Rom J Leg Med [33] 141-147 [2025]
DOI: 10.4323/rjlm.2025.141

INTELLIGENCE-LED MASS SCREENINGS FOR DETECTION OF PERPETRATORS. LEGAL ISSUES AND PUBLIC ACCEPTANCE

Dariusz Wilk

Jagiellonian University, Faculty of Law and Administration, Department of Forensic Science, Kraków, Poland

Abstract: Intelligence-led mass screening (ILMS, mass screening, canvas, dragnet) is one of solutions for detection of perpetrators. ILMS is based on collection and analysis of reference materials from large group of people with similar features as perpetrator. Practice from many countries suggests that this procedure can be effective. Nevertheless mass tests are focused mainly on third parties (non-offenders) and it is controversial from the point of view of privacy protection and some crucial civil liberties and rules of criminal proceeding. The aim of the research was to check a level of social permission for mass screenings and to set the optimal procedure from legal point of view.

The first part of research was focused on level of social permission for mass screenings. 800 persons in Poland were surveyed within the study – 385 persons from general public and 415 law students. About 75% of general public and 65% of law students admitted that they will give a consent for taking reference material if they were asked for it (responses in surveyed groups were statistically different; $p < 0.01$), which means that ILMS is generally accepted by the most of society.

Comparative legal research about application of ILMS in criminal proceedings for selected European countries and common law countries was the second part of study. It was revealed that mass screenings in many countries are voluntary (Germany, Netherlands) or are under the suspect sampling regime (USA, England & Wales, New Zealand, Canada). Only in some countries massive collection of reference materials can be compulsory according to provisions of criminal procedure (Austria, Switzerland, Italy, Poland, Sweden, Finland).

Keywords: ILMS, mass screening, dragnet, reference sample, detection of perpetrator.

INTRODUCTION

Traces recovered from the crime scene are an an important source of information about perpetrator's activity and allow for its identification. To perform forensic identification it is necessary to obtain reference (comparative, control) sample from the person, who is to be checked as the potential source of the trace. Usually reference materials are collected individually from suspects, victims or other persons, who may have been present at crime scene (e.g. household member, family). In some cases such materials can be found in forensic databases (e.g. CODIS, AFIS).

If the suspect is not indicated by victim or witnesses during interview or lineup, one of the interesting solutions is to take massively control samples from persons who exhibits similar features as perpetrator. Intelligence-led mass screening (ILMS), also called as canvas, dragnet, sweep, can be defined as "searches administered to large numbers of persons whose only known connection with the crime is that authorities suspect that a particular class of individuals may have had the opportunity to commit it" (1). This means that reference materials are collected within the procedure mostly from third parties, without direct suspicion (or without a warrant in common law systems). The group of persons from whom samples are collected may be large and is typically selected based on specific features of offender (sex, age, appearance), place of residence or job, etc.

ILMS gives an opportunity to detect the perpetrator, which is the main advantage and aim of the

*Correspondence to: Dariusz Wilk, Jagiellonian University, Faculty of Law and Administration, Department of Forensic Science, Kraków, Poland, E-mail: dariusz.wilk@uj.edu.pl

procedure. Nevertheless, when the size of the selected group for mass screening is large, ILMS may be very expensive, time-consuming time and may overload forensic labs with a substantial number of samples for analysis within short period, which can lead to errors and backlog in other analyses and tasks. It should be mentioned that detection of perpetrator is not always possible by ILMS even the group was selected properly, because it is a risk of cheating by perpetrator through providing faked samples or replacement by other person (e.g. colleague, paid person). Moreover, the use of ILMS raises ethical and legal concerns regarding invasion of privacy, human liberties and other fundamental rights, including protection against self-incrimination.

Although ILMSs are aimed at maintaining the public order and safety by prosecuting crimes and detection of perpetrators, it is necessary to obtain social consent for such activities. Thus, the main aim of the research was to assess acceptance level in society for mass screenings through public survey conducted in Poland. The second objective was to set the optimal procedure for ILMS taking into account protection of privacy and civil liberties. This part of the study was based on a comparative legal analysis.

Mass screenings across the world and their efficiency

ILMSs have been proceeded in various countries around the world. Most likely, the first mass fingerprinting was carried out in the case of murder of June Anne Devaney, a British child, aged 3 years 11 months, who was murdered on night from 14 to 15 May 1948, when a girl was a patient at Queen's Park Hospital in Blackburn, Lancashire, UK. Beside the victim's cot, a glass bottle with fingerprints was found. All hospital staff and individuals (ambulance drivers, nurses' friends, technical workers, tradesmen), who could have had reason to have been in hospital ward within five years prior to the crime, were checked by taking fingerprints and were eliminated as suspects. Fingerprints were also checked and eliminated by comparison to tenprint cards stored in databases. Set of fingerprints on the bottle (from few fingers, thumb and palm), remained as un-identified, was recognized as belonging to the murderer (2). Thus, it was decided to ask every male at or over the age of 16 who lived in the vicinity of Blackburn to cooperate in fingerprinting with the promise that all records would not be used in other cases and would be destroyed after completion of mass screening. The mass fingerprinting was conducted from 23 May to the beginning of August and over 45,000 sets of prints were taken and analysed without success. After analysis of the Electoral Register, which was primarily used for selection of males, it was revealed that some persons were omitted. Fingerprints taken from Peter Griffiths, within this additional group, matched to fingerprints from the bottle. He confessed to the murder of the girl and after trial he was sentenced to death(3).

It is worth emphasizing that mass screening was conducted much earlier in Poland to detect a perpetrator of double murder. Two women were murdered on 29 January 1936 in Kraków in Poland by using military bayonet. Moreover, some shoeprints from military boots were detected and collected from the area close to house of victims. Investigators assumed that perpetrator was a soldier from one of military units in Kraków. The recovered shoeprints were compared with soles of shoes of all soldiers stationed in Kraków, that is from about few thousands of males. During inspection of one military unit at 3 December 1936 Wojciech Leja's shoes were revealed as consistent with traces from the crime scene. Although much evidence was collected, the jury decided that he was "not guilty" (4). The case remains unsolved to this day.

Presently DNA analysis can be recognized as the most important source of information about a perpetrator when biological traces are found at a crime scene. Due to the development of forensic genetics biological materials (blood, saliva) have become the main subject of mass screenings for detection of perpetrator. The first DNA dragnet was conducted in UK in 1987 in the case of murder of two girls in Leicestershire villages: Lynda Mann in Narborough in November 1983, and Dawn Ashworth in Enderby in July 1986. Semen samples were recovered at crime scenes, and modus operandi was similar in both murders. In early 1987 every male from three local villages and born between 1953 and 1970 was asked to voluntarily give blood samples for DNA testing. Within eight months 5 511 males provided blood samples and only one person refused for giving the sample. Unfortunately none of the DNA profiles from collected blood samples were consistent with the semen samples recovered from the victims' bodies. In September 1987 it was reported to the police that Ian Kelly gave a blood sample instead of a colleague from work – Colin Pitchfork. DNA tests confirmed that he was the perpetrator. Pitchfork was sentenced to life imprisonment for the two murders with a minimum term of 28 years (5-6).

The aforementioned cases suggest that ILMSs involving the mass collection of different type of materials are efficient solution for detecting

perpetrators when standard investigation techniques were insufficient. Such actions were conducted in many cases in different countries around the world. Number of cases with DNA dragnet and success rates are presented in Table 1.

The data show that DNA dragnets were utilized in Europe, especially in United Kingdom and Germany. Also some cases were reported in Netherlands and United States. In present own studies about practice of mass screenings in Poland 25 cases with DNA dragnet were revealed from 2001 to 2024, mainly in murders and rapes of young girls or adult women. Only one case concerned other type of crime (that is causing a threat to life or health by setting fire to a vaccination point).

The success of ILMS, understood as detection of the perpetrator or providing crucial information about suspect, depends on many factors, inter alia: proper selection of group for collection of reference materials, obtaining materials from entire selected group (i.a. high percentage of persons with collected samples), reliability of collecting materials and lack of fraudulent practices by perpetrators during collection of samples.

Results from Table 1 show that success rate of DNA dragnets ranges from 9.5% up to 46%. The lowest efficiency was reported in United States, where DNA dragnets were rarely applied and this approach was criticized as unconstitutional (in relation to the Fourth Amendment), particularly with regard to the right to privacy (12-13).

The average success rate was observed in UK (about 20%). Interesting observations can be given for effectiveness of ILMSs in Germany. Initially, between 1989 and 2003, the success rate of DNA dragnets was high (69%), but later it dropped significantly (to 16%). This observation may be related to the increased awareness of perpetrators about identification through biological traces and greater mobility of society. In this way perpetrators could have been omitted from the selected groups (ILMSs are usually performed within local society) or they may have refused to submit samples.

The success rate of DNA dragnets is relatively high in Poland. About 36% of all DNA mass screenings in Poland resulted in the detection of perpetrator, although overall number of such actions was relatively small. The first successful Polish DNA "manhunt" was conducted from September 2000 to May 2001 to catch murderer and serial rapist. Blood samples (primarily, from 128 persons) and mouth swabs for Y-STR DNA analysis were collected from 457 males from Świnoujście (city in North-Western Poland) and surroundings close to crime scenes. Brother of the perpetrator was identified after analysis of 421 samples and subsequent investigative activities focused on the suspect (14).

Public perception about participation in mass screening

Public views on participation in mass screenings were evaluated through the survey of 800 persons in Poland (385 persons from general public and 415 law students). The most important question for the study was following: "Imagine that there has been a crime in your neighborhood in recent days, and traces have been revealed at the crime scene that could identify the perpetrator. The police suspects that it was made by a person living in your area and therefore decided to collect reference material from all residents of your area, including you. Would you voluntarily agree to collect sample from your body by Police for the purpose of solving this case?". Respondents, who agreed to participate in mass screening, were also asked which type of materials could be collected: fingerprints, mouth swab, odor sample, photo of face, speech sample. Results of the survey are presented in Figs 1-2.

About 70% of respondents admitted that they would agree for taking reference material if they were asked for it. Responses between the surveyed groups were statistically different ($p < 0.01$ in chi-squared test). Thus, results indicate that public acceptance of participation in ILMSs is relatively high.

The highest percentage of respondents who agreed to submit reference materials, stated that they could provide fingerprints (tenprint card, about 97%). A moderate proportion of respondents expressed consent

Table 1. Number of criminal cases with DNA dragnet and success rates in different countries

Country (years)	No. of reported cases	No. of successful cases (%)	Source of information
United States (1991-2004)	21	2 (9.5%)	[7]; corrected by own studies
United Kingdom (1995-2004)	292	61 (21%)	[8]
United Kingdom (2009-2011)	35	5 (14%)	[9]
Germany (1989-2003)	69	32 (46%)	[10]
Germany (2004-2024)	39	6 (15%)	own studies
Netherlands (1999-2004)	14	4 (29%)	[11]
Poland (1995-2024)	25	9 (36%)	own studies

for providing mouth swab for DNA analysis (74%), odor sample for dog scent line-up (68%) and speech sample for voice identification (60%). Surprisingly, the fewest respondents (53%) agreed to provide photo of face, despite the fact that most of them can be assumed to have willingly uploaded at least one face photo to social media.

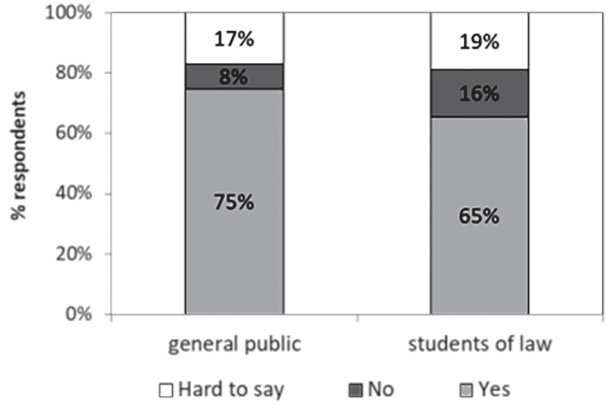

Figure 1. Opinions regarding agreement for participation in mass screening for detection of perpetrator.

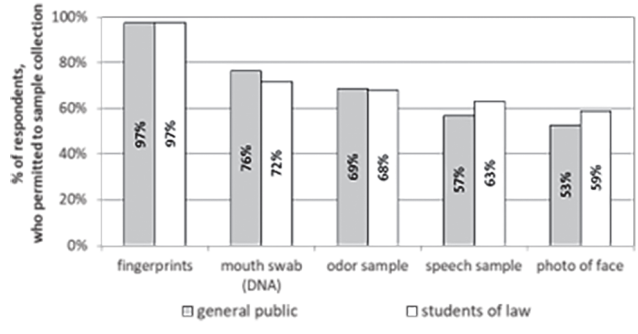

Figure 2. Opinions regarding type of reference material by respondents who agreed for participation in ILMS.

Legal grounds for mass screening in criminal proceedings

The idea and aims of mass sampling are clear and similar regardless of jurisdiction. Nevertheless, criminal procedure models and rights or obligations of law enforcement authorities and prosecutors usually differ, especially when civil and common law systems are compared.

Comparative research was conducted in selected European countries and common law countries (US, England & Wales, New Zealand, Canada) to examine the possibilities and legal grounds for mass collection of reference materials from third parties for identification of perpetrators. Results are summarized in Table 2.

In general, four main legal models for mass collection of reference samples can be distinguished.

1. In the first model no specific regulations exist for mass screenings and even for taking materials from third parties for identification purposes. This situation was found in some jurisdictions, mostly in common law (US, England & Wales, New Zealand, Canada). This means that it is necessary to apply the suspect sampling regime for obtaining reference material. Samples from third parties (non-suspected persons) can be obtained only with their consent and this activity of society may be recognized as assistance to police in combating crime.

2. In other jurisdictions legal basis for mass screening is expressed in criminal procedure code and collecting materials can be conducted only with informed and written consent. This model is found in Germany, Netherlands and Ireland.

Detailed requirements for mass screenings are

Table 2. Legal basis for mass screenings within criminal proceedings in selected countries

voluntary sampling (no specific regulations related to ILMS or sampling from third parties)	- **United States of America** - **England and Wales** - **New Zealand** - **Canada**
voluntary sampling (ILMS is specified in the law; only with informed and written consent)	- **Germany** (§ 81h of German Criminal Procedure Code) - **Netherlands** (art. 151a sec. 1 of Dutch Criminal Procedure Code) - **Ireland** (art. 29 of Criminal Justice (Forensic Evidence and DNA Database System) Act 2014)
obligatory sampling (ILMS is specified in the law)	- **Austria** (§ 123 item 2 of Austrian Criminal Procedure Code) - **Switzerland** (art. 256 Swiss Criminal Procedure Code)
obligatory sampling (based on regulations for collection of reference materials from third parties)	- **Italy** (art. 224-bis of Italian Criminal Procedure Code) - **Poland** (art. 192a § 1 of Polish Criminal Procedure Code) - **Sweden** (chapter 28, § 12b of Swedish Code of Judicial Procedure) - **Finland** (chapter 8, § 32 of Coercive Measures Law nr 22.7.2011/806)

specified in Germany. According to § 81h of German Criminal Procedure Code (Strafprozeßordnung), a DNA dragnet can be conducted only when investigation concerns crime against life, physical integrity, personal freedom or sexual self-determination. Biological material may be collected from persons who meet certain test criteria presumed to apply to the perpetrator. Afterwards DNA profile and information about gender can be determined from this material and can be compared to traces collected from crime scene. Familial searching may be also conducted. It is not permitted to upload DNA profiles obtained from these samples to national DNA database. Written consent is necessary for sampling, DNA analysis and profile comparisons. The procedure must be authorized by a court decree and can be conducted only if it is not disproportionate to the seriousness of the offense, particularly with regard to the number of people who will be tested. Samples and DNA profiles should be immediately deleted if they are no longer necessary to establish the circumstances of the proceedings.

Similarly in Netherlands, sampling of biological materials from third parties for DNA analysis may be conducted only with their written consent (article 151a section 1 of Dutch Criminal Procedure Code; Wetboek van Strafvordering). Written consent from a judge at request of prosecutor is necessary when materials are to be collected from at least 15 persons.

Taking of samples within mass screening is also settled in Ireland (article 29 of Criminal Justice (Forensic Evidence and DNA Database System) Act 2014). Samples may be taken from a class of persons, which was authorised for a mass screening in relation to the investigation of a particular relevant offence. Authorization must be provided by a member of the Garda Síochána not below the rank of chief superintendent if he has reasonable grounds for believing that the mass screening of that class of persons is likely to further the investigation of the offence and is a reasonable and proportionate measure to be taken in the investigation of the offence. A class of persons may be determined by: sex, age, kinship, geographic area in which the persons reside or work, period of time during which the persons did anything or were at any place or by any other appropriate matter. Sample may be taken only after the person has been informed and has provided written consent. According to article 29 item 10 of the Act a refusal to participate in the ILMS "shall not of itself" constitute reasonable cause to suspect the person of having committed the relevant offence and to arrest and detain him.

3. In some European countries, the collection of samples within ILMS can be compulsory according to specific provisions of Criminal Procedure Code (Austria, Switzerland) regarding the collection of reference materials from group of persons possessing similar features as the perpetrator.

In Austria (in accordance with § 123 item 2 of Austrian Criminal Procedure Code; Strafprozessordnung) a physical examination, including taking of a mouth swab, is permitted for persons from group of people, who can be recognized by certain characteristics and it can be assumed, based on certain facts, that the perpetrator is among this group. The collection of reference materials is allowed only in investigations related to crimes punishable by at least five years imprisonment or crime under article 10 of the Criminal Code and without measure activity the investigation would be much more difficult. A physical examination must be ordered by the public prosecutor with court approval, however oral swabs can be taken by the police on their own initiative. The person from selected group for taking reference materials are obliged to participate in the procedure (15).

In 2023 specific regulations related to DNA mass testing came into force in Switzerland. According to article 256 item 1 of Swiss Criminal Procedure Code (Strafprozessordnung), the compulsory measures court may at the request of the public prosecutor order that samples be taken to create DNA profiles from persons who display specific characteristics established as being relevant to the commission of the offence. This measure can be applied in an investigation of any felony. The group of persons to be investigated may be more strictly defined by means of DNA phenotyping in accordance with Article 258b. Moreover, if the profile comparison in DNA mass testing does not produce a match, the compulsory measures court may order that a familial relationship with the person to whom forensic evidence pertains be used as a basis for further investigations.

4. The last distinguished model is based on general provisions in criminal procedure code or similar act for taking reference materials from third parties (non-suspected persons) without consent. Thus, ILMS is not precisely regulated in this model, but such operations are permitted through right of law enforcements for sampling of non-suspected persons. This model is applied among others in Italy, Poland, Sweden and Finland.

In Italy compulsory taking of reference materials for DNA analysis or medical tests from third parties is grounded in article 224-bis of Italian

Criminal Procedure Code (Codice di Procedura Penale). The judge, also ex officio,may issue an order for the compulsory execution of sampling of hair, saliva or other acts affecting personal freedom for the purpose of determining the DNA profile or medical tests, when the person has not given a consent to be examined by an expert. Several conditions should be fulfilled for giving the order:

- taking materials or other acts are necessary to carry out forensic expertise;
- it is absolutely indispensable for providing evidences about facts;
- investigation is related to non-negligent crime, committed or attempted, for which the law establishes the penalty of life imprisonment or maximum imprisonment period exceeding three years, for the crimes from articles 589-bis (causing death culpably by violating road traffic regulations), 590-bis (causing serious or serious injury by violating road traffic regulations) of the Italian Penal Code or in other cases expressly provided by the law. Coercive measures may be applied for taking samples in such situation.

In Poland sampling of selected reference materials from third parties is permitted under article 192a § 1 of Polish Criminal Procedure Code (Kodeks postępowania karnego). Authorities may collect fingerprints, mouth swabs, hairs, saliva, handwriting samples, odors, photograph and voice sample in order to narrow the group of suspects or to determine the evidential value of the revealed traces. After application in the case materials, that are no longer necessary for the proceedings, should be immediately removed from the case files and destroyed. Consent of the person is not necessary for collection of reference materials, but using coercive measures by public authorities is not permitted (16).

Providing a saliva samples, which is the part of body inspection, is also mandatory for third parties in Sweden. According to chapter 28 § 12b of Swedish Code of Judicial Procedure (Rättegångsbalk, 1942: 740) body inspection by taking a saliva sample may be carried out on someone other than the person who can reasonably be suspected of a crime, when two conditions are fulfilled:

- the purpose is to facilitate identification, through a DNA analysis of the sample, in the investigation of a crime that may result in imprisonment;
- there is a special reason to assume that it is important to the investigation of the crime.

The result from analysis may not be used for any purpose other than that for which the sample was taken and may not be compared with the DNA profiles in registers of DNA profiles, maintained according to the law of processing personal data by the Police (2018:1693). The collection of materials under this article is not permitted for persons under the age of 15.

Similarly in Finland, in accordance with chapter 8 § 32 of Finnish Coercive Measures Law (Pakkokeinolaki, 22.7.2011/806), personal inspection for determination of DNA profile, detection of gunshot residues or to perform other similar research may be carried out for person who is not suspected of the crime even without his consent. Such activities may be conducted only for investigation related to an offence for which the maximum punishment is at least four years in prison. The initial condition for such activity is that the research is essential for the investigation, that is the investigation would be impossible or substantially more difficult by using means less inferred the rights of the subject of the investigation. DNA profiles, corresponding results and stored samples must be destroyed when the case has been resolved or the investigation has been dismissed without consideration of the merits.

Regardless of which legal model (solution) is applied for ILMS it is worth to underline that taking reference materials from persons violates their rights to privacy, protection of personal data (information autonomy) and can be considered as intrusion in presumption of innocence. The idea that non-suspected people should have free will for giving any assistance to the Police, including providing a reference material, is better realised in jurisdictions with voluntary sampling. Nevertheless, the voluntary nature of consent is undermined, because individuals asked for providing the sample in a mass screening are under social pressure. Refusal to participate in ILMS can be also considered as a signal for Police to undertake more advanced activities against the person, including charges, arrest and sampling under the suspect regime (i.e. mandatory and with using coercive measures). Voluntary sampling, with giving free will for third parties, appears to be only theoretical construct and is often illusory in practice.

Therefore, mandatory sampling of reference materials in ILMS can be considered as safer for ensuring fundamental rights and procedural safeguards fpr participants in criminal proceedings, provided that mass testing is limited to exceptional cases and under strict conditions prescribed in the penal procedure code. The following conditions should be fulfilled when deciding on the mandatory collection of materials within ILMS:

- investigation concerns most harmful types of crime (homicide or other offences against life, rape or

other sexual offences, robbery, offences against personal freedom, terrorists activities);

- the trace collected from crime scene enables identification of the perpetrator, i.e. it can be assigned with a very high probability to the perpetrator of the crime;

- the perpetrator has not been detected, despite standard investigative approaches (e.g. typing of suspects based on witness statements or other data obtained from the case) being applied;

- particular features of the group selected for sampling can be precisely defined;

- individuals from the group can be identified and are accessible for public authorities for sampling.

An important issue for ILMS is selection of the group for material collection. The size of the group cannot be too large for organizational and financial reasons, but it should be enough to assume with high probability that the perpetrator may be in the group. The procedure of ILMS can be only initiated by the court decision issued at the request of the prosecutor.

To preventh the illegal use of collected reference materials, that is contrary to their intended purpose, it is necessary to destroy the samples and DNA profiles from the samples immediately after comparison of results to the traces. Only information about collection of the material from the person within ILMS and exclusion from the suspects may be stored in the case files. Using results obtained for collected samples should be strictly prohibited in other proceedings or for other purposes. In particular, they may not be uploaded to the national DNA database.

In conclusion, intelligence-led mass screenings (ILMS) by sampling reference materials from the selected group of persons for detection of perpetrators can be assessed as relatively well accepted procedure by the society, which was observed in the public survey. Due to intrusion on fundamental rights and freedom, the procedure of ILMS may be permitted under the criminal procedure law only in exceptional cases and in proceedings related to serious crime. Judicial supervision is necessary to prevent abuse of such procedures by law enforcements.

Voluntary sampling within ILMS was recognized as illusory due to social pressure and a high risk of recognizing persons who refused to provide the sample as suspects by law enforcements. Therefore, compulsory mass screening limited to cases under specified circumstances and after permission of the court was proposed as better solution for ensuring civil liberties in criminal proceedings.

Conflict of interest

The authors declare that they have no conflict of interest.

Acknowledgments

The research and participation in 14th Balkan Academy of Sciences in Istanbul in 2023 has been supported by a grant from the Priority Research Area (FutureSoc (Future Law Lab)) under the Strategic Programme Excellence Initiative at Jagiellonian University.

References

1. Drobner FW. DNA Dragnets: Constitutional Aspects of Mass DNA Identification Testing. Capital University Law Review. 2000; 28: 479-511
2. Thorwald J. The Century of the Detective. Harcourt Brace & World: New York; 1965. 513 p.
3. Ten million fingerprints. The Sydney Morning Herald, 22 February 1954.
4. Maziarz J. Sądy przysięgłych w II Rzeczypospolitej w praktyce Sądu Okręgowego w Krakowie. Wolters Kluwer: Warsaw; 2017. 437 p. (in Polish)
5. R v Pitchfork. EWCA Crim 963 (2009). Available from: http://www.bailii.org/ew/cases/EWCA/Crim/2009/963.html (Accessed: 2024-03-04)
6. Britton P. The Jigsaw Man. Transworld Publishers Ltd: London; 2023, 672 p.
7. Walker S. Police DNA "sweeps" extremely unproductive. A National Survey of Police DNA "Sweeps". A Report by the Police Professionalism Initiative, University of Nebraska: Omaha; 2005. 21 p.
8. The National DNA Database Strategy Board. National DNA Database Annual Report 2006–2007. Home Office: London; 2008, 44 p.
9. The National DNA Database Strategy Board. National DNA Database 2009–2011 Biennial Report. Home Office: London; 2012, 85 p.
10. Sauter M. DNA-Massentests in Strafverfahren. Rechtliche und rechtstatsächliche Aspekte genetischer Reihenuntersuchungen zur Aufklärung von Straftaten. Verlag für Polizei Wissenschaft: Frankfurt 2003; 261 p. (in German).
11. de Poot CJ, Kruisbergen EW. Kringen rond de dader. Grootschalig DNA-onderzoek als instrument in de opsporing. WODC: Hague 2006; 231 p. (in Dutch).
12. Esmaili S. Searching for a Needle in a Haystack: The Constitutionality of Police DNA Dragnets. Chicago-Kent Law Review. 2006; 82(1): 405-523.
13. Grand J.S. The blooding of America: Privacy and the DNA dragnet. Cardozo Law Review. 2002; 23(6): 2277-2323.
14. Dettlaf-Kąkol A, Pawłowski R. First Polish DNA "manhunt" – an application of Y-chromosome STRs. International Journal of Legal Medicine. 2002; 116: 289-291.
15. Mayrhofer T. Verfassungsrechtliche Zulässigkeit des DNA-Massentests nach § 123 Abs 2 StPO. Master Thesis, Johannes Kepler Universität Linz: Linz; 2018, 64 p.
16. Wilk D. Materiał referencyjny w procesie karnym. Aspekty prawne i kryminalistyczne pobierania i gromadzenia materiałów porównawczych do identyfikacji osób. FNCE: Poznań; 2025, 756 p.