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“ARCHIBALD REISS DAYS”

BOOK OF ABSTRACTS



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# POSSIBILITIES AND SCOPE OF ENVIRONMENTAL PROTECTION THROUGH CRIMINAL LAW – THE NEW ENVIRONMENTAL CRIME DIRECTIVE

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**Purpose:** Starting from the point of view that the criminal law protection, in general, needs to achieve both traditional and modern standards of its purpose, always in accordance with its proven dogmatic principles, the authors of this paper seek to provide scientifically based argumentation for the possibilities and scope of the criminal law protection of the environment, in a wider context of achieving European Green Deal objectives, seen through the prism of a new Environmental Crime Directive at the European Union level. Bearing in mind that a huge gap in the field of criminal law response to environmental crime has been detected between the normative and realistic situation on the ground, and that the activities of the European Union legislation gave a brand new document aimed at assuring environmental protection through mechanisms of criminal law, the main purpose of this article is to examine, underline, and prepare future changes within the national criminal law framework in terms of criminal law protection of the environment, so that it should be as efficient as possible but at the same time constitute a rational system of criminal law provisions.

**Design/Methods/Approach:** Apart from the introductory remarks and the conclusion, the paper will organize into two main chapters. The first chapter will talk about some general issues of criminal law that protect the environment. These include whether or not the environment should be a separate protected value, how harmful it is to society, and the technical details of the crimes that need to meet certain standards in order to be considered normative. The second chapter will deal with the structure, aims, and goals of the new Environmental Crime Directive in fighting environmental crime as a part of fulfilling processes of the European Green Deal. A part of this chapter will focus on new forms of illicit behavior that have been identified as new environmental criminal offences, which common sanctions for environmental crimes are expected to be prescribed and which mechanisms are proposed as a tool for enhanced cross-border investigation and prosecution, in order to make relevant investigations and criminal proceedings more effective.

All common methods of research in the field of law will be used, starting from the dogmatic method, normative method, and comparative method. The historical method will also be used in part of the research in which the distinction between prior legal documents from 1998 and 2008, which did not have sufficient effect, and the new one will be analyzed.

**Findings:** Changes in the area that defines new environmental crimes at the European Union level, minimum common standards in prescribing criminal sanctions, and enhancing the exist-

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ing ones, as well as setting brand new tools and mechanisms in strengthening and enhancing the effectiveness of law enforcement cooperation in the field of environmental crimes have been brought about by the new Environmental Crime Directive aimed to crack down on environmental crime, and they can be seen and marked as an important contribution to criminal law protection of the environment, but only seen as the ultimate instrument of the state reaction to environmental crimes. Even though environmental crimes have their negative impact on human health, safety, and economics in general, they have to be realistically conceived and seen only as an *ultima ratio societatis* in protection of the environment.

**Originality/Value:** The importance of the paper is reflected in pointing out the problematic issues of criminal law protection of the environment, its legitimacy, and its place in the overall system of criminal law provisions of the national states, in order to make the needed balance with the proven dogmatic standards of the criminal law protection, traditionally based on the respect of its fundamental principles of legality, legitimacy, guilt, and proportionality, and the needs of a contemporary criminal policy in order to provide a common regional framework that will be in line with the environmental needs and transnational character of the criminal offense in this category of criminality.

**Keywords:** environmental crimes, European Green Deal, Environmental Crime Directive, criminal law protection of the environment.

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**Zoran Stojanović**, PhD, is a Retired Full Professor of Criminal Law at the Faculty of Law, University of Belgrade, Serbia, where he lectured Criminal Law and International Criminal Law. He was the Head of the Department of Criminal Law and Criminology. In 1978, he spent time at Oxford University, England, and, as Humboldt's scholarship holder, in 1985/1986 at the Max Planck Institute for Foreign and International Criminal Law in Freiburg (FRG), Germany. He renewed research stays in FRG many times. He participated in the work of numerous expert committees as a president in charge of making drafts of criminal and related laws in Serbia and in Montenegro. He was Dean of the Faculty of Law in Novi Sad (1991/1992) and Federal Minister of Justice (1993/1994). He was a member of the Serbian State Prosecutorial Council and a permanent representative of Serbia in the Assembly of States Parties of the ICC. Professor Stojanović has written and published more than 230 works (monographs, commentaries, textbooks, articles, reports, and papers for scientific and expert meetings and scientific research projects) on criminal law, criminal law theory, international criminal law, and criminal policy. From 2016 to 2021 he was dean of the Faculty of Law, University of Donja Gorica. Since 2018, he has been a member of the Montenegrin Academy of Sciences and Arts and a member of the Scientific Society of Serbia. He speaks German and English and uses Italian and Russian.

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# THE APPLICABILITY OF THE RULES ON INTERNATIONAL CRIMES IN OUTER SPACE

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**Purpose:** The objective of this reflection is the analysis of the applicability of the rules on international crimes in outer space. It must be taken into account that, in principle, international standards, even in their complexity, are designed to be applicable by states in their territorial spaces or, taking into account different variables, to their citizens in spaces outside the jurisdiction of the state. However, nothing prevents them from being applicable in the future, as long as their applicability can be verified.

**Design/Methods/Approach:** In order to structure the purpose of this work, a systemic method would have to be used, which allows all possible applicable standards to be framed. To do this, we must start from the considerations of general international law, including the scope of application *ratione materiae*, *ratione personae*, *ratione loci*, and *ratione temporis*. Interconnected with general international law, the contractual obligations of states should be considered, including special norms such as the Law of Treaties, the Law of the Sea, Human Rights, International Criminal Law, European Law, etc. Likewise, the principles of extraterritoriality, extraterritorial application of rules, universal jurisdiction, etc. must be taken into account, in addition to national rules, depending on each case.

**Findings:** There is a false belief that outer space is governed by existing conventional rules and that, therefore, binds each state, depending on the obligations undertaken.

However, now that the true conquest of space has begun, with an enormity of resources and uses, which may be contrary to the norms that protect the attribution and criminal liability of international crimes, it is when the set of regulations needs to be articulated. relevant to approaching these issues. Current scientific evidence and the lack of specific regulation require a more detailed treatment of these issues.

**Originality/Value:** Outer space has only been studied throughout history as a claim in its territorial conquest. Issues that go beyond these territorial claims or even the use for resource extraction or the use to obtain energy sources or the use of space for armed conflicts have not been addressed.

An all-encompassing and particularized approach is required on issues that have to do with attribution or criminal liability for the commission, persecution, and prosecution of international crimes, especially for crimes of aggression (both state and individual), genocide (both state and individual), crimes against humanity, and war crimes.

**Keywords:** applicability of international norms, outer space, international crimes.

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He has taught university teaching in Europe, the United States, Latin America, and Africa.

Among some of his distinctions are the Diplomatic School Medal, the UNED Medal, the University of Salerno Medal, the “Serge Lazaref Prize” from NATO, and the shared “Rafael Martínez Emperador” Prize from the General Council of Power Judicial. He is an Academic of the Academy of Diplomacy of the Kingdom of Spain.

He has published 27 books, 5 of them in English, and more than 150 studies in Spanish, English, French, and Italian.



# SEEKING A METHODOLOGICAL APPROACH TO COMBAT TRANSNATIONAL CRIME: A LOOK AT RESEARCH CARRIED OUT IN THE JEAN MONNET CHAIR EUVALWEB

**Teresa Russo, PhD<sup>1</sup>**

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**Purpose:** The Jean Monnet Chair EUVALWEB, which boasts the participation of eminent national and international scholars and practitioners, deals, among other topics, with the former cooperation in justice and home affairs (JHA), focusing on the internal security of the Union, as well as of the neighbouring and future Member States. This paper will deal with the JHA, which is one of the main areas that the accession states have to adapt to, taking on an external and foreign policy dimension of the Union.

**Design/Methods/Approach:** In particular, the fight against irregular immigration and police and judicial cooperation in criminal matters have assumed a central dimension of the European space in order to safeguard the security needs of the Union, which are also projected outwards and into its neighbourhood. However, trends that have emerged from our research have shown a broadening of criminal offences as a result of the impact of European (but also international) law on national legal systems. Anyway, the prosecution approach to serious crimes affects the freedom and justice requirements, ending up being left to the case-by-case assessments of national judges.

**Findings:** Therefore, the expansion of the Union's criminal competence, via the additional harmonization of national criminal laws in the battle against transnational crime and the establishment of ad hoc bodies and agencies for the coordination, prevention, and prosecution of crimes, actually conflicts with a number of crucial issues, such as the use of data obtained through the European Investigation Order.

**Originality/Value:** These issues appear to be caused by the lack of a "system" guarantee within the Union's legal order itself, as well as the absence of European criminal and procedural rules, which inevitably force Member States, national authorities, and lawyers in general to firmly cling to the core values of their respective procedural and constitutional systems.

**Keywords:** European Investigative Order, EU criminal competence, JHA, judicial and police cooperation, procedural rights.

## *About the author*

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Promoting Public Awareness on Enlargement, EU Values and the Western Balkans' Accession" (EU-VALWEB), a lecturer of EU Values, Integration and Migration Law (DSG Unisa) and of International Law, Cyber Security and Ethics of Artificial Intelligence (DISA-MIS Unisa). She is a founder and director-in-chief of the online journal "EUWEB Legal Essays. Global & International Perspectives". She is a Scientific Coordinator of the International Credit Mobility project with Albanian Universities, selected for co-funding by the European Commission's Erasmus+ Programme – Key Action 1 with Partner States since 2018.



# PREPARING HUNGARIAN POLICE CADETS TO DEAL WITH UNEXPECTED SITUATIONS AND LEAD OPERATIONS

**Gábor Kovács, PhD<sup>1</sup>**

University of Public Service, Budapest, Hungary

**Purpose:** An important part of the professional training of Hungarian police cadets is the acquisition of practical skills. The knowledge acquired during theoretical training must be applied in practice.

Preparation for the annual joint civil service training is an important milestone in the training. The study will present the whole didactic process, from good practice to experience.

**Design/Methods/Approach:** Preparation for joint exercises is preceded by thorough planning. Well-prepared background materials ensure thorough preparation and successful implementation of the exercise. This process is described in the paper. Relevant literature will be included in the study. The methodology will ensure that each workflow is precisely defined and the process is presented.

The approach to the topic is theoretical and also more practical, so that the reader can gain useful experience based on good practices.

**Findings:** The study conveys useful methods and findings and good practices for law enforcement professionals. The findings of the study are based on the processing of the relevant literature and the experience of good practices. These practices are highly adaptable to all types of management work.

**Originality/Value:** The topic has not been processed from this point of view before, despite the fact that there is significant literature on managerial work. The author discusses the topic with a new approach. The conclusions drawn from the processing of the topic and the recommendations can be effectively used in everyday education practice.

**Keywords:** police education, joint exercise, preparation process, good education practice,

## *About the author*

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# CORRUPTION AND MONEY LAUNDERING IN THE REPUBLIC OF NORTH MACEDONIA

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**Purpose:** This paper aims to analyze the emerging forms of corruption in the Republic of North Macedonia, focusing on specific corrupt crimes and their potential connection to money laundering. In the Macedonian criminal code, several corrupt crimes are incriminated, and since the motive for their execution is the acquisition of illegal property benefits, an analysis is made for the most common connection with money laundering, that is, the money that was acquired through corruption is shown as legally acquired money. A period of 10 years from 2014 to 2023 is being researched in order to obtain indicators of the most frequently committed corrupt crimes, as well as the volume, structure, and dynamics of reported, accused, and convicted perpetrators. Then an analysis is made of the situation with money laundering, i.e., for which corrupt crimes the criminal investigation is most often extended, and criminal proceedings are also conducted for money laundering. The research also analyzes the type and amount of confiscated financial assets that originated from corrupt crimes and went through the money laundering process.

**Design/Methods/Approach:** The paper is organized into several units, including an analysis of corrupt crimes according to Macedonian penal legislation, a normative analysis of money laundering as a separate crime, a presentation of the research methodology and data provision, a systematization and comparative analysis for the researched period, the drawing of conclusions, and a display of references.

**Findings:** Corruption and money laundering are social phenomena that negatively affect democracy and the rule of law, especially in societies in transition, but are not uncommon in highly developed democracies. Corruption is a criminal phenomenon that manifests itself through several public forms and forms of execution. It is criminalized in several crimes against official duty, from abuse of official duty and powers, receiving and giving bribes, embezzlement and serving in the service, and falsification of official documentation to illegal acquisition and concealment of property. These are serious crimes that cause serious financial implications where the damage is inflicted on the state budget, and the benefit gained is for personal or family enrichment that is not possible to acquire in a legal way. It is in this direction that the research is aimed at obtaining knowledge about the most frequently committed corrupt crimes in the Republic of North Macedonia and whether the investigators took measures and actions to provide evidence of the type and amount of the acquired illegal property benefit, whether the financial resources passed the process of money laundering, and whether it has been detected, secured, and confiscated and to what extent.

**Originality/Value:** The paper is original, and it shows a theoretical analysis of the corrupt crimes, an analysis of the risk of connection with money laundering, as well as presented and

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analyzed data from the author's own research for the researched period with the application of research methods and techniques.

**Keywords:** corruption, money laundering, criminal investigation, evidence, confiscation.

### *About the author*

**Svetlana Nikoloska** is a full professor at the Faculty of Security in Skopje, University "St. Kliment Ohridski" – Bitola, in the field of criminalistics. She is the author of several textbooks in the field of criminalistic methodic of criminalistic investigation of classic crime, economic-financial crime, money laundering, computer crime, and illegal drug trade. She participated in numerous international scientific conferences and presented and published papers and has participated in several international projects.



# FINANCIAL INVESTIGATION OF ENVIRONMENTAL CRIMES IN NORTH MACEDONIA

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**Marina Mitrevska, PhD**

Institute for Security, Defence, and Peace, Faculty of Philosophy  
Ss. Cyril and Methodius University in Skopje, North Macedonia

**Purpose:** Environmental crimes are listed high on the agendas of international organizations like Interpol, Europol, the United Nations, etc. Environmental crime is one of the EU's priorities in the fight against serious and organized crime as part of EMPACT 2022-2025.

According to Europol, environmental crime covers the gamut of activities that breach environmental legislation and cause significant harm or risk to the environment, human health, or both. National police and international organizations must take action to combat this type of crime. However, this criminal investigation is very specific due to the serious consequences of environmental crimes, and there is a special methodology for preventing and proving these crimes. During the criminal investigation, investigators must take different operational-tactical measures, investigative actions, specific expertise during the crime scene investigation, etc.

Financial investigations are a part of the criminal investigations, and law enforcement agencies must take activities within their competences.

**Design/Methods/Approach:** For the preparation of this paper, the authors used content analysis methods. They analyzed the data published by authorities, such as the police, financial police, the Agency for Financial Intelligence, and others. They also analyzed data from annual reports and other official documents.

**Findings:** Criminal investigation of environmental crimes is on the margins of law enforcement agencies and their activity for combating this type of crime in North Macedonia. Authorities have some activities, but that is not enough for successful investigations. There is a need for better and more successful criminal investigations in the country, including better interinstitutional cooperation during financial investigations.

**Originality/Value:** The paper presents conclusions about this very important topic and proposes measures for more successful results of the criminal investigations of environmental crime in North Macedonia.

**Keywords:** environmental crimes, financial investigations, North Macedonia.

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*About the authors*

**Marina Malis Sazdovska**, PhD, is a full professor, and her fields of interest include environmental criminalistics, criminalistic tactics, etc.

**Marina Mitrevska**, PhD, is a full professor with expertise is human security and similar.



# COORDINATED RESOLVING OF CROSS-BORDER CRIMINAL ACTIVITIES AS A DETERMINANT IN THE PROCESS OF FURTHER WESTERN BALKANS INTEGRATION – CASE STUDY: SERBIA AND NORTH MACEDONIA

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**Mitko Arnaudov, PhD**

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**Purpose:** The purpose of the paper is to determine how much resolving cross-border crime activities contributes *de jure*, but primarily *de facto*, to regional integration within the Western Balkans. States and political entities within the region are facing similar cross-border criminal activities, including illegal migration, human trafficking, drug routes, and illegal weapons trafficking, which in a huge manner define the security mosaic on the field. The authors will try to, through the level of cooperation in resolving the abovementioned challenges, assess the contribution in the process of regional integration.

**Design/Methods/Approach:** Research relies on analysis, where content analysis, functional analysis, comparative analysis, and structural-functional analysis will be applied. It is also planned to use synthesis, abstraction, deduction, and induction in combination with rational choice techniques. The classification will be used when creating a typology of effective and ineffective state mechanisms in the field observed in the research, in accordance with the previous analysis. At the end, in the conclusions and recommendations chapter, prediction will be used as a method that will enable authors to propose potential mechanisms for further regional integration, based on the necessity of cooperation in resolving cross-border criminal activities.

**Findings:** Regional integration within the Western Balkans, in the case study of bilateral relations between Serbia and North Macedonia, is based on political will. The authors have reached the same findings in the process of resolving cross-border criminal activities. Concretely, if there is clear political will, the cooperation will be concrete and effective. On the other hand, without political interest, *de jure* cooperation and integration within the resolving cross-border criminal activities field will not be visible on the ground.

**Originality/Value:** Analyzing the contribution of cooperation in the process of resolving cross-border criminal activities to the regional integration in the context of the Western Balkans provides double scientific originality: first, in the theory of regionalism, this paper offers an explanation of the role of cross-border criminal activities in the contemporary processes of regional cooperation and integration; second, on a practical level, it proposes mechanisms for

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potential intensified cooperation in resolving the mentioned crime challenges, released of potential obstacles on a political level.

**Keywords:** cross-border criminal activities, cooperation, Western Balkans, integration, Serbia, North Macedonia.

### *About the authors*

**Marjan Gjurovski**, PhD, is a full professor at the state University of Ss. Cyril and Methodius in Skopje. Previously he was working as an associate professor at the same university, as well as at the University of St. Kliment Ohridski in Bitola, North Macedonia. His professional excellence is substantial, bearing in mind not only his academic contribution in the context of a lecturer and author of the numerous scientific papers and books but also the usability of his academic achievements in the practical policy and security sphere.

**Mitko Arnaudov**, PhD, has been engaged at the Institute of International Politics and Economics as a Research Fellow. His main research interests are international relations, Serbia's relations with its neighbors, regional relations in the Balkans, neighborhood relations in the Western Balkans, contemporary Balkan history, European and Atlantic integration processes in the Western Balkans, and the Western Balkans' relations with the European Union. In October 2021, Arnaudov received his PhD from the Faculty of Political Sciences, University of Belgrade, defending his doctoral thesis "Foreign Policy Strategy of the Republic of Macedonia from 2006 to 2015".

# THE AGE RULES OF CRIMINAL DISCRETION IN HUNGARIAN AND INTERNATIONAL CRIMINAL PROCEDURE: ARGUMENTS AND COUNTERARGUMENTS IN FAVOR OF EVER- DECREASING AGE LIMITS

Vince Vári, PhD<sup>1</sup>

Bianka Bodó

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**Purpose:** Over time, juveniles have always occupied a place of particular importance in the criminal justice system and other areas of life. This is not a coincidence, since this is the age group that will later become full citizens and influence the development of a country with their lifestyle and the teaching of their children. In our research, we covered the situation of this age group in criminal law and criminal proceedings, focusing primarily on the issue of the age of criminality and the ability to judge. The goal was also to obtain an answer to the complex aspects of dealing with the complex social problem inherent in juvenile delinquency through the derivation of the historical development of discretion, its domestic and international regulation, and the examination of the age of criminality.

**Methods:** During the processing of the topic of the study, we primarily approached it from a criminological point of view. Throughout the process, we examined both domestic and international literature. We reviewed the legal regulations, their reasons, and their background. We used and analyzed national and international statistical data to prove our hypothesis. In addition to the presentation and processing of Hungarian legislation, we also looked at international law. After that, we focused on the Serbian legal regulation and the circumstances that led to and justified the development of the current regulatory environment. As an applied method, in addition to the formal logical one, we followed the historical-analytical, comparative-systematic, and legal analytical procedures.

**Findings:** During the research, we concluded that the criminal law and criminal procedure law regulations for juveniles in Hungary are modern and developed. However, to ensure its efficient use, it requires improvement based on numerous international and national examples. Essential steps must be taken to stop or slow down the increase in juvenile offenders. However, simply reforming the age regulation of criminal prosecution and significantly lowering the age limits will not suffice. A comprehensive judicial reform would be necessary, where all the pedagogical and educational tools – currently scattered – found with civil and state actors, with which the goals of unique prevention related to juveniles can be enforced more effectively, should be institutionalized. Together with them, we can uncover the typical causes of the crimes and scientifically analyze the processes leading to them. Competent and dedicated professionals should follow the lifestyle and integration of the juvenile over a more extended period, providing them with appropriate help and support in challenging life situations.

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**Value:** This paper will contribute to elaborating this problem from the criminal law and criminological aspects and improve the practice of courts, prosecutors, lawyers, and the police in this area. It will also help to improve the work of decision-makers with a more scientific approach to the problem and reveal the dark sides of populist penal policy.

**Keywords:** discretion in criminal law, criminal procedure for juveniles, criminal capacity, juvenile offender, crime prevention.

### *About the authors*

**Vince Vári**, PhD, is a pol.lt.col. and an associate professor. He has a doctorate in government and jurisprudence and has been a police officer, university lecturer, and researcher. He has gone through all levels and areas of law enforcement education and has over 20 years of experience. He currently works as an associate professor at the Criminal Procedure Department of the Faculty of Law Sciences, University of Public Service, in Hungary. He defended his doctoral dissertation in 2016 titled „Relative Efficiency of the Police and Law Enforcement.” He is the author of two monographs and mini-monographs, and the number of publications he has written independently and jointly is over a hundred. His main research area is still the police, specifically measuring the organizational effectiveness of the police. In addition, he researches the investigative relationship between the investigating authority and the prosecutor’s office, as well as possible solutions to simplify the investigation. In 2022, he wrote a joint monograph on the relationship between the Serbian and Hungarian investigative authorities and the prosecutor’s office in the field of inquiry, together with Assoc. Prof. Dragana Čvorović, PhD, from the University of Criminal Investigation and Police Studies. He has already participated in numerous professional trips abroad and regularly visits foreign universities to teach within the Erasmus program. He speaks English and German at an intermediate level.

**Bianka Bodó** is a graduate student at the Faculty of Law Sciences, University of Public Service, in Hungary, majoring in criminal investigation. He is a demonstrator at the Department of Criminal Procedure, actively participates in organizing student academic life, and is a member of the university’s talent management student body, Szent György College. His areas of interest are criminal sciences and criminology.

# INTERNATIONAL COOPERATION AND SPECIAL INVESTIGATIVE MEASURES

Sasho M. Stojanovski, PhD<sup>1</sup>

Ministry of Interior of the Republic of North Macedonia

**Purpose:** The international community recognizes crime as a phenomenon that still represents a serious safety issue, a serious threat, and a danger to the countries and the international community. The harmful consequences that it causes are becoming a reason and necessity for continuous undertaking and improving the measures and activities for its prevention and suppression. It is a fact that certain institutions and instruments are acting and are practiced only at the regional level, and that there are still countries in which they still are not incorporated into their legislations. For these reasons, the purpose of the paper is to point out the positive effects of the use and their practice and acceptance in all countries, i.e., their full internationalization.

**Design/Methods/Approach:** The main goal of the paper will be realized by analyzing the content of the provisions of the conventions and protocols that set up the foundations for international police and judiciary cooperation, institutions such as Interpol, Europol, Frontex, Eurojust, and the European Judicial Network, and instruments such as the Red Notice, European Arrest Warrant, Fugitive Active Search Teams, European Network of Fugitive Active Search Teams, and Special Investigative Measures, with which the cooperation is accomplished. Each institution and instrument will be individually elaborated in the context of international cooperation, after which appropriate conclusions will be drawn for their efficiency in the fight against crime.

**Findings:** International cooperation in dealing with crime foresees and is conducted in accordance with international conventions, protocols, and other legal acts. They offer the opportunity to conduct an effective and successful fight against crime. However, the emergence of new forms and ways of committing crime imposes the need for constant development of cooperation, promotion, and discovering and developing new forms of cooperation.

**Originality/Value:** Bearing in mind the fact that the undertaking of measures and activities to deal with crime only at the national or regional level does not give the expected results, the author considers that the internationalization of the institutions and instruments of international cooperation in dealing with crime is becoming a necessity. Only by practicing the same methods of action globally can greater efficiency be expected.

**Keywords:** crime, international cooperation, international institutions, international instruments.

## *About the author*

Sasho M. Stojanovski, PhD, from Skopje, has been employed at the Ministry of Interior of the Republic of North Macedonia since 1998. He presently works as an investigator in the Investigative Center within the Public Prosecutor's Office in Skopje.

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# THE DISTINCTION BETWEEN THE OFFENCE OF MASS DISORDER AND THE OFFENCE OF HOOLIGANISM

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**Purpose:** At first glance, one may confuse the crime of mass disorder with the crime of hooliganism, as both crimes pose a threat to social values. In this regard, it is appropriate to carry out a comprehensive analysis with reference to the delimitation of the offences in question, that is, identifying the similarities and differences between the two offences is essential to ensure the accuracy.

**Design/Methods/Approach:** In order to achieve the aim of the research, the comparative method was used as a basic method, which made it possible to determine the similar and different elements between the offences under analysis. At the same time, emphasis was placed on the logical method and the interpretative method. In the research process, the legal framework in the field was consulted, as well as handbooks, works and scientific articles of specialists in the criminal field.

**Findings:** In the Republic of Moldova, the number of violations against public security and public order is increasing, based on a wide range of causes. Respecting this social value plays a fundamental role in a democratic state. The comparisons identified and described between the offence of mass disorder and the offence of hooliganism are of major importance in the legal framing of the offences examined.

**Originality/Value:** This study aims primarily to support the process of justice by highlighting some advisory ideas with reference to the delimitation of two similar offences in terms of composition. The originality of the research lies in the parallelism between two offences in the same field: the offence of mass disorder and the offence of hooliganism. This research contributes to facilitating the work of prosecutors and courts, as the criteria of differentiation addressed in this work are decisive in determining criminal liability and punishment.

**Keywords:** mass disorder, hooliganism, similarities, differences, delimitation, democratic state.

## *About the author*

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# PROSECUTION OF HATE CRIME AND HATE SPEECH IN BOSNIA AND HERZEGOVINA

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**Muamer Kavazović, PhD**

**Edita Hasković, PhD**

Faculty of Criminal Justice and Security Studies, University of Sarajevo  
Bosnia and Herzegovina

**Purpose:** Given the fact that existing legal provisions in B&H can lead to inadequate responses on the occurrences of hate speech and hate crime we conducted research of approaches of B&H's judiciary in solving those crimes through critical analyzes of existing case law in all four jurisdictions in B&H from 2012. to 2022. with absolute sample of hate crime and hate speech court cases. Analysis was conducted by using the six elements test – Article 19, aiming to establish a threshold of criminal liability on a case-by-case basis.

**Findings:** After an in-depth analysis of 47 court cases in a ten-year period (where 8 were classified as hate crimes and 39 as incitements to hatred), the authors came to the conclusion that approximately 77% of all cases indicted for incitement to hatred do not reach a necessary threshold. This very high percent of incorrectly qualified cases leads us to the conclusion that most of the practitioners (prosecutors, lawyers, and judges) do not understand the very concept of hate crime and hate speech.

**Originality/Value:** Misapplication of the provision of incitement to hatred for prosecuting cases of hate speech that do not represent incitement to hatred or that are hate crime cases raises the question of legal security and the ability of professionals to recognize, identify, and react to a true case of incitement to hatred. Adequate legal and social response to hate speech and hate crime has wide repercussions on the entire B&H's society, and therefore the state must respond to those harmful behaviors in a legally correct manner. Therefore, based on the results of conducted research and identified problems, the authors created recommendations that can lead to overcoming the identified issues.

**Keywords:** hate crime, incitement to hatred, Article 19, judiciary practice, Bosnia and Herzegovina.

## *About the authors*

**Marija Lučić-Čatić** is a full professor and a vice dean for international cooperation at the Faculty of Criminal Justice and Security Studies of the University of Sarajevo. Furthermore, she is Editor in Chief of Criminal Justice Issues – Journal for Criminalistics, Criminology, and Security Studies. Her main areas of professional interest are related to criminal justice systems and criminology.

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# CRIMINAL OFFENCES AGAINST THE ECONOMY IN THE REPUBLIC OF SERBIA 2018–2023

**Radmila Trklja, PhD<sup>1</sup>**

**Boban Dašić, PhD**

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**Purpose:** Economic crime is one of the most expensive types of criminal activities. There are numerous reasons why estimating the total cost of economic crime is impossible. Economic crime has a huge impact on a country's economic security, first damaging the state, then various entities, and of course businessmen. The aim of the paper is to point out the negative impact of this type of crime on the economic security of Serbia.

**Design/Methods/Approach:** During the research, the following methods were used: the method of analysis and synthesis, the method of induction and deduction, the method of generalization, and the method of concretization.

**Findings:** The level of economic security depends on the economic condition and development of the country. The results of this research indicate that national economies with a stable economic system and developed economic relations have lower rates of economic crime and therefore better economic security.

**Originality/Value:** The value of the research is enormous considering the total economic damage that economic crime causes to the economic security of the country. Work on preventing and suppressing economic crime must be a priority item for all the subjective forces of a country.

**Keywords:** economic crime, economic security, state, business entities, national economy.

## *About the authors*

**Radmila Trklja** was born in 1982 in Uroševac. She defended her doctoral dissertation entitled "Management Accounting Support for the System of Motivating and Rewarding Employees in Modern Companies" in 2013 at the Faculty of Economics of the University of Niš. She is employed at the Academy of Applied Studies of Kosovo and Metohija in Leposavić as a professor of Applied Studies. She published two textbooks and over 40 scientific papers. Local journals in which he publishes his works are "Baština", "Facta Universitatis", "Računovodstvo", "Bankarstvo", "Vojno delo", and "Ekonomski signali".

**Boban Dašić** was born in 1971 in Peć. In 2010, he defended his doctoral dissertation entitled "The Impact of Foreign Direct Investments on the Regional Development of Serbia" at the Faculty of Economics of the University of Kragujevac. He is employed at the Academy of Applied Studies of Kosovo and Metohija in Leposavić as a professor of Applied Studies. He published one monograph and over 90 scientific papers. The local journals in which he publishes his works are "Baština", "Vojno delo", "Akcionarstvo", "Ekonomija: teorija i praksa", "Ekonomski signali", and "Ekonomika poljoprivrede".

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# MISDEMEANOR LAW PROTECTION OF PUBLIC ORDER: STATE AND TRENDS IN SERBIA

**Branko Leštanin**

Ministry of Interior of the Republic of Serbia

**Željko Nikač, PhD<sup>1</sup>**

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**Purpose:** The protection of public order (and peace) in Serbia is the subject of several legal regulations, but the Public Order and Peace Act is systemic in this area. From the very beginning of the creation of Serbian statehood, there was a need to protect public order in order to achieve a harmonized system in the realization of human rights and freedoms. The aim of this paper is to explore the protection of public order in misdemeanor legal, comparative, theoretical, and empirical terms. The paper should explore how the incrimination of certain human behaviors that threatened public order went, but also the decriminalization of such behaviors depending on social development, moral values, etc. In this way, the authors believe that a comprehensive perception of public order in Serbia would be obtained. The authors place their research in the spatial context related to the territory of the Republic of Serbia and in the time frame for the period 2018–2023. This period was chosen as the beginning of the research time frame after the implementation of the new Public Order and Peace Law.

**Design/Methods/Approach:** The authors use the normative method to analyze the norms of the laws. The authors will present and analyze statistical data and numbers related to the state and trends of public order protection from the point of misdemeanor law. For these purposes, the authors use data from the Ministry of Interior of the Republic of Serbia for the period 2018–2023. Data from the Statistical Office of Serbia, Croatia, and Montenegro related to the number of inhabitants were also used. a comparative method will be used for exploring the public order norms in some other states.

**Findings:** Throughout history, the process of incrimination and decriminalization of certain human behaviors, which for that period were understood as a threat to public order, can be observed. This especially applies to, for example, insulting a police officer. The norms governing these behaviors used to be scattered in various regulations, but more recently they have been codified in a systemic law regulating public order (and peace). The authors hypothesize that the state and trend of public order in Serbia after the amended legal text are relatively stable, that nominally the largest number of violations were committed in Belgrade (but this will be explored using the rate of misdemeanor), that the most frequent violations are related to quarrels and making noise, but there is a significant share of fights and provocations to fight, and also that insulting a police officer is a significantly present as a new misdemeanor.

**Originality/Value:** The issue of public order has been poorly explored globally and both in Serbia and in the neighborhood. With this paper, the authors want to contribute to a better understanding of this issue by looking at all aspects through the prism of misdemeanor law. In

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this way, the law enforcement (police) will be able to come up with new preventive mechanisms in the coming period if this issue were to be reduced to the smallest possible extent in Serbia.

**Keywords:** public order, misdemeanor law, police, state, trends, Serbia.

### *About the authors*

**Branko Leštanić** graduated from the Police Academy in Belgrade and subsequently completed the Program on Terrorism and Security Studies at the George Marshall European Center for Security Studies in Garmisch-Partenkirchen, Germany. After graduating, he worked in various jobs in the Serbian Police, which included leadership and management positions in the police. He currently works as an officer for the supervision of private security and private detectives in the Kraljevo Police Directorate. He was awarded by the Minister of Interior in 2005 for outstanding results in the field of security. He is the author of several papers in theoretical and professional journals in the fields of security, police science, and (criminal) law, as well as five books.

**Željko Nikač**, PhD, graduated from the Faculty of Law in Belgrade. He completed specialist training for criminal operatives, a special human rights course for members of the police, and was repeatedly praised and awarded for the achieved results. At the beginning of 2010, he was permanently employed at the then Academy of Criminalistic and Police Studies (now the University of Criminal Investigation and Police Studies). He was vice-dean for scientific research (2009–2012), and is currently working as a full professor at the University of Criminal Investigation and Police Studies. He was an external associate of the Committee for War Crimes of the Federal Government (1996–1998) and a member of several professional associations. He is the author of several scientific research papers, he was involved in several scientific projects and is a member of the editorial boards of several scientific journals. He is the author of several collections of regulations and monographs and participant in several scientific and professional meetings with international participation.

# TERRORISM, MONEY LAUNDERING, AND HUMAN TRAFFICKING IN THE EUROPEAN UNION: TRENDS AND COUNTERMEASURES

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**Purpose:** The purpose of this paper is to enable an overview of the trends in the European Union that exist in the fields of terrorism, money laundering, and human trafficking, as well as the activities that the European Union implements in the fight against these problems.

**Design/Methods/Approach:** The main methods that will be used in the paper are deductive-inductive and analytical methods, which will help in a better understanding of the circumstances that help the development of terrorism, money laundering, and human trafficking, and ways to solve them.

**Findings:** A clear insight into the current situation and circumstances that affect the development of terrorism, money laundering, and human trafficking in the European Union, but also in the activities that the European Union implements in order to oppose their strengthening.

**Originality/Value:** Terrorism, money laundering and human trafficking are important issues that the European Union is dealing with. These problems threaten the stable institutional, political, and security functioning of the European Union. The mentioned phenomena and their current level will be analyzed through the circumstances that enable their development and strengthening. Certain prerequisites lead to the emergence of phenomena that are the subject of research, so by observing and eliminating those prerequisites, a safer and more stable environment can be created. The paper will present the activities and measures implemented by the competent authorities of the European Union to combat the strengthening of the mentioned problems. The focus of the action of these authorities is to eliminate the causes that lead to the occurrence of these phenomena and to close the channels that enable the strengthening of terrorism, money laundering, and human trafficking.

**Keywords:** European Union, terrorism, money laundering, human trafficking, police, institutions.

## *About the author*

**Aleksandar Jazić** is a senior research fellow at the Institute of International Politics and Economics in Belgrade. He is a member of the editorial board of the scientific magazine *Međunarodna politika* (International Politics) and, during his work, took part in many scientific conferences and round tables. In addition, he gave lectures at the Institute and in other scientific institutions. Aleksandar Jazić defended his doctoral thesis entitled “Reform of the local self-government system in the countries of the Visegrad Group” in 2012 at the Faculty of Political Sciences, University of Belgrade. After that, in 2017, he finished High Engineering School of Professional Studies “Tehnikum Taurunum,” University of Belgrade, and earned the title of professional engineer for environmental protection. His areas of research are: local self-government, civil protection, international relations, terrorism and propaganda.

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# CLASSIFIED DATA AND CRIMINAL LAW – A NEED FOR CERTAIN CHANGES?

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**Purpose:** The primary aim of this article is to analyze the positive legal frameworks regarding data secrecy within the context of criminal law as prescribed by the Data Secrecy Law (DSL) and the Criminal Code of Serbia (CC), with an accent on classified data.

**Design/Methods/Approach:** The first section of the article will provide a brief overview of the normative framework, encompassing relevant provisions of the DSL, CC, and relevant bylaws. Following this, the analysis will focus on two specific offenses: Article 98 of the DSL, which deals with disclosing classified data, and Article 316 of the CC, which pertains to disclosing state secrets. Particularly, attention will be paid to aggravated forms of the offense outlined in Article 316 of the CC, which deals with grave offenses against the constitutional order and security of Serbia. In the third section of the article, considerations regarding potential legal changes to existing provisions of the DSL and CC will be addressed.

The methodology employed will primarily involve content analysis, complemented by the dogmatic method and a conceptual approach, aimed at achieving the primary objectives of the research.

**Findings:** These analyses reveal some inconsistencies within the domestic legal system. This discrepancy is most apparent in the realm of prescribed sanctions, where different penalty ranges exist for substantially similar criminal offenses. Moreover, shortcomings are evident in certain ways of perpetration. In broad terms, our legal system delineates two regimes of classified data protection: before and after 2009, when the DSL entered into force.

**Originality/Value:** The issue of data secrecy constitutes a crucial aspect of the national security system. In light of the identified inconsistencies, we intend to propose solutions for future amendments. The significance of data protected by provisions of the Data DSL and CC underscores the sensitivity of this topic, necessitating further development. While an adequate normative framework is essential, effective law enforcement is urgently required for comprehensive protection. Moreover, enhancing the culture of security in the handling and management of classified data is a vital component of data secrecy protection.

**Keywords:** data secrecy, classified data, state secret, criminal law, data protection.

## *About the author*

**Jovana Banović** is an Assistant Professor at the University of Belgrade Faculty of Security Studies and a researcher in the field of Criminal Law. She holds LL.B., LL.M., and LL.D. degrees from the University of Belgrade Faculty of Law and has successfully passed the Serbian Bar Exam administered by the

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# JURISDICTIONAL CHALLENGES OF CYBERCRIMES AND THE ROLE OF THE INTERNATIONAL CRIMINAL COURT

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**Purpose:** The International Criminal Court's (ICC) Prosecutor's recent announcement, considering the investigation of cybercrimes that violate the Rome Statute, highlights the growing relevance and jurisdictional challenges posed by cybercrime offenses in the digital age. The Rome Statute sets out the crimes falling within the jurisdiction of the ICC, the rules of procedure, and the mechanisms for states to cooperate with the ICC. It established four core international crimes: genocide, crimes against humanity, war crimes, and the crime of aggression. While the Rome Statute does not explicitly mention cybercrime, such crimes may meet the elements of core international crimes already defined. This research aims to critically examine the jurisdictional challenges faced by the ICC in prosecuting cybercrimes under its mandate, focusing on the gravity issues. The study explores the ICC's potential role in addressing cybercrime offenses, considering the growing relevance and complexities posed by these crimes in the digital age and the absence of explicit provisions in the Rome Statute.

**Methodology:** This qualitative research aims to examine the jurisdictional challenges of prosecuting cybercrimes under the ICC's mandate and explore the Court's potential role in addressing cybercrime offenses. Employing a comprehensive doctrinal research approach and grounded theory analysis, the study will review the Rome Statute, relevant international legal frameworks, case studies, and expert opinions to identify the challenges, such as variations in national cybercrime laws, differences in the rules of evidence and criminal procedure, evidence collection, and the international standardization of evidentiary requirements in terms of admissibility in a court of law.

**Findings:** The research is expected to reveal that while cybercrimes can theoretically qualify as international crimes under the ICC's jurisdiction, successful prosecutions in the near future may be hindered by the gravity challenges. The study will highlight the need for the ICC to develop expertise and capacity in investigating and prosecuting cyber activities, potentially focusing on incidents where cyber operations support kinetic strikes against protected persons and objects. The research is expected to yield insights into the legal and practical implications of extending the ICC's jurisdiction to cybercrimes, as well as recommendations for adapting legal frameworks and developing the Court's capacity to effectively address cybercrime offenses. The study concludes by emphasizing the importance of the ICC's proactive approach in anticipating and responding to the evolving nature of international crimes in the digital domain and the need for ongoing research and collaboration between the ICC, states, and tech companies to ensure accountability for cybercrimes that threaten international peace and security.

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**Originality/Value:** This research provides a novel and comprehensive analysis of the jurisdictional challenges faced by the ICC in prosecuting cybercrimes, contributing to the understanding of the Court's role in addressing these offenses in the digital age.

**Keywords:** cybercrime, jurisdiction, International Criminal Court, Rome Statute, UN Charter, prosecution.

### *About the author*

Mr. **Naeem AllahRakha** is a professional lawyer who recognized his expertise as an advocate in the High Court by joining prestigious bar councils. He is a founding member of the Cyber Law Department of Tashkent State University of Law. His influence is felt not only in litigation and academia but also in his contribution as an author, publishing numerous influential pieces of literature in international journals.



# CBRN THREATS AND SECURITY: THE ROLE AND IMPORTANCE OF FUNDAMENTAL SCIENCES, POLICE AND SECURITY FORCES

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**Purpose:** The dangers presented to organisms by chemical, biological, radiation, and nuclear (CBRN) agents have been present throughout human history and persist today. It is impossible to entirely eradicate the risks and threats posed by CBRN agents, encountered in various forms that may or may not be documented in literature. Given the growing diversity of CBRN-related threats, maintaining continuous attention and awareness is crucial to safeguarding safety and security within society. Awareness should encompass identifying both existing and evolving threats, along with acknowledging the necessity for flexible, efficient, science- and technology-driven strategies to prevent, detect, and respond to CBRN threats. It is crucial to stay abreast of evolving challenges and threats to CBRN security through sustainable security solutions and scientific and technological innovations. Science, technology, and engineering play a vital role in addressing these issues. The advancement of science and technology is key in detecting and mitigating CBRN threats. The CBRN threat landscape involves adversaries, terrorists, and criminal groups aiming to acquire chemical or biological agents or exploit the beneficial applications of nuclear and other radioactive materials for malevolent purposes. In the current era, security strategies highlight the frequent utilization of technological advancements and scientific support. Nations are noted to leverage biological innovations when traditional methods prove inadequate in safeguarding their borders. Today, defense strategies reliant on human resources are being supplanted by artificial intelligence, with weaponry benefiting from technological and scientific progress. In this era of significant scientific advancements, efforts are focused not only on addressing fundamental challenges like population growth, resource exploration, and water and food scarcity but also on enhancing security measures. CBRN; it is increasingly significant globally and in Turkey. The broad scope and numerous hazards associated with the CBRN concept underscore its contemporary importance. Factors like chemical plants, nuclear facilities, epidemics, and chemical and biological warfare represent just a fraction of the risks posed by CBRN threats to human and animal life. Consequently, CBRN threats, pervasive across all aspects of life, consistently entail risks to human and animal well-being. Various pertinent ministries, institutions, and organizations, including the Ministry of National Defense, the Ministry of Health, other relevant ministries, the General Directorate of Security, the Gendarmerie General Command, the fire department, and notably the Disaster and Emergency Management Presidency (AFAD) under the Ministry of Internal Affairs, are actively engaged in managing these risks.

**Design/Methods/Approach:** Chemicals encompass elements, compounds, or mixtures that permeate various facets of human existence, boasting a broad spectrum of applications. They exist in natural settings in their pure state, are synthetically manufactured, or arise as byprod-

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ucts. Pharmaceuticals, food items, paints, cosmetics, textiles, cleaning agents, pesticides, and more sectors feature their presence. While these chemical entities facilitate human activities, they also pose potential dangers and unintended adverse effects. Hazardous chemicals, crucial for safeguarding the ecosystem and biodiversity, play a pivotal role in diverse industries and applications.

In our daily lives, from hazardous household chemicals in homes to chemical factories, and from chemical factories to nuclear power plants, there are threats that may pose risks to living organisms and human life. Moreover, on an international scale, the high potential for CBRN agents to be utilized as warfare agents during terrorist attacks underscores their significance. Consequently, the Ministry of Internal Affairs and relevant institutions conduct research on CBRN threats and collaborate with pertinent ministries and organizations. It is crucial to address the existing CBRN threat faced by personnel working in environments prone to such risks. Assessing the strengths and vulnerabilities of identified threats is essential. Equally critical is ensuring that personnel in authorized institutions are equipped to handle CBRN threats, possess expertise in CBRN threats, and are proficient in crisis management.

**Findings:** CBRN poses a significant threat to security, requiring police and security forces to coordinate with affiliated organizations, institutions, and ministries. Specialized units and personnel trained in CBRN play a crucial role in crisis management through the implementation of emergency plans. Preparing and planning by relevant institutions, police, and security forces, along with fostering cooperation, coordination, and mutual assistance, are vital for effective emergency response and recovery from chemical, biological, radiological, and nuclear threats.

To effectively and efficiently manage pre- and post-disaster stages, such as modern disaster management in CBRN incidents, it is crucial for our country to be prepared at local, national, and international levels. This preparedness involves raising public awareness, adequately training first response teams, and ensuring they have the necessary equipment. To prevent or minimize damages from CBRN threats that may impact human and natural life in Turkey and globally, it is essential for relevant institutions, organizations, police, and security forces to collaborate and fulfill their duties, responsibilities, and coordination before, during, and after CBRN incidents.

During the identification of CBRN agents in CBRN incidents through fundamental scientific methods encompassing both instrumental and traditional experiments, law enforcement and security personnel tasked with responding to such incidents can promptly identify the agents. This swift identification is crucial for safeguarding their own well-being as well as the health and safety of individuals in the vicinity and the surrounding ecosystem. By enabling the rapid detection of CBRN agents, basic sciences contribute significantly to minimizing the impact of CBRN incidents and are instrumental in ensuring safety and decontamination measures. Basic scientists are thus tasked with promptly identifying CBRN agents upon the occurrence of an incident, employing pertinent scientific methodologies, and informing law enforcement and other security entities. Subsequently, they must strategize on the appropriate intervention methods to mitigate the CBRN threat with minimal risk and harm. Facilitating the dissemination of scientific knowledge on mitigation and security measures is of paramount importance. Given the indispensable and dynamic role of basic sciences in addressing CBRN incidents, it is evident that the significance of basic sciences in managing CBRN threats and security is escalating, close to their importance in various other domains nationally and globally.

**Originality/Value:** The mini review focuses on the CBRN threats and security. Also, it is about the risk management of CBRN threats like chemical, biological, nuclear, and radioactive. CBRN



is also the current subject all over the world. Given the wide range of CBRN agents, the associated threats and hazards are diverse. It is crucial to address these specific risks, considering the working environments of personnel in the management administration of the relevant institution. In incidents stemming from CBRN threats, personnel involved must be well-versed in the security and management protocols of the scene. These events can significantly impact human and environmental health, affecting both society and institutions. For instance, emergency health services play a vital role in addressing health issues resulting from CBRN threats before patients are transported to hospitals. Therefore, CBRN threats not only endanger those directly affected but also pose risks to the personnel responding to such situations initially. Crime scene security and management procedures necessary for the safety of all living beings vary based on the nature and circumstances of each urgent intervention.

To prevent or reduce potential harm to human health and the environment from CBRN threats that could impact Turkey domestically or internationally, it is essential for relevant institutions and organizations to collaborate with law enforcement, security forces, and civilians proactively. Ensuring seamless cooperation and coordination with assigned duties and responsibilities before, during, and after such incidents is imperative.

**Keywords:** police, security, fundamental sciences, CBRN threats, CBRN terrorism.

### *About the author*

Prof. **Aybüke A. İsbir Turan**, PhD, was born on July 24, 1977 in Ankara. She graduated in 1999 at Ankara University, Faculty of Science, Department of Chemistry. In April 2000 she started working as a Research Assistant at Ankara University, Faculty of Science, Department of Chemistry, Analytical Chemistry. She completed her master's degree at Ankara University, Institute of Science and Technology, Department of Chemistry, between September 1999 and August 2001. She completed her PhD studies at Ankara University, Institute of Science and Technology, Department of Chemistry, between August 2001 and October 2007. She received the title of Associate Professor in February 2013. She continued her working life at the General Directorate of Mineral Research and Exploration (MTA) between January 2008 and February 2019. In February 2019, she started to work as an Associate Professor at the Police Academy Forensic Sciences Institute. She received the title of Professor in May 2020 and continued to work. Her scientific field is Chemistry; she has studies in the fields of Forensic Sciences, Analytical Chemistry, Instrumental Chemistry, Electroanalytical Chemistry, Nanomaterials, Nanotechnology, Precious Metals, Nuclear Energy. ORCID no.: 0000-0002-3650-7810



# DARK WEB–BLACK DEEP BETWEEN PAST AND PRESENT

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**Purpose:** Black Deep Network services are a platform for psychological and information operations, propaganda dissemination, online indoctrination, recruitment and mobilization, virtual training of actors, planning and coordination of cyber operations, arms trading, trading of essential information on critical infrastructure, and information on people who possess knowledge of certain technologies used to collect funds and commit financial fraud with personal data. The black deep network allows users of the service complete anonymity and ensures a high degree of crypto-protection of the information exchanged. The diversity and possibility of combining different services and electronic tools increase the operational security of network users and reduce the possibility of state authorities to identify actors. The purpose of this paper is to show how black deep web services are reflections of the real situation on the global stage and are used by non-state and state actors.

**Design/Methods/Approach:** Basic and general scientific methods will be used in the work for the purposes of conducting research. Of the basic scientific methods, analysis, induction, and generalization will be used the most. The upcoming research will be based on the basic principles and postulates of the axiological theoretical-methodological direction in the methodology of social sciences.

**Findings:** The aim of this paper is to shed light on the dangers of certain aspects of black deep network, as well as to look at the relationship of the international crises towards dark side of virtual space.

**Originality/Value:** The threats coming from the black deep web have a global impact on the information environment and their diversity represents the adaptation of the black deep web to the needs of the physical environment and geopolitical circumstances.

**Keywords:** security, black deep network, deep web, terrorism, conflict.

## *About the authors*

**Hatidža Beriša**, PhD, is employed at the University of Defence. She was born on April 22, 1961, in Pristina, Republic of Serbia. She is a Lecturer at the Department of Strategy, National Defence School, Military Academy. She finished her basic academic studies at the Faculty of National Defense

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in Belgrade, Belgrade University, and gained a title of defence and protection professor. She completed her master's degree at the Union University in Belgrade, defending her master work titled "Strategic Planning and Information Systems for the Defense System," and obtained the title of Master Manager. She completed her master's degree program at the Faculty of Defense and Protection at the University of Belgrade, defending her master's thesis titled "The Defense and Security Effects of Narcotics and Drugs in Kosovo and Metohija" and earned her Master's Degree in Defence, Protection, and Security. She completed her doctoral studies at the Belgrade University, Faculty of Political Science, defending her doctoral dissertation entitled "Political Violence in Kosovo and Metohija from 1945 to 2003", and obtained the title of Doctor of Political Science. From 1987 to 2013 she was engaged in the service of the army of the Republic of Serbia. She is the author of numerous expert and scientific papers, mainly in the field of security, diplomacy, and geopolitics.

**Katarina Jonev Ćiraković** is a PhD Candidate at the Faculty of Political Science. She was born on April 21, 1987, in Belgrade, Republic of Serbia. She finished her basic academic studies at the Faculty of Political Science in Belgrade, Belgrade University, and completed her master's degree at the Faculty of Law in Belgrade, defending master work titled "Cyber Security in International Relations". She is one of the leading experts in the field of protection of children and youth on the Internet. Also, she is author of numerous expert and scientific papers, mainly in the field of cyber security, cyber terrorism, and geopolitics.

**Aleksandar Ćiraković** is a PhD Candidate at the Faculty of Political Science. He was born on April 21, 1983, in Loznica, Republic of Serbia. He finished studies at the Military Academy. Also, he completed his basic academic and master's degree studies at the Faculty of Political Science in Novi Sad. He is the author and coauthor of numerous scientific papers, mainly in the field of security, AI, and geopolitics.

# CYBERTERRORISM REVISITED: A PARADIGM SHIFT?

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**Purpose:** The main aim of this paper is to discern how the views of cyberterrorism, primarily in scholarly literature, have evolved since the beginning of the century and what are the implications of this change both for future research and counterterrorist policies. The purpose of the paper is also to examine why these changes occurred and whether their scope and character are sufficient to constitute a paradigm shift in cyberterrorism research.

**Design/Methods/Approach:** Building on previous research, this paper will first consider conceptualizations of cyberterrorism from the beginning of the 21<sup>st</sup> century up to today and compare them. In the next chapter, the issue of the “reality” vs. “potentiality” of cyberterrorism will be re-examined in order to determine if there are any events that fully fit the proposed definitions. Then, a section of the paper will consider possible reasons for gradual change in the focus of scholarship on cyberterrorism, from the defense of critical infrastructure to the prevention of radicalization and recruitment. The final chapter will attempt to ascertain whether these changes constitute a paradigm shift in terms of cyberterrorism research. Starting from qualitative analysis of scholarly literature on cyberterrorism, the author will then use methods of induction and deduction, analysis and synthesis, to answer proposed research questions.

**Findings:** Key findings are that there was indeed a shift in cyberterrorism research, reflected primarily in the shift from cyberterrorist attacks against critical infrastructure towards terrorists’ use of the Internet for spreading propaganda, radicalization, and recruiting. This change, however, does not necessarily constitute a paradigm shift but follows the social and political changes brought by realizations that 1) state, or state-sponsored, actors were behind every cyberattack against critical infrastructure so far; and 2) the rise of social media and, especially, their exploitation by ISIS as well as developments related to 2016 presidential elections in the USA revealed the dangers of viral propaganda and fake news.

**Originality/Value:** After a quarter of a century of cyberterrorism research, it seems to be the time to examine its development, reach, and results. Reconsiderations of cyberterrorism research are also a salient example of relationships between scholarly research and policy-making and can therefore be useful for practical purposes as well.

**Keywords:** cyberterrorism, cyberwarfare, paradigm shift, counterterrorism, cyberattacks.

## *About the author*

Ivana Damnjanović, PhD, is an Associate Professor at the University of Belgrade – Faculty of Political Science. Her research interests include relationships and intersections between politics and technology, political violence, democracy, and democratization. So far, she has authored two books as well as over 20 papers in national and international journals and edited volumes.

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# INNOVATIVE SOLUTIONS FOR SECURITY CHALLENGES: INTEGRATING NATURAL AND APPLIED SCIENCES IN THE EMERGING THREAT OF AI-DRIVEN CYBER ATTACKS

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**Purpose:** The proliferation of artificial intelligence (AI) has introduced unprecedented cybersecurity challenges, marked by the rise of sophisticated AI-driven cyber attacks. This paper explores the imperative for innovative solutions that leverage the convergence of natural and applied sciences to address these evolving security threats.

**Design/Methods/Approach:** Drawing upon insights from natural sciences such as biology, chemistry, and physics, alongside applied sciences like computer science, engineering, and mathematics, this study elucidates multifaceted strategies to bolster cybersecurity resilience. Through interdisciplinary collaboration, researchers integrate diverse scientific domains to develop adaptive defense mechanisms inspired by natural principles such as biomimicry and ecological modeling, capable of real-time threat detection and mitigation. Furthermore, the incorporation of relevant case studies underscores the practical application of interdisciplinary approaches, highlighting their efficacy in addressing contemporary cybersecurity challenges and enhancing resilience in dynamic threat landscapes.

**Findings:** Advanced mathematical models and computational techniques enable the analysis of massive datasets, uncovering hidden patterns indicative of cyber attacks. Leveraging machine learning algorithms and data analytics, cybersecurity professionals augment threat detection capabilities and enhance decision-making processes in rapidly evolving environments.

**Originality/Value:** Interdisciplinary collaboration fosters the development of holistic cybersecurity frameworks that integrate technical, behavioral, and policy dimensions. By engaging stakeholders from academia, industry, and government, innovative solutions are co-created to address the complex challenges posed by AI-driven cyber attacks.

**Keywords:** emerging threat, security challenges, cyber attacks, convergence of sciences, applied sciences, natural sciences, holistic cybersecurity.

## *About the author*

Major **Alexandru Ioan**, PhD, is a seasoned professional with a wealth of experience in law enforcement and managerial roles. Throughout his career, he has honed exceptional leadership and organizational skills, particularly in overseeing intricate operations to ensure public safety and security. His background encompasses both management and criminal investigations, providing him with a unique

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perspective and expertise in strategic planning, interpersonal communication, and problem-solving. He holds degrees in management, economics, and legal sciences from esteemed institutions, reflecting his commitment to academic excellence and professional development. Additionally, he continuously seeks to enhance his skills and knowledge through participation in various training programs and certifications, particularly in areas such as law enforcement, cybersecurity, and project management. With a diverse skill set, including digital competencies, language proficiency, and technical aptitude, he is well-equipped to contribute effectively to any organization or team.



# CHALLENGES AND GAPS IN BIOTERRORISM'S DETECTION AND INVESTIGATION

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**Purpose:** This paper explores specific challenges about detecting and examining evidence in suspected or confirmed bioterrorism events to identify gaps and discuss opportunities.

**Design/Methods/Approach:** This desk-based study is based on current literature and INTERPOL's experience working with its membership in the area of bioterrorism prevention, preparedness, and response.

**Findings:** The nature of bioterrorism incidents and lack of fit-for-purpose equipment make them very difficult to detect compared to other unconventional terrorism attacks. While some countries have built strong approaches to detect and examine bio-contaminated evidence, many countries are still looking for guidance in that domain. Building on its outreach and work with its 196 countries, INTERPOL – with the support of its partners - is strengthening the global monitoring and detection of bioterrorism incidents as well as contributing to the establishment of safer and more robust approaches for the investigation and processing of bio-contaminated evidence.

**Originality/Value:** While some scientific literature exists on bioterrorism forensics, the recent one mostly focuses on microbial forensics. This paper focuses on the institutional limitations and gaps in the detection of bioterrorism incidents, measures for the safe and efficient processing of the evidence collected in such investigations, as well as discussing opportunities to address those gaps.

**Keywords:** bioterrorism, forensics, contaminated evidence, intelligence, incident detection.

## *About the authors*

**Cheong Ju Kim** is a criminal intelligence officer in the Bioterrorism Prevention Unit and possesses 20 years of experience in law enforcement as a police officer of the Korean National Police Agency and a police advisor at the UN Mission in Liberia.

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# ENVIRONMENTAL DNA – eDNA

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**Purpose:** A healthy and preserved environment is the prerequisite for future development and the basic survival of today's and future generations. The role of criminal law in the matter of realization of a right to a healthy environment is the ultimate defense mechanism, as well as a mechanism flexible enough to recognize and adjust to societal changes, with a need to identify and sanction different illegal behaviors. Societal changes, ongoing struggle between the interest of the capital against individual interests, and economic prosperity all led to a new range of illegal behavior and criminal acts against an environment that require more attention from the public. As a group of specific criminal acts, a new issue occurred regarding the detection and proving of the criminal act, but we must take into account the present-day capacities regarding the detection and verification of such criminal acts. A deeper analysis of comparative legislature and court cases concluded that the USA has developed such an act of proving – harvesting samples from the environment, purposefully adjusted to the crime against the environment. Proper use of this act of proving, adjusted to such criminal acts, has given positive results. The subject of this research was finding the way in which such samples could be harvested from the environment, the quality of the results obtained, and regarding which criminal acts it would be beneficial to utilize this modified mode of extracting e-DNA.

**Design/Methods/Approach:** The subject of this research was processed using the methods of formal logic, system analysis, the comparative method, as well as the normative method.

**Findings:** *De lege ferenda* suggestions for more effective detection and improving evidentiary action of crime against the environment.

**Originality/Value:** This paper will contribute to the elaboration of this problem from the criminal law perspective and improve the practice of courts, prosecutors, attorneys, and the police in this matter.

**Keywords:** crime against the environment, criminal procedure, detection and proving, harvesting samples, environmental DNA.

## *About the author*

**Minja Blažić Pavićević**, PhD, has been a lawyer since 2014, with extended practice in criminal law cases. She graduated and received LL.M. degree from the University of Belgrade Faculty of Law. She is the author of several scientific articles in the field of criminal law and criminal procedure law, which were published in domestic and foreign journals, with participation in several domestic and international conferences in the field of criminal law. She defended her doctoral dissertation “Specifics of the Criminal Procedure for Crimes Against the Environment” at the University of Novi Sad Faculty of Law in 2023.

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# THE NEXT DIGITAL ERA: POST QUANTUM CRYPTOGRAPHY OVERVIEW

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**Purpose:** A study has already been prepared that claims that by 2025 they will be able to break RSA encryption with quantum computers. It is true that the study was later refuted by another team, but it is worth exploring this topic more closely. One needs to be clear about what Q-day is and what it will bring. Without data encryption, there is no security, and it can bring chaos.

**Design/Methods/Approach:** The existing quantum computer technologies will be presented in a few sentences. If the Q-day comes, we can break the RSA encryption using the RSA algorithm and Shor's algorithm. The National Institute of Standards and Technology (NIST) has announced a call for proposals in which applicants can develop post-quantum cryptography algorithms and protocols. These algorithms and protocols will be able to protect sensitive data and communications from attacks that would be able to crack encryption with current cryptographic methods using a powerful quantum computer. As a result of the tender, post-quantum cryptographic algorithms that may be suitable for industrial and government applications in the future will be selected and recommended. These algorithms and protocols will be presented briefly in the study.

**Findings:** One of the objectives of this paper is to highlight the potential threats to RSA encryption in the future, which could compromise people's privacy. Another goal is to raise awareness and introduce new post-quantum cryptographic algorithms as potential solutions to safeguard against Q-day.

**Originality/Value:** This paper reviews new post-quantum cryptography algorithms and presents the current state of the art. If civilizations, countries, and organizations do not transition to these new algorithms by the time usable quantum computers become available, they could face significant challenges. Awareness in this area will be important for those who deal with security.

**Keywords:** public-key cryptography, post-quantum cryptography, quantum computing, quantum-resistant, quantum-safe.

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# PROVIDING LOCATION DATA TO LAW ENFORCEMENT AUTHORITIES IN THE REPUBLIC OF CROATIA

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**Purpose:** The purpose of the conducted research is to determine the proportion of respondents who would voluntarily provide information about their location to law enforcement authorities, as well as the proportion of those who would not provide information about their location under any circumstances. It was also investigated whether there was a difference in whether law enforcement authorities use ICT or not.

**Design/Methods/Approach:** The research was conducted in the Republic of Croatia and included a random sample of 300 respondents. The majority of respondents were women (66%), and the largest share of respondents had completed high school education (74%). Respondents were asked to answer whether, in certain situations involving the work of law enforcement bodies, they would provide location information, whether it was a direct identifier such as information about their own location or whether it was an indirect identifier. Respondents were placed in six situations in which law enforcement agencies do not use ICT and six situations in which they use ICT.

**Findings:** The results showed that 68.8% of respondents would never voluntarily provide information about their location to law enforcement authorities. Always, in every examined situation, 10.9% of the respondents would give information about the location. There is an insignificant difference between situations where law enforcement agencies use ICT and when they do not use technologies. When law enforcement authorities use ICT to collect, process, and analyze data on locations (location of an individual and location as an indirect identifier), 12.5% less would give the location in the case of using ICT. Considering that more and more segments of the scope of work of law enforcement bodies use ICT with the increase in the use of artificial intelligence methods, the results of this research can serve as a landmark in regulating and determining in which situations, with which methods, and to what extent law enforcement bodies can be used in addition to protecting the right to security, adequate protection of personal data would be ensured.

**Originality/Value:** The value of the work is that, based on the research results, it contributes to more adequate regulatory and implicative solutions related to the use of artificial intelligence methods by law enforcement agencies with the aim of achieving proportionality of the right to privacy and the right to security. The originality of the research lies in the fact that it investigates in which cases the respondents themselves would be willing to provide location data, and based on their will, conclusions are drawn about the problems of using artificial intelligence methods by law enforcement agencies when the location data is a direct or indirect identifier.

**Keywords:** ICT, LEA, location data, personal data protection, right to security.

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### *About the authors*

**Simona Strmečki** is a senior lecturer in the scientific field of information systems and informatics. At the University of Applied Sciences in Criminal Investigation and Public Security, where she has been employed since 2005 she teaches courses related to information security, cybercrime, electronic evidence, and criminal analytics. She participated in numerous international conferences and published articles in the field of information security, cybercrime, and the use of GIS technologies in criminalistics.

**Hrvoje Filipović**, PhD, graduated at the University of Zagreb – Faculty of Criminalistic Science (graduated criminalist). After graduating, he started working at the Ministry of the Interior, Koprivničko-križevačka County Police Administration as a police officer. His teaching activity began in 2009 at the Police School in Zagreb, and since 2014 he has been working at the Police College in Zagreb as a senior lecturer. He enrolled a postgraduate programme in criminal law sciences at the Faculty of Law in Zagreb in 2012. He completed his postgraduate studies in 2018 by defending his thesis “The Role of the Police in Providing Procedural Protection of Vulnerable, Endangered, Or Protected Witnesses.”

# GEOGRAPHIC PROFILING – ENVIRONMENTAL AND OFFENDERS' BEHAVIOR PATTERNS OF ROBBERY CHARACTERISTICS

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**Dubravka Maurer, PhD Student**

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**Purpose:** Geographic profiling is a crime analysis technique that uses the locations of a connected series of crime sites to identify or to predict offender patterns and to determine the most probable area of offender residence. The paper aims to highlight the significance of spatial and temporal components of crime in relation to the other components that make a criminal event with the aim to make informed decisions. It is a part of the research project *Geographic Profiling of Robberies in the Area of the City of Zagreb, Croatia*. The project objective is to investigate spatial patterns and related variables influencing the criminal path of robbers.

**Design/Method/Approach:** The research methodology involves collecting and processing police crime data on robbery crimes in 2018 and publicly available geographical and census data to enhance the research findings. It utilizes geospatial data processing technology to analyze crime patterns and connections between socio-demographic, spatial, and temporal features of the criminal events. It also explores the movement of offenders based on the ecological criminology principles and emphasizes the significance of geostatistical methods in crime analysis.

**Findings:** The distance distribution covered by perpetrators of robberies shows the presence of the distance decay effect. There is also a certain correlation between both the crime-related and the offender-related variables, such as the age of the offender and the means of usage, as well as the time of day of the crime incident. The frequency of occurrence of the crime in relation to the distance and temporal component indicates a trend of shorter distances in the night and morning hours, while there is a greater variation in distance during the day, which might be connected to the mobility of the offenders, especially those who use public transportation.

**Originality/Value:** This is the first study of geographic profiling in Croatia to date. It emphasizes the environmental and criminal behavior features of the robberies that are specific to the area of the City of Zagreb as an initial step of the model development. The research paper builds on the existing knowledge of the topic and addresses possible implications for future development of the spatial crime models in Croatia.

**Keywords:** geographic information systems, robberies, distribution of crime locations, spatial and temporal patterns, socio-demographic variables of robbers.

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**Dubravka Maurer**, PhD student, graduated from the Faculty of Geodesy, University of Zagreb in 2013 with a master's degree. During her studies, she worked as a lab technician and later as a teaching and research assistant at the Chair of Photogrammetry and Remote Sensing at the Faculty of Geodesy. Currently, she is involved in teaching various courses related to remote sensing, photogrammetry, and topographic information systems. Additionally, she is actively working on her doctoral thesis, which focuses on geographic profiling of robbery perpetrators in the City of Zagreb.

**Anja Batina**, PhD student, is a geodesy and geoinformatics professional with a master's degree from the Faculty of Geodesy, University of Zagreb. She has been working in the GIS domain since 2015. In 2018, she started pursuing a PhD at the Faculty of Geodesy on topic Geospatial Multi-Sensor Approach for Lake Water Quality Monitoring and Assessment. She has experience in various areas including GIS, asset management, infrastructure, logistics, remote sensing, water management, search and rescue, nature protection, and sustainable energy.

# MODERN CRIMINAL INTELLIGENCE IN HIGHER EDUCATION TRAINING AND PRACTICE

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**Purpose:** The aim of the article is to present the teaching of criminal intelligence in law enforcement higher education, as well as to present the practice developed in the new legal environment.

**Design/Methods/Approach:** The author presents and examines the legal framework and practical aspects of the operation of criminal intelligence in Hungary and the situation of training, with special regard to the new Criminal Procedure and Police Law.

**Findings:** On the one hand, analysis of the domestic legal regulation of criminal intelligence and the relevant EU recommendations is the subject of the critical review, and on the other hand, the analysis of the development of criminal intelligence training in the domestic law enforcement higher education. The development of domestic training follows legislative changes, but the uniform application of criminal intelligence in practice needs improvement.

**Originality/Value:** The article can contribute to the uniform practical and training application of criminal intelligence. The monitoring of changes in established practice can be the subject of further articles.

**Keywords:** criminal intelligence, training, law enforcement higher education, practice.

## *About the author*

**Peter Nyeste** is an associate professor at the Criminal Intelligence, Economic Crime, and Cybercrime Department of the Law Enforcement Faculty. He has been researching and teaching in the field of criminal intelligence for 15 years.

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# DETECTING DEPENDENCIES IN DATAFLOW KERNELS

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**Anton Kos, PhD**

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**Purpose:** The importance of artificial intelligence in detecting crime is constantly rising. Artificial intelligence algorithms are known to be computation demanding. It is common that the execution of artificial intelligence algorithms in modern cloud infrastructures is performed using dedicated hardware. Computer hardware that includes dataflow hardware along with conventional processors is capable of accelerating artificial intelligence algorithms. They also exist in a form of nodes suitable for cluster or cloud infrastructure.

**Design/Methods/Approach:** This article describes a method to automatically detect dependencies in dataflow kernels. The tool for constructing a dependency graph is presented. The example code is chosen to depict the process of detecting dependencies. The proposed method is also suitable for hybrid processors consisting of both control-flow and dataflow hardware on the same chip die.

**Findings:** The dependency graph creation enables automation of translating algorithms from control-flow to dataflow hardware. This can lead to an even higher acceleration factor when using dataflow hardware for the execution of artificial intelligence algorithms.

**Originality/Value:** While there are frameworks that can serve for designing dataflow hardware and using the hardware for executing algorithms, not much work has been performed to automatically transform control-flow into dataflow algorithms. The dependency graph was designed for this purpose.

**Keywords:** dataflow, dependency graph creation, translating the code automatically, artificial intelligence.

## *About the authors*

**Nenad Korolija** is a senior science associate at the School of Electrical Engineering, University of Belgrade, Serbia. He received his PhD degree in electrical engineering and computer science in 2017. His interests and experiences include developing software for high-performance computer architectures and dataflow architectures. In 2008, he worked on the HIPEAC FP7 project at the University of Siena, Italy. In 2013, he was an intern at Google Inc., Mountain View, California, USA. In 2017, he worked for Maxeler Ltd., London. In 2021 and 2022, he worked for Johns Hopkins University on parallelizing the protein formation simulator.

**Anton Kos** received his Ph.D. in electrical engineering from the University of Ljubljana, Slovenia, in 2006. He is currently an associate professor at the Faculty of Electrical Engineering, University of Lju-

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bljana. Between 2000 and 2009 he was the head of IT at GlaxoSmithKline d.o.o., Ljubljana, Slovenia. He is the (co)author of a scientific monograph, more than sixty papers published in international engineering journals, more than a hundred contributions at international conferences, and two patents. He is a member of the research program ICT4QoL - Information and Communications Technologies for Quality of Life, funded by the Slovenian research agency. He is the leader of two industrial research and development projects that design sensor-based smart systems. His teaching and research work include signal processing, communication networks, information systems, quality of service, dataflow computing, and real-time biofeedback systems. His professional work encompasses co-organizing international VIPSI conferences, serving as a program committee member at several international conferences, and serving as an associate, topic, and guest editor for several international scientific journals. He is a senior member of IEEE, the Union of Electrical Engineering of Slovenia, and SICOM. Between 2018 and 2022 he was the IEEE Slovenia ComSoc chapter chair.



# NETWORK-RESEARCH BASED DYNAMIC METHOD IN CRIME PREVENTION AND INVESTIGATION

Zoltán György Bács, PhD<sup>1</sup>

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**Purpose:** The purpose of the present study is to introduce the basic concept of the new method, to explain the interconnection between the formation of new information based upon already known information, the time-flow and the formation of information networks and the dynamic link between the changing values of information on the subsequent progress of the investigation.

**Design/Methods/Approach:** The method of research presented in this study is deductive and comparative analysis.

The study contains several fictitious cases to depict the theory in situations close to real circumstances.

**Findings:** The dynamic analysis and assessment method to be called “DanubeAnalyst” is unique since all the actual analyzing methods are based on static networks without considering the possible effects of the calculable or supposable information on the investigation progress. This is the first method to be assisted by wide use of artificial intelligence.

**Originality/Value:** Being the first analysis method using the widest possible database and assisted by the fastest selection, systematization, processing, evaluation, assessment, and double-checking in its every moment provided by the AI, this analysis and assessment method is capable of achieving a significant reduction of the time of preparation and making decisions in a wide range of law enforcement activities.

**Keywords:** information cycle, information value, information impact, network, dynamism.

## *About the author*

Prof. **Zoltán György Bács**, PhD, is an assistant professor at the Ludovika University of Public Service. He is a former diplomat, author of almost sixty publications in four languages. He specializes in terrorism, national security, innovative assessment and evaluation methods, radicalization, drug problems, and organized crime in Latin America. He served as a diplomat in Moscow, Kiev, Baku, Minsk, and Buenos Aires. Between foreign assignments, he worked for international and national private companies in Hungary. He is fluent in Spanish, English, and Russian languages.

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# THE SPECIAL TOOLS OF THE CRIMINAL POLICE IN THE PREVENTION OF HOMICIDE

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**Purpose:** The criminal investigation service of the police receives dozens of reports annually indicating that individuals, driven by various motives, intend to take another person's life with the assistance of a "hitman." The police must do everything in their power to prevent the fatal outcome of such crimes. In this research, the author examined how the criminal investigation service of the Hungarian police conducts direct prevention and what methods and tools they use for this purpose.

**Method:** The author began his examination with the Hungarian Criminal Penal Code's material legal regulations, starting from the formation of intent up to the commencement of intentional homicide. Subsequently, the author obtained official crime statistics pertaining to homicide and analyzed them, considering the aspects of act on criminal procedural law. The author approached the topic from criminological, criminal-tactical, and criminal methodological perspectives. Finally, from a practical standpoint, the author conducted qualitative interviews among professionals of homicide unit, supplementing them with his own nearly two decades of experience.

**Results:** During the research, the author concluded that in the Hungarian context, the criminal material law adequately regulates the issue of homicide, taking into account the various stages of the offense with due weight. Criminal procedural law provides multiple options for law enforcement authorities to directly prevent the commission of the offense. The police can effectively intervene in the handling of "hitman" type crimes in terms of direct prevention, but only up to a certain level of organized commission.

**Value:** This study can shed light on which tools can help prevent homicides in Hungary in the 21<sup>st</sup> century at various levels of organization.

**Keywords:** homicide preparation, stalking, criminal penal code, criminal procedural law effectiveness, special tools, prevention.

## *About the author*

**Béla Árpás** is a police lt. colonel and university lecturer with nearly thirty years of duty experience. He began his career as a police officer, then worked as a robbery investigator and subsequently as a homicide superintendent. Later, he was the head of the Operational Investigation Unit of Violent Crimes at the Budapest Police Headquarters for over six years. This period had been followed by successful work for five years at the Cold Case Unit. In the two years preceding his university career, he led the Operative Subdivision of the Organized Crime Division at the National Bureau of Investigation. Since August 2023, he has been a lecturer at the Department of Crime, Economic Protection, and Counter Cybercrime of the Faculty of Law Sciences at the University of Public Service. His research focuses on

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homicide and organized crime. He represented Hungary in the Europol Homicide Working Group for six years during his career. He has received numerous high-ranking awards and recognitions, including the “The Criminal Investigator of the Year” award in NBI in 2021. In addition to civilian and police diplomas, he completed the International Law Enforcement Academy in English in 2013. He speaks English at an advanced intermediate level.



# IMPLEMENTATION OF MENDEZ'S PRINCIPLES IN OFFICIAL FORMS OF COMMUNICATION *IN PERSONAM* BY REPRESENTATIVES OF STATE AGENCIES IN THE REPUBLIC OF SERBIA

Zvonimir Ivanović, PhD<sup>1</sup>

Valentina Baić, PhD

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**Purpose:** The authors are elaborating on the Mendez principles adopted by the UN in 2022 as one of the very important, worldwide-accepted principles in communication with state agencies (more than 77 states joined a statement by the Chilean delegation to the UN during the Third Committee's interactive dialogue with UN torture prevention mandate holders on 14 October 2022, in support of the Mendez principles at the 77th session of the UN General Assembly in New York).

**Design/Methods/Approach:** The authors are presenting principles and their importance in preventing mistreatment of the citizen and enforcement of human rights and freedoms when communicating with state agencies of any kind, with special emphasis on criminal law enforcement agencies. Principles are depicted in the basic relation to the tackling guarantees promised by the state legal system from international principles carved in the UN charter, all international conventions and covenants, and in the internal laws and bylaws.

**Findings:** In the article, the authors are faced with significant resistance from all actors on the side of state agencies, with the normal resistance to new methods and new techniques that are not existing in the actual practice of law enforcement agencies. Also, there is a hope from the other side to get treatment promised by national and international legislation and a craving to have existing conditions more convenient to the common public and individuals.

**Originality/Value:** The authors are also challenging non-existing overall principles in the communication of state agencies with citizens and providing an area to implement principles in Serbian discourse, from a theoretical but also from a practical point of view. Non-existing principles in the practice but also in the theory provide fertile ground for the seed of Mendez principles to be planted in the Serbian legal system and practice of law enforcement agencies. Both authors are involved in the Cost Action 22128 Implementenz project about implementing Mendez principles within countries' systems, firstly with those that have joined the statement of Chile in 2022, but also supported by the UN Association for the Prevention of Torture (APT), the Council of Europe Committee for Prevention of Torture or Inhuman or Degrading Treatment or Punishment (CPT), and other countries.

**Keywords:** Mendez principles, investigative interviewing, law enforcement communication, international communication principles, criminal investigation.

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Prof. **Valentina Baić**, PhD, is a full professor at the University of Criminal Investigation and Police Studies. She is a member of the UCIPS team on the Implementez CA 22128 Project. She teaches tactics and techniques for police questioning and interviewing suspects and citizens at the University of Criminal Investigation and Police Studies.



# THE PERCEPTION OF THE SCHOOL POLICE OFFICER REGARDING THEIR RELATIONSHIPS WITH OTHER ENTITIES IN THE SCHOOL

**Bojan Janković, PhD<sup>1</sup>**

**Saša Milojević, PhD**

**Boban Milojković, PhD**

University of Criminal Investigation and Police Studies, Belgrade, Serbia

**Purpose:** A prerequisite for successfully performing the duties of a school police officer is their good collaboration with other entities in the school. The aim of the research is to explore the perception of school police officers regarding the quality of their collaboration with other entities in schools.

**Design/Methods/Approach:** The survey was conducted from September 2021 to June 2022, and it involved 308 school police officers who expressed their views through a questionnaire.

**Findings:** School police officers rate their relationships with other entities in the school as very good, indicating that the “School Police Officer” program is well accepted and should be expanded to other schools.

**Originality/Value:** Such research has not been conducted in the territory of Serbia and neighbouring countries so far.

**Keywords:** school police officer, school, police, Serbia.

## *About the authors*

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# CERTAIN ASPECTS OF POLICE WORK IN COUNTERING IRREGULAR MIGRATION AND PEOPLE SMUGGLING

Saša Marković, PhD<sup>1</sup>

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**Purpose:** A prerequisite for successfully combating cross-border crime is the implementation of modern proactive models of police work. The goal of the research is to determine the results of proactive action in one area of cross-border crime – preventing irregular migration and combating people smuggling.

**Design/Methods/Approach:** The research refers to the period from 2018 to 2022. Normative and statistical methods, content analysis, formal and logical analysis, and comparative methods were used. Statistical data and verdicts related to the criminal offense from Article 350 of the Criminal Code obtained from the Statistical Office of the Republic of Serbia, the Ministry of Interior, and the courts were analyzed.

**Findings:** Better efficiency and effectiveness in combating cross-border crime can be achieved by implementing an adequate criminal strategy and a proactive way of police work. The new strategic approach led to the discovery and arrest of a large number of people smugglers, and it almost stopped irregular migration through the territory of Serbia.

**Originality/Value:** Such research has not been carried out on the territory of Serbia so far, and it can point out to the scientific and professional public the advantages of applying modern proactive police work models.

**Keywords:** cross-border crime, police, drug trafficking, human trafficking, proactivity.

## *About the author*

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# AN INSIGHT INTO THE PERCEPTION, BEHAVIOR, AND IMPACT OF DISINFORMATION IN THE DIGITAL AGE<sup>1</sup>

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**Purpose:** This thorough research delves into the widespread occurrence of disinformation and the various elements that impact individuals' capacity to identify and counter it. The primary objective of this research is to aid in the formulation of successful tactics and educational initiatives geared towards bolstering media literacy and fostering critical thinking abilities when confronted with disinformation.

**Design/Methods/Approach:** The design/methods/approach section of the study outlines the methodology employed to investigate the phenomenon of disinformation among 278 participants, predominantly comprising students and employees associated with the Ministry of the Interior. The study aimed to delve into participants' experiences, perceptions, and behaviors concerning disinformation, shedding light on their awareness levels and interaction with disinformation across digital platforms. The primary method utilized in this study was the administration of surveys to the participants. Surveys are structured questionnaires designed to gather specific information from respondents in a standardized format. In this case, the surveys likely included questions related to participants' experiences with encountering disinformation, their understanding of what constitutes disinformation, the frequency of their internet usage, and their engagement with social media platforms where disinformation is commonly disseminated. Additionally, correlation analyses were employed as part of the methodology. Correlation analysis is a statistical technique used to determine the strength and direction of the relationship between two or more variables. In this study, correlation analyses likely examined the relationship between various factors such as participants' awareness levels of disinformation, their frequency of internet use, and their engagement with social media platforms. This analysis helps identify any patterns or associations between different variables, providing insights into how these factors may influence one another.

Overall, the combination of surveys and correlation analyses allowed the researchers to collect comprehensive data on participants' experiences, perceptions, and behaviors related to disinformation. By employing these methods, the study aimed to gain a deeper understanding of the prevalence and impact of disinformation in the digital age, particularly among individuals associated with the Ministry of the Interior.

**Findings:** Results indicate that a majority of participants feel informed about the dangers of disinformation, yet there are variations in their confidence in distinguishing fake news. Gender differences were observed, with male participants more likely to use methods to verify infor-

<sup>1</sup> The paper is based on the research conducted as a part of the Erasmus+ KA220-HED project - Cooperation Partnerships in Higher Education (2022/2025).

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mation online. Participants who prioritize online privacy and believe in their knowledge about disinformation are more inclined to use verification methods. Furthermore, individuals who perceive a greater impact of disinformation on society and its prevalence in the media are more likely to verify information.

In our study, 278 individuals participated, comprising 63.3% male and 36.7% female participants, with an average age of 29.29 years (standard deviation = 6.36). All the participants were enrolled at the Polytechnic of Criminology and Public Security, with 69.9% pursuing the Professional study of criminology and 30.1% enrolled in the Specialist graduate study. Additionally, 74.8% of the participants were employed by the Ministry of the Interior. Among the police officers in the sample, who had an average tenure of 6.23 years (standard deviation = 5.37), 23.4% were engaged in basic police work, 18% in criminal work, 15.1% in border duties, 8.6% in traffic-related roles, and 5.1% in the intervention police unit.

**Research Limitations/Implications:** The study's limitations include a sample bias towards younger participants and the absence of measures related to personality traits and cognitive styles. Future research should incorporate a more diverse age range and explore individual differences to better understand the mechanisms influencing behaviors and beliefs related to disinformation.

**Practical Implications:** The findings suggest the importance of enhancing media literacy and critical thinking skills, with a focus on privacy concerns and promoting awareness of disinformation's societal impact. Educational resources and courses, such as those available in the Croatian language, offer practical tools for recognizing and combating disinformation.

**Originality/Value:** This study makes a significant contribution to our understanding of disinformation by exploring various dimensions of this complex phenomenon. By examining individual factors, media literacy, and societal impact, the research provides a comprehensive perspective on the challenges posed by disinformation in the digital age.

Firstly, the study delves into individual factors that influence how people perceive and interact with disinformation. By investigating participants' experiences, perceptions, and behaviors related to disinformation, the research sheds light on the psychological and cognitive aspects involved. Understanding these individual factors is crucial for devising effective strategies to combat disinformation, as it helps identify potential vulnerabilities and areas for intervention.

Secondly, the study underscores the importance of media literacy in mitigating the effects of disinformation. By assessing participants' awareness levels and engagement with disinformation across digital platforms, the research highlights the role of education in empowering individuals to critically evaluate information sources and discern fact from fiction. This emphasis on media literacy aligns with broader efforts to promote digital literacy and critical thinking skills in an increasingly interconnected world.

Lastly, the study examines the societal impact of disinformation, emphasizing its implications for public trust, democratic processes, and social cohesion. By uncovering the prevalence and impact of disinformation among participants, the research underscores the need for collective action to address this growing threat. The findings provide valuable insights for policymakers, educators, and researchers seeking to develop targeted interventions and educational initiatives aimed at combating disinformation and fostering a more informed and resilient society.



This study contributes to a multifaceted understanding of disinformation by exploring individual factors, media literacy, and societal impact. By highlighting the need for tailored educational initiatives and collective action, the research offers valuable guidance for stakeholders seeking to address the challenges posed by disinformation in the digital age.

**Keywords:** disinformation, digital age, social networks, metadata, education.

### *About the author*

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He is a member of the steering committee of the University of Applied Sciences in Criminal Investigation and Public Security, Police Academy “First Croatian Police Officer”, Ministry of the Interior, Republic of Croatia. He is also CEPOL Research & Science Correspondent for the same institution. He was the chairman of the research project “New Security Threats and Critical National Infrastructure”, and the chairman of the Government Commission for the Preparation of the Draft Strategy for the Prevention and Suppression of Terrorism. As a member of project teams, he participated in 10 international projects, 7 national research projects, 4 national experts’ projects, and 2 national international projects. He was a member of the expert committee of the journal “Police and Security”, and the head of the first/second year of graduate study in criminalistics. He is a member of five professional associations and was the executive director of the association George C. Marshall Club Croatia for three years.

# EXTORTION OF STATEMENT BY POLICE – RESPECTING THE RIGHT TO REMAIN SILENT

Katarina Živanović, PhD<sup>1</sup>

Ministry of Interior of the Republic of Serbia

**Purpose:** Bearing in mind that the work of internal affairs bodies, i.e., the police, is a sphere of constant interest of the professional as well as the lay public, it is important to point out whether and in which cases the police, when undertaking legal actions, possibly exceed their authorities. In accordance with the above, it is of particular importance to point out the treatment of the police during the hearing of the suspect, since it is an evidentiary action that the police undertake on a daily basis. Also, by legally conducting the aforementioned evidentiary action, the police contribute to the realization of one of the most important international standards – the right to remain silent under police questioning and the privilege against self-incrimination. The above takes on additional importance considering that it is about the standards that form the core of the right to a fair trial, in accordance with the practice of the European Court of Human Rights.

**Design/Methods/Approach:** In the research, the author performed: normative analysis of relevant legal acts; theoretical analysis of professional and scientific papers by prominent domestic and foreign authors; analysis of the content of the Internal Affairs Sector Report of the Ministry of Interior of the Republic of Serbia for a certain period of time (representation of criminal charges against officials for the criminal offense of extortion of statements); analysis of reports of adult perpetrators of criminal acts revealed by the Statistical Office of the Republic of Serbia (also representation of criminal charges against officials for the criminal offense of extorting of statements); analysis of judgments of the Constitutional Court of the Republic of Serbia as well as the European Court of Human Rights.

**Findings:** The results of the research indicate that the police do not exceed their authorities when hearing the suspect and thus do not enter the incriminated zone, that is, they do not commit the crime of extorting a statement. Also, the analysis of the judgments of the Constitutional Court and the European Court of Human Rights identified police behavior which, contrary to the allegations of the applicant of the constitutional appeal or petition, does not constitute extortion of statements. The mentioned results contribute to raising the reputation of the police as well as citizens' trust in the police.

**Originality/Value:** The originality of the mentioned work is first of all reflected in the comprehensive approach to the mentioned issue – theoretical and practical. Namely, the published professional and scientific works do not contain the complete results presented in this research.

**Keywords:** hearing of the suspect, extortion of the statements, police, Constitutional Court of the Republic of Serbia, European Court of Human Rights.

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**Katarina Živanović** is employed at the Ministry of Interior of the Republic of Serbia, in the rank of police captain in the position of head of department in the police training department. Also, she is a member of the editorial board of the scientific and professional journal “Bezbednost” of the Ministry of Interior of the Republic of Serbia.

She gained the title of graduate criminologist after completing her bachelor’s degree studies at the Academy of Criminalistic and Police Studies in 2015, while she earned the titles of master of law (2016) and doctor of legal sciences – public law (2022) at the University of Novi Sad Faculty of Law.

She has been employed as an assistant professor at the Union – Nikola Tesla University in Belgrade since 2022.



# TRAFFIC CONTROL TRAINING FOR POLICE OFFICERS CONTROLLING DANGEROUS GOODS TRANSPORT

Dejan Đurđević<sup>1</sup>

Slaviša Lakićević

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Ministry of Interior of the Republic of Serbia

**Purpose:** The rapid development of science and the adoption of new technologies in the industrial sector have led to the emergence of previously unknown materials. While these materials offer positive attributes, they also harbor hidden dangers for human health, life, and work environments. The necessity of preventive action through continuous monitoring and control of participants in the hazardous goods transportation process, spanning from production facilities to their reaching end users, requires readiness on all levels of government administration.

The Republic of Serbia, as one of the approaches to the management of transport and safety processes related to the transport of dangerous goods, has adopted a series of laws in this area. The most important laws related to the topic of this work are the Law on Transport of Dangerous Goods, the Law on Road Traffic Safety, and the Law on Reduced Risk of Disasters and Emergency Management. The aforementioned laws define the roles in preventive action and preventing the occurrence of, in addition to other technical-technological emergencies in the transport process, adequate actions in emergency, the safe behavior of all participants in the transport and their controlling by members of the traffic police. Of particular importance for this study is the preparation of members of the traffic police in the field of control of participants in the transport of dangerous goods. To achieve the stated goal, within the framework of the Ministry of Interior, the government administration ensures adequate training for police officers responsible for controlling participants in road traffic engaged in the transportation of dangerous goods.

Professional training is organized and implemented in accordance with the Regulation on Professional Training and Development in the Ministry of Interior. The training equips officers with essential knowledge, specific skills, and the right attitudes to properly address this critical aspect of public safety. After completing the training, participants are equipped to apply their acquired knowledge about hazardous goods. They have thoroughly mastered the regulatory framework for hazardous materials transportation and can recognize the risks associated with such transport. Additionally, they are proficient in implementing safety measures and responding appropriately in case of incidents during dangerous goods transportation.

**Design/Methods/Approach:** Drawing upon decades of experience in developing training programs for law enforcement personnel, including response protocols for hazardous materials incidents, the authors have analyzed the content of the Curriculum for Controlling Road Traffic Participants Involved in Hazardous Goods Transportation (N°. 6136/20). In addition, they examine the Handbook for Trainees in the same field, collaboratively developed by the National Emergency Management Training Center, Fire and Rescue Directorate, i.e., Traffic Police Di-

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rectorate. In addition to the above, the authors' personal experiences and observations were realized through direct participation in teachings as teachers. Then, after 9 classes were held, the training participants were interviewed and the received opinions of the participants were processed and analyzed. The behavior of the trainees after the training was also observed and their behavior at extraordinary events and during supervision was analyzed.

**Findings:** The study underscores the significance of comprehensive training and the necessity to prepare a substantial number of police officers to handle dangerous goods control effectively. Furthermore, the existing approach to expanding knowledge, skills, and attitudes among law enforcement officers in the field of dangerous goods transportation represents a tailwind in boosting our safety capacity in supervising the dangerous goods transportation system.

**Originality/Value:** Its originality lies in the practical implementation of Curriculum under real-world conditions, ensuring a safer environment for all participants, for both those directly involved in transporting hazardous goods and the officers responsible for its oversight, since these officers represent the first line of defense in dangerous goods emergency response.

**Keywords:** training, hazardous goods, supervision, traffic police.

### *About the authors*

Police Colonel **Dejan Đurđević** is an Inspector General for Business Process Improvement and Coordination in the Lines of Work II at the Police Training Directorate, Logistics Sector, Ministry of Interior. He is a specialist in property and personal protection – protection against chemical, biological, and radiological hazards. He has 24 years of experience in the development and organization of the realization of professional training in the field of protection and rescue and is the creator of curricula for fire-rescue units and traffic police in the field of working with dangerous goods.

Police Colonel **Slaviša Lakićević** is Head of the Traffic Police Directorate and Safety Consultant for Hazardous Materials Transport, Ministry of Interior.

Police Colonel **Sergej Uljanov** is a Chief Inspector for Business Process Improvement and Coordination in the Lines of Work II at the Traffic Police Directorate, Ministry of Interior, and Safety Consultant for Hazardous Materials Transport. He is a Supervisor of specialized training for traffic police officers overseeing participants in road traffic engaged in hazardous materials transport.

Police Lieutenant Colonel **Ivica Stanković** is Head of the Traffic Control and Regulation at the Traffic Police Department, Ministry of Interior, and Safety Consultant for Hazardous Materials Transport.



# THE ROLE OF OUTLAW MOTORCYCLE CLUBS IN ORGANIZED CRIME WITH AN EMPHASIS ON MOTORCYCLE CLUBS IN THE DUTCH COUNTRIES

**Olgica Vulević, PhD student<sup>1</sup>**

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**Purpose:** Outlaw motorcycle clubs are a specific type of organized criminal group known for their striking aesthetics and loyalty to the club, but also for their connection to various forms of criminal activity. Although many motorcycle clubs are dedicated to riding motorcycles for love and have a communal lifestyle, there are also those that operate as illegal organizations, participating in a range of criminal activities, from illegal drug trafficking, prostitution, and violent crime to money laundering and racketeering. Outlaw motorcycle clubs are a priority issue in the world when it comes to serious crimes, in addition to cybercrime and illicit drug trafficking.

Lower-ranking members see the leadership of higher-ranking members in criminal enterprises as legitimate, and such criminal acts are interpreted as “club business”. In recent years, many European countries have taken far-reaching measures to combat the criminal activities of motorcycle gangs. However, empirical investigations of those crimes involving outlaw motorcycle clubs are widely lacking. While outlaw motorcycle clubs are overrepresented in criminal enterprises where their activities contribute to social and economic harm, the precise involvement of the clubs themselves in these illegal activities is still unclear and under-analyzed.

This scientific work aims to investigate the phenomenon of motorcycle gangs in the context of organized crime, examining their structures and models of action, as well as the social and legal challenges they present. The paper will look at the history of outlaw motorcycle clubs, the evolution of their activities, and the role they play in the broader framework of organized crime. The various legal and police approaches that have been used to combat this phenomenon, as well as the implications for public safety and society as a whole, will also be analyzed. The paper will also review the most famous American outlaw motorcycle clubs, such as the *Hells Angels*, etc.

**Coordinates and methods** in which this work will be carried out: What are the criminal acts most often committed by members of motorcycle clubs? What is their role in organized criminal groups? What are their characteristics? The historical method, analysis method, comparative method, and modeling method will be used in the work.

**Result:** Outlaw motorcycle clubs represent a significant threat in the fight against organized crime. The result of this scientific work shows the complex and multi-layered nature of motorcycle gangs as a form of organized crime. Research has revealed that motorcycle gangs have a strictly hierarchical structure with a strong sense of loyalty to the club and its members. This structure enables effective coordination and implementation of illegal activities, which makes them resistant to external pressures and makes law enforcement more difficult. Data collected indicate that motorcycle gangs often operate as closed communities, making information gath-

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ering and infiltration difficult. Their penchant for violence and intimidation further complicates efforts to curb their criminal activities.

**Value:** Through case analysis and the use of available literature, this paper will offer insight into how motorcycle gangs operate and what are the key characteristics that distinguish them from other forms of organized crime. Finally, recommendations for future policies and strategies that can help reduce the impact and spread of criminal activities associated with motorcycle gangs will be discussed. This work will also provide a good starting point for future research on motorcycle gangs, as the topic is current and unexplored globally.

**Keywords:** outlaw motorcycle clubs, organized crime, violent crime, Dutch and American outlaw motorcycle clubs.

### *About the author*

**Olgica Vulević**, police lieutenant colonel, is an Advisor to the Assistant Minister of Police and a disciplinary officer. She is a PhD student at the Faculty of Law.

# FROM WASTE TO LATENT TRACES VISUALIZATION: THE APPLICATION OF POLY(ETHYLENE TEREPHTHALATE)-BASED POWDERS IN DEVELOPMENT OF LATENT FINGERPRINTS

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**Purpose:** Polymeric materials are used worldwide in various industries and for different purposes. While natural polymers do not pose a problem for the environment, mainly due to their biodegradability and non-toxic properties, (semi)synthetic polymers represent the major environmental pollutants. The necessity to protect the environment can be supported by the reuse of the discarded plastic materials, and very often, the plastic waste has to be recycled prior to its further (re)utilization. A number of recycling approaches are used today for these purposes. In this research, we demonstrated the possibility of using recycled PET packaging material for the preparation of powders used for the visualization of latent fingerprints.

**Design/Methods/Approach:** In this paper, PET-based powder formulations were obtained by PET glycolysis reaction, using ethylene glycol as a solvent. Three different PET packaging materials (having different additives) were used to obtain powders with green, white, and blue appearances. Prepared powders were used to visualize latent fingerprints deposited onto non-porous (glass) surface. The structure and properties were compared between prepared powders, while the quality of visualization was specifically investigated by comparing the powders with the commercial and routinely used BVDA Magnetic Silver powder.

**Findings:** The interactions between components of prepared powders and potential presence of additives were investigated by Fourier-transform infrared spectroscopy analyses. Optical microscopy showed that prepared powders possess round-shaped particles that are uniform in size, which enabled their easy binding to the sweat and lipid fingerprint residues.

**Originality/Value:** Prepared powders demonstrated good interaction with latent traces when deposited onto glass substrate. Moreover, the high-quality fingerprint image was obtained when compared to those developed with the commercial powder. The results showed that powders manufactured from recycled PET could potentially supplement the routinely used fingerprint powders, especially due to its low price (obtained from the waste raw material).

**Keywords:** PET powder, recycling, circular economy, latent fingerprints, forensics.

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### *About the authors*

**Nemanja Vučković**, M.Sc., earned his master's degree in Technology Engineering in 2019 from the University of Criminal Investigation and Police Studies, Department of Forensic Engineering, where he currently works as a Teaching Assistant. Since 2014, he has been actively engaged as a demonstrator at educational events/fairs, where he demonstrated the capabilities of routinely used methods, as well as novel approaches for developing latent fingerprints. Since 2016, he has been an active member of the Forensic Polymer Section, where he conducts research on the synthesis, characterization, and application of various types of polymers in the field of forensic trace analysis.

**Nevena Prlainović**, Ph.D., graduated from the Department of Biochemical Engineering and Biotechnology and obtained her Ph.D. from the Department of Organic Chemistry of the Faculty of Technology and Metallurgy, University of Belgrade, where she is currently employed as an Assistant Professor. Her research interest encompasses synthesis of organic compounds with potential biological activity and elucidation the structure–activity relationship, enzymatically catalyzed syntheses, enzyme kinetics and immobilization of enzymes. A specific part of her research represents modification of nano-material surface, their characterization and uses as a support for enzyme immobilization. Nevena Prlainović has co-authored 35 scientific papers in peer-reviewed journals.

**Nikola Milašinović**, Ph.D., is a Chemical and Material Science Engineer that earned his doctorate degree in 2011 from the Faculty of Technology and Metallurgy, University of Belgrade. He has been working on several long-term projects covering the syntheses of different types of polymer matrices/devices suitable for encapsulation/immobilization of various active substances. Since October 2016, he has held a position as Head of the Forensic Polymer Section. His research covers the synthesis and characterization of natural/synthetic polymer-conjugate powders that could be used in the detection and enhancement of latent finger/palmprints as substitutes for commercially available system applied in police everyday practice.



# PREDICTION OF DETONATION PERFORMANCE AND STABILITY OF NEW-CLASS HIGH ENERGETIC MATERIALS

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**Purpose:** There is a constant need for reliable prediction of the values of detonation parameters and stability of new-class High Energetic Materials (HEM). Due to the risk of possible explosions, it is desirable to reduce the number of experimental studies for the development of new explosives. Research into the relationship between the structure and properties of explosives using computer programs has led to the development of new HEM with advanced performance. A realized program solution can be useful for predicting stability and detonation parameters of different explosive compounds, that is, for the design, production, use, or protection against special purpose explosives.

**Design/Methods/Approach:** The data were analysed using Gaussian 09 software applying ArgusLab, a molecular modeling program for the Windows operating system.

**Findings:** Two key properties that are used to evaluate explosives are the detonation velocity and the detonation pressure. Particularly useful in contemplating the design of new explosive compounds are the Kamlet-Jacobs equations for detonation velocity and detonation pressure. DFT methods, especially B3LYP as a hybrid DFT method, have been shown to yield reliable geometries and also require less time and computational resources.

**Originality/Value:** In this paper, different potential high energetic compounds have been analysed and compared. This review points out innovative approaches in methods and techniques of new-class HEM development and design and gives a basis for future research activities.

**Keywords:** HEM, detonation velocity, detonation pressure, explosives, nitro-aromatic compounds.



### *About the authors*

**Gvozden Tasić**, PhD, is a Senior Research Associate and Head of CBRN Center at the “Vinča” Institute of Nuclear Sciences – National Institute of the Republic of Serbia, University of Belgrade. His main research focus is on CBRN protection and green energy. He is a research team leader for the subject “Development and implementation of novel materials, methods and protocols in prevention, protection, and efficient response to potential CBRN incidents”. Prior to that, he was the project manager on a project: “Hydrogen energy – development of novel materials, electrolytic hydrogen production, hydrogen fuel cells, and isotopic effects” funded by the Ministry of Education, Science, and Technological Development of the Republic of Serbia.

**Marija Ječmenica Dučić** is a PhD chemical engineer (Research Associate in Vinča Institute of Nuclear Sciences) with experience working in research institutions as well as companies operating on the basis of creativity and innovation. The key area of interest in her previous work is environmental issues related to wastewater treatment (biological and electrochemical) and CO<sub>2</sub> removal from flue gases using different technologies (absorption, adsorption). Her research involves working in several software packages designed for modelling and simulations: Matlab, Comsol Multiphysics, ChemCad, Design II, and gProms.

**Jelena Radovanović** is a Junior Researcher at “Vinča” Institute of Nuclear Sciences – National Institute of the Republic of Serbia, University of Belgrade. Her area of interest in work is the designing and development of new-class high energetic materials. Her research involves working in software packages: ArgusLab, ChemDraw, Gaussian 09, Mercury. She is the co-author of two scientific international papers.

**Dušan Veljković**, PhD, is an Associate Professor at the University of Belgrade – Faculty of Chemistry. A special focus of his research is the role of noncovalent interactions in the design of new materials, including high-energy materials. Previously, he was the principal investigator of the project: “Computational Design of High Energetic Materials: Case of Chelate Complexes” funded by the Science Fund of the Republic of Serbia. He was also the principal investigator on the project of bilateral cooperation between Serbia and France (Project: “Cation/ $\pi$  interactions between polycyclic aromatic hydrocarbons and transition metal ions”). He is the author of 28 scientific papers (487 citations, h-index: 12).

**Đurica Katnić** is a Research Assistant at “Vinča” Institute of Nuclear Sciences – National Institute of the Republic of Serbia, University of Belgrade. As part of his scientific research, Đurica Katnić deals with the development of chromatographic and instrumental detection methods for the determination of organic pollutants. In addition, he deals with the synthesis, characterization, and modification of carbon materials obtained from waste biomass, as well as the application of synthesized carbon materials for the adsorption of organic and inorganic pollutants. He is also engaged in the development and improvement of materials and methods for CBRN protection and detection. He is the author/coauthor of six scientific international papers.



# NUCLEAR FORENSICS – TECHNIQUES FOR CHARACTERIZATION (EXAMPLE OF NUCLEAR TECHNIQUE USE)

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**Purpose:** Nuclear forensics presents the examination of nuclear and other radioactive materials using different analytical techniques to determine the material origin. The most commonly used methods in nuclear forensics are high-resolution gamma spectrometry, mass spectrometry, and dosimetry. Their application enables the answer to the unauthorized use of these materials. Radiological technique can be used for surface contamination or dose rate determination. For isotopic analysis, gamma spectrometry, as a non-destructive method of nuclear forensics, is used. On the other hand, alpha spectrometry, as a destructive method, requires the application of radiochemical preparation. Measurement of gross alpha/beta activity is also a nuclear technique that can be used to determine the presence of alpha or beta emitters as a screening method. Other techniques imply Fourier transform infrared spectroscopy, mass spectrometry, inductively coupled plasma mass spectrometry, scanning electron microscopy, X-ray diffraction (XRD), field portable X-ray fluorescence (FP-XRF) spectroscopy, etc.

**Design/Methods/Approach:** In this paper, a description of the methods used in nuclear forensics has been described, including a literature review. Special emphasis is placed on gamma spectrometry and dose rate measurements.

**Findings:** Gross alpha/beta measuring represents a screening technique that identifies the presence of gross alpha or beta emitters without the possibility of identifying individual radionuclides. Gamma spectrometry does not require special sample preparation, and it is not time-consuming compared with alpha spectrometry, where radiochemical preparation is necessary.

**Originality/Value:** In this paper, dosimetric measurement, which is carried out by controlling the radioactivity of goods during import, export, and transit at border crossing, has been described. Radioactivity control is based on measurements performed by authorized legal persons and involves measurements of the dose rate of ionizing radiation from the goods and examination of samples by gamma spectrometric method.

**Keywords:** nuclear forensics, gamma spectrometry, dosimetry, analytical techniques.

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### *About the authors*

**Marija Janković**, PhD, Assistant Director for Science, principal research fellow, is a leading researcher in the field of ionizing radiation (20 years of experience in nuclear techniques – gamma spectrometry, alpha spectrometry,  $^{90}\text{Sr}$  measurement, gross alpha/beta activity measurement, tritium determination, and dosimetry) in the Laboratory for Radiation Measurements, Radiation and Environmental Protection Department, “Vinča” Institute. She is a technical manager of the Radionuclide Activity Testing Sector. She is engaged in CBRN training at the CBRN Center for Forensics and Training at the “Vinča” Institute. She is the author/co-author of 55 papers published in scientific journals, 7 chapters in the monograph, and 200 papers presented at conferences. Her number of citations is 786, and her h-index is 11. She completed several trainings organized by the International Atomic Energy Agency and trainings organized by RACVIAC and DOE/NNSA.

**Jelena Krneta Nikolić**, PhD, senior research associate, is a leading examiner in the Laboratory for Radiation Measurements, Radiation and Environmental Protection Department, “Vinča” Institute, with 15 years of experience in gamma spectrometry analysis, dosimetry, and radionuclide metrology. She is the author/co-author of over 50 papers published in scientific journals and about 150 papers presented at conferences. Her number of citations is over 800, and her h-index is 13. She completed several trainings organized by the International Atomic Energy Agency.

**Marija Šljivić-Ivanović**, PhD, principal research fellow, is Head of the Radiation and Environmental Protection Department, “Vinča” Institute. She is an expert in Environmental Science and Management, Environmental Engineering, and Chemical Engineering. Her scientific work is focused on the study of separation processes and immobilization of heavy metal ions and radionuclides present in water and soil, using different sorbents. She is a leading researcher in the fields of chemistry and environmental protection, and characterization of materials using different analytical techniques. She is the author/co-author of over 45 papers published in scientific journals and about 100 papers presented at conferences. Her number of citations is 667, and her h-index is 14.

**Nataša Sarap**, PhD, senior research associate, is a leading examiner in the Laboratory for Radiation Measurements, Radiation and Environmental Protection Department, “Vinča” Institute, with 15 years of experience in radiochemical analysis. She is the author/co-author of about 30 papers published in scientific journals and about 150 papers presented at conferences. Her number of citations is 111, and her h-index is 7. She is a leader of the research team on the topic: “Radioecological Research and Matrix Design for Solidification and Stabilization of Radioactive Pollutants”. She completed several trainings organized by the International Atomic Energy Agency.

**Filip Veljković**, PhD, senior research associate in the Department of Physical Chemistry, “Vinča” Institute, is a leading researcher in the field of mass spectrometry with many years of experience. He is a leader of the research team on the topic: “Optical Emission (OE) and Mass Spectrometry (MS) for the Characterization of Plasma, Clusters, and Polymeric Materials”. He is the author/co-author of 27 papers published in scientific journals and about 40 papers presented at conferences. His number of citations is 129, and his h-index is 7.

**Bojan Janković**, PhD, principal research fellow in the Department of Physical Chemistry, “Vinča” Institute, is a leading researcher in the field of physical chemistry, characterization of materials using different analytical techniques: XRD, XRF, FTIR, SEM-EDS, GC-MS, TGA-DTA-DSC. He is an expert in polymer degradation and stability analysis and their composites. He is the author/co-author of over 125 papers published in scientific journals, 9 chapters in the monograph, and 80 papers presented



at conferences. His number of citations is 1867, and his h-index is 22. Due to his outstanding scientific contributions, he is included in the Stanford list, which includes scientists ranked in the top 2% of the world's best scientists for the results achieved in the entire career as well as for the results achieved in 2020, 2021, and 2022.



# DRUG USE STATISTICS IN SERBIA: ANALYSING A POPULATION'S DRUG USE STANCE ON CANNABIS LEGALISATION

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**Purpose:** The 2023 annual report of the *European Monitoring Centre for Drugs and Drug Addiction (EMCDDA)* reveals that illegal drugs are widespread in Europe, and it is difficult to avoid the expansion of new psychoactive substances (PAS), their availability, and subsequent harmful effects. The problem of addiction and behavioural disorders caused by PAS in Serbia has grown in recent years. Therefore, it is necessary to develop appropriate strategies to combat the abuse of PAS among the population. This, among other things, entails regular education of the population about the harmfulness of drug use, as well as assisting persons who have encountered addiction problems.

**Design/Methods/Approach:** This study aimed to analyze the data obtained using two independent surveys conducted on the territory of the Republic of Serbia in 2023. One survey included research related to the use of illegal drugs and prescription drugs with psychoactive effects with 72 respondents, and another survey specifically included the opinion about the legalisation of cannabis in which 86 people participated.

**Findings/Originality/Value:** For the fight against drug abuse to be successful, it is required to have the best possible insight into the consumption of PAS on the territory of one country. Based on an anonymous questionnaire, effective preventive strategies and programs can be developed in order to reduce the use of PAS in different population groups. The data findings of this research revealed that one-third of respondents ever used some illegal drug, and most of them (67%) revealed that it was cannabis. Regarding the opinion on the legalisation of cannabis, about half of the respondents (48%) believe that the law allowing recreational use in Serbia is not necessary and that cannabis should remain banned. The same percentage of respondents believe that for people with serious illnesses, cannabis-based preparations should be made available.

**Keywords:** drug use, questionnaire, cannabis, legalisation.

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### *About the authors*

**Jelena Uvalić**, MSc, graduated from the Department of Chemistry, Faculty of Sciences, University of Novi Sad. She completed her master's degree in chemistry at the Faculty of Sciences, University of Novi Sad, and the topic was Determination of the Solubility of Caffeine in Methylsalicylate by Gravimetric and HPLC/DAD Methods. She enrolled in another master's degree in forensic engineering at the University of Criminal Investigation and Police Studies, University of Belgrade. Her research interests are related to knowledge of psychoactive substances, their detection, and the analysis of chemical samples.

**Dragana Jovanović**, MSc, graduated from the Department of Pharmacy, Faculty of Medicine, University of Niš. She completed her master's degree in national security at the University of Criminal Investigation and Police Studies, and the topic was Biosafety Procedures in the Preparation and Storage of Medical Cannabis Preparations to Prevent Abuse on the Territory of the Republic of Serbia. As a member of the Pharmaceutical Chamber of Serbia, her job involves providing advice on the safe use of antibiotics and herbal remedies. Her research interests concern common knowledge about biosafety procedures for collecting, preparing, and preserving.

**Ana Branković**, PhD, finished her PhD studies at the Faculty of Biology, University of Belgrade. Currently, she is an Associate Professor at the University of Criminal Investigation and Police Studies. Her research focuses on forensic biology, mostly the use of microscopy in forensic botany and the development of novel methods for pollen and spore purification for easier forensic identification of plant materials.

**Snežana Đorđević**, PhD, graduated from the Faculty of Pharmacy, University of Belgrade and specialized in toxicological chemistry at the Military Medical Academy, where she earned her PhD. She is the Head of the Department of Toxicological Chemistry at the National Poison Control Centre and a Full Professor at the Medical Faculty of the Military Medical Academy University of Defence. She is a member of the Pharmaceutical Society of Serbia, Pharmaceutical Chamber, Serbian Association of Toxicologists, EUROTOX and the DCO in Anti-Doping Agency of Serbia. Her research focuses on clinical toxicology, with a particular focus on psychoactive substances.

**Biljana Koturević**, PhD, graduated chemistry-biochemistry at the Faculty of Sciences, University of Novi Sad. She obtained her PhD at the Faculty of Physical Chemistry, University of Belgrade. Presently she is employed as an Assistant Professor at the University of Criminal Investigation and Police Studies. Her research interests are analysis of the kinetics of solid-liquid extraction under different heating conditions; modeling the kinetics of extraction; application of innovative extraction techniques on various plant materials and methods of analysis of psychoactive substances. Recently she has focused her research in the field of forensic toxicology.



# THE IMPORTANCE OF FORENSIC AUDITING TECHNIQUES AND INSTRUMENTS COMBATING CRIMINAL ACTS

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**Purpose:** Non-objective and untrue data in financial reports and accounting are not always the result of error, incompetence, ignorance, or incorrect application of international accounting standards and/or international financial reporting standards, but are often the result of criminal activity in the field of financial transactions and business. Internal and external audits are not an instrument for detecting criminal acts, nor is this their main goal. In this context, practice has generated forensic auditing as a new service within the auditing profession. It is a specialized activity of auditing financial reports, the primary goal of which is the prevention, detection, and investigation of criminal acts.

**Design/Methods/Approach:** The paper will be focused on the application of audit instruments and techniques in the prevention and detection of criminal acts. In order to detect and/or prevent a criminal act, forensic auditors, in addition to knowing a wide range of forms of criminal acts and criminal schemes, need to recognize warning signs that represent economic indicators of illegal actions in the field of financial operations, identify them, and apply effective procedures for their disclosure. This clearly indicates that in order to suppress criminal acts in the modern business environment, it is necessary for forensic auditors to be competent in the implementation of audit instruments and techniques with the help of computers and programmes. The methodological framework of the paper includes analysis, synthesis, and description with the use of relevant literature by foreign and domestic authors.

**Findings:** The aim of this paper is to point out the importance and role that forensic auditing has as an instrument for detecting and preventing criminal acts in the operation of modern business systems. The paper will specifically analyze criminal acts related to financial reports, warning signs of the so-called “red flags” indicating possible criminal activity in financial reports and accounting, types of criminal activities, and forensic audit analysis in the context of detecting and preventing criminal activities in companies. The emphasis in the paper is on the importance of audit methods and analysis in forensic audit investigations of criminal acts, all with the aim of better understanding the action and role of the audit profession in suppressing criminal acts.

**Originality/Value:** This paper will represent a solid starting point for further research, considering the covered topic which is current at the national level and at the global level as well.

**Keywords:** financial reports, criminal activities, disclosure, auditing profession, forensic auditing.

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**Slađana Vujičić**, Doctor of Mechanical Engineering, was born in 1970 in Kragujevac. She has been employed at the Higher School of Business Economics and Entrepreneurship in Belgrade since 2010, where she has been appointed to various teaching positions, including teaching assistant and assistant professor, and currently holds the position of full professor in the narrower scientific field of Management, Marketing, and Entrepreneurship, teaching courses in Innovation Management, Business Planning, Entrepreneurship, and Environmental Management. She was appointed as a reviewer for the social-humanistic and technical-technological fields by the National Council for Higher Education of the Republic of Serbia on June 29, 2022. She also serves as a reviewer for the technical-technological field at the Agency for Accreditation of Higher Education Institutions of the Republic of Srpska. She is the editor-in-chief of the journal “Business Trends,” ISSN 2334-816X, published by the Higher School of Business Economics and Entrepreneurship in Belgrade, Serbia (category M51-2023), and the deputy editor-in-chief of the “International Review” journal, ISSN 2217-9739, published by the same institution (category M23-2023). She is a member of the editorial boards and a reviewer for numerous domestic and foreign journals and serves on the Scientific Committees of domestic and foreign conferences. She has participated in numerous domestic projects and has authored or co-authored over 150 scientific papers to date.



# FORENSIC LINGUISTICS AND POLICE WORK: STATE AND CHALLENGES

**Jelena Vojinović-Kostić, PhD<sup>1</sup>**

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Bosnia and Herzegovina

**Purpose:** This paper aims to shed light on the importance of forensic linguistics in the performance of the goals and tasks set before the police, the position of forensic linguistics and its application in police work today, and the possibilities of application and development.

**Design/Methods/Approach:** The methods used in this paper are analysis and synthesis, with an emphasis on case analysis.

**Findings:** Forensic linguistics as a branch of applied linguistics is insufficiently known to the police in our area, in relation to the level of its applicability in police affairs, and it is necessary to permanently point out its importance and the possibilities it provides in the evidentiary procedure and in the prevention of criminal offenses from terrorism and beyond.

**Originality/Value:** The value of this paper is in the illumination of forensic linguistics, and in drawing attention to its' practical capacities in the processes of collecting data and evidence by judicial bodies and the police application of critical discourse analysis, state and challenges, in police affairs with reference to the Republic of Srpska.

**Keywords:** forensic linguistics (FL), discourse analysis (DA), critical discourse analysis (CDA), language, police, Republic of Srpska.

## *About the author*

Prof. **Jelena Vojinović-Kostić**, PhD, completed her bachelor's degree studies in general linguistics at the Faculty of Philology, University of Belgrade, where she also obtained a master's degree (major: Science of Language) and then a doctorate (specialist field: Discourse Analysis). She worked as a Teaching Assistant at the same faculty, Assistant Professor and Associate Professor at the Pan-European University "Apeiron", Banja Luka, Republic of Srpska. She is a Research Associate at the Institute for Serbian Culture Priština-Leposavić, Republic of Serbia, permanently employed in the Ministry of Internal Affairs of the Republic of Srpska, Directorate for Police Education, in the position of senior professional associate for scientific and research work. She is the author of several scientific papers in the field of linguistics and two monographic publications and a participant in numerous scientific gatherings and conferences.

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# THE SOCIAL CLIMATE OF THE CLOSED PRISON IN ZENICA IN THE PERIOD FROM 1993 TO 2016: A LONGITUDINAL STUDY

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**Purpose:** The social climate of prisons is considered to be an important scientific interest (Moos, 1974; Ilijić, 2021) because it reveals latent relationships, processes, and events within the prison community. The universe of variables of the social climate of prisons is stratified, and the most frequent events – variables are, from a view of prisoners, repression, disorganization, prison code, and deprivation.

**Design/Methods/Approach:** As the basic instrument, we used the revised and adapted CIES (Correctional Institutions Environment Scale Manual) created by Moos (Moos, 1974) for different types of prisons. The survey technique proved to be the most appropriate, and the instrument contained 39 items in a Likert format. The samples of the interviewed prisoners were representative in relation to the statistical group of prisoners serving their sentences.

**Findings:** The paper analyzes the results of testing of the social climate of the closed prison in Zenica in 1993, 1994, 1997, and 2016, which satisfies the requirement for longitudinality. We found that the values of the social climate subdimensions vary between the war period (1993 and 1994) and the post-war period (1997). As a comparative criterion, we took the measurement of the social climate from the 2016 period. The subdimensions of repression and deprivation proved to be the most stable and pointed to the fact that these are structural features of closed prisons, regardless of the environmental conditions (war or peace).

**Originality/Value:** The originality of the work is reflected in the fact that the social climate of a closed prison was measured in the samples of the mentioned periods and that the findings can be used for comparative research conducted in other prisons. Research of this type can be used for more humane functioning of prisons, especially in terms of managing security risks in prisons, creating re-educational treatments, and reducing recidivism.

**Keywords:** prison, repression, disorganization, deprivations, prison code.

## *About the author*

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# INTERNET RADICALIZATION AND THE POSSIBILITY OF SPREADING RADICAL IDEAS AND MATERIALS ON THE DEEP WEB

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**Purpose:** The purpose of this paper is to analyze the potential danger arising from internet radicalization and the wide space of the deep internet, which is not controlled and offers opportunities for extremist groups to draw materials related to terrorism and various types of organized crime. Internet radicalization is one of the types of hybrid threats that is not institutionally sufficiently controlled. Technological development in the last few decades has been in constant growth. Society cannot be imagined to function normally without the use of special tools and programs on the Internet. The Internet brings the world together, but only virtually. Various social networks, such as Facebook, Instagram, Twitter, etc., enable quick and easy communication with people who are on the other side of the planet. With that, information spreads rapidly and easily, because the rate of internet users is enormous. Extremist groups use these networks pretty well, especially for their purposes related to the recruitment and training of fighters, so that they can then go to various battlefields in the Middle East and, in recent years, in Ukraine. The paper aims to make a normative analysis of the existing laws and by-laws for the prevention and inhibition of this type of hybrid threats, an analysis of existing reports, and a comparative analysis of legal solutions in the Republic of North Macedonia, the Republic of Serbia, and Bosnia and Herzegovina.

**Design/Methodology/Approach:** The paper will be systematized in the following order: Analysis of international acts and documents brought by relevant institutions of the European Union, which are in the direction of preventing internet radicalization as a type of hybrid threat. Comparison of domestic legal regulations with the legal regulations of neighboring countries. Defining terms for internet (online) radicalization, the danger of internet radicalization, and which are socially vulnerable groups that can be subject to this kind of threat. As a case study – ISIS, who annually recruited over 30,000 members using internet tools. Comparative analysis and comments on the existing legal solutions in the Republic of North Macedonia and the efficiency of the application of the legal provisions in the Republic of Serbia and Bosnia and Herzegovina.

**Findings:** The danger arising from internet radicalization represents a security threat both for the Republic of North Macedonia and for the entire Western Balkans. The surface internet, and especially the “deep internet,” is suitable ground for the spread of radical ideas, another type of hybrid threat, fake news, disinformation, and the spread of hate speech that has become a part of our everyday life. The Western Balkans is still a vulnerable area. Fear is rising that online recruitment by extremist groups could result in foreign fighters joining Russia’s invasion of Ukraine, following the Ukrainian president’s public call that all foreign fighters are welcome in Ukraine.

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Analysis of documents from Eurostat according to their statistics since 1998, when there were only 12 websites related to terrorism and violent extremism, an increase of 6940 websites with such extreme material was recorded, and Eurostat statistics show that in 2014 there is an increase of up to 80% of such websites whose main content is extremist ideologies and terrorism as phenomena.

**Originality/Value:** The paper is original, founded on the basis of the authors' own efforts and theoretical insights into the problem of internet radicalization to which the competent authorities, the legislator, perhaps even the state itself, pay the least attention. Also, analysis of documents, internet searches, and analysis of secondary data searched on Eurostat for this type of security threat. Internet extremism in the Western Balkans is strongly related to the demographics of the population and the history of the region. Extremist ideologies do not have influence on one country only, but many. Extremist ideologies that prevail in the Western Balkans have loyal internet users who are limited in political and ideological terms and are easy targets for action. Such regionalized extremist narratives are closely related to the history and longstanding inter-ethnic conflict in the region.

**Keywords:** internet radicalization, extremism, deep web, foreign fighters, security threats.

### *About the authors*

**Marjan Nikolovski**, PhD, is a full professor at the Department of Security Sciences at the Faculty of Security in Skopje, University of St. Kliment Ohridski from Bitola. He received his master's degree on the topic of "Methodology of the Detection and Proof of the Crime of Terrorism", his doctorate on the topic of "Connection and Impact of Organized Crime, Terrorism and Politics". He has published 5 university textbooks, participated in several national and international research projects in the field of security, and has published more than 100 scientific papers in domestic and international scientific journals. His area of scientific interest is the functioning of the security system in dealing with organized crime and terrorism.

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# TRENDS OF CHANGES AND GENDER DIFFERENCES IN INTELLECTUAL ACHIEVEMENTS AND PHYSICAL ABILITIES AT THE ENTRANCE EXAM OF THE UNIVERSITY OF CRIMINAL INVESTIGATION AND POLICE STUDIES

Danijela Spasić, PhD<sup>1</sup>

Radivoje Janković, PhD

University of Criminal Investigation and Police Studies, Belgrade, Serbia

**Purpose:** The entrance exam for the University of Criminal Investigation and Police Studies (UCIPS) implies the selection process, evaluating candidates through High School Success (HSS), Serbian Language Test (SLT), General Knowledge Test (GKT), and Basic Physical Abilities Test (BPA). The aim of this research is to determine gender-based differences in all segments of the entrance exam. Additionally, trends in HSS, SLT, GK, and BPA over four years have been analyzed, along with a comparison of results across different generations.

**Design/Methods/Approach:** The sample was composed of candidates who took the entrance exam from 2018 to 2021 and were granted admission. Out of a total of 1339 candidates (551 females and 788 males), 308 students (120 females and 188 males) were enrolled, whose results were analyzed in accordance with the objectives of the study. Analysis began with descriptive statistics and continued with an independent t-test to assess gender differences, while MANOVA was used to evaluate generational success. Additionally, a trend analysis was conducted over the four-year period. In all analyses, statistical significance was set at  $p < 0.005$ .

**Findings:** Significant differences were identified in BPA in favor of males across all generations, while females achieved better results on SLT in 2019/20 and HSS in 2018/19. Other segments showed no significant differences. Further analysis revealed improvements in most performances from 2018 to 2020, after which the scores stabilized in 2020 and 2021. This may be attributed to a more stringent selection process, with a higher ratio of candidates competing for fewer available spots, namely a lower percentage of applicants being enrolled.

**Originality/Value:** This research provides insights into trends and gender-based differences within the selection process, which can contribute to the improvement of both the selection system and gender equality. Additionally, the analysis of results indicates an improvement in the knowledge and abilities of candidates over the observed selection period at UCIPS, which could positively impact the efficiency of their studies.

**Keywords:** gender-based differences, entrance exam, selection process, trend analysis.

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**Danijela Spasić**, PhD, is an associate professor at the University of Criminal Investigation and Police Studies in Belgrade, at the Department of Police Studies. She completed her master's and doctoral studies at the Faculty of Security, where she defended her doctoral dissertation entitled *The Concept of Community Policing and Domestic Violence*. She is a member of the American Society of Criminology – Division of Policing (from 2019 until today). Her narrow area of research interest includes: position and role of women in the security sector, women's human rights and the principles of gender equality, security and victimological aspects of gender-based violence, human security, policing.

**Radivoje Janković**, PhD, is an associate professor at the University of Criminal Investigation and Police Studies, Department of Police Studies. He completed both his MSc and PhD at the Faculty of Sport and Physical Education, University of Belgrade. His research spans over a wide range of topics within sports science and police training. This includes exploring the dynamics between intellectual capacities, personality development, and physical fitness, assessing their impact on professional and academic performance in law enforcement settings. The scope of his studies broadly investigates physical fitness, preparatory training efficacy, and the development of competencies in police education.

# THEORETICAL AND METHODOLOGICAL ISSUES REGARDING FEAR OF CRIME

Natasha Peovska, PhD<sup>1</sup>

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**Purpose:** The purpose of this paper is 1) to present and elaborate on some theoretical concepts that explain the fear of crime as a complex phenomenon and 2) to raise some methodological issues regarding the validity and reliability of measuring fear of crime, especially regarding questions used to measure it.

**Design/Methods/Approach:** The paper uses a descriptive method and a synthesis of the existing knowledge related to theoretical concepts that explain fear of crime and analyzes and discusses methodological issues related to the measurement of the fear of crime.

**Findings:** The review of the relevant literature shows that the most common theoretical concepts for explaining the fear of crime are the vulnerability concept, the victimization concept, social control, and the ecological concept, which belong to the social demographic model of explaining the fear of crime. But in the literature is also found and tested the social psychological model based on the model of Van der Wurff et al. (1989). The trend in further research and explanations should be directed more towards interactive models of fear of crime explanation. Analysis of some methodological issues showed that there is a need in the fear of crime research to use measures grouped into three broad categories labelled “cognitive”, “affective”, and “behavioral”, as a most appropriate way of measuring such a complex phenomenon.

**Originality/Value:** This paper will contribute to a deeper understanding of fear of crime as a complex phenomenon, especially for understanding and testing different kinds of theoretical explanations of fear of crime. Also, it can help in solving some methodological issues regarding measuring fear of crime.

**Keywords:** fear of crime, concept, measurement, issue.

## *About the author*

**Natasha Peovska**, PhD, is an associate professor at the Faculty of Security – Skopje, University “St. Kliment Ohridski” – Bitola. She focuses her study and research interests on victims of crime, juvenile delinquency, theories of crime, and criminal policy. She particularly seeks innovative ways to improve the position of the vulnerable victims of crime in the legal system and in society. She has published her scientific work in over 40 journals and conference proceedings. As a project coordinator and member of project teams, she took part in managing and conducting desk and fieldwork in research projects related to crime, fear of crime, juvenile victimization and delinquency, school violence, the position of the inmates in Macedonia, including the marginalization and deviancy of children inmates in correctional facilities, the process of statistical presentation of crime, etc.

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# ACTIVELY LISTENING TO REISS

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**Purpose:** The present article analyzes the manuscript “Listen, Serbs, Beware of Yourselves!” written on June 1, 1928. This article attempts to answer the questions of whether Reiss kept something and/or someone silent or if the skillful hand of an experienced criminalist left us clues to prevent high corruption in the Kingdom of Serbs, Croats, and Slovenes. It examines what the alternative history of the Kingdom and the Serbs would have been if his book had been published in 1928, considering the context in which the manuscript was created. And finally, the paper summarizes what Serbia, listening to Reiss, has done in the field of preventing corruption in the past twenty years.

**Design/Methods/Approach:** In this article, legal-historical, sociological, analysis and synthesis methods, as well as the inductive-deductive method, were used for the analysis of Reiss’s book. The aim of such methods was to show the relationship between society, corruption, and anti-corruption measures during the observed period. The inductive-deductive method was used to draw conclusions about the possibilities for applying Reiss’s ideas in modern Serbia.

**Findings:** Hearing and listening are not the same. While most people can hear, far fewer actively listen. Serbs are no different from any other people in this respect, as we will verify this through the case of Reiss’s appeal to the Serbs. The new National Strategy for the fight against corruption is an opportunity for Serbs to show that they actively listened to Reiss’s warnings on the centenary of the book’s publication.

**Originality/Value:** The article offers ideas on how Serbia, by actively listening to Reiss, can improve corruption prevention based on the corruption proofing of legislation, efficient prevention of conflicts of interest, effective control of the assets of public officials, and anti-corruption education for young people.

**Keywords:** Reiss, Serbia, corruption prevention, proofing of legislation, education.

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# WOMEN IN THE POLICE – SERBIA, MONTENEGRO AND BOSNIA AND HERZEGOVINA

**Marta Tomić, PhD<sup>1</sup>**

**Marija Mićović, PhD**

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**Purpose:** We analyzed the status of women in the police organization through the gender division of labor and hegemonic masculinity in order to show as clearly as possible what prevents women from integrating into this profession in the same way as men. The police maintain hegemonic masculinity through the use of authority, the glorification of the use of force, and the subordination of women. The gender division of jobs in the police profession is carried out in such a way that women are assigned jobs that are typically female (administration, administrative jobs, juvenile delinquency jobs, counter jobs, etc.).

**Design/Methods/Approach:** We have singled out some recent research on gender equality in the police from our areas, Serbia, Bosnia and Herzegovina, and Montenegro, in order to show that these theoretical concepts are grounded in practice in police organizations. Data on the position of female police officers indicated a significantly lower representation in the police, a lower representation in operational police jobs, as well as in higher command and management positions. The data in this text refer to Serbia and two neighboring countries: Montenegro and Bosnia and Herzegovina.

**Findings:** There is an internal informal division into “female” and “male” jobs. “Women’s jobs” include legal, financial, analytical jobs, then jobs related to human resources management, communication, as well as logistics support jobs, since the majority of women are in the financial sector, the human resources sector and joint jobs, administrative jobs, etc. In addition, women are still most represented in the lowest police ranks. Other barriers include gender discrimination and harassment, male-dominated selection boards (when it comes to hiring and promotion), and working conditions that are unfavorable to family and parental responsibilities.

**Originality/Value:** Observations on the state of gender inequality in the police profession in Serbia, Bosnia and Herzegovina, and Montenegro indicate that the position of women in key aspects such as promotion and salary is less favorable than men. Some of the most important problems faced by employed women are obstacles in advancing to management positions, lower pay for the same jobs or jobs of equal value, as well as a lower representation of women who are only employed or engaged in entrepreneurship compared to men.

**Keywords:** gender division of labor, hegemonic masculinity, women, police, Serbia, Bosnia and Herzegovina, Montenegro.

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**Marta Tomić**, PhD, graduated from the Faculty of Philosophy in Belgrade. She received her master's degree and her PhD degree from the same faculty in the Department of Sociology. She was elected to the scientific title of research associate. She is employed at the Research Center of the University of Criminal Investigation and Police Studies in Belgrade, working as a research associate. She has published scientific papers in the fields of sociology and criminology in prominent scientific journals on the list of the Ministry of Science of the Republic of Serbia.

**Marija Mićović**, PhD, graduated from the Faculty of Security Studies in Belgrade. She received her master's degree and her PhD degree from the same faculty. She has published scientific papers in the fields of environmental and human safety, emergencies, critical infrastructure, and industrial safety. Since May 2006, she has been employed at the Academy of Criminalistic and Police Studies, today the University of Criminal Investigation and Police Studies, Belgrade. She was elected to the scientific title of research associate.

# THE RIGHT TO LIBERTY AND SECURITY – CASE OF JANAKIESKI V. MACEDONIA

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**Purpose:** As stated in Article 5 of the Convention for the Protection of Human Rights and Fundamental Freedoms, everyone has the right to liberty and security of person. Therefore, the paper shall pay attention to the Macedonian Case of Janakieski in front of the European Court of Human Rights, especially to the applicant’s complaints under Article 5 of the Convention, i.e., his continuous detention, be it in prison custody or house arrest, without sufficient grounds; the overlapping of preventive measures in the second and third investigation; and a violation of the “speedy” requirement in the review proceedings of house arrest in the third investigation.

**Design/Methods/Approach:** The paper shall focus on the allegations raised by the applicant Janakieski and the established violations of the Convention’s provisions by the European Court of Human Rights. Also, the paper shall provide an overview of the relevant literature, international and domestic legal acts, and practice of the European Court of Human Rights.

**Findings:** From the used references, the paper shall be able to establish the violations of Article 5 of the Convention in the Case of Janakieski, i.e., how Macedonian authorities violated the applicant’s rights of Article 5 of the Convention.

**Originality/Value:** The main goal of the paper is to point out the violations of rights in the Case of Janakieski and by doing so to raise the awareness of the importance of human rights defined in the Convention’s Article 5 and the necessity for their protection.

**Keywords:** right to liberty and security, European Court of Human Rights, Macedonia, Case of Janakieski.

## *About the author*

**Katerina Krstevska Savovska** has finished law studies (graduated lawyer, 2001), has defended her master’s thesis titled “The legal limitations of the police powers in relation to the protection of the human rights and freedom” (master’s degree in legal sciences – criminal law, 2007), and has defended her doctoral dissertation titled “The role of the European Committee for the Prevention of Torture in protecting persons detained by the Police” (PhD in Legal Sciences, 2011) at the Faculty of Law “Justinianus Primus” – Skopje within the University “Ss. Cyril and Methodius” – Skopje. Krstevska Savovska has worked at the Sector NCB INTERPOL – Skopje within the Macedonian Ministry of Internal Affairs and at the Cabinet of the Minister of Finance within the Macedonian Ministry of Finance. Krstevska Savovska currently works as a professor in the scientific area Criminal Law at the Faculty of Security – Skopje within the University “Ss. Kliment Ohridski” – Bitola. She conducts lectures for the course “Criminal Procedure Law” on the first cycle of studies. Also, she conducts lectures on the second and

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third cycles of studies. Professor Krstevska Savovska has published more than 70 publications (papers, reports, research, etc.). As a lecturer, moderator, or participant, she has attended numerous events in the field of the criminal justice system, police powers, and human rights (conferences, seminars, trainings, workshops, etc.), and has been a member of several working groups, committees, and projects.



# AI AS A TOOL FOR LEA – POSSIBILITIES AND HUMAN RIGHTS IMPACT

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**Purpose:** A trend toward the use of automated processing techniques and algorithms in crime prevention, suppression, and investigation has been present for a number of years. AI in the field of criminal law enforcement is already a reality, since many AI-based tools and technologies have been developed and adopted, while others are being conceptualized and considered. The aim of the author is firstly to consider and analyze possible uses of AI by LEA, particularly for investigatory and evidentiary purposes, and secondly, to consider their impact, primarily by observing it from a human rights perspective.

**Design/Methods/Approach:** Different possible ways of using tools and technologies based on artificial intelligence will be analyzed – from digital intelligence gathering and analysis, through advanced techniques of digital forensics, to predictive policing, facial, voice, and emotion recognition.

**Findings:** Although LEA could and would undoubtedly benefit from AI, such as for digital forensics, illegal money flow tracing, biometrics identification, etc., some of the recent and on-going developments might not have only the bright side. The trend of embracing the advents of AI without taking into account the magnitude and seriousness of their possible negative impact on human rights raises some important questions, especially in the absence of an adequate legal framework.

**Originality/Value:** The value of this work is reflected in a synergistic view of the advantages and opportunities, on the one hand, and the dangers and necessary limitations of the development and use of tools and techniques based on artificial intelligence for the purposes of combating, investigating, and proving crime in the light of existing and emerging rules for the protection of human rights.

**Keywords:** law enforcement, criminal investigation, artificial intelligence, human rights.

## *About the author*

**Milana Pisarić** is an Assistant Professor at the Faculty of Law, University of Novi Sad. Areas of her scientific interest include criminal procedure, digital forensics, electronic evidence, high-tech crime, and information security.

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# PUBLIC PROSECUTOR DEALING WITH PUBLIC SECURITY AND INDIVIDUAL SAFETY THROUGH DOMESTIC VIOLENCE: EUROPEAN EXPERIENCES

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Basic Public Prosecutor's Office in Lazarevac, Serbia

**Razvan Horatiu Radu, PhD**

Prosecutor's Office attached to the High Court of Cassation, Romania

**Purpose:** The main goals of this article are to explain and improve public prosecutors' responses to various types of crimes that impact public and individual security. It is not simple to describe the public state role of a public prosecutor, who must care about the security of each citizen, no matter where the citizen is living. The level of protection must remain constant and continuously improve with each action taken by the public prosecutor. Domestic violence affects each segment of society, and efficient state action is crucial for the protection of individual and public safety at the same time. Constant effort of the judiciary, and especially of Public Prosecutor demands public confidence in this legal sector and this part of the judiciary.

**Design/Methods/Approach:** The article consists of a brief description and explanation of legal rules, laws, and some practical experiences and cases throughout Serbia and Romania. The analytical approach and reader-friendly intent of authors are prominent parts of this article. Authors' intention to explain difficult legal terms and procedural phases with practical examples from different legal surroundings makes this article readable and close to readers with and without legal knowledge.

**Findings:** The main conclusion is that the rights and obligations of public prosecutors are the same in these two neighboring countries. Public security and individual safety are complex issues, difficult to preserve and protect. Are we safe? Are we secure? Are our families stable and friendly? There are some answers in this article, and the reader has to choose the right answer for his/her doubt.

**Originality/Value:** The legal fight against domestic violence throughout Europe is similar, and every victim must be promptly and adequately protected. Victims must be protected even when they do not ask for help and when they do not want help, be it legal, physiological, human, social, or similar.

**Keywords:** Public Prosecutor, public safety, individual safety, European experiences.

## *About the authors*

**Jasmina Krštenić** has been a Public Prosecutor since 2003. She is a PhD candidate with more than 30 published and presented articles in domestic and international publications and conferences. For

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two consecutive years, she presented articles at the international scientific conference “Archibald Reiss Days.” She is the editor of the journal “Prosecutor’s Word,” published by the Association of Public Prosecutors of Serbia.

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# MODERN CHALLENGES OF OBSTETRIC VIOLENCE

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**Purpose:** Obstetric violence is presented as a violation of women's rights and their reproductive health, which ranges from verbal and physical abuse to the absence of informed consent and the denial of the right to choose. In Serbia, women experienced 16 types of violence during various medical treatments in gynecological and obstetric institutions. It is indicated that medical treatments such as Kristeller's procedure, or episiotomy, are often performed without the patient's consent, with her opposition, causing great suffering and pain, as well as serious negative consequences for health and life.

**Design/Methods/Approach:** Desk research studies are presented on cases from the international and domestic context that show similarities in the forms of obstetric violence that result in serious physical injuries, up to the death of the woman or baby. Recent domestic cases of the deaths of babies and mothers are presented. That these are not isolated cases is illustrated by the experiences of gynecological-obstetrical violence in Serbian maternity hospitals, which many women shared on forums, in the comments of media publications, and in discussion groups on social networks.

**Findings:** In cases of obstetric violence, there are elements of the Criminal Code definition of negligent treatment as the use of an unsuitable means, an unsuitable method of treatment, or failure to apply an appropriate hygiene measure, which causes a deterioration of the health condition, resulting in severe physical injuries or the death of the patient. Often, negligent treatment is confused with medical error, but there is a difference because a medical error does not hurt health, although the patient's rights established by law are certainly violated. Two things are the same – trauma, the consequences of which women still feel today, which was a direct consequence of verbal and physical violence by health workers and the silence of the authorities, except in cases of the Protector of Citizens and the Ministry of Health reactions.

**Originality/Value:** The necessity of empathy towards the patient and professionalism concerning the dignity of patients in these cases are indicated, as well as the need to avoid negative outcomes in the form of traumatizing the victims and their families. It is also recommended to break down the so-called "wall of silence" of wrongly understood professional solidarity among health workers as a way of obtaining evidence in official processes.

**Keywords:** reproductive health, obstetric violence, criminal offense of negligent treatment, gynecological-obstetrical institutions.

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Svetlana Janković, MA of science in defense, security, and protection, is a retired lieutenant colonel. She is a doctoral student at the Faculty of Engineering Management of Union Nikola Tesla University

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in Belgrade. She is the author of over 50 scientific articles and two works of a monographic nature. She is the winner of Anđelka Milić award for 2018. She is specially focused on the problems of gender equality in the armed forces, the position of women in the army, the Women Peace and Security agenda, the influence of feminist theory and activism on changes in public policies in the world and Serbia, issues of inclusive security, gender aspects of natural disasters, digital security, migration, discrimination against women and children, etc. She is currently the president of the Association Center for Encouraging Dialogue and Tolerance in Čačak.

# MANAGING EMOTIONS IN POLICE WORK: THE CASE OF TRAGIC EVENTS

**Mark Pogrebin, PhD<sup>1</sup>**

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**Stan Stojkovic, PhD**

University of Wisconsin-Milwaukee, USA

**Purpose:** To understand the complexities of emotional trauma on police officers after experiencing a life-changing event such as a shooting or difficult investigation or problematic encounter with a citizen or citizen group, we need to comprehend the types of mechanisms within police organization that may preclude an officer from recovering from a traumatic citizen encounter.

**Design Methods/Approach:** Based on interviews obtained from a sample of patrol officers working in four urban police departments, the study examined how police officers account for their handling of emotions in their work experiences involving tragic events.

**Findings:** Because of the norms to refrain from displays of emotion, police officers find few opportunities to deal directly with the pent-up feelings engendered by tragic events; consequently, the aftermaths of tragedies are rarely discussed in terms of the impact on officers involved. The police find themselves unable to reveal their feelings to fellow officers, much less discuss them, for fear of being viewed as inadequate and incapable of handling tragic situations.

**Originality/Value:** Notwithstanding the personal attributes of officers, such as years of experience as a police officer and the type of training provided to police officers, to mention a few, equally relevant and important considerations must be given to how police organize themselves and the organizational determinants of responses to police trauma. Most importantly, we discuss in this paper those structural components of police organizations, such as police supervision, organizational culture, and the role of police leadership, that can both assist and/or hinder officers who have suffered traumatic experiences because of doing police work. The paper will also provide recommendations to police administrators on how they can effectively manage police trauma, along with suggestions on how police structure can be modified to assist those officers who faced trauma because of their work situations.

**Keywords:** emotional trauma and police work, tragic events and police work, structural components of police trauma, police leadership and trauma.

## *About the authors*

**Mark Pogrebin** is a retired Professor Emeritus from the University of Colorado-Denver and the author of numerous articles and books on criminal justice and criminology over a 50-year period.

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# A CROSS-NATIONAL STUDY ON JUVENILE DELINQUENCY AND ITS RELATIONSHIPS WITH PEER DELINQUENCY, SELF-CONTROL, AND FAVORABLE ATTITUDES TOWARD VIOLENCE

**Myunghoon Roh, PhD<sup>1</sup>**

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**Diego Gomez-Baya, PhD**

University of Huelva, Spain

**Purpose:** Juvenile delinquency is a social problem in many countries, and its consequences in further life stages are dramatic. More cross-national studies are needed to reach evidence to guide program design to prevent and reduce this problem around the world. This study aimed to examine cross-nationally the role of peer delinquency in crime perpetration (both violent and property crimes) and the associations with self-control and attitudes towards violence.

**Design/Methods/Approach:** Data from the Second International Self-Reported Delinquency Study (ISRD-2), 2005–2007, was used. Samples from the Czech Republic, Germany, Norway, Spain, the United States, and Venezuela (n=14,928, 50.6% boys, aged 11–18) were selected. The study followed a cross-sectional design, and participants completed self-report measures in each country.

**Findings:** Some country differences were found. Males reported more delinquency, more favorable attitudes toward violence, less self-control skills, and more delinquent peers. The results indicated that peer delinquency, positive attitudes towards violence, and low self-control were related to more property and violent crimes perpetration. Attitudes and self-control mediated the relationship between peer delinquency and crime. Moreover, gender moderation was found, so that peer delinquency, attitudes, and self-control presented a strong effect on delinquency in the sample of boys. These results provide cross-national evidence of the variables associated with delinquency and may guide the design of prevention programs.

**Originality/Value:** This research discovered a moderate level of support for individual-level risk factors in juvenile delinquency within an international context. Furthermore, culture-universal effects on self-control, peer delinquency, and favorable attitudes toward violence should be investigated in the future.

**Keywords:** juvenile delinquency, cross-national study, property and violent crime.

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### *About the authors*

**Myunghoon Roh** has been an Assistant Professor in the Department of Criminal Justice and Criminology, formerly the Administration of Justice, since 2021. Before he came to Newport, he was an Assistant Professor of social sciences at Texas A&M University in San Antonio. He received his bachelor's degree in English from Hankuk University of Foreign Studies in Seoul, South Korea. He holds a Master of Public Administration from Brown University in Providence, RI, and a Ph.D. in Criminology and Justice Policy from Northeastern University in Boston, MA. His dissertation was titled *A Cross-National Study of Youth Offending: Toward an Integration of Individual and Macro Theory Crime*. His research interests include juvenile delinquency, comparative criminology, and criminology theory. His research has been published in *Violence and Victims*, *BMC Public Health*, and *The International Journal of Emergency Mental Health and Human Resilience*.

**Diego Gomez-Baya** is an Associate Professor at the Department of Social, Developmental, and Educational Psychology, at the University of Huelva (Spain). His research interests are the promotion of psychological well-being and healthy lifestyles in adolescence and youth, and the study of gender differences in risk and protective factors from a developmental and educational perspective. He leads the project "Positive Youth Development in Spanish Undergraduates: Analysis of Developmental Assets Related to Health, Psychological Well-Being and Social Contribution", and holds the Presidency of the Council for Childhood and Adolescence in Andalusia (Spain).



# EFFECT OF CONDITIONING COURSE ON AEROBIC ENDURANCE IN FEMALE STUDENTS OF THE UNIVERSITY OF CRIMINAL INVESTIGATION AND POLICE STUDIES

Goran Žigić, MSc<sup>1</sup>

Raša Dimitrijević, PhD

University of Criminal Investigation and Police Studies, Belgrade, Serbia

**Purpose:** The general aerobic endurance is considered an important component of physical fitness. In addition, aerobic endurance represents one of the most important physical abilities of police officers. The aim of the research was to determine the effect of the conditioning course on changes in aerobic endurance in female students of the University of Criminal Investigation and Police Studies.

**Design/Methods/Approach:** The sample of respondents consisted of 60 first-year students with an average age of 19.10 years. Cooper's 12-minute running test, expressed in meters (m), was used to assess the aerobic endurance of the respondents. Based on the results of the Cooper test, the maximum oxygen consumption –  $VO_{2\max}$  was calculated and expressed in milliliters of oxygen per kilogram of body weight per minute (ml/kg/min). The conditioning course consisted of 24 exercise sessions applied over 12 weeks. Initial and final testing was performed to determine the effect of the course. A student's t-test for independent samples was used to determine the significance of the differences between the initial and final measurements.

**Findings:** The results of descriptive statistics showed that the average value of the Cooper test at the initial testing was  $2083.08 \pm 220.68m$ , while  $VO_{2\max}$  was  $35.32 \pm 4.86ml/kg/min$ . The average value of the Cooper test at the final testing was  $2289.67 \pm 216.17m$ , while  $VO_{2\max}$  was  $39.90 \pm 4.83ml/kg/min$ . The results of the t-test showed that after the implemented course there was a statistically significant difference in the results of the Cooper test ( $p = 0.000$ ) and  $VO_{2\max}$  ( $p = 0.000$ ). In addition, the obtained results of the Cohen's effect sizes showed that the conditioning course influence can be classified in large values (Cooper:  $d = 0.95$ ;  $VO_{2\max}$ :  $d = 0.95$ ).

**Originality/Value:** Based on the obtained results, it can be concluded that the applied conditioning course had a significant impact on the improvement of the general aerobic endurance of female students.

**Keywords:** aerobic endurance, Cooper test, conditioning, female students.

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### *About the authors*

**Goran Žigić** graduated from the Faculty of Sports and Physical Education of the University in Belgrade in 2001. He defended his master's thesis at the same faculty in 2014 and received the academic title of Master of Science in the field of physical education and sports. In the previous period, he published more than 20 scientific works. His area of interest relates to the monitoring and improvement of the morphological status and physical abilities of students and police officers. In 2019, he was elected to the position of Skills Teacher at the University of Criminal Investigation and Police Studies in Belgrade.

**Raša Dimitrijević**, PhD, completed his bachelor's degree studies at the Faculty of Sports and Physical Education of the University in Belgrade. At the same faculty, he received his PhD degree in 2017. He was elected to the title of Scientific Associate by the Ministry of Education, Science and Technological Development of the Republic of Serbia in 2018. In the previous scientific work, he has published over 60 reference units. A field of his research interests includes the monitoring and development of motor skills and morphological characteristics in the population of police officers and police students. He currently works as a Skills Teacher at the University of Criminal Investigation and Police Studies in Belgrade.

# SUSPECT INTERROGATION THROUGH THE EYES OF CONDEMNED – ARE THE MENDEZ RULES NECESSARY FOR POLISH INVESTIGATORS?

**Olga Mazur, PhD<sup>1</sup>**

Krakow Detention Center, Poland

**Purpose:** In the year 2021, the Polish Ombudsman, in a letter to the Police Chief Commander in Poland, recommended disseminating the ideas contained in the “Principles on Effective Interviewing for Investigations and Information Gathering” and including them in the training program for police officers. He also requested the development of special national guidelines on the manner of conducting police interrogations, which will precisely define the standards for conducting such activities, their duration, the method of documentation and registration, and procedural safeguards for the person being interrogated. In response to this request, the Police Chief Commander said that after analyzing the Principles, he concluded that everything contained in them already has its equivalent in Polish regulations, both generally applicable and internal. Therefore, he sees no reason to develop an additional act. But is it true that Polish investigators do not need the Mendez Principles?

**Design/Methods/Approach:** The author wanted to present the results of her survey, which included convicts serving prison sentences. The research focused on how Polish investigators – police officers and prosecutors – conduct interrogations, identifying which strategies they resort to when conducting this activity and which strategies, in the opinion of the interrogators, should be unacceptable.

The convicts were surveyed twice, 11 years apart. The first survey took place in four closed-type penitentiaries and involved 185 men and 41 women. The average length of the sentence imposed on the respondents was 7.5 years for men and 2 years and 4 months for women, respectively. The second survey was also in the closed-type penitentiary and involved 150 men and 31 women. The average length of the sentence imposed on them was 15 years for men and 1 year and 9 months for women, respectively.

**Findings:** It will be shown how the interrogators’ approach to the interrogated changed, what strategies are used, and whether convicts evaluate prosecutors or police officers better. The author will point out significant changes in the way suspects are interrogated in Poland and answer the question of whether this is a change for the better and whether the Mendez Principles are needed by Polish investigators.

An analysis of the totality of respondents’ answers indicates that the behavior of interrogators toward interrogators over the decade separating the surveys has changed, and in favor. This is evident from the opinions of convicts expressed in their responses to questions about the frequency with which they resort to such strategies of using physical force or shouting or using false evidence during interrogation.

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In 2009, more than 85% of respondents (male) indicated that interrogators often or very often shout at the interrogator – in 2020, one of these two responses was already marked by  $\frac{3}{4}$  of respondents. A similarly high response rate was given to the statement that “interrogators plant false evidence of guilt in an effort to accuse the suspect.” Nearly 80% of respondents said this happens often or very often. In the second edition, such indications were less than 60%. Notably, the number of respondents who indicated that interrogators threaten suspects with force (from 80% in 2009 to 58.34% in 2020) and actually use force (from 81.09% in 2009 to 62.84% in 2020) dropped significantly.

**Originality/Value:** The survey is the first attempt to answer the question of how Polish investigators interrogate. It is also part of a larger research project that also included a survey of prosecutors and police officers. The results of these analyses are the first comprehensive study of the practicalities of how Polish investigators interrogate suspects since the 1970s. They also prove that over time police officers use different strategies and resort to different methods, although the way they are trained has not changed in any way.

**Keywords:** interrogation, methods of interrogating, suspect, police interrogation.

### *About the author*

**Olga Mazur** is a doctor of legal sciences who graduated from the Faculty of Law and Administration of the Jagiellonian University in Krakow. She completed her postgraduate studies in evidence law at the Jagiellonian University in cooperation with the Institute of Forensic Expertise in Krakow. She has been professionally associated with the administration of justice for more than a dozen years. She works as an officer of the Prison Service and is the author of publications on issues relating to the principles of suspect interrogation and miscarriages of justice.

# POSSIBLE ADVANTAGES OF SEQUENTIAL LINEUP

**Bence Mészáros, PhD<sup>1</sup>**

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**Purpose:** The lineup is an important and often used investigative method to identify suspects (and other relevant persons or objects) in criminal cases. There are two ways to perform the lineup in a criminal investigation: the sequential lineup shows lineup members to the witness one at a time and asks the witness to make a decision on each one before showing the next one, whereas the traditional simultaneous lineup shows the witness all lineup members at once. Several researches conducted abroad in the past decades found that sequential presentation led to significantly fewer eyewitness misidentifications than simultaneous presentation. This phenomenon is called the “sequential superiority effect”. Main purpose of the paper is to introduce the sequential superiority effect and its criticism.

**Design/Methods/Approach:** In this paper, the author introduced the scientific debate about the sequential superiority effect, based on foreign experiments and studies, and, from the aspect of criminalistics, outlined the practical and tactical advantages of the sequential method.

**Findings:** The interpretation of the sequential superiority effect has been challenged by the diagnostic feature-detection theory (DFT) of lineup identification, which prefers simultaneous lineups over sequential lineups. Still, the sequential lineup method seems more suitable to avoid eyewitness misidentifications and is inevitable in some cases out of practical reasons, therefore it shall be allowed by law in every country as an alternative to simultaneous lineup.

**Originality/Value:** In this paper, the author introduced the Hungarian regulation on lineups, which currently does not allow the use of the sequential method. The author proposed a possible regulation for the sequential lineup, which can be adopted by any country.

**Keywords:** sequential lineup, simultaneous lineup, eyewitness identification.

## *About the author*

**Bence Mészáros, PhD**, is an associate professor at the Ludovika University of Public Service, Faculty of Law Enforcement (Budapest, Hungary). He is head of the Department of Criminalistic Tactics and deputy head of the Department of Forensic Sciences. He is a criminal procedure lawyer and a teacher in criminalistics who gained his PhD in 2011 in undercover policing. He has been a colonel of Hungarian National Police since 2015.

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# CONTEMPORARY INTERNATIONAL ASPECTS OF SOLVING PSYCHOLOGICAL VIOLENCE

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**Purpose:** The aim of the research on this issue, which is set as a hypothesis in the title of the paper, represents an area that is not considered enough in domestic scientific circles, and therefore the question arises whether there is adequate legislative regulation of this area. Keeping in mind the daily obligations and stressful circumstances of every person due to personal circumstances, the topic is always current, although it cannot be considered a pressing issue at the moment.

**Design/Methods/Approach:** Analysis of international legislative regulations that are important for the field of research and their comparative consideration, as well as the deductive method, will certainly be used. Bearing in mind the raw nature of this research topic, the approach will certainly be critically perceived and not just based on presentation and hypothetical determination.

**Findings:** The conclusions of the research will be formulated at the end of this paper. Because of everything presented so far, it is difficult to list them in a concise list, but they will certainly represent not only the author's position but also a presentation of some of the already partially stated positions of foreign authors who dealt with this field.

**Originality/Value:** Psychological violence is criminalized as an independent form by the Global Health Alliances. This form of violence is often directly related to family violence, that is, violence in partner relationships, but it must certainly be taken into account that this type of violence can exist in all "places" where there is any interpersonal relationship, regardless of whether it is the tête-à-tête or online correspondence and cooperation. Although this is primarily a non-legal issue, legislative protection must undoubtedly exist, be adequate, and, of course, there must be general and special prevention. Bearing in mind the complexity of this issue and the fact that certain actions that can be characterized as psychological violence have different visible and hidden consequences for the victim, i.e., in the criminological sense, the victim, it is clear that not all aspects of psychological violence can be considered, but with more conciseness and precision will be devoted to an adequate discharge when considering the mentioned problematics of this research.

**Keywords:** psychological violence, criminal responsibility, legislative issues, international aspects, international law.

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*About the author*

**Nenad Bingulac**, PhD, is an Academician of the International Academy of Sciences and Arts and an associate professor at the Faculty of Law for Commerce and Judiciary, with 15 years of active scientific and academic experience in the field of criminal and misdemeanor law, which is not only based on theory but also on practice through many years of work in the High Court in Novi Sad as a judicial associate.



# EMPOWERING AUTONOMOUS VEHICLES WITH 5G: A PATH TO SEAMLESS MOBILITY

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**Purpose:** The purpose of this research paper is to explore the feasibility and benefits of leveraging 5G connectivity to empower autonomous vehicles (AVs). The paper focuses on three key areas:

- Remote driving applications: Investigating the potential of 5G networks to enable remote control and operation of AVs.
- Vehicle-to-everything (V2X) communication: Examining how 5G can enhance communication between AVs, infrastructure, and other road users to improve safety and efficiency.
- Multi-radio 5G architectures: Analyzing the role of advanced 5G architectures that utilize multiple radio access technologies to support the diverse requirements of AV applications.

By examining the convergence of 5G and AV technologies, the research aims to contribute to the development of next generation connected and autonomous transportation systems.

**Design/Methods/Approach:** To achieve the stated purpose, the research paper will employ the following design, methods, and approach: literature review, technical analysis, case studies, stakeholder interviews.

**Findings:** The research paper explores the feasibility and benefits of leveraging 5G connectivity to empower autonomous vehicles (AVs), focusing on three key areas: remote driving applications, vehicle-to-everything (V2X) communication, and multi-radio 5G architectures.

**Originality/Value:** This research paper provides a comprehensive and in-depth exploration of the convergence of 5G and autonomous vehicle technologies, contributing to the development of next-generation connected and autonomous transportation systems.

**Keywords:** autonomous vehicle, fifth-generation technology standard for cellular networks, vehicle-to-everything, vehicle-to-vehicle.

## *About the authors*

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# A SYSTEMATIC LITERATURE REVIEW ON THE USE OF ALGORITHMS AND AI FOR CRIME-FIGHTING

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**Purpose:** AI research is a rapidly growing field, and technology that uses AI is entering more and more parts of society, including law enforcement. The study looks at the role of artificial intelligence in law enforcement.

**Methods:** In this study, the author summarises and synthesises the claims and findings from previous literature, in particular relating to the possibilities and risks associated with using algorithms and artificial intelligence in police work. The method of study is a systematic literature review, using results from searches in the Scopus academic research database. The keywords used are “law enforcement,” “policing,” “crime prevention,” “crime reduction,” and “surveillance,” in combination with “algorithm” or “artificial intelligence”.

**Findings:** The results show that the use of AI has great potential to facilitate law enforcement, enabling the use of facial recognition, crime predictions, tracking of individuals, etc. Most of the described use cases involve either the analysis of images, behavior or text, or a combination of these. At the same time, the technology also constitutes a number of ethical risks as it can lead to discrimination, ambiguity regarding where the responsibility for the outcome of the AI programs lies, mass surveillance, and in particular, the infringing of privacy.

**Value:** The topicality of the subject is unquestionable, as artificial intelligence is becoming more and more present in our time. Further research on this topic is expected in the near future, as all law enforcement agencies and society as a whole have a well-understood common interest in combating crime more effectively, in which AI will play a key role.

**Keywords:** artificial intelligence, algorithms, law enforcement, policing, surveillance, crime prevention, ethics.

## *About the author*

**Ágota Németh** is a lecturer at the Department of Criminal Intelligence, Economic and Cybercrime at the Faculty of Law and Justice of the National University of Public Service. She teaches criminal analysis and risk analysis. Her research interests include criminal analysis and organised crime. She is a PhD student at the Doctoral School of Law Enforcement, writing her thesis on criminal analysis support for drug crime detection.

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# ASSESSMENT OF ADHESION STRENGTH OF THIN NICKEL COATINGS ON DIFFERENT SUBSTRATES BY MICROINDENTATION AND BIDIRECTIONAL BEND TESTS

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**Purpose:** Thin coatings of various materials are often used in engineering applications to improve corrosion resistance, as mechanical protection against wear, to change electrical resistance, or to produce microelectronic devices. Key technological trends lead to the further miniaturization of mechanical, optical, and electronic products and devices. The production of miniature devices (MEMS and NEMS sensors, detectors, actuators) cannot be imagined without improved and advanced technologies for obtaining thin coatings from different materials. When materials form an integrated system, their individual properties affect the integrity of the entire so-called composite system. Microhardness and adhesion tests are very important for the characterization and eventual failure analysis of composite systems.

**Design/Methods/Approach:** Composite systems of monolayer nickel coatings on brass and stainless-steel foil substrates were obtained by ordinary and ultrasound-assisted electrochemical deposition. By changing the current density and using ultrasonic mixing of the electrolyte, the microstructure and properties of the coatings were changed. The composite systems were tested using the Vickers microindentation method. For each system, the microhardness was measured, and the critical reduced depth was calculated as a quantitative indicator of adhesion quality. A tool was created for testing the adhesion of coatings using the bidirectional bending method. The critical number of bending cycles until material failure, i.e., adhesion loosening, is also determined. The measurement results of both methods are compared and systematized. A relation was made between adhesion quality criteria, i.e., the critical reduced depth and the critical number of cycles to failure.

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**Findings:** The adhesion of the coatings is better the higher the critical number of bending cycles until failure and the higher the value of the critical reduced depth. Based on their values, it can be concluded that the adhesion of nickel coatings on brass is better than that on steel foils. Adhesion of coatings obtained with the assistance of ultrasound is better compared to ordinary electrochemical deposition. Coating thickness and adhesion quality are inversely related, thinner coatings have better adhesion to the substrate.

**Originality/Value:** In scientific research, great efforts are still being made to form quantitative criteria for evaluating the quality of adhesion of films to substrates. Based on the measurements made by two different methods, a quantitative relationship between the adhesion criteria defined by the methods was established.

**Keywords:** adhesion, ultrasound-assisted nickel electrodeposition, Vickers microindentation, bidirectional bending test, the critical cycle number, the critical reduced depth.

### *About the authors*

**Sara Rethas**, BSc, earned her bachelor's degree in technology engineering from the University of Criminal Investigation and Police Studies (UCIPS), Faculty of Forensic Sciences and Engineering. She graduated with a grade average of 10. She won the "Student of the Generation" award for students who graduated in 2023 from the University of Criminal Investigation and Police Studies. She won three awards as student of the year in 2020, 2021, and 2022. In the academic year 2023/2024, she enrolled in master's studies at the same university. She has participated in many events promoting forensics and her university. Her scientific interests include forensic material analysis, forensic ballistics, and forensic traceology.

**Nikola Mitrović**, MSc, earned his master's degree in mechanical engineering in 2022 at the Faculty of Mechanical Engineering, University of Belgrade, at the Department of Process Engineering and Environmental Protection. He is employed at the University of Criminal Investigation and Police Studies as a teaching assistant. In the academic year 2022/2023, he enrolled in doctoral studies at the Faculty of Forensic Sciences and Engineering of the University of Criminal Investigation and Police Studies. His professional interests lie in the field of forensic engineering, particularly in the field of activities in emergencies, explosions, and fires.

**Sara Petković** is a final-year student at the University of Criminal Investigation and Police Studies. She is currently an associate in teaching in five courses: Ballistic Engineering, Forensic Methods in Criminalistics, Thermographic Tests, Technological Tests of Tools, and Tools and Technical-Technological Characterization of Materials, at the Faculty of Forensic Sciences and Engineering of the University of Criminal Investigation and Police Studies. She has participated in numerous manifestations promoting forensics and her university. She cooperated with the National Center for Criminal Forensics on different occasions. Her interests include forensic ballistics, forensic material analysis, and blood splatter analysis in forensic traceology.

**Ivana Mladenović**, PhD, focuses on experimental and theoretical research in the fields of material science and composite structures. Her main research fields are electrochemical deposition and characterization of metallic composite structures, with a particular focus on metallic laminates and thin solid films and their structural-morphological and mechanical characterization. Recently, she has been involved in the optimization of synthesis parameters for electrodeposition using various optimization software tools and the prediction of material mechanical responses via artificial neural networks.



**Vesna Radojević**, PhD, is a Full Professor at the Faculty of Technology and Metallurgy (FTM). She received a PhD degree in materials science from the University of Belgrade, Serbia, in 2000. Since 1987, she has been with the Department of Construction and Advanced Materials. She is the author of two books, more than 60 SCI articles, and more than 35 technical solutions. Her research interests include the processing and characterization of functional composite materials (biocomposites, dental composites, construction composites, optoelectronic composites, materials for energy storage) at the micro to the nano level. She has been awarded several silver plaques for technological innovations. She is currently participating in or has previously participated in four international and twelve national scientific projects.

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# FIXING LATENT FINGERPRINTS DEVELOPED BY IODINE FUMING: A NOVEL METHOD

**Om Prakash Jasuja, PhD<sup>1</sup>**

**Pawan Mandal, PhD Candidate**

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**Purpose:** When properly analyzed, latent fingerprints at the scene of occurrence are considered infallible evidence, but before analysis, it is crucial to visualize them in a way that facilitates their proper scientific analysis. A number of factors determine their visualization, such as the type of the surface, the time lapse between the impinging of the prints and their visualization, the method used to visualize the same, etc. A good number of methods are available to visualize the latent prints, including iodine fuming. A very simple method does not produce permanent prints, so it is necessary to either photograph them quickly or develop them repeatedly. The present work proposes a novel and simple method to address this issue, observing that prints developed using this method remain permanent for an extended period.

**Design/Methods/Approach:** It was observed that phase transfer catalyst (PTC) reacts with iodine to give triiodide ions, which make the developed print permanent. PTC was applied with the help of a fine brush on the suspected area having latent fingerprints and subsequently fumed with iodine fumes. Prints could be seen in dark brown color and were permanent.

**Findings:** The above-mentioned method was used to develop the latent prints on various porous and non-porous surfaces like paper, cardboard, wood, plastic sheets, glass, polythene sheets, gloves, and polystyrene sheets. The latent fingerprints of very high quality could be seen, which were permanent for more than a week.

**Originality/Value:** At present, various methods are suggested to make iodine prints permanent, but they have their own limitations, like not being a simple method to use, not being versatile, resulting in background coloration, etc. The proposed method is not only a simple and non-destructive one but also can be used for all types of surfaces. Further studies on various aspects are being undertaken.

**Keywords:** latent, fingerprints, personal identification, iodine fuming method, non-destructive.

## *About the authors*

Prof. **Om Prakash Jasuja**, PhD, has been in the field of forensic science since 1980 and a professor of forensic science since 2003. He is a researcher in the field of fingerprints and questioned document examination and has more than 100 publications in leading national and international journals of repute. He has been honored by various national and international forums and got awards for his research presentations. He has supervised a large number of master's and 8 doctoral students.

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# ANTISEMITISM TODAY

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**Purpose:** Antisemitism of our days is escalating in the shadow of the current Israeli-Palestinian conflict. But before Hamas's terrorist attack on Israel and the Israeli armed response that is still devastating Gaza and leaving thousands of Palestinians dead, a rise in antisemitism was observed across Europe. In France, the rise of antisemitism is linked to the 2017 election of Emmanuel Macron as president, who was believed to be a protégé of Jewish banking circles. In Germany, a new wave of antisemitism was initiated in 2020 by anti-pandemic restrictive measures and continued during the first months of 2024 together with other types of political extremism.

**Design/Methods/Approach:** Desk analysis of international documents and ECHR decisions condemning antisemitism is presented. Analyzed are internet sources, media, university, and government websites, which reveal dehumanizing, rage-filled rhetoric erupting and echoing through the streets of major cities, college campuses, and small towns around the world. The international legal response against antisemitism is presented, e.g., the Stockholm Declaration from 2000, the founding document of the International Holocaust Remembrance Alliance, which states that humanity is still scarred by antisemitism and xenophobia, which is why the international community has a responsibility to fight against these evils.

**Findings:** Behind current antisemitism is a long history of criminal acts, including verbal abuse, workplace discrimination, violence, and propaganda that spreads stereotypes and lies about Jews, depicting Jews who hiddenly strive "to rule the world". Current antisemitism is based mostly on stereotypes and gaps in knowledge, e.g., that antisemitism practically disappeared after the Second World War.

**Originality/Value:** The conclusion helps to identify what the connections are with current forms of violent political extremism and to differentiate what is and what is not a criminal act of antisemitism, including anti-Israelism, anti-Zionism, anti-Judaism, and hatred of one's own country's Jewish citizens, thus enabling the practical application of public communications and education, and sanctioning of antisemitic acts.

**Keywords:** current antisemitism, antisemitism as crime, Gaza strip war, Stockholm declaration, ECHR against antisemitism.

## *About the author*

Zorica Mršević, PhD, is a retired principal scientific fellow of the Institute of Social Sciences. She is the author of 24 books and over 400 scientific papers in the fields of violence theory, gender equality, human rights of women and other marginalized groups, and criminology. She was the deputy of the Protector of Citizens of the Republic of Serbia for gender equality. She taught Comparative Feminist Jurisprudence at the University of Iowa, as well as Theory of Violence and Women's Human Rights at the Central European University in Budapest for three years. She now teaches Gender Studies and Phenomenology of Violence at the Faculty of European Legal and Political Studies.

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# IMPACT OF STRATEGIC MANAGEMENT ON THE EFFICIENCY OF INVESTIGATING AND PROVING MODERN CRIMES

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**Purpose:** The purpose of this paper is to clarify the influence of strategic management on the effectiveness of modern crime investigation and proof processes. It aims to provide an understanding of how strategic management can enhance the coordination and performance of various institutions involved in combating contemporary criminal activities. By identifying key elements of successful strategies and offering practical recommendations, the paper seeks to contribute to both academic literature and practical improvements.

**Design/Methods/Approach:** This paper examines the impact of strategic management, as a new social technology, on the efficiency of investigating and proving modern forms of crime. A multidisciplinary approach is used, encompassing legal, administrative, criminological, informational, and security sciences. Strategic documents and practices of relevant institutions are analyzed, and the methodological framework includes a qualitative analysis of survey questionnaires with experts in the fields of management, forensics, police, and security.

**Findings:** The results of the study suggest that the appropriate application of strategic management significantly improves coordination between various organizations and institutions involved in investigating and proving crimes. Key components of successful strategies include clearly defined goals, resource allocation, continuous training, personnel policy, and the use of modern technologies for data collection and analysis. The efficiency of investigative processes is further enhanced through the integration of informatics and forensics, enabling faster and more precise identification of evidence.

**Originality/Value:** This paper contributes to contemporary literature by providing an analysis of the impact of strategic management on the investigation and proving of modern forms of crime, an area that has not been sufficiently researched. The results indicate the need for further improvements in the strategic approach in this field, particularly due to rapid technological changes and increasingly complex forms of crime. Additionally, the paper offers practical recommendations for improving existing strategies, which may be useful in terms of enhancing the legislative framework.

**Keywords:** strategic management, law, investigation efficiency, modern crimes, forensics, criminology, security, information technology.

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*About the author*

**Mihajlo Rabrenović**, PhD, is committed to research in the fields of strategic management and administrative law, integrating theoretical and practical approaches in both public and private sectors. He graduated from the University of Belgrade Faculty of Law with a GPA of 9.74 and completed postgraduate studies in strategic management in the public sector. He also specialized at the LSE, the University of Illinois, etc. He has extensively published in high-ranking journals and authored monographs on strategic management, the public sector, and healthcare reform. He is a professor, consultant, and active contributor to numerous academic and professional organizations.



# TECHNOLOGY'S IMPACT ON POLICE WORK: SOCIO-POLITICAL VIEW

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**Purpose:** Technology is the driving force of changes in today's world. Police embrace innovations to keep up with new forms of crime and maintain order more efficiently. In this paper, the author views technology as a crucial tool in police work. The purpose of the paper is to present the socio-political view of technology's impact on police work from two aspects: first, the implementation of technology as part of the improvement of police work and second, the implementation of technology as an inevitable step due to the emergence of new forms of crime.

**Design/Methods/Approach:** This study starts with a review and analysis of recent domestic and foreign scholarly literature. Besides the content analysis method, the author will apply induction and deduction as well as synthesis to provide conclusions based on collected information about the researched topic.

**Findings:** The main findings of the paper are the identification of challenges and influences of technology on the police profession from a socio-political view. The author will point out the technology impact on police work from two aspects mentioned above.

**Originality/Value:** The originality of this paper is its focus on technology's impact on police work from a socio-political view. Many papers deal with technology in police from aspects of practice and efficiency. There seems to be a lack of papers that research this topic from the point of view of sociology and political science. This paper provides a deeper understanding of technology's impact on community and police. Besides scientific contribution, the value of this paper is to encourage those who are making decisions on the implementation and regulation of technology in police work to consider all the processes from a wider aspect.

**Keywords:** police, socio-political view, technology.

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