
Model of Crime Scene Investigation for the Crimes Committed with the Use of Explosive Substances

Ivana Bjelovuk, Aleksandar Bošković, Dejan Bošković

University of Criminal Investigation and Police Studies, Belgrade, Serbia

Article Information*

Review Article • UDC: 343.982:343.344

Volume: 22, Issue: 1, pages: 112–123

Received: January 15, 2025 • Accepted: April 11, 2025

<https://doi.org/10.51738/kpolisa.2025.1r.008>

Author Note

Ivana Bjelovuk  <https://orcid.org/0000-0002-9370-8758>

Aleksandar Bošković  <https://orcid.org/0000-0001-6108-6184>

Dejan Bošković  <https://orcid.org/0009-0007-9996-4828>

We have no known conflict of interest to disclose.

Corresponding author: Ivana Bjelovuk

E-mail: ivana.bjelovuk@kpu.edu.rs

* Cite (APA): Bjelovuk, I., Bošković, A., & Bošković, D. (2025). Model of Crime Scene Investigation for the Crimes Committed with the Use of Explosive Substances. *Kultura polisa*, 22(1), 112–123, <https://doi.org/10.51738/kpolisa.2025.1r.008>



© 2025 by the authors. This article is an open-access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

Model of Crime Scene Investigation for the Crimes Committed with the Use of Explosive Substances

Abstract

Explosive substances as dangerous substances are used to commit crimes both with the intention and negligence. With regards to the properties of the explosive substance its use may cause very serious consequences for the life and health of people and the environment. Problems that may arise are certain difficulties in defining the scene of the crime where an investigation should be carried out, because the evidence may be scattered over a large area and destroyed and covered too. This paper discusses the classification and analysis of crimes committed with the use of explosive substances provided in the Criminal Law of the Republic of Serbia, as well as the criminal procedural characteristics of the crime scene investigation according to the Criminal Procedure Code of the Republic of Serbia. Special attention was paid to the criminal aspects of crime scene investigation in such cases with a focus on finding, preserving and significance of traces of explosive substances and other physical evidences with some empirical data – the number of crimes committed with/without explosions and verdicts, too. The aim of the research is solving the problem of the organisation of crime scene investigation. The result of the research is recommended model for crime scene investigation with the use of explosive substances as an attempt to improve the crime scene investigation. In order to justify the research, the statistical representation of the number of criminal acts with the use of explosive substances in the Republic of Serbia from 2017 till 2021 is presented.

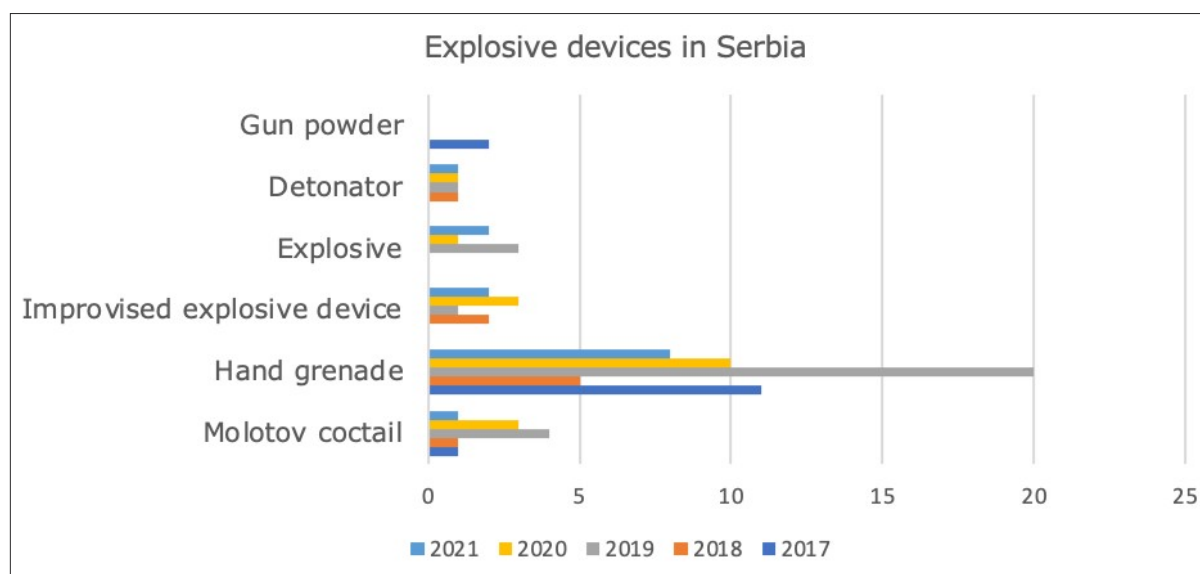
Key words: explosive substances, criminal act, crime scene investigation, physical evidence, model.

Introduction

Explosive substances are also known as energetic (Beveridge, 2017, p.1) and dangerous (Radić, 2011, p.17) materials. They can lead to chemical destruction with the release of hot gaseous products under high pressure and the use of these substances for crimes may cause serious consequences for the health and lives of people, material goods, the environment and fear and anxiety among citizens also. When handling explosive substances many risks are present, such as particularly typical risks of the emergence of technical and technological accidents. Crime scene investigation (CSI) for crimes committed with the use of explosive substances is specific comparing to investigations in other crimes. In some situations, it is quite clear that it is a crime, while in others (e.g. technical and technological accidents caused by any explosive substance) it will not be clear whether it is a crime or that offence was committed intentionally or not (Bjelovuk et al, 2013). In the professional literature one can find different classifications of explosive substances (Korajlić, 2009, p.25; Kumar et al, 2016; Beveridge, 2017, p.2). The causes of an explosion can be intentional (the perpetrator knowingly uses explosive substances, but should first come into possession of certain explosive substance) and accidental (often related to disrespect of regulation regarding the production, distribution, transportation and storage of explosive substances).

When responding to a call to the explosion scene, the investigator is required to have a working knowledge of a diverse set of science disciplines such as criminalistics, chemistry and engineering

Figure 1. The number of explosive devices used in Serbia in the period 2017 till 2021 (Ministry of Interior of the Republic of Serbia, 2022).



(Thurman, 2017). In support of the justification of the research, the number of explosive devices used in the Republic of Serbia in the period from 2017 till 2021 is given.

It is obvious from the diagram (Fig.1) that the explosive substances are used in the observed period in the Republic of Serbia as means of committing various criminal acts, namely gunpowder, detonators, explosives, improvised explosive devices, hand grenades and Molotov cocktails. The hand grenade was used the most.

Classification of crimes committed with the use of explosive substances and criminal procedural aspects of crime scene investigation

Explosive substances are not always mentioned in the description of crimes as means of their committing. In the Criminal Code of the Republic of Serbia (Official Gazette of the Republic of Serbia) such crimes can be systematized in three groups:

- Crimes committed only with the use of explosive or some other dangerous substance without their activation (there is no explosion - illegal manufacturing, possession, carrying and transport of weapons and explosive substances, intake of dangerous substances to Serbia and illegal alteration, disposal and storage of hazardous substances, etc.);
- Crimes committed with the activation of explosive or other hazardous substances as means of committing (terrorism, illegal fishing, causing general danger, etc.);
- Crimes that in their description do not contain specific means of committing, but can be committed with the use of explosive substances. There is an explosion (murder, aggravated theft, destruction and damage of public objects, terrorism, etc.).

The classification of crimes can be committed with explosive substances, points out to the ways and means of committing, as well as to the fact that certain offences can be made without the explosion, while during the committing of some other crimes, explosion is a must. Within the five years period 2008–

2012 in Serbia the number of registered crimes from the first group was almost double than the number from the second group, and in the Republika Srpska (entity in Bosnia and Herzegovina) that number was less than two thirds, while the number of these crimes comparing with other crimes in Serbia was only 0,87%, while in Republika Srpska that ratio was 1,08%. In the time of committing of these crimes the ratio of unknown perpetrators was 55,9% (Ministry of Interior of the Republic of Serbia and Ministry of Interior of the Republika Srpska, Bosnia and Herzegovina). This entity was chosen because there was a war in that area at the end of the 20th century, so there is a high probability that some explosive substances remained in illegal possession.

When it comes to the act of committing of some of these crimes judicial practice has different opinions, as illustrated in the following judgment of the Appellate Court in Novi Sad (The verdict of Appellate Court in Novi Sad in Republic of Serbia, Kž.1 2973/11 from Oct. 19th 2011) in relation to the offence of unauthorized production, possession, carrying and trafficking of weapons and explosive substances from the Article 348 of the Criminal Law: "The subject of the crime is not determined with the performance of that crime, in a sense, that it's just a weapon that was illegally acquired, produced, sold or kept, but the subject of that crime is firearm, its parts, ammunition and explosive substance in general, so when the defendant illegally kept the ammunition without permission from the authorities, that is what is considered a crime with all its characteristics within the actions of the defendant."

Reviewing the criminal procedural aspects of CSI in the Republic of Serbia, it should be noted that the legal basis for the performance of a CSI as evidentiary action is in Article 133 of the Criminal Procedure Code (Official Gazette of the Republic of Serbia) which stipulates that the investigation is conducted when for the clarification of fact in the proceedings it is necessary to have direct insight into the matter by an authority conducting the proceedings, while other material and formal conditions are not predicted. Procedural provisions do not predict for which criminal offences CSI should be performed. Also, the degree of their importance, the type of sanctions, severity of the prison sentence in accordance with the type of crime are not determined (Bošković & Kesić, 2020). Accordingly, CSI should be performed for all crimes in which at the area one can find evidences, identify specific facts and circumstances relevant for the clarification of the crime, the detection of the perpetrator and the securing of evidence (Bošković, 2013), which includes the crimes committed with the explosive substances.

The question is who is responsible for the CSI, i.e. whether the investigation is made by a public prosecutor, police or court. In accordance with the provision from the Article 2, paragraph 1, point 15 of the Criminal Procedure Code (Official Gazette of the Republic of Serbia) that prescribes that the authority of the proceedings is a public prosecutor, the court or other state body before which the proceedings are being conducted, it can be concluded that in the preliminary investigation both public prosecutor and police are authorized for the CSI regardless of the severity of the crime. On the other hand, in investigation phase primary person for CSI is a competent public prosecutor because he leads the investigation, but in most cases, he entrusts CSI to the police because of their expertise, equipment and competency. The authorized police officer shall immediately notify a public prosecutor about the need for CSI bearing in mind that Serbia has introduced prosecutorial investigation, but we can also notice that there is no legal impediment for the police to perform a CSI independently and to immediately notify a public prosecutor (Bošković & Kesić, 2020). The body in charge for a CSI will typically seek help from a professional person

from forensics, traffic, medical or other professions. Engaged professional person shall, if necessary, do the finding, securing, describing of evidences, take measurements, sketches, photographs and the necessary samples for analysis or gather other data.

When it comes to the subject of the CSI Criminal Procedure Code of the Republic of Serbia introduced the division of forensic examination of persons, items and places. In accordance with Article 134 of the Criminal Procedure Code (Official Gazette of the Republic of Serbia) envisaged when a forensic examination can be made on a person, whereby a distinction is made whether the investigation is made on a defendant or on some other person. Thus, it is predicted that the investigation of the defendant can be made without his consent if it is necessary to determine the facts relevant to the proceedings, while the investigation of other persons, without their consent, can be made only if it has to be established whether their bodies bear certain trace or consequence of a crime. If during the examination of a person it is determined that there are certain biological evidences or certain physical injuries, it is for sure that under the fulfilment of the conditions set by the law, it may be order to take biological samples for forensic genetic analysis. In addition to people, the subject of the CSI can be movable and immovable assets of the defendant or other persons and also the Code prescribes the investigation of the scene.

Just for comparison, in the US of America gathering of evidence from the crime scene comes down to two questions: first, the question of the permissibility of entering into certain areas in order to search the place where the offence took place and secondly, securing evidence and handling them in order for them to be presented in court proceedings (Kesić, 2014). If the crime is committed in a public place or in a public facility, authorized officers do not need to have special authorization to enter into such areas. However, when it comes to private facilities authorized officers enter such facilities usually based on the consent of the person who controls those facilities or on their own initiative if there is urgency of action, and in other circumstances on the basis of a court order (Gardner & Anderson, 2004).

The authority in charge for the proceedings is authorized to make a record on performed CSI that must be in narrative form containing facts from a crime with a special focus on the found evidences, given that the found condition is documented also with the photo-documentation, sketch, situation plan and the report of the forensic examination of the scene, which is stated in the minutes of the investigation to which these documentation are attached to. In relation to the obligation of the authority in charge of the proceeding to take photographs of the traces and items during the CSI, it is interesting to point out the standpoint of the judicial practice in the Republic of Serbia according to which "the crime scene records, despite the lack of photos, is the evidence on which judicial decision can be based, so it cannot be excluded as evidence" (The verdict of the District Court in Niš, KŽ. 774/07 from Sept. 14th 2009). Specifics of crime scene investigation in crimes committed with the use of explosive substances – organizational model

After securing the scene that must be timely, professional and complete, the next thing is to perform a CSI and to assess the risk of new explosions, to determine the boundaries of the scene, to remove and evacuate citizens and to make records of eyewitnesses in order to collect information. The adequacy of the risk assessment from new explosions depends on expert knowledge, training, and equipment of the investigating team. It is useful to have unmanned aircrafts, self-propelled robot vehicles and arms, the explosive and metal detectors, police dogs trained to detect explosives and special protective equipment. CSI is a set of complex activities which include an immediate review of material objects and

their connection with the objective to find evidences of a crime and to clarify other important circumstances and by the person conducting the investigation (Žarković et al, 2012). Expert team should immediately perform a visual inspection of the scene to detect evidences and their interaction. Visual inspection of the scene enables contemplative reconstruction of the event, as well as to make assumptions about possible locations of evidences in order to avoid their destruction. CSI involves the collection and processing of evidences that are being sent to the appropriate forensic analysis based on which one can come up to the level of grounds for suspicion that is sufficient to file criminal charges against suspects. When collecting evidences, it is very important to establish a forensic chain and to respect the international standards that regulate the behaviour at the scene in general, while for the forensic analysis of evidences it is important to perform in an accredited laboratory according to the ISO17025.

The entrance to the crime scene is not allowed for disorganized groups, but first the entrance should be enabled to those members of the investigation team who are specially trained. What evidences of explosive substances can be found at the scene depends on the type of substance as well as of the way of activation of the explosive device. In order to determine the facts and find the evidences it is necessary to make a detailed forensic examination of the scene with establishing the following manifestations of the explosion: thermal effect, brisance and the shock wave effect and fragmentation effect. Fragments of the casing of an explosive device, detonator, fuse, timer device, clockwork, battery parts, parts of wire conductors, circuits, shock tube, explosive substance, parts of paper wrapper, etc. can be found. Many fragments of the explosive device can be plunged in the soil or in the other objects at the scene. Those parts are important because of the possibility to calculate the velocity in which fragments have scattered and the explosive mass. Parts of explosive devices is not easy to find since very often they are mixed with soil or other substances or they are barely visible. These evidences allow the police and the public prosecutor to set the appropriate version and to plan operational activities.

The evidences like clothing, shoeprints, blood, hair, saliva, faeces, urine, nails, cigarettes buds, lighter, matches, cap, button, cigarette case, soil, glass, paint, etc. can be found at the scene also. In rare situations traces of papillary lines can be found, which has happened in the criminal practice in the Republic of Serbia (e.g. on the lever of a hand grenade). Breaking of glass due to an explosion in certain situations can provide enough data that allow the forensic engineers to calculate the explosive mass based on the shock wave effects. It is essential to determine the centre of the explosion. Damage caused by the shock wave can often be used to distinguish the gas explosion from an explosion caused by conventional explosives. Mass of used explosives may also be determined from a crater dimension (Bjelovuk, et al, 2015). For the purpose of later expertise, one should take samples of the surface due to the existence of the particles from an explosive substance. All found evidences are immediately expertly labelled and packed in airtight container in order to avoid their alteration or subsequent contamination, but one should take care about the packing order and the separation of evidences.

The CSI is documented with the report, photo-documentation, sketch and situation plan of the scene by the forensic technician and these documents are attached to the record of the forensic examination of the scene that has been done by the criminal inspectors has evidentiary significance. Record of the CSI is a basic document that secures the place on which a crime was committed and which, in addition to the evidentiary significance, has an operational character, because based on established facts, it is possible to set appropriate versions and to plan and undertake further actions.

Photography visually shows the situation on the scene and it is recommended to use in scale photo based on which it can be determined the size of some evidence.

Sketching the scene is done after finding, labelling and photographing of evidences. Based on the measures from the sketch the situation plan - technical drawing is made in scale with the use of drawing kits or in some program (AutoCAD, etc.), on which the most important measures are indicated, as well as cardinal directions, GPS coordinates, written legend with all necessary explanations, which contains the same labels for evidences under which they were entered into the record of CSI and visible in the photo documentation.

The contribution of CSI in clarifying and proving the crimes committed with the use of an explosive substance is undeniable, because during a CSI one is always trying to answer key questions, such as:

- whether it is technological or technical accident and of which crime was that, or was it a crime at all;
- place, time and manner in which the crime was committed;
- whether one or more perpetrators committed the crime;
- circumstances related to the crime and perpetrator;
- types and origin of explosive substance used;
- consequences of the explosion;
- suspects, etc.

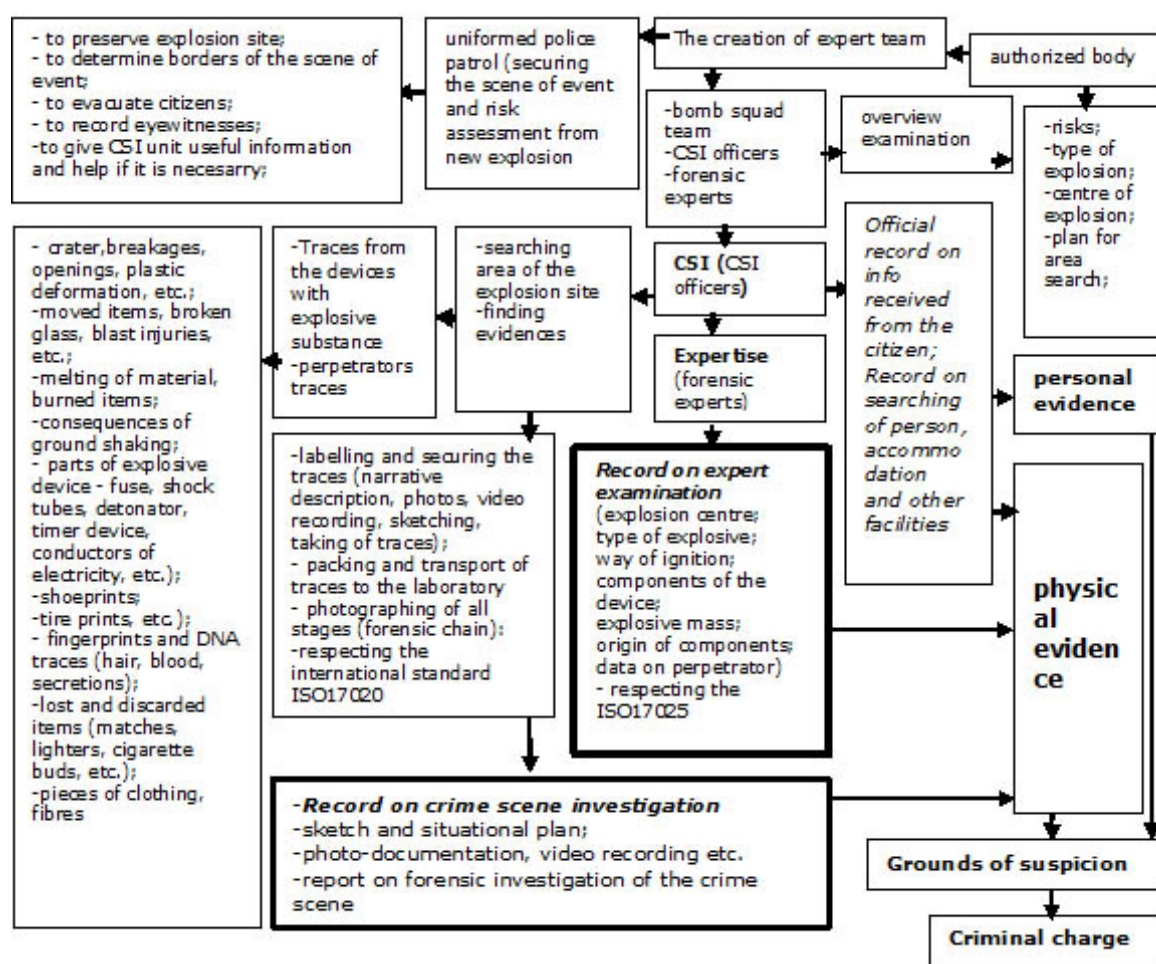
A special contribution of CSI in proving crimes committed with the explosive substances is reflected in enabling expert examination of evidences and with that evidentiary action valid evidence is provided. These evidences are very important in such crimes considering that there are rare or unreliable personal evidence, since statements of persons often do not contain the essential facts about the crime and the perpetrator. However, apart from the above mentioned, evidences that originate from explosive substances and perpetrator, and the evidences resulting from the physical effects of the crime to the perpetrator have appropriate evidence and operational significance, because they are the ones that bring the perpetrator in a reciprocal relationship with the committed crime and they are the subject of the expertise.

The research results indicate that, in order to solve and prove crimes committed with the explosion of an explosive substance, and depending on the found evidences during the investigation, in Serbia and in Republika Srpska the following expertise were conducted: chemical, physical, electronic, fingerprint and DNA expertise. In Serbia in relation to the total number of crimes committed with the use explosive substances, expertise in the mentioned time period was represented with 94,72%, while the percentage of representation in Republika Srpska is 94,19% (Ministry of Interior of the Republic of Serbia and Ministry of Interior of Republika Srpska). Evidences found during the investigation of such crimes allows to make appropriate expertise with the application of the latest scientific and technical achievements, the results of which enable solving of large number of these crimes, but also direct further operational activities, thus indirectly contributing to the discovery of new evidence.

CSI and expertise of found evidences may involve engagement of experts from many areas due to the multidisciplinary nature of the phenomenon and the different approaches to the problem. Thus, the expertise can be performed by the experts: chemists can provide information about the type of used

explosives, forensic engineers can provide information about the mass of used explosive based on the damage caused by the explosion, type of used explosive device, ways in which the explosive was initiated, as well as material damage, pathologists can provide information about the cause of injuries and possible causes of death for the victims of an explosion, forensic biologists can provide information on possible DNA profile, specialists in fingerprints can provide information on fingerprints from a perpetrator etc. Examination of damage is a common starting point for investigating the cause of an explosion. The crater has a great importance as the evidence in CSI (Xu et al, 2021). In the initial examination of the crater, evidences of explosion may contain important information, i.e. characteristics of the explosive substance. The crater could also be the source of the device fragments and unburned explosive, but it can also be used for the assessment of the explosive mass (Bjelovuk et al, 2015).

Figure 2. Model for CSI of crimes committed with the use of explosive substances (Bjelovuk, 2014, p.30)



Model for the CSI in case of the use of explosive substance (Fig. 2) shows the role of each entity in investigation. It also points out what specific evidences should they look for. As a result of these activities, and based on the collected physical and personal evidence, the authorized entity shall submit criminal charges when there are grounds for suspicion that a crime was committed or that a particular individual is the perpetrator of that crime.

Discussion

Performance of the CSI in which explosive substance was used has common elements with CSI of other crimes, but also lot of specific characteristics due to the existence of the risk of new explosions, dispersion of evidences on large area, unclarity of whether in that case there is an existence of intent of the perpetrator to commit a crime or the offence was committed out of negligence or if that case was a crime at all.

Model for the CSI where the explosive substance was used, would regulate the position and role of each participating entity. Suitable distribution of the roles of individual criminal procedure actors and the use of authorizations during a CSI is very important when viewed from the criminal procedure stand point. Respecting provisions of the Criminal Procedure Code of The Republic of Serbia during the performance of CSI is essentially important for future criminal proceedings because if the CSI was performed by the authority which according to the provisions of Criminal Procedure Code has no jurisdiction for it (e.g. police independently conduct an inquiry, and the prior consent of the public prosecutor was mandatory) such record of the CSI could not be used later as evidence in criminal proceedings and would lead to its exclusion from evidence. On the other hand, if certain appropriate forensic rules are not respected in terms of finding, processing and securing evidences with the use of an explosive substance, it may happen that there is irregularity in the CSI documents which brings in the question of their evidentiary significance. For these reasons, the proposed model for the CSI in crimes committed with the use of explosive substances is even more important. Bearing in mind that the behaviour at the such crime scene is not regulated equally in all countries, the implementation of international standards when collecting evidences from the scene, would allow a unified behaviour of all entities involved in a forensic chain, and therefore the possibility to exchange evidence according to international standards ISO17020 and ISO17025.

Conclusion

Explosive substances, regardless of the type of activity, contain the risk to cause an explosion, i.e. to be used for the committing of certain crimes, and their diversity and characteristics make the investigation very specific, which must be performed with the respect for the provisions of criminal procedure rules, because of its timely and professional performance the further course of the criminal proceedings often depends. Crimes committed with the use of explosive substance are in most cases proved through physical evidence obtained with the expert examination of evidences from an explosive substance and perpetrator found on a scene, which specifically highlights the importance and contribution of the CSI in solving and proving these crimes. That is why it is important to recognize the existence of mutual causal links between each evidence on one hand and committed crime on the other hand, because that enables the assessment of their relevance and suitability to evolve into physical evidence. For evidentiary significance, it is essential that the evidences found during a CSI are processed correctly and professionally secured in CSI documents, because the results of the research indicate that the current practice in some cases revealed some distinctions of certain facts in the investigation documents, with which their evidentiary force is being questioned.

In many situations when the committing of a crime was with the explosive substances evidences at the scene are present in small quantities, which creates certain difficulties in their finding and securing, and which requires expertise and perseverance of scene of crime officers and experts and their synchronized teamwork with other members of the investigation team. The importance of CSI and contribution of found evidences is indisputable for solving crimes, especially knowing that the personal evidences are difficult to obtain, and they are often unreliable.

Proposed model for the performance of CSI with the use of explosive substances would facilitate the crime scene management since it precisely describes the role of each entity during the performance of CSI. Since it envisages the implementation of international standards during the forensic examination at the scene, but also when performing analysis in forensic laboratories, it would enable the exchange of evidence at the international level. With appropriate special training for the performance of CSI in such crimes in order to reduce the risk when working on a scene, finding specific evidences and use of international standards would allow us to overcome the current problems in the CSI.

References

- Beveridge, A. (2017). *Forensic investigation of explosion*. Boca Raton, FL: CRC Press.
- Bjelovuk, I. (2014). *Forensic analysis and modelling of characteristics of crater emerged from the surface explosion of brisant explosive* [Doctoral dissertation, University of Belgrade, Faculty of Mechanical Engineering].
- Bjelovuk, I., Jaramaz, S., Elek, P., Micković, D., & Kričak, L. (2015). Modelling of the characteristics of crater emerged from the surface explosion on the soil. *Combustion, Explosion, and Shock Waves*, 51(3), 395–400. <https://doi.org/10.1134/S001050821503017X>
- Bjelovuk, I., Kesić, T., & Žarković, M. (2013). Consequences of explosive devices' activation on victims and their criminal justice importance. In G. Meško, A. Sotlar, & J. Greene (Eds.), *Criminal justice and security – Contemporary criminal justice practice and research: Conference proceedings of the Ninth Biennial International Conference on Criminal Justice Practice and Research* (pp. 279–296). Ljubljana: University of Maribor, Faculty of Criminal Justice and Security.
- Bošković, A., & Kesić, T. (2020). *Krivično-procesno pravo (Criminal proceedings law)*. Belgrade: University of Criminal Investigation and Police Studies.
- Bošković, D. (2013). Uloga privatnog obezbeđenja u proceni rizika od nezgoda u proizvodnji, transportu i skladištenju eksplozivnih materija (Role of private security in the assessment of risks of accidents in the production, transport and storage of explosive substances). *Bezbednost*, 55(2), 125–141.
- Krivični zakonik Republike Srbije. Službeni glasnik RS, br. 85/2005, 88/2005 – ispr., 107/2005 – ispr., 72/2009, 111/2009, 121/2012, 104/2013, 108/2014, 94/2016, 35/2019 i 94/2024. (Criminal Code of the Republic of Serbia)

- Zakonik o krivičnom postupku Republike Srbije. Službeni glasnik RS, br. 72/2011, 101/2011, 121/2012, 32/2013, 45/2013, 55/2014, 35/2019, 27/2021 – odluka Ustavnog suda, i 62/2021 – odluka Ustavnog suda. (Criminal Procedure Code of the Republic of Serbia)
- Gardner, J. T., & Anderson, M. T. (2004). *Criminal evidence: Principles and cases*. Belmont, CA: Wadsworth/Thomson Learning.
- Kesić, T. (2014). *Međunarodni standardi postupanja policije u krivičnim stvarima (International standards for the behaviour of police officers in criminal matters)*. Belgrade: Academy of Criminalistic and Police Studies.
- Korajlić, N. (2009). *Kriminalističke metode – otkrivanje, razrešavanje i dokazivanje eksplozija (Criminalistic methods – Detection, solving and proving of explosions)*. Sarajevo: Centre for Security Policy.
- Kumar, S., Jain, P., & Sharma, M. (2016). Importance of forensic investigation in explosion: A case study. *Journal of Forensic Research*, 7(5). <https://doi.org/10.4172/2157-7145.1000347>
- Radić, V. (2011). *Opasne materije (Dangerous materials)*. Belgrade: Pan-Plast.
- Presuda Apelacionog suda u Novom Sadu, Kž.1 2973/11 od 19. oktobra 2011. (The verdict of the Appellate Court in Novi Sad, Republic of Serbia, Kž.1 2973/11 from October 19, 2011)
- Presuda Okružnog suda u Nišu, Kž. 774/07 od 14. septembra 2009. (The verdict of the District Court in Niš, Kž. 774/07 from September 14, 2009)
- Thurman, A. (2017). *Practical bomb scene investigation (3rd ed.)*. Boca Raton, FL: CRC Press/Taylor & Francis Group.
- Žarković, M., Bjelovuk, I., & Kesić, T. (2012). *Kriminalističko postupanje na mestu događaja i kredibilitet naučnih dokaza (Criminalistic behaviour at a crime scene and credibility of scientific evidence)*. Belgrade: Academy of Criminalistic and Police Studies.
- Xu, R., Chen, L., Zheng, Y., Li, Z., Cao, M., & Fang, Q. (2021). Study of crater in the Gobi Desert induced by ground explosion of large amounts of TNT explosive up to 10 tons. *Shock and Vibration*, 2021, Article ID 7357877. <https://doi.org/10.1155/2021/7357877>

Model vršenja uviđaja kod krivičnih dela sa upotrebom eksplozivnih supstanci

Bjelovuk Ivana, Bošković Aleksandar, Bošković Dejan
Kriminalističko-policijski univerzitet, Beograd, Srbija

Sažetak

Eksplozivne supstance se, kao opasne supstance, koriste za nehatno ili umišljajno izvršenje određenih krivičnih dela. S obzirom na to kakva su svojstva eksplozivnih supstanci, njihova upotreba može izazvati veoma ozbiljne posledice po život i zdravlje ljudi i životnu sredinu. Problemi koji se mogu javiti su određene poteškoće u definisanju mesta događaja na kom treba vršiti uviđaj jer tragovi mogu biti razbacani na velikom prostoru i zatrpani. U radu su date klasifikacija i analiza krivičnih dela sa upotrebom eksplozivnih supstanci predviđenih u Krivičnom zakoniku Republike Srbije, kao i krivičnoprocesna obeležja uviđaja prema Zakoniku o krivičnom postupku Republike Srbije. Posebna pažnja posvećena je kriminalističkim aspektima uviđaja na mestu događaja kod krivičnih dela izvršenih eksplozivnim supstancama sa posebnim osvrtom na pronalaženje, fiksiranje i značaj tragova eksplozivnih supstanci kao i drugih materijalnih tragova, uz navođenje pojedinih empirijskih podataka – broj izvršenih krivičnih dela sa i bez eksplozija kao i presude. Cilj istraživanja je rešavanje problema organizacije poslova vršenja uviđaja. Rezultat istraživanja je preporučeni model vršenja uviđaja na mestu događaja kod krivičnih dela sa upotrebom eksplozivnih supstanci kao pokušaj unapređenja vršenja uviđaja uzimajući u obzir specifičnosti i potrebe angažovanja velikog broja subjekata. U cilju opravdanosti istraživanja dat je statistički prikaz broja izvršenih krivičnih dela sa upotrebom eksplozivnih supstanci u Republici Srbiji od 2017. do 2021. godine.

Ključne reči: eksplozivne supstance, krivično delo, uviđaj, materijalni dokaz, model.