USA, through the Second World War, the Vietnam War, the Arab-Israeli war, and continue with societal conditions in countries with increased repression and poverty, leading to mass migration, refugee crisis, and claims of political asylum. These events prompted the research of the effects stress has on families. The war in the former Yugoslavia motivated researches that relate to the individual and family reactions to the stress. Lately, with the refugee crisis these topics are reopened. The traumatized family is defined as a family exposed to a stressor, consequently getting unwanted disruption of its life routine. Refugee families are faced with numerous stressors such as exposure to threats, violence, fear for their lives and the safety of their loved ones. In other countries they face chronic stressors such as poor housing, poor nutrition, economic dependence, social marginalization, social stigmatization, forced change of lifestyles, acculturation. The separation of home and community and living in a new and unfamiliar environment brings profound uncertainty, confusion, vulnerability, fear and mistrust. The new way of life affects everyone individually and brings new changes in the family dynamic. This paper attempts to find a link between trauma of family members that have been affected by the war and refuge and the family characteristics. It is also an attempt to give an answer to the question whether or not it's possible to retain the basic family function, raising the child and his personality development.

Key words: refuge, refugee family, traumatization, stressors, functional family

Introduction

Together with the studies dedicated to the family as a psychosocial entity, an increased interest emerges about the problems of the everyday life and functioning of the family in stressful circumstances, especially in times of big social disasters. Studies about the family crisis, as well as the crisis in common, started to emerge during the social and economic turbulences in America, the Second World War, the Vietnam War, the Arab-Israeli Conflict, and continued to be conducted taking into consideration the social circumstances in countries, in which repression and poverty are common, leading towards mass migration of the population, refugees, and seeking political asylum. These events, motivated to a great extent the studies related to family reactions of stress. The war in the 90s of the previous century which took place in former Yugoslavia also increased the interest and led towards investigations related to individual and family stress reactions.

Unfortunately, this topic is still popular nowadays considering the forced migrations which are very common in the last few years, and which are caused by the violation of the basic human rights and freedoms, including the right to life and the freedom of movement. These circumstances make thousands of people to escape from the African and Asian countries and to find shelter in the countries of Europe. Most of the refugees come from Afghanistan, Somalia, Eritrea, Libya, Pakistan, as well as Syria, where the Civil War started in 2011. The situation in Syria additionally deteriorated in 2013 causing one of the biggest exoduses in the newer history.

Even though the influence of the refugee human rights violation on the individual well-being is profoundly researched, there is still not enough information about the effects of the refugee life on family level. Most of the studies dedicated to mental health are mainly focused on Post-traumatic stress disorder and depression caused after a violent loss and other stressful events (Craig, Sossou, Schnack, & Essex, 2008; Momartin, Silove, Manicavasagar, & Steel, 2004; Morina, Rudari, Bleichardt, & Prigerson, 2010; Schaal, Elbert, & Neuner, 2009; Schaal, Jacob, Dusingizemungu, & Elbert, 2001). Studies conducted from the perspective of systematic family theory and therapy show that the stressful experiences of refugees are multiple traumatic events that influence the whole family and can disintegrate family and social functioning (Brende & Goldsmith, 1991; Carroll, Foy, Cannon, & Zwier, 1991), Batić, 2012). Furthermore, it was discovered that interventions on family level are most efficient for improving mental health of refugees, mostly those collectivelly acommodated (Weine et al., 2006; Waine et al, 2008 Weine, 2011).

Family and stress

Most frequently, the family is defined as a social group which is characterized by unity and specific types of interactions. Moreover, the family is a social group because it is a biosocial entity established not only in accordance with social rules, but also as a result of the biological laws of reproduction and based on blood relations of its members. "The family is a universal human group which is typical for every human era and for every human being individually, and thus, during his/hers lifetime" (Golubovic-Pesic, 1981).

Golubovic-Pesic mentions three universal characteristics of the family. First: the family is a community of persons from different gender and children who are a product of this union (who can also be adopted). Second: the family is a primary community in which the personality of the child develops. Third: the family is a community which provides psychological and sociological connections among its members (Golubovic-Pesic, 1981).

According to the systematic approach, the family, taking into consideration the mutual connection of its members, in other words, their interdependence, is considered as a system composed of subsystems (spouses, brothers-sisters) (Olson, 1993). The second important feature is its development, in other words, the family is considered a system which undergoes different developmental phases and which constantly develops. It is a continuous system which is maintained with the connectedness with previous generation. One of the characteristics of the family is its interconnection, in other words, its connections with the society and other social groups.

Considering the fact that the family is the most intimate human community, in which most of the needs of its members are satisfied, every member has an influence and is under an influence on the other family members. As a result of this, it is an important source of production and reduction of stress. With reference to this, the family members are close to each other, if one member suffers a traumatic event, the other members can reduce or intensify it. "Traumatized family is defined as a family which is exposed to a stressor that has caused unwanted interruption of its daily routine. The stressor can be an event or series of events that disturb the life of the family, its routine, well-being and its trust in the safety and predictability of the everyday life" (Figley, 2012).

The family stress is a condition of an increased anxiety within the family in cases when it is not able to successfully cope with the new demands, whether external or internal, within the family.

The refugee family, taking into consideration the fact that its faces a series of sudden stressful changes and obstacles, such as loss of their homes, job loss, social status, personal, family and social identity, integrity and continuity loss, separation from the loved ones, uncertainty regarding how long the life as a refugee will last is considered to be a traumatized family.

Considering the manner in which, generally, the family can be traumatized, there are four different modalities:

1. When the disaster directly affects the whole family (for example: fire, natural disasters, traffic accidents, displacement...)
2. When the disaster affects only one family member with whom the other family members cannot come into contact with (for example: war, mining accident etc.)
3. Cases in which one family member is a victim, which traumatizes the other family members.
4. Intra-familial trauma, when the disaster comes from the family (occurs within the family), for example: incest, violence, divorce etc.

In cases in which the family is affected by a natural disaster, the studies show a relatively low level of emotional anxiety related to the disaster (Smith, 1983). It is supposed that one of the reasons why natural disasters do not leave emotional scars, is the fact that they do not affect directly the social support of the system, such as the family, neighborhood, community. On the contrary, if these systems are affected, such as in cases of escape or displacement, the individual will suffer serious social and emotional problems.

Families which have simultaneously been affected by a natural disaster are more able to help each other and to overcome the emotional difficulties caused by the disaster than in other circumstances.

When we hear about the accident on the media (telephone, TV, letter), when the disaster hits someone we love, but we cannot come into contact with, it is a situation that causes an extreme stress, and the recovery can lasts for years (Figley, 1982, 1983). The experiences of several groups of American citizens who were held hostages in Iraq are a good example for this phenomenon. Figley, McCubbin, (1983) inform that this situation was far more traumatic for the family than for the hostages. Moreover, while their daily routine was structured and predictable, their families were crowded with information, which was changing constantly their daily routine. These families found themselves in a situation, for which, they have not prepared before.

In the process of monitoring a family member who has been a victim, the whole family is indirectly emotionally affected. They are preoccupied with the reactions of the victim resulting of their attempts to help him/her, and which is a secondary stress response. In the process of reducing and alleviating post-traumatic reactions, the family members who give support can also be traumatized. For that reason, it is very important every person who suffers from Post-traumatic stress disorder (PTSD), to be analyzed in family context and perspective, considering the fact that the other members of the family are also victims because of their emotional relation with the victim.

In the literature and in the studies we can also notice the attitude and belief according to which the family is often a context of victimization. Domestic violence and abuse are also considered psychological and health problems, despite the fact that families which were traumatized by intra-familial violence are most difficult to reveal and treat.

Regardless in which of these four manners a family has been traumatized, it is forced to handle the stress and use its potentials for adaptation. During this process some families recover more quickly, while others need more time.

Refugee life as a stress source

According to the Geneva Convention, a status of a refugee is given to a person who owing to a well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion, is outside the country of his nationality and is unable or, owing to such fear, is unwilling to avail himself of the protection of that country; or who, not having a nationality and being outside the country of his former habitual residence as a result of such events, is unable or, owing to such fear, is unwilling to return to it (Geneva Convention, 1951) If we accept Figley's definition of traumatized family as a family exposed to uncommonly intense stressor which disturbs normal life routine in an unwanted manner, we could assume that every refugee family fall into this category. If the reason for the escape or displacement is a war, which as a massive stressful event hits the whole community in which the family lives and simultaneously affects all family members and their social environment. The experience of a refugee family can be divided in three parts: (before the life as refugee (escape), during the life as a refugee and after the life as a refugee) and each part is notable for its exposure on certain stressors.

The first period ends when the refugees leave their homes. Until then, people were exposed not only to stressors who made them leave their homes, but also to obstacles in achieving this intention. For most of the families it is a period in which they are exposed to threats, violence, insecurity, fear for their own life and the life to their closest family, loss and injuries. All this together is a motif for leaving. On the other hand, the significance of the home and the uncertain future as a refugee complicated the escape. Exposure to high levels of stress during the pre-migration period makes refugees potentially vulnerable population in relation to mental health.

The second period is the life as a refugee which starts when the family leaves their home, and ends after they return to their own homes or settle in another country forever. This period is notable for the presence of chronic stressors such as: bad accommodation,

bad food, material shortages and economic dependency, social marginalization, social stigmatization, imposed changes in lifestyle, acculturation etc. Considering the fact that the reaction to stress is still present after it emerges, traumatic experience from the first period creates disadvantageous basis for even more exposed influence of stressors, typical for the period of life as a fugitive.

Leaving the home, separating from the community and the life in a new and unfamiliar environment brings deep insecurity, confusion, vulnerability, fear and mistrust. The uncertainty about how long the life as a refugee will last and the uncertainty about the probability to return in their home or staying in another country cannot be avoided. The loss of home is related to other losses with which the refugee family faces. It is a loss of their lifestyle, separation from the social environment including relatives, neighbors, friends and other significant persons, job and social status loss. The new lifestyle influences every individual separately, and it includes changes in the dynamics of the family group.

Refugees are especially vulnerable category because during the life as a refugee they are exposed to numerous risks such as the following: the danger of human trafficking to which minors who travel without company are exposed to; danger of child neglect (even in parental presence), as a result to the difficult travel conditions; different types of abuse, exploitation, violence, abuse during the travel which is very common due to legal holes (insufficient identification documents and the inability to enjoy one's rights, lack of knowledge of the language and culture of the country in which they pass by, abuse by criminal groups, the risk of being robbed and/or deceived by human traffickers, health risks, conflicts among the refugees due to ethnic tensions and conflicts during the escape. Experts agree that most susceptible to these risks are women and children, and the higher risk exists of human trafficking and sexual exploitation.

Characteristics of a refugee family

The refugee family, due to the forced abandonment of their home suffers violent changes in the manner in which it functions, in its development, and very frequently in its structure which seriously endangers the continuity of its lifestyle.

Functionality of the family refers to the usefulness of the family patterns in achieving the family goals. The sense of well-being and connections between family members are indicators of a functional family. On the other hand, the term 'dysfunctional' is a descriptive term referring to family relations that are unusual and related to symptoms of anxiety regardless of the reasons for the problem. A functional family must be able to adapt itself to the developmental changes and environmental demands. Strong

generational hierarchy and family authority are crucially important for optimal functioning of the family. Bivers emphasizes the family competence which is defined as the ability of the family to overcome the challenges, which can be noticed by the egalitarian leadership of the parents, strong parental coalition, or coalition of other adults and establishing intergenerational boundaries (Bivers, 2000).

One of the basic functions of the family is growth and development of the child and this process is conducted by the parents. The refugee family, as a result of different circumstances loses its natural leadership. Furthermore, parents lose their jobs, they are eradicated from their natural environment, and, if they are accommodated in refugee camps, other people take care of them, which put them in a condition similar to the condition of their children. When they come in a new environment, children, as well as adults, learn new language, in which children are always more successful, which causes the parents to lose their leadership within the family. "Parents often fell degraded and demoralized by being financially dependent and they feel helpless. These cumulative negative effects produce high levels of stress among adults, which negatively influence their children"(Ajduković, 1996, Ajduković & Ajduković, 1993).

Emotional expression within the family, in other words, clear and direct expression of feelings is an indicator of a normal communication which is one of the most important mechanisms of healthy family functioning (Witaker, 1988), as well as one of the positive mechanisms which helps in coping with family stress (McCubbin, Figley, 1983).

In order to protect themselves, parents, as well as children, do not express their feelings. When feeling sad, the children have the tendency to hide their feelings, and to protect their parents they manifest good mood (Bjorn & Bjorn, 2004, Ignjatović-Savić 1995, Batić, 2012). It is crucial for the children to show their feelings within the family, in front of their loved ones, where they feel secure and accepted. Absence of this process leads towards prolonged influence of the stress (Batić, 1998). All this can cause developmental unbalance among children.

Every change that results from the life as a refugee additionally complicates the life of the family, most often when as a result of the absence of the father (capture, participation in war death), the family structure changes. In structurally deficient refugee families the family dynamics changes as well, and in this context, the mothers takes paternal role, despite the fact that they has also been traumatized, which makes them less considerate to the needs of her children. Children are the most sensitive family members. A review of the studies related to this topic show that children's reactions depend on how they perceive the adult family members, especially their parents. In case of paternal absence, the ability of the mother to handle stress is crucial (Jensen, 1989, Shaw ,1987).

Aside from the structure of the family, an important role plays its functionality before the life as a refugee. Those families who used to have dysfunctional patterns regarding family conflict solving and conflict solving with the environment, in a circumstances causing high stress levels, such as escape, get into a condition of continuous family crisis.

Studies on refugee family in the Republic of Macedonia

Studies on refugee family conducted in Macedonia (Batic, 1998) aimed to establish the connections between trauma of family members caused by war and life as a refugee on one hand, and the features of family functioning on the other hand. This study was conducted on the sample of the refugee families from Bosnia that were accommodated in Macedonia during the military conflict in former Yugoslavia.

The data were obtained with interviews, observations, as well as numerous psychological experiments, specifically modeled for children and adolescents, and experiments specifically modeled for adults that helped in determining the effects of the stress, as well as the family condition and relationships. Based on the results obtained with the help of quantitative and qualitative analysis, and with the application of theoretic models of systematic family therapy and theory, as well as the model for condition and relationships within the family, four types of refugee families were established in accordance with the structure and level of functionality: completely functional, completely dysfunctional, incompletely functional and incompletely dysfunctional refugee families.

Families that before the refugee life used to be functional, and were notable for the strong parental coalition and generational boundaries, were more able to adapt in the new circumstances, even in paternal absence. On the contrary, mothers from deficient families, who before the escape had dysfunctional patterns (where the parental coalition or the coalition between parent and child was weak and the leadership was inefficient), were less successful in getting accustomed to the new circumstances.

Children from functional refugee families, regardless of the structure, are better in handling the new circumstances and show lower stress levels.

The study showed that preservation of parental hierarchy among parents and children, besides the absence of father/husband, in extremely stressful circumstances and changes, seeks for changes in the system that would lead to better adaptation. Due to this, in the past, functional systems used to change in other type of systems (mothers go to work and take over the role that previously belonged to the father). This points out to the flexibility of these families which are able to change the family structure, roles and rules (Batic, 1998).

In contrast to the functional, in the past, the dysfunctional, unbalanced systems were impossible to change, so the mothers were unable to preserve the generational hierarchy among themselves and the offspring subsystem, and slowly started to lose control over the children. These families are unable to adapt, which contributes towards higher stress levels.

Furthermore, families that functioned well before the refugee life are more balanced and adaptable, flexible to systematic change when needed, in other words, when the changes are useful for maintaining and improving family functioning, which enables them to successfully handle the crisis.

Results show that, in refugee families, the essential role of the family is endangered, and that is, development of child's personality. However, simultaneously with this process, the resilience of the family, their ability to adapt, to overcome the crisis and sustain their relative functionality, even in cases when the circumstances have significantly changed are also very important. In this regard, we could also include the fact that one part of the families who were surveyed functions relatively well. If we could establish a gradation in relation to the danger children in refugee family are facing, then we can conclude that: the development of child's personality is least endangered in refugee families that before becoming refugees had functional relationship. The level of danger increases in structurally deficient families that before becoming refugees had functional patterns of behavior. More endangered is the development of a child in refugee families with dysfunctional behavioral patterns and most endangered are the structurally deficient dysfunctional families. This situation points out that even in stressful circumstances such as the life as a refugee, family functionality is crucial for its adaptation.

Overcoming family stress

In the process of studying the family stress, the attention is redirected from the life events and problems, to the manner in which they can be handled, in other words, the manner in which families handle stressful circumstances. Overcoming is most commonly defined as reduction and prevailing over psychological shock or stressful circumstances (Fleishman, 1984, according Srna, 1997). This definition can also be applied in the process of determining family overcoming. An important progress in understanding the overcoming made Lazarus (1984), who believes that it is a process, and not a separate attempt, action or effort.

Contemporary understandings of this term include that the overcoming is more than a reaction to a stressor and it includes a set of interactions within the family,

as well as interactions of the family with the environment, taking into consideration the developmental aspect. It includes simultaneous activities in several dimensions of the family life such as: maintaining satisfactory communication conditions and family organization, promoting members independence and self-respect, establishing family boundaries, coherence and community, existence and development of social support in the process of interaction with the environment and maintaining the efforts to control the influence of stressors and quantity of the change in the family community (Olson, 1993).

The process of stress overcoming is a central topic of contemporary stress theories mostly because it is considered a stabilizing factor that helps individuals and families to maintain psychosocial adaptation during the stressful period.

Family stress overcoming is defined as "reaction that happens when the family is in a situation which demands undertaking unusual efforts to observe, undergo and define new situation, as well as to undertake specific actions that would help them return to previous daily routine" (Olson, 1993). When we talk about family overcoming of stress, the most important question that emerges is: Is it possible to discover which families will be immune to the traumatic event and which families will not be? Based on the studies conducted for several decades, there emerged more than ten factors typical for families that easily cope with stressful events (functional families) and as much factors typical for families that have difficulties to cope with such events (dysfunctional families).

McCubbin and Figley (1983, 2014) identified 11 characteristics that differentiate families which handle stress better than families who are not able for that:

1. Ability to accept stressors, which means that effective families are able to accept the fact that they are obligated to cope with very stressful event or series of events. They may at some point of time be confused, but they quickly recover and start to mobilize their energy and ability to act.
2. View the situation as a family problem: Effective families quickly redistribute the focus of the problem or stressor from one of more family members, and in that manner, they acknowledge that it is a threat for the whole family.
3. Adopt a solution-oriented approach to the problem: Functional families do not spend time looking for the wrongdoer responsible for the crisis, but they mobilize their forces and efforts together to solve the problem.
4. Show high tolerance for other family members: Functional families are more tolerant during the crisis and tend to identify the needs for negotiation, patience and consideration during the crisis, which requires joint cooperation.

5. Clear and direct expression of commitments and affection: Effective families are composed of members who clearly and directly express their feelings, not considering the fact whether they are in crisis or not.
6. Open and clear communication means that the family members talk not only about their feelings, but also about many other different issues.
7. High family cohesion: Effective families are composed of members who enjoy each other company, they miss each other when they are not together, are proud of being part of the family and ask each other for help when needed. Cohesion is especially important when the family is traumatized. During the crisis, it is normal the cohesion to be higher, even though some families tend to reject other members when they need the most help.
8. Flexible family roles are always important for the family, mostly in times of crisis, when one or more family members are not able to function effectively.
9. Utilization of effective resources: Functional families are able to accept their own resources (interpersonal and material), as well as external resources (professional and unprofessional help) without difficulties and shame. Moreover, they are able to recognize stressful circumstances and to rely on others, as well as to support others when they need that.
10. Absence of violence: Functional families, regardless of the stress quantity they must accept, do not show violence towards themselves or towards other family members. Eruption of emotions is normal and expected when the family is traumatized.
11. Absence of substance abuse: Functional families are rarely composed of members who abuse substances, because, according to them, it is not a solution for reduction of tension.

Figley (2012) mentions the following criteria:
1. Conversation with others about the daily routine, and if needed, participation in groups for support.
2. Widening the group of people who could help and would like to help.
3. Putting energy into work or into something that would help others (for example: getting involved with the Red Cross).
4. Writing letters of sympathy.
5. Education about the war and the region in which the loved one/s fight.
6. Physical activities (exercise), dedicating more time to hobbies and other activities.

When faced with crisis, some families can apply methods for coping with stress and which are not useful and may cause additional stress. And those are:

1. Denial and wrong perception of stressors;
2. The problem is seen as individual, rather than family problem;
3. Main goal of solving problem is finding the wrongdoer;
4. Low tolerance from and for other family members;
5. Indirect, or lack of emotions and commitments expression;
6. Closed and ineffective communication;
7. Low family cohesion;
8. Rigid family roles;
9. Ineffective usage of the available support sources;
10. Practicing violence;
11. Abuse or overuse of stress-controlling substances.

Studies dedicated to families of soldiers who participated in the Gulf War, discovered additional methods that families used to cope with stress and that were not efficient. Those methods include:

1. Self-accusation of all or more of the negative aspects of the situation;
2. Avoiding responsibility for the unwanted situation and blaming the government for that;
3. Cynicism regarding living conditions;
4. Lack of motivation for carrying out daily tasks and responsibilities;
5. Venting frustrations and feelings in front of others, especially loved ones;
6. Exaggerated search for information that would solve the existing problems;
7. Exaggerated stress control practicing or avoiding thoughts about the stressor.

The positive mechanisms and techniques that were being applied by the refugee families in Macedonia, according to the studies are:

- Accepting the stressor, and the awareness of the mother in deficient families that now she must lead the family and play an active role;
- High tolerance in regard to accommodation conditions;
- Ability to accept help from other people (relatives abroad offer material support to the family);
- Lack of substance abuse;
- Conversation with others about the daily routine and events, as well as about their own feelings and emotions;
- Putting energy into something (home, at work, at school);
- Maintaining contact with absent family members when possible (Batić, 2012).

Conclusion

Forced migration causes high levels of stress to children and family exposed to it. The knowledge we have nowadays about the functioning of families affected by forced migration and involuntary displacement and the factors which contribute the family to become more resilient, provides psycho-social basis for interventions that would help children and families to overcome the crisis in a shorter period of time.

However, we believe that, the psychosocial interventions in refugee camps, asylum camps and similar places, as well as the work with these families are limited. In spite of the resilience that is manifested by some of the families and their ability to adapt, the refugee situation is hardly suitable for the development of family life.

Although crisis intervention enables faster recovery and reduction of suffering, as well as overcoming and coping with refugee stress, a final solution for these families is to provide them adequate standards of living.

References:

1. Ajdukovic M., Ajdukovic D. (1998), "Impact of displacement on the psychological well-being of refugee children", International Review of Psychiatry, 10, 186-195.
2. Batić D. (1998), Emocionalno-socijalni odnosi deteta i majke u deficijentnoj porodici izbeglica (magistarski trud), Filozofski fakultet, Beograd.
3. Batić D.(2012), Rezilijentnost porodice izbeglica, Beograd: Temida, Prometej.
4. Beavers, W.R.& Hampson, R.B. (1990), Successful Families: Assessment and intervention, New York: Norton.
5. Brende & Goldsmith (1991), "Post-traumatic stress disorder in families", Journal of Contemporary Psychotherapy, 21, 115-124.
6. Craig, Sossou, Schnack, & Essex (2008), "Complicated grief and its relationship to mental health and well-being among Bosnian refugees after resettlement in United Sates: Implicatios for practice, policy and research", Traumatology, 14, 103-115.
7. Figley, C. R. & McCubbin, H. I. (1983), "Looking to the future: Research, education, treatment, and policy". In: C. R. Figley & H. I. McCubbin (eds.), Stress and the Family, Volume I: Coping with Catastrophe. New York: Brunner/Mazel, 185-196.
8. Figley Ch. R. and Kiser L J. (2012), Helping Traumatized Families (Psychosocial Stress Series), 2nd edition, London: Taylor & Frances.
9. Golubović Pešić Z. (1981), Porodica kao ljudska zajednica, Zagreb: Naprijed.

10. Ignjatović-Savić N (1995), "Expecting the unexpected: A view on child development, from war affected social context", Psihologija, Special issue.

11. Konvencija o statusu izbeglica sa Završnim aktom Konferencije opunomoćenika Ujedinjenih nacija o statusu izbeglica i lica bez državljanstva (apatrida), Ženeva

12. Kaslow F.W (1993), The military family in peace and war, NY: Springer.

13. Lazarus R., Folkman S., (1984), Stress, Appraisal and Coping, NY: Springer.

14. McCubbin H.L., Charles R. Figley (eds.) (2014), Stress And The Family: Coping With Normative Transitions, Volume 1, Family & Relationships , NY: Routlegde.

15. Momartin, Silove, Manicavasagar,&Steel (2004), "Comorbidity and PTSD and depresion:associations with trauma exposure, symptom severity and funkcional impairment in Bosnian refugees resettled in Australia", Jurnal of Affective Disordes, 80, 231-238.

16. Morina, Rudari, Bleichardt, & Prigerson (2010), "Prolonged grief disoder, depresion and postraumatic stress disorder among bereaved Kosovar civilian and surviviors: A preliminary investigation", Internationl Journal of Social Psychology, 56, 288-297

18. Olson, D.H. (1993), "Circumflex model of marital and family systems", in: Walsh, F (ed.), Normal Family Processes, NY: Guilford Press.

19. Jensen ,P. S. (1989), "Father absence: Effects on child and maternal psychopathology", Journal of the American Academy of Child and Adolescents,

20. Srna J. (1997), "Porodica u ratu i izbeglištvu" in: Vlajković J., Srna J., Kondić K., Popović M., Psihologija izbeglištva, Beograd: Nauka.

21. Schaal, Elbert, & Neuner E. (2009), "Prolonged grief disorderand depresion in widows due to Rwandan genocide", Omega, 59, 203-219.

22. Schaal, Jacob, Dusingizemungu, & Elbert (2010), "Rates and risks for prolonged grief disorder in a sample of orphand and widowed genocid survivors", BMC Psychiatry, 10, 5-65.

23. Vlajković J., Srna J., Kondić K., Popović M. (1997), Psihologija izbeglištva, Beograd: IP Nauka.

24. Vukčević M., Dobrić J., Purić D (2014), Istraživanje o mentalnom zdravlju tražilaca azila u Srbiji, Beograd: UNHCR

25. Walsh., (1993), Normal Family Processes, New York /London: The Guilford, Press,

26. Walsh, F., (1998), Strengthening Family Resilience, New York/London: The Guilford Press.

27. Walsh F. & McGoldrick: (1991), "Loss and the family: A systemic perspective". In Walsh F. & McGoldrick, Living beyond loss: Death in the family, New York: Norton.

28.   Walsh F. (2007), "Traumatic loss and Major Disasters: Strengthening Family and Community Resilience", Family Process, Vol.46, No2.

29.   Weine et al., (2006), "A family beliefs framework for socialy and culturally specific preventive interventionswith refugee youths amd families", American Journal of Orthopsychiatry, 76, 1-9.

30.   Waine et al. (2004), "Family conseqences of refugee trauma", Family Prosses, 43, 147-160.

31.   Weine,S.M. (2011), "Developing Preventive Mental Health Interventions for Refugee Families in Resettlement", Family Process, Vol. 50, No. 3, 410-430.

THE ROLE OF THE ARMY OF THE REPUBLIC OF MACEDONIA
IN DEALING WITH REFUGEE CRISIS

Zhanet Ristoska, PhD
Ministry of Defense of the Republic of Macedonia
E-mail: zanet.ristoska@yahoo.com

Biljana Popovska, PhD Candidate
Unviersity of Bucharest, Berlin Campus,
E-mail: bpopovska@yahoo.com

Abstract

So far Republic of Macedonia has faced large refugee crisis caused by the huge number of migrants and refugees fleding from conflict areas and trying to get to Western Europe. In the course of the second half of 2015 the situation on the southern border of the Republic of Macedonia was alarming. During August, more than 14 thousand refugees were present in the territory of the Republic of Macedonia on daily bases. This huge influx demanded an appropriate response by institutions to provide the safest way which would enable the flow of these people on the northern border and outside the Republic of Macedonia. Seen from a historical perspective this was not the first time the country had such a situation at the borders. However and from the past experience from the Kosovo crisis in 1999, this time, the country managed relatively well and quickly to activate the mechanisms to deal with such situations. The legislation of the Republic of Macedonia involves the possibility to activate Army units during a declared crisis situation to support police forces and state institutions primarily responsible for the implementation of measures and activities for such humanitarian and security threat. The subject of analysis in this paper will be legal provisions for the activation of Army units in crisis situations and specific activities and challenges Macedonian Army faced during the second half of 2015 and 2016 in relation to the refugee crisis. The recommendations in this paper are aimed at re-evaluation and completion of certain legal possibilities for the competences of institutions in dealing with crisis situations and appropriate use of units of the Army of Republic of Macedonia.

Keywords: refugee crisis, army units, security threats, institutions, activities

Introduction

EU and South Eastern Europe have faced many challenges arising from the escalating refugee crisis and the influx of large numbers of refugees from the crisis regions of the Middle East and Africa. En route towards Western Europe refugees were passing through a number of Southeast Europe countries. Macedonia was one of the main transit countries of the Balkan route through which several hundred refugees were passing on daily bases. Threats and risks from the great refugee crisis were numerous and included the likelihood of humanitarian disasters, spreading diseases and epidemics, excessive load and collapse of the economic systems of the transit countries up to direct security challenges in terms of maintaining order, preventing possible violence and guaranteeing the physical safety of refugees but also the residents of the transit or possible new resident countries for the refugees. Great was the possibility that some of these people, using the guise of refugees from conflict to penetrate the EU and South Eastern Europe coutries in order to carry out terrorist attacks and to endanger the safety of citizens and the vital values of the Member States and South East Europe.

Macedonia was part of the Balkan route through which huge number of refugees and migrants from conflict areas in Syria, Afghanistan, Iraq and some countries of Africa transited. In the course of the 2015, about one million refugees and migrants transited the territory of the Republic of Macedonia. After the declaration of a crisis situation on the part of the territory of the Republic of Macedonia, the Army of the Republic of Macedonia (further in the text: ARM) was included and was given a legally regulated mission to deal with the challenges arising as a result of the large refugee and the migrant crisis as a support to the police forces. The Citizens of many cities in the country almost did not feel that great movement which was primarily due to the efficient involvement of the police and the army units which enabled the bulk of these refugees regularly to be recorded and to transit the territory of our country's northern border with Republic of Serbia, thus preventing a large number of refugees illegally to cross our border with Greece. Hence, R. Macedonia has served as an example for other countries on how to deal with the influx of migrants and refugees from conflict areas. With some of its units (military police and engineering units) ARM was constantly present in the field which certainly had implications related to the money spent as well as the excessive volume of daily engagement of its forces beyond the normal duties and tasks. Still, all activities undertaken by Army members in dealing with the refugee crisis had to be performed only

in support of the police units i.e. they had no legitimacy to act independently (without police authorization), which had implications for the safety of its members and their efficiency in the execution of tasks. Unfortunately, there had been a number of injured security personnel on duty. Today, the situation at the state borders of the Republic of Macedonia is secure. The Balkan route is closed and the number of illegal crossings has been reduced drastically.

Republic of Macedonia and the refugee crisis

Macedonia wholeheartedly supported the policies of Brussels in respect of the measures and actions to deal with the refugee crisis at its national borders. It allowed humanitarian organizations without problems to provide the necessary support and assistance to migrants and refugees. However, during 2015, the number of refugees and migrants has rapidly begun to increase. Moreover, at one point in the course of August 2015, the situation at the southern border was such that during one night 14,000 refugees and migrants were present at the railway station in Gevgelija. Overnight, the town of Gevgelija of 15,600 inhabitants has grown for more than 14,000 refugees and migrants. This situation was alarming and it was evident that only with border police the border could not be safe. Hence, the situation could have escalated and cause security implications for the country. Numerous anomalies became obvious while recording and registering the migrants. For instance, most of the refugees and migrants were men aged between 18 and 30 years. Also, some of the migrants coming from Greece had burns and wounds on their right hands. Dozens of people had the same identity documents. In addition, majority of the Frontex documents stated that those people were born on January 1 and May 5 (Ivanov Gj., 2016). Then, Macedonia was one of the few sovereign states in Europe, which alone made a decision and implemented it. Earlier, on July 19, 2015 the President of the Republic of Macedonia as its supreme Commander initiated the possibility of engaging the Army of Republic of Macedonia. During this period tactical measures were implemented to assess the deployment of the army to protect the border in a support of the police forces. The President convened the Security Council of the Republic of Macedonia and conclusions were adopted to protect the national security from the threats Republic of Macedonia was facing due to the refugees and migrants influx on the southern border. The public was informed about some of these measures and activities. Some of them were classified and were to be implemented in institutions for the purpose of prevention and management. Government took the initiative to procure the necessary equipment and some time was given to make all the preparations to put the protective fence when appropriate (Ivanov Dj, 2016).

On 19 August 2015, the Government of Republic of Macedonia adopted a decision declaring the crisis situation in the southern and northern borders. The very next day, on August 20, decision was made to deploy ARM in support to the Ministry of Interior to deal with the declared crisis conditions due to the migrant crisis.

Initiated by the Macedonian Government and the countries along the Balkan route, an expanded ensemble of the European Commission and the Member States en route of refugees and migrants transit convened in October 2015. According to the plan of the European Union, 55,000 refugees and migrants were to remain on the Balkan territory. Macedonian President Dr. Gjorge Ivanov resolutely countered this possibility, pointing out that Macedonia had capacity for only 2,000 people in the temporary transit centers, of which 1000 at the entry and 1000 at the exit. He also recalled Republic of Macedonia experience of 1999 when the country was enforced to accept 360,000 refugees from Kosovo at the state expense (http://president.mk/mk/2011-06-17-09-55-07/2011-07-19-10-40-39/3488.html).

On 15 November, President of the Republic of Macedonia convened the Security Council of the Republic again and opted for concrete measures and activities to actively involve military units in support to the police units in regulating the situation on the southern border with Greece. "Greece has not shown interest in cooperating with us, except at the level of the police officers engaged at the border. To my personally request to the Greek Prime Minister Tsipras, the refugees and migrants from the illegal camp Idomeni were displaced from the Macedonian border. Greece displaced them to other locations, which contributed to opening new alternative Balkan routes. This has been passed to the Bulgarian prime minister and president who expressed gratefulness as we have pointed out that they should expect the new wave to come through their territory.

On 2 March 2016, European Council President Donald Tusk came to Macedonia. A plan to regulate the migrant wave was presented to him. It involved a regulation with one entry and one exit point. Macedonia's position was that the so called "Principle of the tube" should be implemented on the entire Balkan route so it could be regulated. Brussels followed in this regard. Idomeni became entry point at the border stone 59 while the exit point was at the Austrian-German border. So,ehen the route was established, a"valve could have been installed" to close the Balkan corridor.

After the Macedonian route was close an attempt was made for moves to Italy via Albania. However, it dried up due to the snow in Albania. There was also a second route through Bulgaria. But, Bulgaria and Greece erected a fence at the common border with Turkey. Later, an attempt was made for movements via sea or more specifically from Turkey through Bulgaria and Romania as entry to Europe. However, due to the unfavorable weather conditions and large ocean waves, the migrants abandoned the route.

On March 11, 2016, in an interview for the biggest-selling German newspaper "Bild", President of the Republic of Macedonia Dr. Gjorge Ivanov pointed out that Macedonia was put into an absurd situation as non NATO and EU member to guard Europe from the European Union.

So, although, Macedonia was one of the most affected countries by the huge influx of refugees and migrants among the conflicts' impacted countries it managed successfully without compromising the security situation in the country. It responded appropriately and effectively to this major challenge by utilizing all legal possibilities, human and material resources and effective strategies and tactics to deal with it.

Some aspects of the legislation regarding the use of the Army of Republic of Macedonia

ARM is the armed force of all citizens of the Republic. It is composed of permanent and reserve forces. Organization of the units, commands, staffs and institutions, as well as their size, structure, number, composition and mission are laid down in the organization and formation of the Army. The army consists of branches, types and services. Manning of the army is carried by the organizational structure and formation of the Army. Manning in the armed forces is done by professional soldiers, military officers and civilians serving in the Army, as well as resources. Manning of the reserve forces is done with reserve conscripts. Management of the armed forces in carrying out the tasks is laid down in the Constitution and is under the jurisdiction of the President as Commander in Chief of the Armed Forces. According to the Defense Law, commanding role of the Army is performed on the principle of one leader, subordination and unity in commanding to engage forces and means. According to the latest lineup, the Army is organized in three levels as strategic, operational and tactical one. Command and control of the ARM units at strategic level is carried out by the President of the Republic of Macedonia as a supreme commander of the army. President of the Republic carries out the Commanding role with the Army, through the Minister of Defense and in accordance with the Constitution. Chief of Staff and the commanders directly command with the Army units and facilities in accordance with the regulations for commanding adopted by the President of the Republic.

The role of the army in one sovereign and independent state must be legally supported and determined. In Republic of Macedonia since its independence until today a number of laws and regulations, as well as political and strategic documents governing the use of military units were adopted. Immediately after the independence, the Parliament passed the Constitution of RM (1991). Constitution as the highest normative legal act regulates several areas pertaining to the Republic of Macedonia

as a sovereign, independent, democratic and social state. Constitutional solutions have created a basic framework to build the defense of the Republic of Macedonia. Defense system, as a subsystem of the system of national security is intended to protect the freedom, independence, sovereignty and territorial integrity of the Republic of Macedonia from all forms of military threats and other forms of use of military force. The defense of the Republic of Macedonia is discussed in more details in Chapter 7 of the Constitution which is titled "Defense of the Republic of war and emergency situation." It regulates the military and the state of emergency, the manner of declaration, the duration of emergency and martial law and the powers and responsibilities of the bodies during that state. Article 122 states that: "The armed forces of the Republic of Macedonia protect the territorial integrity and independence of the Republic. The defense of the Republic is regulated by a law adopted by a two-thirds majority of the total number of MPs. (Macedonian Constitution,1991)

The first Law on Defense of the Republic of Macedonia was adopted in 1992, and it was later repeatedly amended so that further defines all matters relating to the defense of the country. In 2001, a new Law on Defense was adopted (Defense Law,2001). According to the Defense Law of 2001, "the defense of the republic is exercised by the citizens, the state government and the armed forces as the Army of Republic of Macedonia". Defense Law of 2001 over the past decade repeatedly changed and was amended. The Defense Law precisely and expressly defines the role of the army and its units within the country and the participation of the army in activities outside the territory of the State. Chapter IV of the Defense Law - Army of Republic of Macedonia, specifies how ARM is organized and why it is organized: "The army is organized, prepared and trained to conduct armed struggles and combat actions to exercise its constitutional role (Defense Law,2001) ." The Law on Defense sets forth the organization and composition of the Army by types, branches and services. Tasks and duties of the General Staff in the system of Defense, as well as issues concerning the responsibilities about commanding the army, manning, mobilization, preparation, financial security, chains of command and control, crypto protection and counter electronic security are also defined. Article 40 - Participation of the Army in emergency relief activities, explains the principle of involvement of army units in case of emergency. The provisions of the Act further defined in the Strategic Defense Review (further on: SDR) of (2003). President acts in the framework of the Constitution and the Law. Functions of the President in the defense area are set forth in Article 18 of the Defense Law of 2001. These activites constitute the office of the supreme command as the highest level of command in the armed forces of the Republic of Macedonia. The provision of Article 18, paragraph 1, item 5 of the defense prescribes the authority of the president to "adopt documents to engage the Army and order it." Based on this provision,

none other than the President of the Republic may issue an order to engage the Army. A similar conclusion applies to the provision of section 8 of the defense law that provides the authority of the president to "order mobilization of the Army." From the wording of this provision, it may be concluded that no one else, and in no case cannot order mobilization of the Army or part thereof other than the President of the Republic. Basic constitutional duties of the president are to represent the country in a role of a head of the state and carry out the supreme commanding with the armed forces in a capacity of a commander in chief(Macedonian Constitution,1991).

In 1998, the first Defense Strategy of the Republic of Macedonia was adopted as a basic document presenting the fundamental national values and interests and identifying threats and risks to national security. In 2001 it became evident that the political framework of the Strategy of 1998 should not be exceeded and it does not correspond to the specific events and conditions of the security plan. So, until then the Army of Republic of Macedonia developed as a force for conventional actions. However, after the events of 2001, it became clear that due to the developments and security analysis ion national and global level, it inevitably had to be restructured in order to respond to the increased asymmetrical threats.

In 2003, Concept for National Security and Defense was developed and adopted by the Parliament. It established platform based on which all the goals, attitudes, activities and measures undertaken by the Republic of Macedonia to become a country with a higher degree of national security and the closer to the countries which are part of the collective security systems to build upon. The Concept for National Security and Defense of the Republic of Macedonia is the most important document which provides the basis for improving the specific laws and documents. Then, based on conceptually founded views on vital security issues the implementation of standards and operating procedures closer to NATO standards began. In the course of 2003, the first phase of the Strategic Defense Review was made based on the conceptual commitments laid out in the Concept of National Security and Defense policy framework i.e., SOP. Later, activities proceeded with adoption of standards and commitments to the development of the Army and accession to NATO, thus completing the second and third phase. The first phase is a part when documents that served as basis, guidelines and planning assumptions were prepared. The second phase covered the part on assessment of the forces.

Primary missions of the defense of the Republic of Macedonia are defined in the second phase of the Strategic Defense Review. They are: the defense of the country; operations in support of peace; contribution in dealing with regional conflicts; protecting the broader interests of the country.

Further below the tasks of the mission "defence of the country", are discussed. They are:

1.1. defense and protection of the territorial integrity and independence of the Republic of Macedonia in accordance with the Constitution, the Law on Defense and the National Concept for Security and Defense of the Republic of Macedonia;

1.2. support to the forces of the Interior Ministry (further on: MOI) in dealing with the threats, risks and safety hazards, which exceed their capabilities and capacities;

1.3. support of the state authorities, local government units and other government and non-governmental organizations and institutions, as well as citizens in dealing with natural disasters and epidemics, technological and other institutions and other incidents;

1.4. performing operations and military support as host country of the international forces in the territory of the Republic of Macedonia to perform tasks and responsibilities taken by Republic of Macedonia including joint defense of the territorial integrity and sovereignty of Macedonia.

As subtasks of the task 1.2. the following situations have been defined:

-support of MOI with intelligence;

- support MOI with resources and capabilities that exceed their capacities;

- support the MOI in border security;

- support the MOI in executing actions of securing facilities of importance
for the defense;

- support the MOI in dealing with asymmetric threats.

Later on in the text the Strategic Defense Review (further on: SDR) it is explained that according to the developments of the defense missions ARM should define the actions for its implementation. For the subtask "support units of the Interior Ministry" the SDR precisely defines the activities and the specific cases with/for which Army units will support the police.

Strategic Defense Review was made in order to specify the tasks of the armed forces in defending the country from abroad. It also took care to answer the previous dilemmas regarding the use of the armed forces in security threats which are not external aggression to our state, but relate to conditions in a disturbed security situation in the country due to other reasons and situations in which police units as primarily responsible for these situations are not able to respond independently.

Law for Crisis Management, adopted in 2005, in its provisions also covers situations of crisis requiring support from the Army troops. As far as the role of parts of the army in handling emergency and crisis situations caused by natural, technological and other sources of danger in terms of removing the effects which existed before as legal provisions (Law Defense Ordinances for civil defense, etc.). However, it is the first

law that deals in detail with this issue and legalizes the use of military units which within the state are used to support police forces in dealing with crisis situations. Armed Forces that can be used for participation in disaster management and humanitarian emergencies are precisely defined in SOP missions. In addition, conditions under which they can be engaged are provided in Article 32 of the Law on Crisis Management. Under this law, to use military forces for crisis management in support of the police, the Steering Committee on Crisis Management will have to make a proposal through the Government to the President of the Republic. The proposal must specify the type and number of forces and capabilities of the ARM, the purpose and tasks they are required for and the duration of the activities. Coordination in deciding is performed by the police while commanding the units of the Army, participating in the operation is the responsibility of the formational commanders (Law on Crisis Management,2005).

Army units in support of the police in dealing with the refugee crisis

In the previous section we introduced the main legislative commitments for the mission, tasks and the use of the Macedonian Army, its formation, method of management and command. Development and changes of the legislation made possible for ARM units to be used in support of the forces of the Interior Ministry in dealing with the threats and risks over the security of the country.

Members of the Army units, in conjunction with the MOI in border security, were engaged to close the routes used by refugees and migrants. Also, members of the Army were engaged in tackling the rampant infiltration of refugees and migrants into the Republic of Macedonia. In addition, their pick up and transport or reporting to the Ministry of Interior was carried out. Also, during the entire time of the crisis, engineer units of the Army, which provided the appropriate engineering support in dealing with the situation at the state border were engaged. All these activities imply constant engagement of ARM in conducting patrols along the border, organizing meetings and observation posts, and continuous reconnaissance of the terrain.

The units of the Army of Republic of Macedonia were engaged round the clock as a support to the police units on the southern border. Based on the decision of the president and the order issued by the General Staff as well as and in accordance with the plans for the use and deployment of the Army, they performed tasks within the scope of assistance and support to the Ministry in dealing with the crisis. A large number of illegal crossing of the state border were prevented and persons were transported or escorted to the transit center in Gevgelija for further processing. Again, during the intensified refugee crisis Army exercised the experience gained as during the 12th rotations in Iraq

and 24th rotations in Afghanistan. In only two days, the army managed to build a 20 km long security fence. By setting the fence, the flow of migrants was completely regulated at the entry point of the famous stone 59.

Army and police units were properly organized in response to the crisis by declaring a crisis situation in the border area. Also, there was coordination on daily basis with the Center for Crisis Management and all ministries in the Government of Macedonia, UNHCR, IOM and other international and national NGOs. Humanitarian aid and reception conditions were coordinated by the Ministry of Labor and Social Policy. With the installation of the fence on the part of the state border of the Republic of Macedonia to Greece mass crossing of the border was prevented.

However, we should say that there was not enough people (police and army), for hermetically to close the southern border. It should be noted that army units are with no police authorizations and coordination and management are done by police members which certainly complicates and hinders in some respects the efficiency of handling detainees. Also, in that period problems arose in relation to inadequate capacity to accommodate persons in detention centers. Reception Center in Gevgelija has a capacity of 1,920 persons (in areas inside and outside the temporary facilities). The center can accommodate 569 people on 24-hour care. In addition to the shelters provided by various entities this figure can be increased to a maximum of 812 persons. Maximum capacity of the entry in the temporary transit center in Tabanovce is 991, while for 24-hour accommodation the capacity is 356 persons. With shelters provided by various entities present in the center, the capacity is increased to a maximum of 510 persons. It is necessary to increase the number and capacity of the officials of the border police at points of entry in order to handle the large and the complex migratory flow and for providing adequate efficient and effective identification and registration. It is necessary to improve the mechanisms to control the crowd. It is also necessary to intensify cooperation with the countries of the region and with the EU in order to reach and prepare a joint and unified response to the crisis. Intelligence should be share with the countries of the region and the EU in order to protect the country and for a prevention of possible terrorist attacks. It is necessary to design appropriate financial structure for crisis response which relies on government capacities, as well as to the appropriate humanitarian organizations with international and national character and the financial assistance from the EU.[69]

As a comparison to Macedonian case further in the text a comparison of the situation in the Republic of Slovenia, which also had a large influx of refugees and migrants at the border with Croatia is provided. Slovenia has actively been involved in addressing

---

[69] The data for most of this part of the paper are obtained by analysis and synthesis of official reports and declarations of the General Staff and the Center for crisis management during the crisis period http://morm.gov.mk/ http://www.arm.mil.mk/ http://www.cuk.gov.mk/mk/

migrant crisis. The country supported all the efforts to prevent illegal migration by participating in two operations in the Mediterranean, with the multipurposed patrol boat "Triglav". Certainly, the situation with the migrant routes through the Western Balkans was of a concern for Slovenia. Later developments indicate possibility of a second wave of migration. In regard to this, Slovenia is intensively preparing for it. "We continue to support EU policies related to migration. Public should understand that the so-called "Wave-through" policy is not an option. At the same time, the countries of this route should refrain from independent decisions and should continue close coordination, especially if the situation escalates". In this context, Slovenia repeatedly highlighted the need to support the Western Balkans, particularly Macedonia. We highly appreciate the responsible way in which Macedonia had to deal with the situation. Slovenian police helped the Macedonian police with a donation of equipment, as well as in controlling the border and illegal migration. At present, the ninth group of Slovenian police officers help at the Macedonian border. Migration wave in Slovenia was managed by the police on a daily basis, but also by the 376 members of the Slovenian Armed Forces and 295 members of the administration for protection and disaster relief, which operates within the defense sector as well as by volunteers subordinated to these institutions. Slovenian Armed Forces gave logistical support system for civil protection and the police, assisted in the protection of the national borders and certain buildings/facilities and areas. In addition, the Parliament of Slovenia with a two-thirds vote approved an amendment to the Defense Law which enabled the Slovenian Armed Forces to have additional powers to protect the border. In order to increase the sustainability of the Slovenian Armed Forces, they were additionally manned by contracting the reserve forces. With these ammendements and opportunities Slovenian Armed Forces have successfully addressed the needs and requirements of state institutions and have not registered any incidents so far. (From the Interview with Minister of Defense of Slovenia Andrea Katic for the Defence magazine "Shield", November 2016).

Conclusion

Currently, the Army has the right skills to fulfill the primary mission - defense and protection of the territorial integrity and independence of the Republic and to protect the life and safety of its citizens. When other state institutions (e.g., MOI / Police, the Center for Crisis Management, Protection and Rescue Directorate and others) are leading institutions in the response to an event of non-military nature, the Army always has a supportive role. To fulfill this role, the army has military capabilities to support the police and other state institutions in the protection of the critical national infrastructure,

to support in dealing with the consequences in the event of a terrorist attack, and to support state institutions in case of natural disasters; epidemics, technological and other risks and crises.

During the past i.e., after the crisis was declared on the part of the territory of the Republic of Macedonia, Task Forces of the Army of Republic of Macedonia in more than 200 rotations were engaged. Main mission of these forces was to achieve coordination and collaboration with the forces of the Interior Ministry in closing routes for illegally border crossing, dealing with controlled and uncontrolled entrance at the territory of the country by migrants, their gathering together and transport/escort to the Ministry of Interior as well as to provide engineering support.

However, we can conclude that for greater efficiency and safety of members of the Army in meeting these legal given opportunities, it might be necessary certainly depending on the security assessment for a given crisis situation in these activities to provide additional authority and powers through amendments in the legislation.

References:

1. Бакрески Оливер и Димче Петровски (ур.) (2015), Реформи во одбраната, Скопје: Министерство за одбрана.
2. Гоцевски Т., (2000) Одбранбено осамостојување на Македонија, Куманово: Македонска ризница.
3. Котески Г., (2014) АРМ низ призмата на националната безбедност, Скопје: Јофи-скен.
4. Law on Defense of the Republic of Macedonia, "Official Gazette" no.42 / 01
5. Law on Crisis Management, Official Gazette "No. 29, 2005
6. Ministry of Defense of Republic of Macedonia, (2012) White Paper on Defense, Skopje: Ministry of Defense
7. Ministry of Defense, (2014) Long-term Defence Development Plan 2014-2023
8. Ministry of Defense, (2003) Strategic Defense Review, political framework
9. Нацев, З. и Петровски Димче, (2009) АРМ кон НАТО, концептуален пристап и организационен развој, Скопје: Филозофски факултет
10. Николовски, И. (2003), „Армијата на Република Македонија и нејзините реформи за членство во НАТО", во: Македонија во НАТО, Куманово: Форумпринт.
11. Ivanov. Gj. (2016) "Geostrategic and political position of the Republic of Macedonia during the migrant and refugee crisis " In Contemporary Macedonian Defence, Volume 16,N 31, Skopje,>Ministry of Defence, Skopje, 2016
12. „Штит", магазин на Министерството за одбрана Република Македонија

HIGH-TECH CRIME - FORMS AND SECURITY RISKS

Marija Gjosheva, PhD
Department of Cybercrime and Digital Forensics
Ministry of Interior Affairs of the Republic of Macedonia
Email: gjoshevam@hotmail.com

ABSTRACT

In the era of high technology, which many consider the beginning of the 21st century, its application has found a place in our lives with all its positive and negative benefits, so fast that high technology has become a topic of today and not something that will bring us the future. We approached closer to the phenomenon of high-tech crime which by its characteristics is transnational and international. Thus stressed to the need for taking over a global action through closer international cooperation in the legal sphere as well as in the fight against high-tech crime, because without harmonization of measures and activities and without rapid and efficient exchange of evidence and information it is very likely a greater number of crimes to remain unpunished.

Keywords: high-tech crime, types and forms of endangerment, protection against high-tech crime, international institutions.

Introduction

The world is passing through the second "industrial revolution". Information technology now touches every aspect of our living. Daily activities for most people are affected by a computer. Businesses, governments, individuals and others use the benefits of information revolution. Despite the benefits in time and money, the computer has an impact on everyday life because the computer routines replace many human tasks. Computers are also used to store sensitive data of a political, social, economic and personal nature. They help in improving the economy and living conditions in all countries.

The computer has a large amount of data to store on the compact medium and high speed operation enables the most complex calculations to be realized in a few milliseconds.[70]

The development of information technology contributes to increasing the types of crimes in the area of high-tech crime especially with elements of cross-border organized and transnational crime. In many countries around the world which have developed informational structure which by its nature is very vulnerable to these kinds of attacks, high-tech crime is marked as one of the worst. Scientific and expert community has recognized the threatening danger from high-tech crime.[71]

Definition and types of high-tech crime

New technologies allow criminals new opportunities and fields of action. The mode of committing the crime in the past and today is very different. In the hands of people who are criminal, information technology can become a tool for danger or damage to life, property or dignity of the individual. The approach of classical security only brings stalled innovations in terms of high-tech crime. It is no longer feasible in this digital world because the information processing is distributed very quickly. Innovative solutions rely on new technologies and the traditional approach to security changes.[72]

The basic features of high-tech crime is the **use of the computer as an object of attack** and **as a means of committing the crime.** When it appears **as an object of attack,** the computer can attack two components- hardware and software. Damage, destruction or abuse of these two components is achieved through three core assets, namely: computerized viruses, worms and trojans. Unlike the first two, which when their creator send there is no more control over them, the third type is a danger which for us is of particular interest since it is a computer program that allows the sender to access the "infected" computer, and to have an insight into its data and manipulate with them without the owner being aware of it.

---

[70] Doctoral dissertation entitled "New challenges and threats of high-tech crime against national security" defended at 05.03.2017 the Faculty of Philosophy Ss. "Cyril and Methodius" Skopje - Institute for Security, Defense and Peace.
[71] The police and high-tech criminal - case studies and problem in the work of the Ministry of Interior Vladimir Urosevic, Sergei Ulyanov, Radoje Vukovic, Ministry of Internal Affairs of the Republic of Serbia.
[72] Creating a Safer Information Society by Improving the Security of Information Infrastructures and Combating Computer-related Crime, Europe 2002, pp. 7, pdf.

When appearing **as a subject of attack or as a means of committing the crime,** it is a "relief" or facilitating the realization of a criminal activity with its help. Here, it is very important to note that the computer can be used as a tool for planning or covering up the crimes or the management of certain criminal activities. This feature is important because in the future it will be the point of connection between organized crime and high-tech crime.

According to the Convention on Cybercrime, the following manifestations and practices of the criminal acts of high-tech (cyber) crime are listed:

1. Computer fraud;
2. Identity theft (phishing, pharming and spam);
3. Financial theft and abuse;
4. Data and documents forgery;
5. Computer vandalism;
6. Making and use of computer viruses (viruses, worms and Trojans);
7. Computer sabotage and espionage;
8. Hacking (creating and abuse of botnet networks);
9. Unauthorized reproduction of legally-protected computer programs (software piracy);
10. Computer terrorism.[73]

Computer fraud

Computer fraud is the most widespread form of high-tech crime.[74] The numerous forms of fraud and their realization is virtually unlimited. Typical for computer fraud is that the offender and the victim does not come into direct physical contact, their contact is direct, but electronically.

The thing that characterizes computer fraud is that it is spread everywhere, in different forms such as: false advertisements which involves fictitious sale of all kinds of goods, when the victim make payments – they are deceived and do not receive the goods they had paid for, then unauthorized access to electronic mail and changing invoices for payments used by companies and concerning changes to the "Iban code" - that is a change of actual account at which should be paid in cash into a false account with a

---

[73] Cybercrime Convention was adopted by the Council of Europe on 23.11.2001 in Bucharest and entered into force on 01.07.2004 year Republic of Macedonia has ratified the Convention by law to ratify the Convention on Cybercrime adopted on 16.07.2004 year.
[74] Jugoslav Achkoski, Security of computer systems, computer crime and computer terrorism, Skopje, 2012, page 30, pdf

minimal change which is imperceptible to the victim. Thus the funds go to the account controlled by the criminals so they are gaining with a huge financial gain.

Most of the computer frauds are committed by international organized criminal groups operating in different countries in the world, and therefore the prosecution against them is very difficult.

Identity theft

Identity theft is complex problem that is spread throughout the world. The offenders can act alone, but they often form networks as they could operate around the world so the number of their victims becomes multimillion.

Computer criminals can overcome security measures for protection, to break through a database (detailed financial data such as bank accounts, data from credit cards, medical data to persons and other sensitive information), and data from personal documents: passports, identity cards, driving licenses etc. Also stealing the identity is easily executed through social networks, primarily because of the fact that large number of people have unprotected free - open profiles. Also, the offenders can easily come to the identity of any user of credit cards as one of the types of high-tech crime that is on the rise, for example by installing cameras over ATMs, setting "skimmer devices" to read data from credit cards which devices can easily be purchased online. Also, on the Internet can be found numbers of credit cards sold to certain forums where the membership in these forums is limited and not everyone can simply subscribe.

The main objective is financial gain. With all these stolen personal data of persons through illegal identity theft, cybercriminals can compromise people, to sell their personal information to other criminals of all types and levels, which can be used to carry out serious criminal acts such (terrorist financing, money laundering, human trafficking, illegal migration, computer terrorism etc.) that would affect the national security of the country.

Nowadays, as the best known and most common ways of identity theft through information system in order to abuse it, are Phishing, Pharming and Spam. Phishing attack involves activity by unauthorized persons through the use of fraudulent messages, email, create fake web pages of financial and other organizations in order to specify the user to disclose their confidential data, data such as bank accounts, credit card numbers, user names, pin codes and other approaches. Once the criminals obtain confidential information from a security nature, they can sell to them to other governments, private companies, in which way they can cause serious security breaches. Pharming is a form of remote attack which targets vulnerable web page and it redirects to a malicious web page.

This attack can be done by changing the file information to the embattled computer or by exploiting security flaws DNS (domain name system). DNS task is linking names with real addresses on the Internet, and for the compromised DNS is said that it is "poisoned". These attacks are concentrated on specific industries, such as financial and security. Also, if by pharming attack anyone comes to health information, they can be altered, that is, a particular therapy or blood test for example to the President of a country or the Premier to be changed, which means assassination of this person, which would cause a serious unrest in that country, thereby directly affecting the national security of the country. Spam is unwanted e-mail. It is a problem which many years creates concern among Internet users. Whether it comes to end-users, large companies or ISPs, spam except that asks users problems it causes financial losses. Despite major efforts to prevent spam with a variety of information tools, legal regulations, unwanted e-mail is still an unsolved problem in Information Systems. It can be freely said that many users are accustomed to spam and accepted as something inevitable.

Besides the disturbing character that the spam has with the end-users, the problems created by the spam have a broader importance. Namely, it could affect the reputation, damage and integrity of companies or individuals taking the time of the alien computer to perform the action, the space on the hard disk, network opportunities, etc. Addresses are being collected through daily internet search to obtain new addresses that later would be used to send spam messages. These addresses are later being sold to interested persons, mostly to spammers themselves who use them for mass messaging. Also it looks like an advertising message which offers certain products or services. In some cases spam message can contain scripts that gather all the information that you possess on a computer, network, or server. Also spam messages may contain malicious code, embedded macro viruses that after its activation on the device or the network will take all the information, images, documents that you own.

Financial theft and abuse

Financial theft and abuse are among the most common computer crimes, relating to unauthorized access to systems of financial institutions, such as systems of banks, processing centers serving banks and have large sets of financial data including personal data of customers, penetration of bank accounts, data from credit cards, and abuses of credit cards.

With data theft of cardholders and their pin codes, the criminals are making great abuses through the withdrawing large amounts of cash, they make forged payment cards with abused cardholder's data and use them in various countries around the world,

such as at ATM (cash dispenser) and POS terminals whereby perform illegal transactions of sale. There are various forums on the Internet, which for a certain amount are offering complete data from payment cards for sale (numbers of payment card data from owners of credit cards, PIN codes and CVV 2 code that is commonly used to carry out transactions on the Internet).

Lately there are frequent abuses when buying online that is e-commerce (online trading). When it comes to e-commerce, we can conclude that lately it is in development, we live the era of internet marketing which enables the exchange of products ever, anywhere at the speed of light.

The term e-commerce means transactions that are conducted online, and only on the web-based applications for trade (transactions through email are excluded), and covering goods and services in the material and the immaterial form. Mitigating circumstance in internet commerce is reduced risk to detect criminals, primarily because they do not need to appear in the shops, no need to set up a "skimmer devices" (devices for data theft from credit cards) at ATMs, do not need to produced forged payment cards and withdrawing cash from ATMs. To carry out illegal transactions online, criminals only need data from payment cards and CVV 2 code located on the back side of a payment card (in some cases not necessary, it depends on the website) and of course internet access .

As one of the largest financial theft and abuse which is also on the rise is Internet banking. It has become one of the best known and most widespread electronic services. Extremely convenient financial service that offers 24 hours service with no extra charge. However, online banking fraud is on the rise. Internet banking should be safe. The protection of personal user data is priority. Also Internet economy has become one of the strongest economies in the world. Most of our life now is done "online". Cybercriminals see great opportunity for financial fraud, theft, income from the stolen data and other valuable information.

These cyber-attacks directly targeting the business systems, large supply chains, as well as large business companies. These attacks mainly threaten individual security of person, then directly threaten the financial sector, affects the economic stability of the country, losing faith in the reliability of the state system, thereby reducing the financial gains of the state and thus it becomes economically weak, and when a country is economically weak it is an open field for many kinds of organized crime and corruption, and it affects the national security of the country.

Data and documents forgery

The rise of this activity is linked with the emergence of computerized color laser printers. These printers have the option of high-resolution printing, modification of documents, even creating fake documents. The quality of these documents are often not distinguished by the quality of authentic, and often there are attempts to counterfeit banknotes using the computer and peripherals.

Special emphasis should be put on data and documents forgery. The most popular is the personal documents forgery (ID cards, passports, driving licenses, health cards, etc.), also and educational certificates forgery, forging a various documents for economic purposes, for health purposes, etc. Using forged documents in election process in any country represents a major threat.

Computer vandalism

Cyber vandalism is a malicious hackers' act with performing disturbance of the functioning, modification and even destruction of the site. Cyber vandalism characterized as website defacement (destruction of the website) or Dos attacks (Denial of service). If in the past vandalism express itself by writing or drawing graffiti on walls in public places, or even further back by typing in caves, which undoubtedly was used as a means of communication "today it is done with WEB sites attacks". The affected websites must be temporarily closed to eliminate the damage, and return to normal original state. The immense possibilities offered by the Internet and its reach around the world, without borders or computer space allows this type of criminals to spread messages on the Internet that usually hate speech, as well as economic terms whereby damaging the economy and industry.

Cyber vandalism has a major impact on government sites as well as religious sites, and it may be political reasons or just for fun. For example, if the official website of the government, the president of a country, unauthorized change the contents and become threats from religious and national origin to a particular nation or written speech of hatred, it can cause protests, riots by members of that nation, which can easily escalate and thus become a threat to the national security of the state. In 2009, a computer vandalism- defacement was committed on the official website of the President of Macedonia, Dr. George Ivanov.

Preparation and use of computer viruses

A computer virus is a program, a correct computer code which represents being something else, it aims to do the unexpected, cumbersome and often undesirable situations, and it can do little or great damage to the computer (for example loss of data from the hard disk) . The activated virus can not only infect programs and documents on your computer, but can be reproduced and transmitted to other connected computers in the same way as biological viruses pass from one person to another.

Today viruses commonly spread through internet, when downloading various programs or via e-mail. To protect against the viruses we need to install an antivirus program to our own computer.

Today's viruses are much more powerful than they were in the early versions. Viruses can be activated by opening an e-mail (attachment), by clicking on spam by visiting suspicious sites, open spreadsheets (excel). However, the Internet represents the main "highway" transmission of viruses.

With the help of computer viruses, criminals can come to very confidential and sensitive government information, security information, financial data, personal information, research and medical data, etc. Usually if criminals come to such information, they can sell them in order to gain material benefit, unaware that if this information come into hands of wrong people, it can cause serious threats to security.

Computer sabotage and espionage

Computer sabotage exists in case someone destroys, deletes, conceals or otherwise disables data, program or damages the computer which is important for the state agency, institution, and public service. It is used for gaining economic advantage over competitors to promote illegal activities of terrorists or steal data or programs.

Spying can be motivated by political or economic reasons because many countries through the deployment of its secret services have come to disclosure of political, military, economic secrets to other countries. Computer espionage can be defined as one of the most modern forms of intelligence. Despite hackers and groups they organize unauthorized access to protected system; nowadays there are specialized secret government agencies that collected data intelligence nature by entering into the computer system of other countries. Computer espionage is the act or manner of obtaining secrets without authorization of the holder of the information (personal, sensitive, proprietary or confidential) from individuals, competitors, rivals, groups, governments and enemies, personal, economic, political or military advantage , using

illegal methods on the internet, network or individual computers. Computer espionage is a method used over the Internet. To carry out the computer espionage mainly, malware, including Trojan horses (special Trojans made to spy on the user), viruses, spyware (RAT, Keyloger) are used. Spying can fully execute the Internet by professionals from bases in some remote countries and so on.

Hacking

Hacking up is a penetration into certain information system and entering it. One of the biggest threats on the Internet is the existence of thousands of compromised computers. The networks of such computers are called BOTNET networks or "zombie thieves" and computers that are part of them are present in homes, schools, workplaces and government facilities worldwide. Mainly, they are under the control of one or several hackers-also known as "Bot master", and it is used in carrying out various types of attacks - from distributed attacks disabling services (Distributed denial-of-service, Ddos), sending unwanted messages by e-mail, using tools to capture pressed keypad (Key logger) to the spread of viruses, malware programs, etc. At the same time, the damage that can be caused by the use of such networks, is incomparably greater than the damage done to traditional discrete attacks.

It can be concluded that today BOTNET networks are one of the largest (if not the largest) security threat to the Internet community. The botnet network consists of a series of linked computers that cooperate and operated by a hacker or less group. Bot is an ultimate computer (or server), which is a member of the bot net network.

Unauthorized reproduction of computer programs (software piracy)

"Software piracy" covers a variety of activities: illegal copying programs, forging and distributing software, and exchanging programs. The software is one of the most valuable technologies in the Information Age.

Software pirates not only steal from the companies that produce software, but also inflict damage to consumers, shrink fund research and development of new software. With observance of the law, not only software piracy will be reduced, but would prevent a major economic problems. The fact that "Microsoft" logo is written on the disc or the software is originally installed on the computer, does not mean it is legal, simply stated, software piracy is illegal production and use of software products in abuse of copyrights.

Online sexual exploitation of children

Online sexual exploitation of children as a negative phenomenon is present in many criminal acts long time ago and it is growing globally. With the advent of high technology and global network of communication, the manner of its production and distribution facilitates and becomes easily accessible to a larger group of people, which has turned into an entire industry that ultimately tramples basic moral norms and the rights of children which have become a tool for earnings in the hands of international criminal network.

Regarding the online sexual exploitation of children, an abuse was observed (presentation and publication of pornographic material) through the social network Facebook, video streaming (watching live Internet) via Skype, etc. The reason for this trend is the easy availability on the Internet of children and lack of parental control in respect of persons with whom their children communicate through social networks.

Electronic money laundering

Using technology or electronic money transfer aids criminals in concealing the proceeds of criminal activities. The development of informal banking institutions and parallel banking systems, may allow you to avoid the supervision of the Central Bank, and can also allow evasion of cash receipts that have organized criminal groups.

Also, organized crime groups use the Internet as a communication (usually encrypted), thereby increasing market of digitally encoded technologies. Everyone need this type of technology especially banks that want to ensure the privacy and confidentiality of clients and their financial transactions. Cryptography represents them a powerful tool of criminal groups and terrorists to conceal their activities, and for authorities' additional difficulty for conducting investigations and collecting evidence.

High-tech crime mechanism of contemporary computer 'cyber' wars

Computer war (war in cyber space) is an internet conflict, including politically motivated attacks on information and information systems. Computer War is a new form of keeping a military gathering which application in the international community is increasing rapidly. But, its nature is specific and differs from the known forms of war. Computer war battlefield are communication and information content. Attackers can destroy infrastructures of unfriendly states if largely based on the same computer contents.

There are claims that the new tactic of computer war is causing damage to critical infrastructure in cyber space, and kept the damage. With the computer war attacker may have different strategic goals:

- Distribution of propaganda or causing panic between civilians;
- Permanent damage to the key elements of the technological infrastructure (power, communication centers, etc.).
- a collection of secret information;
- Attacks by viruses (Trojan horses, etc.).

Depending on the purpose you can use tools such as "zombie computers" that are used for DDOS attacks still allow obtaining control over the centers. The consequences of computer war are weakening or termination of the basic physical infrastructure. Critical infrastructure are the systems, and if they are destroyed that will affect economic security, banking, public health, physical security, communication, public transport, electronic commerce etc. and will cause implications for national security.

Cyber terrorism

Third major threat after chemical-biological and nuclear weapons is cyber terrorism. This is a special form of attack on computer networks and databases intended for use of force or threat to the government of a country for its ordering of a particular policy or making certain decisions, the use of cyberspace as a field for making illegally obtained money and using the internet to concealing the origin of illegally gained money (money laundering), in order to use them in financing of terrorist organizations or contemporary called cyber terrorism".

The object of attack may be important infrastructures (water, gas pipeline, electro-distributive facilities etc.), where breaking into computer systems of the control flight will cause plane crashes, activation of nuclear bombs, fear, panic among the population, large human victims. The terrorists have a large arsenal of weapons including chemical and biological weapons, which can cause ecological disasters and chemical pollution, opportunities for terrible poisonings of water systems. The terrorists use internet for dissemination of their goals, which consists mostly in spreading hatred, violence and racism.

Computer terrorism should also be distinguished from "Cyber War" manipulation of computers and computer networks in the context of inter-state conflicts. Computer war carries offensive and defensive activities of the state and the structure of international conflicts. Computer terrorism and computer war could match in the use of certain

methods such as Destruction of computer networks, but it does not mean that this is the same activity. Computer terrorists usually cooperate with weak states or states that are ineffective or corrupt security agencies in order to more effectively act.[75]

Conclusion

High-tech crime is not future, but present. High-tech crime has become more pronounced, it has applied innovation and is growing. With sophisticated information technology type of threats, the way of carrying out attacks, is more different from traditional types and forms of threats and attacks. From a broader perspective countries today face threats to their national security threats that are not traditional. The most important implications of these changes is to increase cooperation at the international level, ticking this need for cooperation between nations in order to successfully respond to threats posed by high-tech crime.[76]

High-tech crime is the kind of crime that often crosses the borders of a state, for example, the crime is committed in one state, the perpetrator is from another state and has caused damage to a third country. Hence, the best practice in combating high-tech crime is intensive cooperation at international level with police services from other countries especially through international institutions such as Interpol, Europol and SELEC.

States should adopt appropriate measures to regulate the investigation of these crimes, to collect evidence of the crime as possible. So, to successfully deal with high-tech crime requires cross-equal legislation and coordinated investigative process.

---

[75] Doctoral dissertation entitled "New challenges and threats of high-tech crime against national security" defended at 05.03.2017 the Faculty of Philosophy Ss. "Cyril and Methodius" Skopje - Institute for Security, Defense and Peace.

[76] James A. Lewis, „Assessing the Risks of Cyber Terrorism, Cyber War and Other Cyber Threats" pdf.

Bibliography

1. COMMUNICATION FROM THE COMMISSION TO THE COUNCIL, THE EUROPEAN PARLIAMENT, THE ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS (2001), Creating a Safer Information Society by Improving the Security of Information Infrastructures and Combating Computer-related Crime, Brussels: EU, accessed: http://eur-lex.europa.eu/legal-content/CS/ALL/?uri=celex:52000DC0890.
2. Convention on Cybercrime (2001), Strasbourg: Council of Europe, accessed: https://www.coe.int/en/web/conventions/full-list/-/conventions/treaty/185
3. Gjosheva Marija, "New challenges and threats of high-tech crime against national security", unpublished PhD thesis defended at 03.05.2017 the Faculty of Philosophy Ss. "Cyril and Methodius" Skopje - Institute for Security, Defense and Peace;
4. Lewis James A. (2002), Assessing the Risks of Cyber Terrorism, Cyber War and Other Cyber Threats, Washington D.C.: Center for Strategic&International Studies, accessed on: https://csis-prod.s3.amazonaws.com/s3fs-public/legacy_files/files/media/csis/pubs/021101_risks_of_cyberterror.pdf
5. Khadam Nadia, "Insight to Cybercrime", accessed on: https://www.academia.edu/2011205/Insight_to_Cybercrime?auto=download

325.254.4-022.236.5: 355.45 (497:497.7)   Review scientific article

THE REPUBLIC OF MACEDONIA AND BALKANS DURING THE REFUGEE CRISIS

Nikola Kiskoski, M.Sc,
E-mail: nkiskoski@gmail.com

Abstract

At a time of mutual tolerance and shortening the procedures for free movement of people and maximum respect of the human rights, we face the challenge of the refugee crisis, where contrary to the above, we must build a fence in order to protect the country's territory and prevent the human rights violations. The national security is the basis for the successful development and survival of a state, as well as a guarantee for the realization of personal and collective security. A series of measures and procedures must be appropriately planned and implemented in order to protect the state from the challenges and threats of modern times such as asymmetric threats, terrorism, especially dealing with the refugee crisis. The measures and procedures which will be implemented must be consistent with the existing laws and respect the human rights, and they should be implemented by relevant state institutions. The decision to use and provide special measures and procedures for protecting and dealing with the refugee crisis must be made by state officials and comply with regional security. It is very important for the crisis management to be lead by professionals within its appropriate institutions and the cooperation must be on a regional level. We need to analyze the refugee crisis in the Balkans and to anticipate the direction in which this refugee crisis will develop in the future.

Keywords: refugee crisis, national security, collective security, crisis management.

Introduction

The refugee crises and migration as a phenomenon date back since ancient times. People migrated as a result of: torture by the conquerors, the horror that was brought by the wars, but rarely, the migration was a consequence of natural disasters (earthquakes,

floods, fires, landslides and so on). The emergence of various infectious diseases and epidemics was a reason for migration as well. Naturally, since ancient times the refugees moved along river valleys, they always moved on the shortest, the cheapest and the safest route. In recent history, the difference in the development between Europe and Western countries on one side, and Africa and Asia on the other side has become a common cause for migration with the hope for a better life. The refugee crises and the fear of the unknown is one of the greatest horrors of every person. The refugee who decided to leave their home, to leave behind everything they own and risk their life and the lives of their families in a hopeless situation. On the other hand, the fear of the recipient countries that terrorist are infiltrated among the refugees should also be justified.

The purpose of this paper is to provide an analysis of the consequences and effects of the refugee crisis in Macedonia and the Balkans. It should be mentioned that all data included in the paper are derived only from publicly available sources.

What implications does the Republic of Macedonia have from the refugee crisis in the last two decades?

What are the consequences of the refugee crisis in the Balkans? Analysis and expectations about the situation ahead?

Defining the terms: crisis, refugee, migrant

According to Oxford Dictionary the word crisis is a turning point, and can be explained as the time when difficult and important decisions must be made or decisive point from which we can expect a positive or negative development. Also, crisis can be explained as a time of intense difficulty or danger.[77]

There are several ways of dividing the crisis. According to the classical typology, the crisis is divided into:

- a crisis caused by natural factors;
- a crisis caused by human factors, and
- a special crisis. [78]

Here emerges the need to define and explain the terms refugee and migrant. According to the basic definitions that exist in the literature, the term refugee can say the following: According to the organization UNHCR, a refugee is a person who is forced to leave their country because of persecution, war or violence. The fugitive is persecuted due to their race, religion, nationality, political opinion or membership in a particular social group. Most refugees cannot return home or are afraid to do so.

_____

[77] http://www.ox.ac.uk/
[78] Марина Митревска, Кризен менаџмент, Филозофски факултет, 2016

The war, ethnic, tribal and religious violence is the leading cause for the creation of refugees.[79]

According to all definitions about refugees, the main reason is the violence against civilians. According to the UN for the term migrant can be defined as the following: A migrant is any person who temporarily or permanently lives in a country in which they were not born. In a broader sense and depending on the policy of the country, the person may obtain the status of a migrant even if they born in that country.[80]

Therefore, the migrant leaves their country consciously, very often their trip is previously planned and they can even choose the country where they want to travel. If the migrant fails in their plans, they may return to their country and home. Unlike them, the refugee is forced to migrate. Their situation is difficult and hopeless, and their return home is almost impossible. Of all the refugees in 2015, only 1% of them have returned to their homes.

For the refugees and displaced persons, the only legal document is the Geneva Refugee Convention of 1951 and the Protocol of 1967. This Convention was adopted by 145 delegates from as many countries that have signed the basic document.[81]

The refugee crisis in general and the routes to Europe

Before we start with the analysis of the last refugee crisis that began as a result of the conflict in Syria, we should have a brief overview of the refugee crisis in the region, as well as the refugee routes used mainly for transit to Europe. The migration route of Africa, Middle East to Europe is a process that dates back to 15-20 years ago. The first migrant route that was used was the Western Mediterranean route stretching in the South - North direction, from Morocco, north towards Spain. The next, newer route is the Central - Mediterranean route also in the direction from South to North direction, from Libya and Egypt to Italy. The latest route is east - Mediterranean route that stretches in the direction East - North, from Turkey to Western Europe. After the closure of a part of this direction, the East - Mediterranean route gets a new direction, which is Turkey - Balkan Peninsula - Central Europe. As a result of this change, the name of the route was changed into East - Mediterranean - Balkan route. According to the above mentioned, it can be said that in recent history there are three main routes in Europe - see picture No.1. These three routes are expected to be present in the future as well.

[79] http://www.unrefugees.org/what-is-a-refugee/
[80] http://www.unesco.org/new/en/social-and-human-sciences/themes/international-migration/glossary/migrant/
[81] http://www.unhcr.org/1951-refugee-convention.html

Picture No.1

The refugee crisis has become one of the biggest problems that the European Union and its Member States have to face. The European Union has for decades been committed to the absence of limits, maximum respect for the human rights and freedoms on the one hand and ensuring the safety of the citizens on the other. The abolition of internal borders and the lack of control of persons staying and transiting through the European Union have proved to be the biggest drawback in the fight against terrorism and the location of persons suspected of terrorist attacks. As an example, those who entered the EU via the Balkan route, through Hungary, can transit freely in all EU countries and carry out terrorist attacks in France. French security services may have no information on that person if that person during their stay in France is not registered at a certain address, hotel, if they do not rent a car and so on. I want to mention that the reduction or abolition of borders within the EU is a major problem for the realization of national security.

It should be noted that the migrant crisis has also become quite a lucrative business for smugglers and criminals. The smuggling of migrants is more present in our region as well. On average, a migrant pays ten to twenty thousand euros to travel from Syria to Europe and usually the ultimate goal of most migrants is Germany. It is considered that the business of smuggling migrants reaches 4 to 5 billion Euros annually. The problem with migration is one of the largest problems. It is a problem for the European Union as the final destination and purpose of all migrants, but it should be noted that migration is a major problem for the countries through which the migrants transit, and which are not members of the EU. These are the countries of the Balkan Peninsula.

---

[82] http://www.bbc.com/news/world-europe

The refugee crisis in Macedonia and the Balkans

The location of the Republic of Macedonia is very important strategically, but it is also one of the key countries for the transit of migrants to other countries in the Balkans and Europe. Historic Macedonia has almost always been a crossroad and a part of some major developments. Ever since the Roman Empire passed through Macedonia: VIA - Egnatia as communication direction from East to West and communication VIA -Militaris that stretched from South to North and is almost identical to today's so-called Balkan route.[83]

If we make a brief analysis of the last two - three decades, we will come to the conclusion that the refugee crisis that is currently happening as a consequence of the war in Syria is the fifth in a row for this short period. We should mention that about 1,200 people were treated in the country in 1991 as a result of the contemporary developments in the Republic of Albania and then in 1992, between 30 and 40 thousand people arrived in Macedonia after they escaped from the war in Bosnia and Herzegovina. During the Kosovo crisis in 1999, our country took care of more than 350,000 people. As a fourth crisis is the conflict in 2001, and as a consequence, nearly 90,000 people were registered as internally displaced persons. It should be noted that in general, in the Balkans in recent years there were several developments that led to several refugee crises and the wars in Slovenia, Croatia, and Bosnia and Herzegovina, the developments in Kosovo, NATO's military intervention against Serbia, and the conflict in the Republic Macedonia and so on. The refugee crisis has had an impact in the demographic composition of the countries receiving the refugees. The migrants in recent years have passed through our country and used the Vardar valley, and after leaving the Republic of Macedonia they continued along the Morava River through the neighboring Republic of Serbia to the border with Hungary joining the European Union. After the closure of the border with Hungary and the construction of the wire obstacle, the refugees continued west to Croatia, Slovenia and Austria. This so-called Balkan route is shown in picture No. 2.

[83] http://morm.gov.mk/wp-content/uploads/2017/01/31_SMO-za-web.pdf

Picture No.2 [84]

At the beginning of the refugee crisis in Macedonia the police managed to deal with the refugees until the middle of August 2015 when the border daily received more than ten thousand people. This was immediately followed by the decision to recruit the Army of Republic of Macedonia to assist in the dealing with the refugees. A system for registering persons was implemented as well. All persons transiting through Macedonia were registered by the army and police officials to assist the police forces of the European Union. Some irregularities were recorded. Some of those documents had the same identity, the same date of birth, many young adults, some of them with injuries characteristic of armed conflict. All these people came to the border of the Republic of Macedonia from a member state of the European Union - Greece. It can immediately be concluded that the control system and the selection of people receiving refugee status were tricked at the very entrance to the Greece Republic. Some of the documents were created on the territory of Greece. The migrants first enter a Member State of the European Union and the Schengen area, and then they come in Macedonia. In this context, the President of the Republic of Macedonia, Dr. Gjorge Ivanov on 11.03.2016, in an interview with the German newspaper "Bild" said that Macedonia is in an absurd situation because Macedonia is not a member of the European Union and NATO and must protect Europe from the European Union.[85] The above can be seen at the next picture No. 3.

[84] http://www.independent.co.uk/
[85] http://morm.gov.mk/wp-content/uploads/2017/01/31_SMO-za-web.pdf

Picture No.3 [86]

In order to stabilize the situation and to avoid escalation, in November 2015 the Army began setting up a wire fence with length of more than 37 km close to the routes of illegal entry and transit through Macedonia. With the installation of the fence the situation was normalized. Macedonia has made legislative amendments to the Law on Asylum and Temporary Protection "Official Gazette number 101/2015 year." Before this change was made, the refugees only had a legal possibility, and that was to seek asylum in the country. Because their aim was not to request asylum in our country, the legal amendment provided them the right for residence in the country, the right to use public transport, the right to use humanitarian aid and so on. All refugees had to go through bandwidth stations and then to use the organized transport with Macedonian trains, buses and taxi companies to the northern border from where they continued their transit through the Republic of Serbia. These amendments established order in the dealing with the refugees. They also had proper medical care and adequate humanitarian assistance. Czech Republic donated 24 vehicles for the police and financial aid. On the other hand, the illegal trade and smuggling of refugees was reduced to a tolerable minimum, the possibility of corruption of all persons involved in dealing with the refugee crisis was also reduced. In 2015 according to the European Union 880,000 people arrived in Europe through the Balkan route, and at the beginning of 2016, the number was 130 000. So, at the beginning of March 2016 a decision was made to close the Balkan route through

[86] http://eurasian-research.org

Macedonia. About 10,000 people were trapped in Greece and relatively few in Serbia. This put an end to the refugee crisis in the region, at least temporarily. Since then, almost everyday some refugees cross the border but those are individual cases.

Similarly to Macedonia, the refugees have used Serbia only for transit. The problems and challenges were similar. Serbia have also partly engaged the security forces and border police and army. In neighboring Bulgaria, the blocking of the border and the engagement of the Army occurred much earlier than in our country. In cooperation with Greece, it raised wire fence on the border with Turkey. In order to arrive to Bulgaria, the refugees had to travel on quite large water surface and therefore, the impact of the refugee crisis in Bulgaria is much lower than in most other countries. This is confirmed by the figures for asylum seekers according to official sources, in 2012 there were 1,387 people, in 2013 there were 7,144 people, in 2014 there were 11,081 and in 2015, 20,391 people.[87] Bulgaria arguments for dealing with the refugee crisis are based on the following values: Bulgaria is one of the poorest countries in the EU, a member of the Schengen zone, it has no budget for dealing with refugees, refugees are a problem for the national security and a different mentality and so on. Based on the arguments, the Republic of Bulgaria is given maximum protection of its borders and we can say that it is the first of all the countries that have taken security measures. Albania unlike the other Balkan countries had a relatively easier task in dealing with the refugee crisis. The number of illegal crossings of the border is far smaller, as well as the number of people who transited through Albania. After closing the Balkan route through Macedonia, the number of refugees crossing Albania was increased. These were people trapped in Greece and those transiting in that period in Greece. Immediately after that, the main refugee route was directed to Turkey.

It is safe to say that besides the Republic of Macedonia, the situation in Greece was rather complicated. Their situation has proved the inefficiency in the handling of such situations, not only of Greece but of the entire European Union. All of them were surprised and relatively unprepared for this challenge. The officials in Greece have got the impression that the main task and number one priority is to provide quickly organized transport to the border with Macedonia and to get rid of the refugees, there by not taking care for their identification and detection of potentially dangerous individuals. There are reports that some counterfeit documents were produced in Greece and then some people have used them to travel to the western countries. On the account of the refugees, Greece had some financial benefits from the transport of those people and by selling them some products. After the setting of the wire fence on the border on the Macedonia's side, the other side sold some tools to the refugees, like scissors for cutting metal wire in order to make passages through the fence. After closing the route the situation was normalized. The borders with the exception of certain countries were insufficiently secured.

[87] http://library.fes.de/pdf-files/bueros/sofia/12570.pdf

5. Conclusion

The refugee crisis that happened in the past few years and is likely to happen in the upcoming period leads to more conclusions and directions for the future and a number of recommendations.

• As mentioned, this refugee crisis has shown that the borders are quite insufficiently secured. The lack of will to resolve the refugee problem and the inertia of institutions. Transferring responsibility to other states by passing refugees almost with no records. This levity proved in practice. Some of the persons who carried out terrorist attacks in European countries transited through this refugee route. The terrorist who sowed death in Paris spent the whole Balkan route with Syrian passport under the name Ahmed Almuhamed without being identified and stopped (PictureNo. 4). He entered Greece on 03.10.2015 and on 07.10.2015 he entered Serbia and then through Croatia and Austria headed for Paris. In this terrorist attack 150 innocent people were killed. Who will bear the responsibility for this event? Is the mistake is in the record or in the work of officials in Greece? From this event it can be concluded that not every person is a refugee and serious work should be done there. Greece is part of the Schengen zone and the initial filter needs to be done there. On average, most of the refugees are men at the age between 18 and 35 and should be an alarm for the security services. A number of these people had injuries characteristic of armed conflict and so on.

[88]

---

[88] http://vecer.mk/makedonija/mvr-dosega-chetiri-lica-so-ime-ahmad-almohamad-vlegle-vo-makedonija-od-grcija

• Another logical conclusion that follows is that there are stale and inadequate laws considering this issue. Here we can mention the example of the Republic of Macedonia. In order for the refugees to be transiting through Macedonia, there had to be done certain legal changes. The lesson that can be learned is that the laws must be updated based on the changes on a regional and worldwide level. If certain changes need to be done, they need to be done timely. Before the changes in the law, the refugees have illegally crossed the border using the railway. Twenty people were run over by trains.

• The refugee crisis initiates the need for installation of wire fences on certain borders in order to avoid escalation of the situation. Nowadays there are more fences than ever. There are wire fences on the border of Hungary and Serbia, Macedonia and Greece, Bulgaria and Turkey, Greece and Turkey and so on.

• In 2015, according to FRONTEX 1.8 million people entered Europe, and half of them used the East-Mediterranean route. Big number of these people transited through the countries of the Balkan Peninsula. The Balkan countries should be prepared for similar situations in the future.

• Refugees are also a challenge and threat to the national security of any country of transit and stay. The budget for the national security should be increased and the security services to be prepared. The enormous number of refugees in a certain area can be a great challenge and danger.

• The refugee crisis is a great opportunity for transit of the ISIS fighters. The only thing they need to do is to dress in civilian clothes and join in the columns of refugees. Of the total number of ISIS fighters who come from Europe, even 60% are sent back and await new instructions for further action. The large number of terrorist attacks across Europe is evidence for this. During this refugee crisis, the system for detecting and separating them from the crowd of refugees simply did not exist or did not work appropriately. Returning veterans easily moved across the Balkan route with other identities. I believe that this is the issue that would be the biggest enigma and challenge in time ahead.

• The big difference in the development and widening gap between European countries on the one hand and the African and the Asian continent on the other hand will lead to new migration and refugee crises. Another indicator is that between 5 and 6 billion people live on the area of Africa and Asia, and the resources and living conditions in this part of the world are becoming more severe. In this current refugee crisis there are people from Africa, but the majority comes from Syria, Iraq and Afghanistan. European laws and the liberal way of accepting refugees will only lead to the beginning of new migration processes.

• The international pressure on countries such as Macedonia with increased number of refugees to close the borders is large. In case of such a situation especially with refugees from Africa, it can be very dangerous for the country that stops the movement, and such a situation will only lead to a profit for the illegal trafficking.

To sum up, although the refugees only transited through the Republic of Macedonia and the Balkan Peninsula, this refugee crisis causes consequences that will be felt in the future. Their goal was not the Balkans, but in the future we must carefully monitor the indicators because there are signs of some movements starting from Africa and even Asia. The great migration can be a very big problem for both, national security and the demographic structure of the population. Based on my analysis, although the Balkan route is closed, we must be vigilant and prepared, not only Macedonia, but the whole region as well. It is calculated that in 2015, on a worldwide level, about 65 million people had to emigrate and leave their homes due to armed conflicts, riots, persecutions etc. If we consider the fact that according to the world average only 1% of the refugees are returning to their homes, we will understand that the topic that we discuss is very serious.

Bibliography

Митревска М. (2016), Кризен менаџмент, Скопје: Филозофски факултет.
http://www.unrefugees.org/what-is-a-refugee/
http://www.unesco.org/new/en/social-and-human-sciences/themes/international-migration/glossary/migrant/
http://www.unhcr.org/1951-refugee-convention.html
http://morm.gov.mk/wp-content/uploads/2017/01/31_SMO-za-web.pdf
http://www.independent.co.uk/
http://library.fes.de/pdf-files/bueros/sofia/12570.pdf
http://www.ox.ac.uk/

CYBER SECURITY AND PROTECTION OF COMPUTER SYSTEMS

Emilija SPASOVA KAMCEVA, PhD
FON University – Faculty of Informatics
E-mail: emilija.kamceva@fon.edu.mk

Nikolco SPASOV, PhD
The Intelligence Agency of the Republic of Macedonia
E-mail: spasov.nikolco@yahoo.com

Abstract

The work presents the methods for raising the awareness regarding the safety of the Internet, i.e. the safety related to the production and maintenance of the web applications in order to preserve the reputation and to prevent loss of money as well as leak of information through those web applications, to point out the dangers that the unprotected web application contain and to join the theory with the practice in order to make the web application safer. The main purpose of OWASP TOP 10 is to educate researchers, designers, architects, managers and organizations regarding the possible consequences of the most significant security weaknesses within the web applications. Top 10 offers the basic techniques for protection against these very dangerous problems, and provides directions for further development and protection.

The basic aim is to provide high degree of protection and to make a holistic approach towards the safety problem resolution by continuous development and improvement of new protection mechanisms.

Key words: cyber security, information, web application, safety flaws and ethical hacking.

Introduction

The vast growth of Internet has brought many good things like electronic commerce, email, easy access to vast stores of reference material etc. As, with most technological advances, there is also other side: criminal hackers who will secretly steal the organization's information and transmit it to the open internet. These types of hackers are called black hat hackers. So, to overcome from these major issues, another category of hackers came into existence and these hackers are termed as ethical hackers or white hat hackers. So, this paper describes ethical hackers, their skills and how they go about helping their customers and plug up security holes. Ethical hackers perform the hacks as security tests for their systems. This type of hacking is always legal and trustworthy. In other terms ethical hacking is the testing of resources for the betterment of technology and is focused on securing and protecting IP systems. So, in case of computer security, these tiger teams or ethical hackers would employ the same tricks and techniques that hacker use but in a legal manner and they would neither damage the target systems nor steal information. Instead, they would evaluate the target system's security and report back to the owners with the vulnerabilities they found and instructions for how to remedy them. Ethical hacking is a way of doing a security assessment. Like all other assessments an ethical hack is a random sample and passing an ethical hack doesn't mean there are no security issues. An ethical hack's results is a detailed report of the findings as well as a testimony that a hacker with a certain amount of time and skills is or isn't able to successfully attack a system or get access to certain information. Ethical hacking can be categorized as a security assessment, a kind of training, a test for the security of an information technology environment. An ethical hack shows the risks an information technology environment is facing and actions can be taken to reduce certain risks or to accept them. We can easily say that Ethical hacking does perfectly fit into the security life cycle shown in the below figure. (Gurpreet K. Juneja, 2013).

What is Hacking?

Hacking is the technique in which the persons, what's in a name? Call them hackers, crackers, intruders, or attackers, they are all interlopers who are trying to break into your networks and systems. Some do it for fun, some do it for profit, or some simply do it to disrupt your operations and perhaps gain some recognition. Though they all have one thing in common; they are trying to uncover a weakness in your system in order to exploit it. (Bhawana S. , Ankit N. and Shashikala K.:,2014).

Local network test simulates an employee or other authorized person who has a legal connection to the organization's network. The primary defenses that must be defeated here are intranet firewalls, internal Webservers, server security measures, and e-mail systems. In Stolen laptop computer test, the laptop computer of a key employee, such as an upper-level manager or strategist, is taken by the client without warning and given to the ethical hackers. They examine the computer for passwords stored in dial- up software, corporate information assets, personnel information, and the like. Since many busy users will store their passwords on their machine, it is common for the ethical hackers to be able to use this laptop computer to dial into the corporate intranet with the owner's full privileges. (Bhawana S. , Ankit N. and Shashikala K.:,2014). Social engineering test evaluates the target organization's staff as to whether it would leak information to someone. A typical example of this would be an intruder calling the organization's computer help line and asking for the external telephone numbers of the modem pool. Defending against this kind of attack is the hardest, because people and personalities are involved. Most people are basically helpful, so it seems harmless to tell someone who appears to be lost where the computer room is located, or to let someone into the building who "forgot" his or her badge. The only defence against this is to raise security awareness. (Bhawana S. , Ankit N. and Shashikala K.:,2014). Physical entry is test acts out a physical penetration of the organization's building. Special arrangements must be made for this, since security guards or police could become involved if the ethical hackers fail to avoid detection. Once inside the building, it is important that the tester not be detected. One technique is for the tester to carry a document with the target company's logo on it. Such a document could be found by digging through trash cans before the ethical hack or by casually picking up a document from a trash can or desk once the tester is inside. The primary defenses here are a strong security policy, security guards, access controls and monitoring, and security awareness. Each of these kinds of testing can be performed from three perspectives: as a total outsider, a semi-outsider, or a valid user. A total outsider has very limited knowledge about the target systems. The only information used is available] through public sources on the Internet. This test represents the most commonly perceived threat. A well-defended system should not allow this kind of intruder to do anything. (K.Bala Chowdappa et al, :2014). A semi-outsider has limited access to one or more of the organization's computers or networks. This tests scenarios such as a bank allowing its depositors to use special software and a modem to access information about their accounts. A well-defended system should only allow this kind of intruder to access his or her own account information. A valid user has valid access to at least some of the organization's computers and networks. This tests whether or not insiders with some access can extend that access beyond what has been prescribed. A well-defined

system should allow an insider to access only the areas and resources that the system administrator has assigned to the insider (Bhawana S., Ankit N. and Shashikala K.: 2014). Ethical hacking is also known as "Penetration Hacking" or "Intrusion Testing" or "Red Teaming". (K.Bala Chowdappa et al,:2014)

Ethical hacking is defined as the practice of hacking without malicious intent. The Ethical Hackers and Malicious Hackers are different from each other and playing their important roles in security. According to Palmer (2004, as quoted by Pashel, 2006): "Ethical hackers employ the same tools and techniques as the intruders, but they neither damage the target systems nor steal information. Instead, they evaluate the target systems' security and report back to owners with the vulnerabilities they found and instructions for how to remedy them". The vast growth of Internet has brought many good things like electronic commerce, email, easy access to vast stores of reference material etc. As, with most technological advances, there is also other side: criminal hackers who will secretly steal the organization's information and transmit it to the open internet. These types of hackers are called black hat hackers. So, to overcome from these major issues, another category of hackers came into existence and these hackers are termed as ethical hackers or white hat hackers. Ethical hacking is a way of doing a security assessment. Like all other assessments an ethical hack is a random sample and passing an ethical hack doesn't mean there are no security issues. An ethical hack's results is a detailed report of the findings as well as a testimony that a hacker with a certain amount of time and skills is or isn't able to successfully attack a system or get access to certain information. Ethical hacking can be categorized as a security assessment, a kind of training, a test for the security of an information technology environment. An ethical hack shows the risks an information technology environment is facing and actions can be taken to reduce certain risks or to accept them. (Bhawana S., Ankit N. and Shashikala K.:,2014)

Types of hacking and hackers

"Hacker" is a loose term and has different meanings. Generally the term "Hacker" is someone who breaks into computer networks for the happiness he gets from the challenge of doint it or with some other intentions like stealing data for money or with political motivations. Hackers are classified to different types. Some of them are listed below.

A White Hat hacker is a computer network security professional and has non-malicious intent whenever he breaks into security systems. A White Hat hacker has deep knowledge in Computer Networking, Network Protocols and System Administration (at least three or four Operating Systems and very good skills in Scripting and Programming).

White Hat hacker has also good knowledge in hacking tools and know how to program hacking tools. A White Hat hacker has the skills to break into networks but he uses his skills to protect organizations. A White Hat hacker can conduct vulnerability assessments and penetration tests are also known as an Ethical Hacker. Often White Hat hackers are employed by companies and organizations to check the vulnerabilities of their network and make sure that no hole is available in their network for an intruder. (K.Bala Chowdappa et al,:2014). A Black Hat hacker, also known as a cracker, is a computer professional with deep knowledge in Computer Networking, Network Protocols and System Administration (at least three or four Operating Systems and very good skills in Scripting and Programming). Black Hat hacker has also good knowledge in many hacking tools and know how to program hacking tools. A Black Hat hacker uses his skills for unethical reasons. A Black Hat hacker always has malicious intention for intruding a network. Example: To steal research data from a company. To steal money from credit cards, Hack Email Accounts etc. (K.Bala Chowdappa et al, :2016). A Grey Hat hacker is someone who is between White Hat hacker and Black Hat hacker. Grey Hat normally do the hacking without the permissions from the administrators of the network he is hacking. But he will expose the network vulnerabilities to the network admins and offer a fix for the vulnerability for money. A Script Kiddie is basically a hacker amateur who doesn't has much knowledge to program tools to breaks into computer networks. He often use downloaded hacking tools from internet written by other hackers/security experts. (H.M David,:2004). A Hacktivist is a hacker with political intentions. The hacktivist has the same skills as that of a hacker and uses the same tools as the hacker. The primary intention of a hacktivist is to bring public attention to a political matter. Phreaker is a telecom network hacker who hacks a telephone system illegally to make calls without paying for them.

Hacking Phases

The overall hacking methodology consists of certain steps which are as follows:
Reconnaissance can be active or passive: in passive reconnaissance the information is gathered regarding the target without knowledge of targeted company (or individual). It could be done simply by searching information of the target on internet or bribing an employee of targeted company who would reveal and provide useful information to the hacker. This process is also called as "information gathering". In this approach, hacker does not attack the system or network of the company to gather information. Whereas in active reconnaissance, the hacker enters into the network to discover individual hosts, ip addresses and network services. This process is also called as "rattling the doorknobs". In

this method, there is a high risk of being caught as compared to passive reconnaissance. (H.M David,:2004). In Scanning Phase, The Information Gathered In Phase 1 Is Used To Examine The Network. Tools like Dialers', Port Scanners Etc. are being Used by the Hacker to Examine the Network So As To Gain Entry in the Company's System And Network. Owning the System Is The Real And Actual Hacking Phase. The Hacker Uses The Information Discovered In Earlier Two Phases To Attack And Enter Into The Local Area Network (LAN, Either Wired Or Wireless), Local Pc Access, Internet Or Offline. This Phase Is Also Called As "Owning The System".

Once the hacker has gained the access in the system or network, he maintains that access for future attacks (or additional attacks), by making changes in the system in such a way that other hackers or security personals cannot then enter and access the attacked system. In such a situation, the owned system (mentioned in Phase 3) is then referred to as "Zombie System". Evidence Removal is phase where the hacker removes and destroys all the evidences and traces of hacking, such as log files or Intrusion Detection System Alarms, so that he could not be caught and traced. This also saves him from entering into any trial or legality. Now, once the system is hacked by hacker, there are several testing methods available called penetration testing to discover the hackers and crackers. (Chowdappa et al, :2014)

What is Web Application Security?

Web application security is a branch of Information Security that deals specifically with security of websites and web applications. It differs from the other branches of Information Security in that web application security is focused on vulnerabilities within the application code that is exposed during a user session on the web. The other areas of information security—that are not directly discussed in this document—are Network Security, Infrastructure Security, Database Security, and Operational Security. A majority of the attacks against web servers are through network firewalls and through the http (80) or https (443) ports. Some of the most commonly used hacking techniques include denial of service, leakage, cross-site scripting, SQL injection and disclosure. (Jon Panella, 2011). Due to the complexity of web applications and their supporting architectures (i.e. operating systems, databases, middleware, etc.), web attacks can be very sophisticated with serious, far-reaching implications. The complexity of web applications can also make web application security a more challenging endeavor than other branches of Information Security. Hackers target web applications because it can be very lucrative for them to do so. For example, a successful attack on a bank's web server could yield thousands of bank account numbers and user passwords information. The hacker could then use that information to gain a fortune by doing unauthorized money transfers and with drawls. (Jon Panella, 2011)

The Open Web Application Security Project

The Open Web Application Security Project (OWASP) is an open-source application security project. Its membership includes corporations, educational organizations, and individuals from around the world. The OWASP works to create freely-available articles, methodologies, documentation, tools, and technologies for web security. The OWASP Top 10 is a set of classes of vulnerabilities that are very high risk. Application developers can judge whether their applications meet best practices based on whether or not they has facilities to protect against these vulnerabilities. The OWASP Top 10 represents a broad consensus regarding the most critical vulnerabilities for web application security. A variety of security experts from around the world contribute their expertise to produce the OWASP Top 10. (Jon Panella, 2011)

The OWASP Top 10 and PCI DSS requirement 6.6 have been linked together as a best practice implementation of web application security. Many organizations "cross reference" the two standards. (Jon Panella, 2011). The following vulnerabilities, in descending order of severity, comprise the OWASP Top 10:

- A1 – Injection Vulnerability
- A2 – Cross Site Scripting (XSS) Vulnerability
- A3-Broken Authentication and Session Management
- A4 – Insecure Direct Object References
- A5 – Cross Site Request Forgery (CSRF) Vulnerability
- A6 – Security Misconfiguration
- A7 – Failure to Restrict URL Access
- A8 – Unvalidated Redirects and Forwards
- A9 – Insecure Cryptographic Storage
- A10 - Insufficient Transport Layer Protection

Limitations of Ethical Hacking

Ethical hacking is based on the simple principle of finding the security vulnerabilities in systems and networks before the hackers do, by using so-called "hacker" techniques to gain this knowledge. Unfortunately, the common definitions of such testing usually stops at the operating systems, security settings, and "bugs" level. Limiting the exercise to the technical level by performing a series of purely technical tests, an ethical hacking exercise is no better than a limited "diagnostic" of a system's security (Gupta, B. B., et al.2015). Time is also a critical factor in this type of testing. Hackers have vast amounts of time and patience when finding system vulnerabilities. Most likely you will be

engaging a "trusted third party" to perform these test for you, so to you time is money. Another consideration in this is that in using a "third party" to conduct you tests, you will be providing "inside information" in order to speed the process and save time. The opportunity for discovery may be limited since the testers may only work by applying the information they have been given. 21. (Gupta, B. B., et al.2015)

A further limitation of this type of test is that it usually focuses on external rather than internal areas, therefore, you may only get to see half of the equation. If it is not possible to examine a system internally, how can it be established that a system is "safe from attack", based purely upon external tests? Fundamentally this type of testing alone can never provide absolute assurances of security. Consequently, such assessment techniques may seem, at first, to be fundamentally flawed and have limited value, because all vulnerabilities may not be uncovered. (Bhawana S., Ankit N. and Shashikala K.: 2014)

Conclusion

The rapid development of technology brings positive and negative changes in society. Positive changes are obvious, while for negative we are sometimes unaware of ourselves. In order to be information security protected it is necessary to have primarily a security culture, especially on social networks such as: Facebook, Twitter, Linkin, etc.

Information security protection is of great importance to institutions, banks, companies, etc. Therefore penetration testing is recommended. Penetration testing determines all weaknesses of information systems and database servers in a given institution. Another convenient way to protect is to use the above-described Open Web Application Security Project (OWASP) that meets all the standards.

Hackers are very diverse. They may bankrupt a company or may protect the data, increasing the revenues for the company. The battle between the ethical or white hat hackers and the malicious or black hat hackers is a long war, which has no end. While ethical hackers help to understand the companies' their security needs, the malicious hackers intrudes illegally and harm the network for their personal benefits which may allow a malicious hacker to breach their security system. This also concludes that hacking is an important aspect of computer world. It deals with both sides of being good and bad.

Bibliography:

1. Ajinkya A. Farsole, Amurta G. Kashikar and Apurva Zunzunwala (2010) , "Ethical Hacking ", International journal of Computer Applications, Vol. 1 No. 10.
2. Ajay S. (2016). "Web Application Hacking." Certified Ethical Hacker (CEH) Foundation Guide. 131-141.
3. Aury M. Curbelo, Alfredo Cruz (2013), "Innovation in Engineering, Technology and Education for Competitiveness and Prosperit", Faculty Attitudes Toward Teaching Ethical Hacking to Computer and Information Systems.
4. Beaver Kevin (2006) "Hacking for dummies", 2nd edition, New Jersey: John Wiley and Sons.
5. Bhawana S. , Ankit N. and Shashikala K. (2014) "Study Of Ethical Hacking", International Journal of Computer Science Trends and Technology (IJCST) ,–Vol. 2, Issue 4.
6. Chowdappa K.Bala et al. (2014), "Ethical Hacking Techniques with Penetration Testing", International Journal of Computer Science and Information Technologies, Vol. 5, Issue 3.
7. Desai Manthan (2010) "Hacking for beginners", my.safaribooksonline.com/.../ introduction-to-ethical-hacking-ethics-legality.
8. Dodson, J., et al. (2016) "Database and Security: Creating a Secure Database for a Capstone Application Development Project." Proceedings of the International Conference on Frontiers in Education: Computer Science and Computer Engineering (FECS). The Steering Committee of The World Congress in Computer Science, Computer Engineering and Applied Computing (WorldComp).
9. Ethical Hacking Techniques to Audit and Secure Web Enabled Applications, (2002). Sanctum Inc.
10. Gupta, B. B., et al. (2015) "Cross-site scripting (XSS) abuse and defense: exploitation on several testing bed environments and its defense." Journal of Information Privacy and Security 11.2 : 118-136.
11. Gurpreet K. Juneja (2013), "Etihical Hacking: A Technique to enhance information security", International Journal of Innovative Research in Science, Engineering and Technology, Vol. 2, Issue 12.
12. Hafele David, (2004), Three Different Shades of Ethical Hacking: Black, White and Gray, SEC Practical Assignment, Version 1.4b, SANS Institute, accessed: https://www.sans.org/reading-room/whitepapers/hackers/shades-ethical-hacking-black-white-gray-1390.

13. Hwang, Yong Ho. (2015) "Iot security & privacy: threats and challenges." Proceedings of the 1st ACM Workshop on IoT Privacy, Trust, and Security. ACM.
14. Ishu J., R. Johari, and R. L. Ujjwal.(2014) "CAVEAT: credit card vulnerability exhibition and authentication tool." International Symposium on Security in Computing and Communication. Springer Berlin Heidelberg.
15. Jamil Danish and Ali Khan Muhammad (2011) "Is Ethical Hacking Ethical?", International journal of Engineering Science and Technology, Vol 3 No. 5.
16. Jason C., C. Morisset, and N. Zannone (2015) "On missing attributes in access control: non-deterministic and probabilistic attribute retrieval." Proceedings of the 20th ACM Symposium on Access Control Models and Technologies. ACM.
17. Leiner, Barry M., et al. (2009) "A brief history of the Internet." ACM SIGCOMM Computer Communication Review 39(5).
18. Manuel V.and A.Petrini (2016). "Virtualization Laboratory for Computer Networks at Undergraduate Level." International Conference on EUropean Transnational Education. Springer International Publishing
19. Mahrouqi, A., et al. (2016) "Simulating SQL-Injection Cyber-attacks using GNS3." International Journal of Computer Theory and Engineering 8.3: p p 213.
20. Nitin N. (2016) "Building a virtual system of systems using docker swarm in multiple clouds." Systems Engineering (ISSE), IEEE International Symposium.
21. Panella Jon, (2011) "Web Application Security and the OWASP Top 10", Sapient's Global Commerce Practice, Sapient Corporation.
22. Reto B. (2002), "Ethical Hacking", in GSEC Practical Assignment, Version 1.4b, Option 1, Nov 24.
23. Salas, M. I. P., and E. Martins (2014) "Security testing methodology for vulnerabilities detection of xss in web services and ws-security." Electronic Notes in Theoretical Computer Science 302.
24. Smith B., Yurcik W., Doss D. (2002), "Ethical hacking: the security justification redux", conference paper presented at Technology and Society International Symposium.
25. Steinmetz, Kevin F. (2015) "Craft (y) ness An Ethnographic Study of Hacking." British Journal of Criminology 55 (1).
26. Tatwani, L. Narayan, and R. Tyagi. (2015) "Security and Privacy issues in Cloud Computing." International Research Journal of Computer and Electronics Engineering.

IN THIS NUMBER: JASMIN AHIĆ, ADMIR HADŽIKADUNIć, FADIL ŠLJIVIĆ
BOGDANČO GOGOV
STOJAN SLAVESKI, STEFANIJA AGROTOVA
MLADEN TRAJKOV, ALEKSANDAR NACEVSKI, VALENTINA VČKOVA
SEVIL MUAREMOSKA ABDULI, NASER ETEMI
LETA BARDŽIEVA
DRAGANA BATIC
ŽANET RISTOSKA, BILJANA POPOVSKA
MARIJA GJOŠEVA
NIKOLA KISKOSKI
EMILIJA SPASOVA KAMČEVA, NIKOLČO SPASOV