

International cooperation of law enforcement and justice system in the area of exchange of fingerprint data in fight against terrorism and organized transborder crime.

Summary

In the European Union and in the entire world, one of the key priorities is the fight against terrorism and cross-border organised crime. Both problems: organised crime and terrorism are global problems that cannot be resolved at the level of one, a few or even a dozen or so countries. They concern to the whole mankind, its existence and development. In the fight against crime in its all manifestations forensic science comes to the rescue with its “senior representative”, fingerprint identification (more generally referred to as “dactyloscopy”), which deals with revealing dermatoscopic traces and identifying persons and unknown bodies basing on mainly the pattern of friction skin ridges. Skin ridges being a biometric feature, are used in automated fingerprint identification systems. In Poland, since the 1990s, fingerprint data have been collected and processed in the police fingerprint files, the AFIS.

The main research topic of this doctoral dissertation is to characterise the issue of international cooperation in the exchange of fingerprint data as an effective tool in the fight against terrorism and organised cross-border crime. Information gathered on terrorism, organised cross-border crime and the analysis of international and national laws, as well as institutional solutions in the field of using fingerprint data in the fight against the threats of the modern world have not only theoretical but also practical significance. As stated in the Conclusions they can prove useful in the work of law enforcement agencies.

Although fingerprint identification has been used in the practice of law enforcement and judicial authorities for over 100 years, international cooperation in the exchange of fingerprint data is a relatively new tool used by law enforcement agencies, so, most probably, many people do not have good knowledge in this area. Additionally, these issues are incorporated in the professional literature of the subject. Bearing in mind the activities carried out by the European Commission aimed at developing and implementing technical solutions for the interoperability of EU information systems, this issue is a new, unexplored scientific area that requires explication and understanding.

Considering all the above the following research hypotheses were formulated:

- a) the acquired knowledge and skills in the operation and potential use of the police databases have an impact on an increase in detection and identification of persons and unknown bodies,
- b) the level of knowledge and skills in the operation and use of the police databases depends on the length of service in the Police,
- c) the correct use of friction skin marks from crime scenes and fingerprinting of persons in the course of making their record are of significance for appropriate data feed to the databases,
- d) the correct use of friction skin impressions from crime scenes and fingerprinting of suspects results in an improved crime detection rate, as well as identification rate of persons and unknown corpses,
- e) positive results (HITS) of searching fingerprint data in the AFIS do not always actually result in issuing an indictment,
- f) the international cooperation in the area of exchanging dactyloscopic data contributes to improved combating of crime,
- g) strengthening international cooperation of law enforcement authorities requires a new organisational approach and legislative changes in Poland,
- h) the acts of the European Union law are implemented into national legislation, and national executive regulations are not always sufficient for the proper use of databases.

For the purpose of the present dissertation the following research studies were carried out: an analysis of the EU legislation implemented into Polish national legal system, a statistical analysis of the use of databases for the purposes of combating crime including terrorism and cross-border crime, and surveys conducted among police officers of the criminal division, the purpose of which was to check the awareness of the importance of fingerprint data processing systems and the scale of their use.

As a result of the above studies it was found that national legislation is not yet sufficiently prepared to fully use the resources of large-scale database systems in which fingerprint and palmprint data are processed (SIS, VIS, ECRIS - TCN). Moreover, in the era of free movement of people between the continents, including travel from Europe to the United States of America, it is vital to develop national procedures for cooperation in combating terrorism and serious crime between the Republic of Poland and the USA. That derives from the provisions of the Agreements concluded in 2019 between the Government of the Republic of Poland and the USA, namely: "For the purpose of executing this Agreement the competent authorities of the

Parties may enter into implementing arrangements or agreements designed to elaborate in more detail on the provisions of the present Agreement”.

When analysing the issues of strengthening international cooperation based on the exchange of dactyloscopic data, it was found that the existing European large-scale systems are being expanded with new functionalities and a wider range of processed data. This applies to SIS and VIS systems, which, as second generation systems, are complemented with images of fingerprints and unidentified marks recovered at crime scenes. The above changes entail the necessity to adapt the national legislation, as well as introduce organisational modifications in the area of tasks performed by the authorities and institutions involved in the cooperation. The European Union has developed many legislative acts constituting the foundation for an effective system of combating terrorism and cross-border crime. The basis of this system is already in place and its development in terms of extending the use of dactyloscopic data and other biometric data, such as face images, DNA profiles or auricles, contributes to strengthening international law enforcement and judicial cooperation. Extending the scope of data processing increases the potential of identifying persons or detecting the perpetrator of a crime and imposes new tasks on the Central Forensic Laboratory of the Police, and more specifically on the Fingerprint Examination Department. The launch of new systems, such as ECRIS - TCN, or Entry / Exit, has similar consequences for the activities of the Central Forensic Laboratory of the Police. A new task resulting from the requirements of implementing interoperability of information systems is the verification of positive results of searches for SIS or ECRIS - TCN, which will be performed by fingerprint experts or examiners. Carrying out of duties connected with the handling of national fingerprint data collections and international inquiries resulting from the implementation of the interoperability of the systems calls for supporting the idea of centralising the systems processing these data. The optimal solution would be to establish a Biometric Institute under the Council of Ministers. The Institute would group together all systems processing biometric data, including fingerprint data, and enable them to be operated from that post. Such a solution would save time needed for sending queries or verifying hits. An additional advantage would be the simplification of search procedures in the large-scale systems. All queries would be handled in one place. The change in the organisation of the functioning of fingerprint databases, the currently functioning large-scale systems and the implementation of new ones will entail a change in the present national law and the development of new regulations.

This dissertation comprises an evaluation of the impact of knowledge and skills in operation and potential use of police databases on the increased level of detection and identification of persons and unknown bodies. The evaluation pointed to the need of ensuring more trainings on the functioning and possibilities of databases, as well as identified that these trainings should be attended by the police officers who carry out criminal or identification proceedings.

The analysis of the influence of the length of service on the level of knowledge and skills in the area of databases operation demonstrated that years of work experience have no impact on increased level of knowledge and skills. The most extensive knowledge on the functioning of AFIS and use of dactyloscopic data is shared by the police officers who have served in the Police between 6 and 15 years and are between the ages of 31 and 40 years. These officers are most active, experienced and knowledgeable in their duties and often submit search requests to AFIS system during pre-trial proceedings.

The analysis of the impact of the correct use of crime scene marks and fingerprinting of persons on the adequate data feed to the database demonstrated that the knowledge of police officers on the possibility of recording crime scene marks and tenprints in the AFIS system and the awareness of corresponding regulations have the greatest influence on the adequate supplying the database with records.

The analysis of impact of the correct use of crime scene marks and fingerprinting of suspects on the increased detection rate and identification of persons and unknown bodies demonstrated that simplified AFIS procedures and the application of technological development in the scope of requested searches of crime scene marks and tenprints in the AFIS have the greatest influence on the increased detection and identification rates.

The evaluation of the impact of international cooperation in the area of fingerprint data exchange on the reduction of crime demonstrated a clear relationship with the police officers' knowledge on the possibilities of searches of unknown latents and tenprint cards in EURODAC system and the automated AFIS systems of the EU Member States.

In addition to that the data on the use of HIT information were analysed. According to the binding procedure each positive result of fingerprint data search in the AFIS should entail subsequent steps aiming to determine or confirm the identity of persons or unknown bodies, as well as issuing an indictment when a criminal is involved. Upon analysing the regulations regarding „post HIT” procedure it was concluded that not every positive result of AFIS search

(of unknown marks recovered from crime scenes) results in an indictment. According to statistical data, nearly 3 % HITs were excluded from the proceedings as being unrelated to criminal acts. Thus, the solved criminal cases that went to court were reduced by this number.

The dissertation covers a wide spectrum of research on the use of international cooperation of the law enforcement authorities in the area of dactyloscopic data exchange as an effective tool in the fight against terrorism and organised cross-border crime. The raised organisational and legislative issues are certainly important elements determining the success in the fight against terrorism and cross-border crime and should constitute a foundation for further considerations.

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