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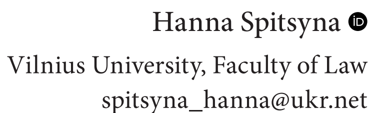
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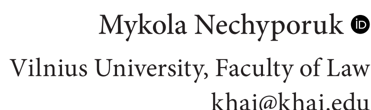
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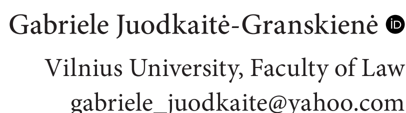
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Chapter 2

Particular Aspects of International Cooperation of Ukrainian Forensic Science Institutions with Foreign Specialists in Collecting, Studying and Processing Human Genomic Information and Conducting Molecular Genetic Analysis During Military Aggression Against Ukraine

ABSTRACT

The monograph deals with issues of organization and examination of physical evidence of biological origin (molecular genetic testing), which is becoming an increasingly relevant element in criminal proceedings.

The authors stress that the studying and processing of human genomic information, as well as molecular genetic testing performed in forensic science institutions both in Ukraine and abroad, can be considered from two interrelated perspectives: of the relevant issues of appointing and conducting molecular genetic testing in present legal conditions, and of the moral and ethical aspects of ensuring that human rights are respected in the use of genomic information and human biomaterial.

Also, an analysis of the practice of the European Court of Human Rights in the field of using genomic information and human biological material was carried out. The need for the legislative introduction of international standards in the process of molecular genetic testing has been identified and substantiated.

Keywords: forensic examination, forensic science institutions, protection of human rights, European Court of Human Rights, national and international legislation, genome, genomic information, human biological material, DNA forensics, DNA identification, molecular genetic testing

1. Introduction

Forensic examination as a criminal procedure has long been firmly embedded in the practice of criminal justice. The development of modern justice is almost impossible without the use of special knowledge, skills and abilities possessed by forensic experts and specialists—specialized competencies applicable in crime investigation (Juodkaitė-Granskienė, 2014, pp. 168-201). Developing and improving on the basis of the latest scientific and technical achievements, forensic examinations appear more and more often in criminal proceedings, helping to determine factual circumstances of a case.

Traditional forensic examinations are quite well developed and publicized (understood and used). However, today's challenges necessitate the development of new forensic areas (types). As a result, the issues of considering innovative forensic examinations are at the core of the scientific discourse, and they include collecting, studying and processing human genomic information as well as conducting molecular genetic testing.

At present, the following purposes of genetic databases have been defined in the course of their application:

– databases are repositories of genetic information;
– databases allow to link different episodes of criminal offenses in one criminal case or connect crimes committed at different points in time (sometimes quite distant);
– databases help establish the identity of a perpetrator, victim of a crime or identify unrecognized corpse.

The collection, study and processing of human genomic information as well molecular genetic testing in conditions of the present legal reality (wars, terrorism acts, etc.) are of particular relevance. Every year, criminals try to use more sophisticated ways to commit illegal acts and conceal evidence. It should be highlighted

that due to the changes in the modern world, various areas of illegal activity are also evolving, but thanks to the use of modern technologies, law enforcement agencies, with an active assistance of forensic science institutions, manage to effectively solve crimes. One of these methods is molecular genetic testing.

In the practice of law enforcement agencies of the Ministry of Internal Affairs of Ukraine, the main method of identifying a person is the study of papillary patterns of fingers. Thus, when committing a crime, perpetrators use gloves to avoid leaving fingerprints, so alternative methods of perpetrator identification are required. Dactyloscopy (fingerprint identification) is being replaced by molecular genetic testing, i.e., DNA research. As stated in Article 1 of the Law of Ukraine *About the state registration of human genomic information*, human genomic information consists of human genetic traits and data about them; molecular genetic research (testing) for the state-managed registration of genomic information consists in research on biological material to obtain genetic traits of a person. All data received by authorized entities will be stored in a database of human genomic information—a collection of organized data on genomic information in electronic form (About the state registration of human genomic information. Law of Ukraine, 2022).

By using 1/100 percent of person-specific DNA, scientists can make specific findings that have significant forensic value to the prosecution in a case. First, they can determine the genetic profile drawn from biological evidence found at a crime scene and compare it with the genetic profile of a suspect, thus allowing to connect the suspect with the crime. Then, a scientist can calculate the statistical probability that a random unrelated person within the human population could coincidentally have the same genetic profile as the one from the crime scene evidence. Such a determination helps the prosecutor prove that the person in question committed the crime. When performing forensic DNA testing, analysts first compare the profile generated from the crime scene evidence sample to the profile generated from the suspect's sample. To this end, the analyst examines 13 locations along the chromosome, known as loci, which the relevant international scientific community has identified as suitable for comparison purposes. Each locus contains two alleles, one from each parent.

When the STRs from a crime scene profile match the suspect's profile, it means that there is a match at each and every one of the 26 alleles (genes) that comprise the 13 loci. (The 13 core loci used for STR comparisons are: TPOX, D3S1358, FGA, D5S818, CSF1PO, D7S820, D8S1179, TH01, VWA, D13S317, D18S51, D21S11, and D16S539. Profiles are also developed at the amelogenin locus for sex determination. Currently, Profiler Plus ID and CoFiler typing systems are the kits predominantly used for analysis. MtDNA analysis only investigates a single locus, in comparison with the 13 used in nuclear DNA analysis.) The specificity of this forensic

identification is one of the most significant strengths of DNA. When scientists compare the crime scene evidence profile and the suspect's profile, they look for a 100-percent match of the two profiles at the 13 loci. This comparison is not a statistical determination, but rather a scientific one. DNA analysts, however, do speak in terms of statistical probability when describing the frequency of finding a certain profile among human populations. There are approximately six billion people on Earth. Comparing DNA at 13 loci can generate a random match probability greater than six billion. In other words, the analyst may testify that there is no likelihood that anyone else, other than the suspect, can have the same genetic profile as the profile generated from both the crime scene evidence and the suspect. By calculating the random match probability, scientists can conclude from whom the DNA originated, a method called DNA source attribution. In other words, these statistical formulae allow the analyst to demonstrate, using 13 loci in STR testing, that an individual profile matching the profile generated from the crime evidence will not be found in any other unrelated person on earth (Kreeger and Danielle, 2003).

Ukrainian law enforcement structures have been using certain types of genomic analysis in their practice for a long time. But now, in the context of the armed aggression, this issue reaches a new level of development and use. After all, right now molecular and genetic testing allows solving a number of urgent needs for identification of people who committed a criminal offense or are missing; identification of unrecognizable human corpses, their remains and human body parts (this especially applies to our defenders who died on the battlefield or civilians who were in the temporarily occupied territories). Thus, for example, only with the help of collecting and processing human genomic information, as well as carrying out molecular genetic testing, it was possible to identify the Ukrainians who died in Bucha (Kyiv Region). Approximately two hundred people have not been identified yet. Their relatives cannot recognize them, a fact that demonstrates the extent to which their bodies have been mutilated by the Russians. That is why DNA testing is the only solution. It is carried out by French forensic experts along with our experts (*The Body Is Completely Burnt…*, 2022).

In the four months of the war, more than 6,000 identification examinations have already been scheduled, of which about 40 percent have already been completed. That is why the creation of a tool for accumulating and systematizing this information, providing a legal status that allows to use it as an evidentiary basis in the process of proving Russian crimes against Ukraine, is extremely urgent today.

2. Literature Review

Particular issues of collecting, studying, and processing human genomic information, as well as molecular genetic testing in forensic science institutions were studied in research papers by such domestic and foreign scientists as O. M. Bandurka, Z. Bernachek, R. K. Bichurin, T. V. Hanzha N. M. Diachenko, A. Ivanovich, M. P. Klymchuk, O. M. Kliuiev, S. M. Lozova, O. V. Matarykina, H. V. Mudretska, V. V. Nevhad, M. V. Nechyporuk, E. B. Simakova-Yefremian, A. Solash, H. O. Spytsyna, N. Ye. Filipenko, O. V. Tsykova, K. Shpindler, M. H. Shcherbakovskyi, G. Juodkaitė and others.

The problems of improving expert activity, the issues of collecting, studying and processing human genomic information as well as conducting molecular genetic testing in forensic science institutions can be studied from various viewpoints: for example, by analyzing an issue's history, researching legal matters from a proper perspective, etc. Each of the indicated research areas is fairly interesting and seems to be promising. However, the mentioned areas are very comprehensive and at the same time research a phenomenon only from one angle, so let us focus on the issues of applying the systemic approach to the indicated issue as a method allowing us to carry out a systemic and structural analysis of the phenomenon being studied, considering it in an integrated manner. The range of scientific developments on this issue is quite wide, but not all problematic issues of forensic examination application have been resolved: some of them have only been identified, while some are still debatable and almost undeveloped. But the main issue of such activity is an almost complete lack of legislative framework. Therefore, in no way detracting from the scientific and practical value of the published research papers on the issue under consideration, let us stress that the issue of collecting, studying and processing human genomic information, as well as conducting molecular genetic tests, necessitates comprehensive coverage to take into account provisions of current Ukrainian and foreign legislation, professional theoretical research, problems of practice and implementation of international experience. The problems of moral and ethical collection and application of such information constitute a separate important issue.

For this reason, the topic that will be examined in this monograph turns out to be highly relevant for Ukrainian science and law enforcement practice.

3. Main Content Presentation

The History of Development

The shift in the EU policy towards a common forensic science area is not only a significant step in the development of forensic science, but it also highlighs the previously unidentified need for forensic harmonization and its role in ensuring human security. It is now recognized that only the harmonization of forensic science and law in general can guarantee the existence of the fundamental values of a democratic society: freedom and security (Kurapka, Malevski and Matulienė, 2016, p. 354). And this is a highly important postulate, especially when it comes to protection of an individual in the process of collecting, studying and processing human genomic information as well as conducting molecular genetic analysis.

Molecular analysis answers the question: what does the substance under study consist of? It is performed using gas chromatography and chromatography of high pressure fluids, chromatography spectrometry and molecular mass spectrometry, molecular spectral analysis (Didyk, 2003, pp. 34-36). DNA analysis is a promising modern method widely applied by Interpol and forensic laboratories around the world. There are two directions in DNA profiling: one is the matching of the biological samples found at a crime scene and those collected from the suspect; the other is the determination of kinship by DNA (routinely used in civil cases to establish paternity) (Mullis and Faloona, 1987).

In the case of performing a retrospective analysis of the origin and development of molecular genetic analysis (also called DNA fingerprinting) and creation of specific databases, it can be stated that in fact the first forensic DNA database was established in 1986-1987 in England when searching for a serial rapist and murderer (after two teenage girls had been raped and killed in Leicestershire within three years). In a short time, in two neighboring towns the police collected blood samples of the whole male population in the corresponding age group (about 5,000 people) who agreed to give it voluntarily. This was the first case of DNA fingerprinting performed to identify the perpetrator. Unfortunately, the undertaken activities did not produce a positive result as the killer replaced his own blood with another person's biological material. This manipulation was exposed a few years later. The entire case, which is considered to be the first application of DNA analysis in criminal investigations, is described in the book *Blooding* by Joseph Wambaugh (Wambaugh, 1989).

Given the significance of such information to law enforcement, DNA databases based primarily on the so-called single-locus VNTR polymorphism that can be conditionally viewed as the first generation of commonly used markers for DNA profil-

ing. Step by step, information on DNA polymorphism of criminals was accumulated at crime scenes, and a number of laboratories stored DNA profiles based on VNTR loci for a total of more than 5,700 individuals in the United Kingdom until 1995. In April of the same year, the National DNA Database (NDNAD) of England and Wales was launched, becoming the world's first nationwide DNA database based on the second generation of STR locus markers. The launch of such a database was preceded by the Criminal Justice and Public Order Act passed in 1994 by the British Parliament which became the legal basis for the NDNAD. This law allowed the police take DNA samples without the consent of any person accused of committing an offense classified as "registered," as well as search for information in a database of relevant DNA profiles. By December 1995, NDNAD had already stored 19,000 DNA profiles and exposed more than 100 criminals while searching the database, due to matching polymorphism data of their DNA with the ones stored in this database. The experience of using the British national forensic DNA database shows an average increase in detection by 60 percent and 3-4 times (National DNA Database Strategy Board Annual Report, 2017) increase in detection of petty offenses.

Considering the cutting-edge experience of England in detection of criminal offenses and felonies, similar forensic DNA databases were launched in the European Union and other countries. To date, forensic DNA databases are already used in 69 countries of the world, and in 34 countries similar databases are at different stages of development (Machado and Granja, 2020). For example, some of the first such databases were launched in 1996 in Northern Ireland, Scotland and New Zealand. In 1997, they were launched in the Netherlands and Austria, in 1998 in Germany and Slovenia, in 1999 in Finland and Norway, in 2000 in Denmark, Switzerland, Sweden, Croatia, and Bulgaria, in 2001 in France and the Czech Republic, in 2002 in Belgium, Estonia, Lithuania, and Slovakia, in 2003 in Hungary and Latvia (Santos, Machado and Silva, 2013).

Interpol has its own automated genetic database, the DNA Gateway, which contains DNA profiles provided by member countries. DNA Gateway was launched in 2002 and stores more than 242,000 DNA profiles from 85 member countries (INTERPOL Official website). Unlike other databases, the DNA Gateway is used only to compare and share information and does not allow to identify a particular person because it does not contain personally identifiable information. It functions as a stand-alone database and is not linked to other Interpol databases.

In the late 1980s, a number of US states decided to launch similar DNA databases and when some other states followed their example, the FBI developed the Combined DNA Index System (CODIS) which allowed to exchange data and their use by other states. It was first applied in court in 1991, in Minnesota. In 1992, the US Armed Forces Institute of Pathology launched a DNA bank designed to identify

the military personnel killed in Iraq during Operation *Desert Storm* of 1991. The peculiarity of this repository is that it stores blood samples of servicemen but not their DNA data that are obtained as unidentified remains found during military operations become available.

The analysis of the CODIS system that was launched as a pilot program in 1990 showed that as of October 1993, a total of 141,870 DNA samples of criminals analyzed on the basis of VNTR polymorphism had been collected in several states involved in this tested system. The best such work has been done in California and Virginia (37,000 and 70,000 DNA profiles, respectively). By 31 December 1993, legislative decisions on the operation of DNA databases had been adopted in 19 US states. A prominent role in further development of such DNA databases and their dissemination throughout the United States was played by the DNA Identification Act of 1994. By the end of 1997, the CODIS database had increased by another 85,000 samples presented as VNTR loci. And at the time of the transition of the CODIS system into another type of polymorphism in the form of STR-loci in different US states, an aggregate of more than 230,000 records of VNTR polymorphism were available as of July 1998.

As a result, DNA databases based on STR polymorphism started to emerge in the USA. The basis for operation of the new national DNA database in the USA is the DNA Identification Act of 1994 (42 USC § 14132), which enshrined the creation of the National DNA Index System (NDIS) covering convicted offenders, arrestees, detainees, forensic casework samples, unidentified human remains, missing persons, and relatives of missing persons. Similar databases have been launched at the local level (Local DNA Index System: LDIS) and the state level (State DNA Index System: SDIS) in compliance with state laws. All of them make up a single system called the Combined DNA Index System: CODIS (CODIS and NDIS Fact Sheet – FBI). Since July 2004, CODIS has been operating in the United States, in all 50 states and the District of Columbia, although in October 1998, when the system was first launched based on 13 STR loci, it was applied for forensic purposes in only nine states but already stored about 119,000 DNA profiles, some of which were received from previously available DNA samples, analyzed on the basis of DQA1/PM- and VNTR-loci.

CODIS was designed to compare a target DNA record against the DNA records contained in the database. Once a match is identified by the CODIS software, the laboratories involved in the match exchange information to verify the match and establish coordination between their two agencies. The match of the forensic DNA record against the DNA record in the database may be used to establish plausible grounds to obtain an evidentiary DNA sample from the suspect. The law enforcement agency can use this documentation to obtain a warrant authorizing the collection of a known biological reference sample from the suspect. The casework labora-

tory can then perform a DNA analysis on the known biological sample so that this analysis can be presented as evidence in the court.

Following the USA, the CODIS system based on 13 STR-loci was adopted in Canada in December 1998 and an analogue DNA database, *National DNA Data Bank of Canada* (NDDB) was launched, but its first practical application took place in mid-2000. At the same time, the NDDB is very similar to the three-tier CODIS system in the USA.

European countries also do not stand aside from collection, study, classification and use of personal genomic information. ENFSI members include 73 organizations (forensic science institutions, forensic laboratories) from 39 European countries (Official website ENFSI). It is the world's largest international organization of forensic science institutions that has gained international recognition. Among the countries which institutions belong to the European network are Armenia, Austria, Azerbaijan, Belgium, Bulgaria, Great Britain, Hungary, Greece, Georgia, Denmark, Spain, Ireland, Italy, Lithuania, Latvia, Montenegro, the Netherlands, Norway, Poland, Romania, Russia,[1] Serbia, Slovakia, Slovenia, Turkey, Ukraine, Sweden, Switzerland, etc. (Linnyk and Omelchuk, 2017, pp. 236-241).

The ENFSI Purpose declared in its Constitution is to be at the forefront of the world in terms of the quality, development and delivery of forensic science across Europe. A core ENFSI activity is the organization's strive to earn credibility in the field of forensic science in Europe and the world by enhancing the quality of forensic services at all stages of court proceedings: from the crime scene to the court (Official website ENFSI).

The 31st ENFSI Annual Meeting organized by the Italian Forensic Science Police Service was held on 29-31 May 2018 in Rome (Italy); it was attended by

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[1] The Council of the European Network of Forensic Institutions (ENFSI) made a decision to suspend the membership of the Russian Federal Forensic Center (Moscow) and the North-West Regional Forensic Center (St. Petersburg). The decision was taken at the initiative of the leadership of the Kyiv Research Institute of Forensic Expertise of the Ministry of Justice of Ukraine (KNDISE). In addition to the exclusion of forensic expert institutions of the Ministry of Justice of the Russian Federation, the ENFSI Council also made a decision to exclude all Russian scientists from the European Academy of Forensic Science (EAFS), as reported by Pinelopi Miniati, Chairperson of ENFSI, in a letter sent to KNDISE. "NFSI´s thoughts are with Ukraine and especially the four Ukrainian ENFSI member institutes. We hope for this pointless war to cease without any more victims on any side," Pinelopi Miniati said in the letter. Victories on the scientific front: forensic expert institutions of the Russian Federation are excluded from international specialized organizations. Publication date: 20.03.2022. URL: https://lexinform.com.ua/v-ukraini/noviny-kompaniy/peremogy-na-naukovomu-fronti-sudovo-ekspertni-ustanovy-rosijskoyi-federatsiyi-vyklyucheni-z-mizhnarodnyh-profilnyh-organizatsij/

representatives of 55 forensic science institutions from 31 European countries. Attention was drawn to exchanging experience and the latest R&D projects in the following areas: DNA analysis, drug analysis, document verification, tools identification, ballistics and forensic visualization (face recognition, photogrammetry, portraiture). When we mention the ENFSI network, it is important to state that ENFSI is a monopoly organization in the European Union in the field of development of forensics in the member states of the European Union and the states that intend to become members. In 2009, the European Commission decided to grant ENFSI the monopoly status concerning forensic science in Europe (European Forensic Initiatives Centre—EFIC Foundation). The Commission tends to turn to ENFSI in situations when information or advice on forensic science is needed. Also, as a result of this decision, the Commission has allocated some funds for ENFSI to spend on various projects executed through specific action grants. As a monopoly organization in the European Union in the field of forensic sciences, ENFSI started the EFSA 2030 project at the beginning of 2022 (Vision of the European Forensic Science Area 2030). Through this project, entitled "Improving the Reliability and Validity of Forensic Science and Fostering the Implementation of Emerging Technologies," ENFSI has a vision to ensure the quality, development and presentation of forensic science with the imperative of foresight to recognize scientific and technological trends that will concern the forensic community in the years to come. The vision of EFSA 2030 aims to include the upcoming trends in forensic science in the application of new methods for solving (so far) unsolvable forensic issues, as well as the challenges brought by the application of new methods, techniques and technologies. The purpose of the vision is to harmonize and balance the development of forensic sciences, which will contribute to a more effective administration of justice in Europe. Important for this paper is Article 2.2 of the Vision which regulates the handling of forensic databases, and therefore the DNA profile database:

> 2.2. Forensic data sharing across agencies and jurisdictions is ongoing and is predicted to increase in the future. Where relevant, the forensic community should study the differences in data collection methods and file formats which hinder the exchange of information, vital to maximizing the use of forensic analysis and comparison. ENFSI supports the harmonization of formats in datasets and offers tools to share reference data.

Further study of professional literature helped find out that apart from ENFSI there are other international organizations in the world today. They address the issue of the development and enhancement of forensic science activities, and international cooperation in this field:

1. The International Association for Identification (IAI) is one of the largest and most authoritative professional forensic associations. Currently, IAI, which has become one of the most prestigious professional associations in the world, has more than 5,000 members from 69 countries. It is chaired by a 15-member Board of Directors headed by the President. The IAI has 29 standing committees. In addition, credible commissions for certification of forensic experts in seven specializations have been established. The association has 45 branches in various US states and other countries (Nechyporuk et al., 2021, p. 836).
2. The International Society for Forensic Genetics was created in 1989 in Germany to advance achievements of genetics in forensic science and justice. The Society has assumed the role of a leading organization in the field of forensic genetics and coordinates research on genetic markers for criminal justice purposes. It was expected that the opening of European borders within the EU could lead to an increase in international crime rate, and forensic geneticists would need standard techniques of research and documenting results. At present, the list of members of the Society includes the main laboratories of forensic genetics of leading forensic institutions in European countries, such as Austria, Belgium, Denmark, Great Britain, Finland, France, Greece, Ireland, Italy, Netherlands Norway, Portugal, Scotland, Spain, Sweden and Switzerland. This group implements a significant project: creation of a DNA database of different populations (Nechyporuk et al., 2021, p. 65).
3. The International Crime Scene Investigators Association was established to assist individuals and organizations specialized in crime scene investigation. Scene investigation is a complex field and requires knowledge and skills in almost all forensic disciplines.
4. The Association for Crime Scene Reconstruction started to operate as an association of a group of experts in the states of Oklahoma and Texas (USA). These experts realized the necessity for a multidisciplinary investigation of an entire crime scene with the aim to recreate many elements of a criminal event and to detect and preserve physical evidence. The Association members include representatives of law enforcement agencies responsible for crime investigation, forensic experts and teachers. Currently, the association has more than 550 members. Among other things, the objectives of the Association's activity are as follows: encouraging exchange of information and procedures (techniques) vital for reconstruction of crime scenes; encouraging research of the existing and development of new improved methods of crime scene investigation for reconstruction; promotion of educational programs designed to raise qualifications of forensic experts-practitioners in the field of crime scene reconstruction; provide the Association members with the opportunity of consultation with colleagues in

particular cases; publication of a newsletter; enhancing cooperation and relations between agencies and representatives of different forensic science institutions; ensuring that the Association members can interact with forensic experts of various expert specializations within the Association and disseminate information about themselves (Nechyporuk et al., 2020, p. 218).

5. In 2015, Forensic Science Ireland adopted a strategic plan for 2015-2018. Apart from the improvement of forensic support of the criminal justice system, the plan called for the creation of a DNA database and initiation of a number of organizational measures, and further international cooperation in the field of forensic science (FSI Strategic Plan 2015-2018).

A significant aspect of the international cooperation of Ukrainian forensic science organizations with foreign experts in collecting, studying and processing human genomic information as well as conducting molecular genetic analysis is the establishing of international and regional reference-information databases of databases international forensic science companies, foreign forensic science institutions (Filipenko, Bublikov and Obolientseva-Krasyvska, 2021, pp. 10-16).

These problems could be tackled and the full potential of point-of-care and mobile forensic analyses could be realized if measurement devices could be operated in an integral forensic network. Through the network, the necessary calibration and quality control measures could be applied that would enable reliable forensic instrumentation for assuring further usage of findings as admissible and reliable evidence. The network would allow forensic experts to assess data generated outside the forensic laboratory and to provide direct assistance to the investigators on location (crime scene). From these activities, it also becomes apparent for which samples a more detailed follow-up examination is required at the forensic laboratory. The forensic expert force is thus used more effectively and findings can be fed into the platform creating a continuous cycle of platform and data development. This approach would combine central data collection allowing forensic intelligence and knowledge management with rapid and efficient decentralized forensic analysis. This novel concept, although technologically challenging, could lead to a step change in the efficiency and efficacy of the forensic information gathering process. It could also cause a paradigm shift in the role of forensic institutes and forensic experts in the criminal justice system: a shift towards a new role for forensic institutes and laboratories as custodians of the forensic platforms and point-of-care and portable equipment and methods. It would also allow forensic institutes to develop powerful forensic intelligence tools to discover potential case and evidence connections, to better understand criminal activities, to monitor and optimize policing, to improve the efficiency of forensic investigations and to assist in crime prevention and disruption (Kloosterman et al., 2015).

For the effective usage of forensic databases, not only proper legal bases are necessary but also bilateral agreements among states are vital. In order to combat terrorism in the most efficient way, seven countries of the European Union (Austria, Belgium, France, Germany, Luxembourg, the Netherlands and Spain) signed a convention on 27 May 2005, in the city of Prüm in the Federal Republic of Germany, which ensures, in particular, the exchange of DNA profiles and fingerprints. The Council of the European Union accepted this initiative by adopting the Decision of the European Union Council 2008/615/JHA dated 23 June 2008 on the stepping up of cross-border cooperation, particularly in combating terrorism and cross-border crime. The convention ensures exchange of forensic data between EU member states in the field of DNA profiles, fingerprints and vehicle registration data.

Given the significance of that document, we would like to cite specific provisions of the convention, in particular those related to forensic databases. For example, Chapter 2 *DNA profiles, fingerprint material and other data*, Article 2 *Establishment of national DNA analysis files* stresses: Member States shall open and keep national DNA analysis files for the investigation of criminal offences. Processing of data kept in those files, under this Decision, shall be carried out in accordance with this Decision, in compliance with the national law applicable to the processing. For the purpose of implementing this Decision, the Member States shall ensure the availability of reference data from their national DNA analysis files. Reference data shall only include DNA profiles established from the non-coding part of DNA and a reference number. Reference data shall not contain any data from which the data subject can be directly identified. Reference data which is not attributed to any individual (unidentified DNA profiles) shall be recognizable as such.

Article 3 *Automated searching of DNA profiles:*

1. For the investigation of criminal offences, Member States shall allow other Member States' national contact points access to the reference data in their DNA analysis files, with the power to conduct automated searches by comparing DNA profiles. Searches may be conducted only in individual cases and in compliance with the requesting Member State's national law.
2. Should an automated search show that a DNA profile supplied matches DNA profiles entered in the receiving Member State's searched file, the national contact point of the searching Member State shall receive in an automated way the reference data with which a match has been found. If no match can be found, automated notification of this shall be given.

Article 4 *Automated comparison of DNA profiles:*

1. For the investigation of criminal offences, the Member States shall, by mutual consent, via their national contact points, compare the DNA profiles of their unidentified DNA profiles with all DNA profiles from other national DNA analysis

files' reference data. Profiles shall be supplied and compared in automated form. Unidentified DNA profiles shall be supplied for comparison only where provided for under the requesting Member State's national law.

2. Should a Member State find that any DNA profiles supplied match any of those in its DNA analysis files, it shall, without delay, supply the other Member State's national contact point with the reference data with which a match has been found. Article 7 *Collection of cellular material and supply of DNA profiles*

Where, in ongoing investigations or criminal proceedings, there is no DNA profile available for a particular individual present within a requested Member State's territory, the requested Member State shall provide legal assistance by collecting and examining cellular material from that individual and by supplying the DNA profile obtained, if: 1) the requesting Member State specifies the purpose for which this is required; 2) the requesting Member State produces an investigation warrant or statement issued by the competent authority, as required under that Member State's law, showing that the requirements for collecting and examining cellular material would be fulfilled if the individual concerned were present within the requesting Member State's territory. 3) under the requested Member State's law, the requirements for collecting and examining cellular material and for supplying the DNA profile obtained are fulfilled (Ivanović and Merike, 2011).

Meanwhile, it should be stressed that this convention is open for accession by any member state of the European Union. After accession, all states will also be obliged to implement it into their national legislations. According to the convention, only member states have access to forensic databases (in the scope of DNA profiles and fingerprints). However, EU candidate countries must thoroughly prepare to join the forensic database through the Prüm Convention. That is particularly true for accreditation of forensic laboratories in the field of DNA profiles and fingerprint analysis in compliance with the ISO 17025 international standard.

If we consider domestic experience of processing human genomic material and conducting molecular genetic testing, the widest network of forensic genetics laboratories is owned by forensic science institutions of the Ministry of Internal Affairs of Ukraine. In particular, molecular genetic analysis is performed at the State Scientific Research Forensic Center of the Ministry of Internal Affairs of Ukraine, forensic science centers of the Ministry of Internal Affairs of Ukraine in the Kyiv, Kharkiv, Vinnytsia, Zaporizhzhia, Lviv, Mykolaiv, and Ivano-Frankivsk regions. The functions of keeping automated forensic records of human genetic traits are also fulfilled by the divisions of Expert Service of the Ministry of Internal Affairs of Ukraine (Stepanyuk, 2019, p. 175).

The main object of forensic molecular genetic analysis is human DNA, i.e., molecules contained in the nucleus (nuclear DNA) and in the cell mitochondria (mito-

chondrial DNA). At the same time, it is worth noting that nuclear DNA, which is the basis of a chromosome, contains the majority of information necessary to determine individual genetic traits of a person, that is why it is of key importance in solving identification tasks. During forensic investigation, human cells with nuclei from which it is possible to isolate DNA can be found in traces of blood, saliva, semen, hair, particles of epithelium, and also parts of organs and corpse tissues. When identifying, seizing and storing objects of biological origin during an investigation of the crime scene and other investigative (search) actions, the investigator, prosecutor, specialists and all other participants must observe measures aimed at preventing destruction or contamination of the trace evidence (Peculiarities of Collecting…, 2016, p. 35).

Despite a well-established practice of conducting this forensic examination and working with personal genomic information, in the legislative field, statutory provisions of such activity appeared relatively recently. As we noted earlier, the provisions of the Draft Law of Ukraine On State Registration of Human Genomic Information were adopted on 14 April 2022 [27], immediately stirring broad response of both scientists and lawyers.

Let's look at some of the most controversial provisions of this Draft Law.

1. Availability of a huge number of corruption risks.

According to Article 3 of the Draft Law, one of the principles which state registration of genomic information must comply with is a combination of voluntarism and obligation. In this regard, the Draft Law clarifies the categories of persons whose genomic information is subject to obligatory state registration (Article 5). In addition, Article 6 of the Draft Law also stipulates that citizens of Ukraine, as well as foreigners and stateless persons, have the right to voluntary state registration of genomic information upon their written statement or a written statement of a person specified in Parts 3 and 4 of Article 6 of the Draft Law. Meanwhile, Part 1 of Article 8 of the Draft Law stipulates the obtaining of biological material from persons who voluntarily join or are called up for military service and from military personnel by a person designated by a military medical commission. At the same time, persons who voluntarily join or are called up for military service and servicemen are not specified in Article 5 of the Draft Law containing an exhaustive list of individuals who are subject to compulsory state registration of genomic information. This category of people is not specified in Article 6 of the Draft Law that defines grounds, procedure and circle of persons who can undergo the procedure of voluntary state registration of genomic information. On the other hand, the requirement laid down in Part 2 of Article 8 of the Draft Law on the need to obtain biological material from servicemen every eight years, though does not contain a clear regulation that obligates military personnel to undergo this procedure, it nevertheless demonstrates its biding nature for the indicated category of people.

Furthermore, Article 8 of the Draft Law does not directly stipulate that such obtaining of biological material from persons who voluntarily join or are called up for military service and from military personnel is carried out specifically for state registration of genomic information of these people. It is only mentioned that such obtaining will be managed by a responsible person of the military medical commission for the purpose provided for in paragraphs 3-5, Part 1, Article 4 of the Draft Law, i.e., for searching for missing persons, identification of unrecognized bodies (remains), identification of individuals who cannot provide information about themselves due to their health or age. At the same time, the purpose specified in Article 8 of the Draft Law for obtaining biological material from persons who voluntarily join or are called up for military service and from military personnel does not in any way disclose the manner of its further use. It has not been clarified, in particular, whether the molecular genetic analysis (testing) will be performed on the biological material of all servicemen without exception for further state registration of their genomic information, or whether the material will only be obtained for the purpose of storing it, and a corresponding forensic examination will be conducted optionally, only with regard to certain individuals from the pool of military personnel to fulfill the purpose specified in paragraphs 3-5, Part 1, Article 4 of the Draft Law. At the same time, the provisions of the Draft Law do not directly specify whether state registration of genomic information will be compulsory for them or not. Meanwhile, given the imperative nature of the provisions of Article 8 of the Draft Law, the indicated doubts may allow abuse of authority among the authorized persons in military medical commissions and may result in violation of rights of persons who voluntarily join or are called up for military service and of military personnel.

In addition, the Draft Law does not define sources of financing the cost of molecular genetic analysis (testing) of biological material obtained from such individuals for state registration of genomic information. The Draft only stipulates that the procedure of obtaining biological material from persons who voluntarily join or are called up for military service and from military personnel is financed from the state budget.

Meanwhile, Article 9 of the Draft Law stipulates that molecular genetic analysis (testing) for implementation of compulsory state registration of genomic information is financed from the state budget, and the same forensic examination for implementation of voluntary state registration of genomic information is conducted on paid basis, in compliance with the procedure governed by the Cabinet of Ministers of Ukraine.

The legal doubts concerning the procedure for acquiring biological material from persons who voluntarily join or are called up for military service and from military personnel, the procedure for state registration of genomic information, the sources

of funding for molecular genetic analysis of their biological material, as well as the procedure for registration of genomic information of the indicated category of persons, constitute corruption-fostering factors, and in the case of realization of the specified provisions of the Draft Law in the proposed version, they may lead to mismanagement of public budget funds or unjustified charging payments for molecular genetic analysis from persons who voluntarily join or are called up for military service and from military personnel (On the adoption of the draft Law of Ukraine on State Registration of Human Genomic Information).

2. Inconsistency between the provisions of the Draft Law and current Ukrainian legislation.

The acquired genomic information will be stored in a special database whose operation and administration is entrusted to the Ministry of Internal Affairs. At the same time, the procedure for processing genomic information and accessing it will be established separately by the Cabinet of Ministers of Ukraine (paragraph 5 of Article 5). This widely discredit government officials on adopting the regulation that, among other things, do not meet the requirements of Article 6 of the Council of Europe Convention 108+ and EU Directive 2016/680 (as concluded in the course of the anti-corruption examination of the Draft Law of Ukraine On State Registration of Human Genomic Information) on the processing of personal data by competent authorities for the purposes of the prevention, investigation, detection or prosecution of criminal offences. These documents require that the procedure for processing corresponding categories of data is stipulated by law. In particular, the rules of data pseudonymization, its protection, and unauthorized transfer of responsibilities by information holders are the fields that call for further improvement. The body responsible for the collection of genomic information will be the one that is often responsible for investigation conducted by the Ministry of Internal Affairs. This results in a conflict of interest that may give rise to abuse. In the opinion of the authors of this article, the resolution of the dilemma of whether abuse can occur in such cases is prevented by the accreditation of forensic laboratories according to the international standard ISO 17025. Accreditation according to the ISO 17025 standard implies impartiality in the work of the laboratory.

The draft law also provides for the regulation of relations in accordance with the criminal procedure norms, but currently does not presuppose corresponding amendments to the Criminal Procedure Code. The rules proposed by the Draft Law, which regulate the process of acquisition, storage and destruction of biological material, include reference rules to the criminal procedural legislation. Such a proposal is somewhat inaccurate, as the criminal procedural legislation of Ukraine includes provisions on acquisition of biological samples from a suspect, witness or victim, provided that forensic medical examination is not required for that purpose

(Articles 241, 245 of the Criminal Procedure Code). In other cases, if necessary, a forensic examination may be ordered by the decision of the investigator. Obligatory involvement of a person in forensic medical examination is implemented by the decision of the investigating judge or court (Part 3, Article 242 of the Criminal Procedure Code). However, such issues as storage and destruction of biological material obtained for state registration of genomic information fall outside the scope of legal regulation of the Criminal Procedure Code. Consequently, it will be impossible to put in practice a number of the above reference standards of the Draft Law, and therefore they need to be further adjusted.

3. Major gaps in the moral and ethical issues.

Ethical issues arising in relation to the establishing and application of genomic information database can be summarized as follows: 1) issues related to the collection and storage of DNA samples and information drawn from them; 2) issues associated with the use of genetic information obtained as a result of such analysis; 3) issues related to access to stored information.

As mentioned above, genetic data is a special type of personal information about a person, considerably different from other types of personal data. Misuse of genetic information is such a serious problem that all laws of EU countries on data protection have been amended to limit the use of data collected by the police to the purpose for which the evidence was collected (Wallace et al., 2014, pp. 57-63). The legislation of many countries (e.g., countries of the European Union, Republic of Korea, USA, etc.) stipulates sanctions for unauthorized access to information stored in DNA databases, violation of its integrity, destruction and disclosure of data or their misuse. Inclusion of similar guarantees into Ukrainian legislation will boost public confidence that genomic information will be used legally and in a way that does not limit human rights.

The right to collect information based merely on suspecting a crime provides ground for abuse. An innocent person can be accused of committing a crime only for the purpose of obtaining biological material from him/her.

Genomic information will be collected, in particular, from people who committed suicide, as well as from those involved in violating the rights of patient or duty to rescue, forced marriage, children exploitation, etc. These are crimes of minor or moderate severity. It is not feasible to justify the need to collect genomic information in such cases.

1. Genomic information is included in the category of “sensitive” personal data (What is wrong with the processing of genomic information in the bill № 4265?) whose processing is prohibited. The Law On Protection of Personal Data provides an exhaustive list of grounds for processing such sensitive categories of individual personal data. Indeed, paragraphs 1 and 7 of the second part of Article 7 allow

such processing, provided that: it is conducted on the condition that the subject of personal data provides explicit consent to such data processing (which covers cases of voluntary registration), or, concerns convictions, fulfillment of the tasks of crime detection and investigation, counterintelligence activities or counteracting terrorism, and is carried out by a state body within the bounds of its authority determined by law. At the same time, the purposes of genomic information processing set out by the Draft Law do not comply with the purposes established by the Law On Protection of Personal Data, and thus the Ministry of Internal Affairs will be able to collect much more information.

Issues related to research on genetic contributions to antisocial behavior and victimization necessitate individual legal regulations. In this regard, the possibility of using information stored in a database for research should also be stipulated by law (Filipenko and Spitsyna, 2022).

Law Enforcement Practice

Law enforcement practice shows that organization and conduct of forensic examination of physical evidence of biological origin (molecular genetic testing) are becoming an increasingly important element in criminal proceedings.

Having analyzed relevant professional literature and practice of collecting, studying and processing human genomic information, as well as peculiarities of conducting molecular genetic testing in forensic science institutions of Ukraine and abroad, we believe that this issue can be viewed in two interrelated perspectives:

- current issues of appointing and conducting molecular genetic testing in current legal reality;
- moral and ethical aspects of ensuring human rights in the use of genomic information and human biomaterial.

Let us consider them in more detail.

Addressing the *first perspective*, we would like to emphasize that one of the most significant elements of the system of forensic support for collection, study and processing of human genomic information, as well as conducting molecular genetic testing, are the organizational principles of performance for a specific type of forensic examination. Professional and competent organization of the process of ordering and performing forensic examination is one of the basic conditions for efficient pretrial investigation, especially in the cases related to human genomic material. In our opinion, legal scholars do not always address this perspective properly. Meanwhile, expert activity on the study of human genomic information, as well as performing

molecular genetic testing, is very difficult and requires qualified use of modern technical means and methods (Galan and Chornyi, 2017).

The issues connected with organizing this area of expert activity are quite comprehensive. For example, Article 4 of the Law of Ukraine on Judicial Examination states: guarantees regarding independence of the forensic expert and accuracy of his/her conclusions are ensured by the procedure for appointing a forensic expert specified by law; the prohibition to interfere with the process of conducting forensic examination under the pressure of legal liability; the existence of forensic science institutions, independent from bodies responsible for crime detection and investigation activities, pre-trial investigation bodies and the courts; creation of necessary conditions for the activity of forensic experts, providing them with material support; criminal liability of a forensic expert for knowingly providing a false testimony and refusing to perform duties without valid reasons; the possibility of re-examination; the presence of process participants in the cases provided by law during forensic examination (About forensic examination. Law of Ukraine). In practice, forensic experts who conduct analysis of human genomic samples on behalf of organizations involved in crime detection and investigation, as well as inquest, can structurally be part of law enforcement agencies (for example, the Ministry of Internal Affairs of Ukraine). On the one hand, it facilitates work of expert departments (for example, the efficiency of expert responsiveness increases). On the other hand, it results in certain complications, since a forensic expert is officially dependent on the head of the particular law enforcement agency, is subject to various conditions of employment in relevant bodies, statutes, etc. An expert who is an employee of a law enforcement structure, by the very fact of his/her position in this body, even unintentionally, may be somehow psychologically affected. If an expert gives preference to a sense of corporate solidarity rather than scientific truth, it may affect the content of his/her expert conclusions. Nevertheless the "dependence" factor is mitigated by the above-mentioned ISO 17025 standard. Also, the independence issues may be solved by means of using different sample marking methods that hide direct information about the case, requesting institution, etc. Another possibility for assuring proper application of legal regulation regarding expert independence would be allocation of expert services into a separate non-departmental structure, which can be called, for example, an expert committee. The issue of technical and forensic support of investigative actions and preliminary investigation on the crime scene should be addressed by the investigation service, which is in the structure of law enforcement agencies, and forensic activities (specialists and expert examination) should be carried out by the experts of such an expert committee.

It should also be stressed that in the theory of criminalistics there is an opinion that identification of a person who committed a crime, a victim or an unrecognized

corpse is one of the principal tasks of criminalistics (Udovenko, 2016). Currently, there are many methods for identifying a person: reconstruction of appearance from the skull, dactyloscopy and others, but we should clarify that the priority is DNA research or molecular genetic testing. The tried-and-tested method of genome research based on existing test systems is effective. But it is not always possible to identify a person, as the database of genomic information is still at the development stage. As forensic experts note, due to the development of genetics, the sex of a person and presence of hereditary diseases can be accurately identified; the color of the skin, eyes, and hair may be approximately determined (see for example: Demidov et al., 2012; Peculiarities of Collecting…, 2016, etc.).

In academic circles, certain viewpoints have been formed as to which identification tasks molecular genetic testing can solve. Thus, in the course of serious crime investigation, it is advisable to conduct biomaterial research to identify a person in the following aspects:

1) determining whether or not a given biomaterial belongs to a specific person;
2) determining gender from biological traces and objects;
3) establishing whether persons involved in infanticide (especially of a newborn) are the child's parents;
4) determining whether remains or parts of a corpse are the remains of one person, and identifying the victim based on examination of samples from close relatives;
5) identifying relationships between different crimes: determining that traces of biological material found at the scenes of different crimes were left by the same person;
6) comparing the genetic profile of a biological material with genetic data stored in a computer database, and if there is a match, guide investigation in searching for a identifying the victim, etc. (Lozova and Lozovyi, 2016).

As for sampling, it should be performed in compliance with certain requirements. Thus, in practice, the most widespread method is the collection of buccal epithelial cells. This method is safe, it is carried out using sterile cotton swabs and brushes (Kanava, 2019). Before collecting biological material, a person must follow certain rules:

1. An hour before collecting, you need to refrain from smoking and consuming meals and fluids.
2. Before collecting samples of the buccal epithelium, rinse the oral cavity several times with clean water without using toothpaste or other oral hygiene products.
3. If the child cannot rinse the oral cavity independently, give him/her some water to drink (if the child does not drink water, the sample is collected from the child no earlier than two hours after breastfeeding or one hour after feeding with infant formulas).

4. To directly collect samples of the buccal epithelium, a person from whom biological samples should be obtained (or the parent of a minor) places a brush (or a sterile cotton swab) in the oral cavity and takes at least 10 samples (oral swabs) from the inner surfaces of the right and left cheek (slightly pressing and turning the brush or cotton swab). For each person, the sampling process is repeated twice (using another brush or cotton swab).
5. After completion of the procedure for taking samples of the buccal epithelium, a corresponding confirmation is drawn up (provided that an employee of the expert service of the Ministry of Internal Affairs takes part in the process, except for a person who provided a sample) or a sample collection protocol drawn up by the investigator (Methodological Recommendations for Organizing…, 2016).

Correct sample collection, proper storage and transportation are necessary to delay DNA degradation, i.e., changes in DNA. Degradation of DNA in samples and occurs due to external factors or intracellular mechanisms, namely: hydrolytic decomposition, chemical oxidation and enzymatic degradation. The mentioned processes result in segmentation of DNA into smaller fragments (Surat, 2018).

It should be emphasized that the main external factors affecting DNA degradation include: temperature, exposure to light, high humidity. These factors contribute to the emergence and rapid reproduction of bacteria, as well as further decay of biological traces (Afanasyeva, 2019). At the same time, we must take into account that in any case natural processes occurring after death of a person lead to DNA degradation (Mc Cord et al., 2011).

Therefore, identified and collected biological samples, as well as physical evidence, should be dried, packed in paper packaging and stored in a cool and dry place away from direct sunlight. If samples are frozen, repeated thawing should be avoided. In order to preserve DNA, the investigator must ensure their correct collection and packaging, providing and maintaining appropriate storage conditions, and, in certain cases, performing examination as soon as possible.

Awareness of the indicated identification tasks, which molecular genetic testing helps to solve, will to some extent ensure the correctness of the actions of investigators at the initial stage of investigation. An important condition for successful solution of expert tasks is to correctly select the sequence of various types of forensic examinations. In particular, it must not be forgotten that, on the one hand, the methods of molecular genetic research are destructive, so after its completion, it is impossible to determine, for example, the papillary pattern in handprints. On the other hand, collecting fingerprints and conducting dactyloscopy examination for further molecular genetic testing require the use of technical means and methods ensuring DNA preservation. In addition, in each case of forensic molecular genetic

testing, a forensic expert must be granted permission to destroy the material. Otherwise, the examination is impossible.

Quite common mistakes that occur in investigative procedures in the course of forensic examinations concern investigative materials, the number of forensic examinations, and also the sequence of their application. The main mistake is the application of one molecular genetic testing for considerable number of objects, which prolongs the forensic examination, and therefore the time necessary for solving urgent issues, significantly increases the cost of consumables and the probability of making an error due to excessive length and laboriousness of the research process (Vuyma, 2020, pp. 79-85).

Another issue is an unjustified application of many molecular genetic tests based on a significant amount of physical evidence, although there is a small probability to find relevant DNA on it (Stepanyuk, 2019, pp. 174-178).

The problem of defining questions that the forensic expert will address requires special attention. Analysis of professional sources, law enforcement and judicial practice also shows instances where questions regarding determination of genetic traits of objects are formulated without asking about any overlap in these traits or lack thereof.

While agreeing with the researchers (Didyk, 2003), we would like to emphasize that in order to avoid the mentioned mistakes, it is vital to involve in criminal proceedings specialists who are qualified in the field of molecular genetics. Upon studying case materials, they can provide clear guidelines on the required number of examinations and objects that should be obtained for testing, and help clearly formulate questions that a forensic expert should address and resolve.

Specific questions will help forensic experts provide clear and unambiguous answers. Therefore, such conclusions will meet the necessary requirements: clarity, unambiguity, and validity, whose understanding will not require specific expertise (Stepaniuk et al., 2019, p. 160).

The need for a preliminary involvement of a specialist is also justified by the fact that, after receiving his/her advice, the investigator is able to predict what additional materials a forensic expert may need to examine, consideration and responses to which may prolong the forensic examination, and also, perhaps, eliminates the need for additional examinations on the same object.

There is one more problem. Refusal of the suspect to provide biological material for comparative research. The Law of Ukraine On State Registration of Human Genomic Information defines persons who are obliged to provide biological material for mandatory state genomic registration in a uniform database of genomic information. The following genomic information is subject to mandatory state registration (On State Registration of Human Genomic Information, 2022):

1) persons convicted of intentional crimes against life, health, sexual freedom, sexual integrity of a person;
2) persons who have committed socially harmful acts against life, health, sexual freedom, sexual integrity of a person, in respect of whom medical coercive measures have been applied by a court decision;
3) persons convicted of intentional crimes against life, health, sexual freedom, sexual integrity of a person;
4) found in biological material recovered during investigative actions from crime scenes, or obtained during pre-trial investigation, and unidentified;
5) unidentified corpses of people and their remains, provided that the information about their discovery has been entered into the Unified Register of Pre-trial Investigations, and the investigation has been initiated;
6) information about missing persons that, according to the court decision, can be determined by conducting a molecular genetic testing of previously collected biological samples or biological material recovered from personal belongings of the missing person.

It should be stressed that the existing difficulties at the stage of molecular genetic testing are primarily related to active opposition from the suspect in commission of a criminal offense, consisting in his/her refusal to submit biological material for examination. This opposition from the suspect or the accused is expressed in the form of a written refusal to submit biological material for research. In this refusal, the suspect or the accused (his/her attorney, legal representative) refers to the fact that as a result of collecting biological material, he/she may become infected. However, it should be emphasized that in the majority of cases this "fear" is an imaginary reason, used in the interests of the suspect or the accused. Samples for comparative research are recovered on a voluntary basis, with the written consent of the person, since collection of biological material is carried out by means of a medical procedure (blood sampling from a peripheral vein or finger, histological samples, etc.). Thus, obtaining biological material for molecular genetic testing against a person's will can be considered as a violation of constitutional rights and freedoms. Therefore, this circumstance is taken into account by attorneys when defending the suspect or the accused, as well as by employees of laboratories or law enforcement agencies implementing the procedure of supplying evidence against the suspect or the accused (i.e., specialists in forensic science institutions of the Ministry of Justice of Ukraine, forensic medical institutions and agencies of the Ministry of Health of Ukraine; experts of the Ministry of Internal Affairs of Ukraine, the Ministry of Defense of Ukraine, the Security Service of Ukraine and the State Border Guard Service of Ukraine; the National Police of Ukraine may be involved in collecting biological material) (On State Registration of Human Genomic Information, 2022). The norm regulating the

procedure for obtaining samples for comparative research is defined by the legislator in Section 3 of Article 245 of the Criminal Procedure Code of Ukraine, where it is stated that collection of biological samples from a person is carried out according to the rules enshrined in Article 241 of the Criminal Procedure Code, which, in turn, states that actions that degrade honor and dignity of a person or are dangerous for their health are not allowed during examination (Clause 4) (Criminal Procedure Code of Ukraine, 2013). However, Article 245 underlines that in the case when a person refuses to voluntarily provide biological samples, the investigating judge or court, upon the motion of a party to criminal proceedings, considered in accordance with the procedure established in Articles 160-166 of the present Code, shall have the right to give permission to investigator, public prosecutor (or to oblige them if the motion was filed by the defendant) to take biological samples in a coercive manner (emphasis added). Therefore, the legal framework in Ukraine has a broad interpretation. In this regard, for accurate and effective work of law enforcement officers and forensic experts in such situations, it is necessary to amend methodological guidelines or create new ones that would regulate the appropriate interpretation of actions when appointing and conducting molecular genetic testing to link an individual with traces recovered from a crime scene. The implementation of the above changes will make it possible to use this norm as efficiently as possible, as a result of which the inevitability of punishment for committing a criminal offense will be strengthened in the minds of the public, which, in turn, will reduce the public harm resulting from illegal acts.

We would also like to note that insufficient research on this issue, the level of its development, as well as the state of the personnel training system do not allow timely identification and objective evaluation of a number of factors that negatively affect the main indicators of both law enforcement agencies and expert work of molecular genetic units in state forensic science institutions.

Current research activity of a forensic expert is characterized by its complex nature and use of experts in various fields. For example, when studying biological material, it is often interesting to solve the issue of its packaging, which is a task of trace evidence analysis that lies beyond the competence of a medical examiner. In addition, it is impractical to distract specialists conducting tests by requiring them to do such work. In connection to this problem, the issue arises about coordination of actions of specialists, integration of different knowledge, therefore, we believe that introduction of *expert integrators (coordinators)* into the staff of expert forensic units is a highly urgent task.

In our opinion, insufficient attention is drawn to general theoretical support of research activity in scientific institutions. Very often, in pursuit of empiricism, criminalistics follows practice, although… it should be ahead of practice and supply

it with new ideas (Teslyuk, 2017). Indeed, it is vital to pay more attention to fundamental research in criminalistics and forensic science, in particular, on issues of integration of knowledge from various sciences. In this regard, the development of areas related to the application of the theories of information, algorithmization automation, modeling in criminalistics and forensic science seems interesting. We consider further development of legal issues related to application of specific expertise to be an important direction of scientific activity. For example, work in the field of evaluation of expert conclusion and effective use of examination results is of interest.

Intellectual and qualification resources of forensic expert forming intellectual resources of the country in general.

Undoubtedly, forensic activity has its own peculiarities and further study of the experts' personality is a relevant direction. Regarding the organizational aspect of this issue, we note that, as practice shows, not every person is able to work in expert units related to collection, study and processing of human genomic information or to conduct molecular genetic testing. Some individuals have no inclination to research and analytical work, some have problems with writing style (which is important when drawing up an expert conclusion), others find it difficult to withstand monotonous nature of the work (everyday activities of an expert are often very similar), and some others, having mastered basic labor skills and having made several examinations, lose interest in further professional growth. The solution seems to be in implementation of the following provisions:

1) to conduct a thorough psychological testing of a person's propensity for conducting research;
2) to check the candidate's written language style upon admission to the expert units;
3) to organize additional, ongoing training courses for specialists, also abroad, as well as seminars and conferences for exchange of experience, and in this respect to make wider use of the potential of computer networking;
4) no less than once in 3-4 years, to rotate personnel in related areas of expert work, if experts are granted corresponding access rights.

The *second perspective* concerns the moral and ethical aspects of ensuring human rights in the use of genomic information and human biomaterial.

The shift in EU policy towards a common forensic science has not only a decisive step in the development of forensic science, but has also highlighted the previously unidentified need for forensic harmonization and its role in ensuring human security. It is now recognized that only the harmonization of forensic science and law in general can guarantee the existence of the fundamental values of a democratic society—freedom and security (Kurapka, Malevski and Matulienė, 2016). And this is a very important postulate, especially when it comes to a person's protection in the

course of collecting, testing and processing human genomic information, as well as conducting molecular genetic testing.

Innovations in the field of organ and tissue transplantation, and achievements in genetic engineering, give rise to controversies in the field of balancing the interests of various participants in these procedures, legal and ethical norms (in connection with the emergence of these issues, a new field of science—bioethics—has emerged).

Mandatory and universally recognized ethical beginning of the implementation of any operations to obtain and use genomic information, as legally enshrined in international legal acts and in national legislations (including Ukrainian), is the coordination of their performing with the interested person (persons). In particular, the International Declaration on Human Genetic Data (hereinafter – The Declaration), adopted by the General Conference of UNESCO on 16 October 2003, stresses the fact that collection, processing, use and storage of genetic data (both by public and private structures) require prior, free, informed and clearly expressed consent (e.g., Articles 2, 9, 14, 21, etc.) (International Declaration on Human Genetic Data).

The aforementioned issues became quite widely manifested in standardization of *national genomic registration* (hereinafter – NGR), and more precisely, the voluntary registration (because under compulsory NGR, the effect of the principle of consent is largely reduced to naught). Citizens of Ukraine, as well as foreigners and stateless persons, have the right to voluntary registration of genomic information. Voluntary national registration of genomic information is carried out on the basis of a written application of a person for collecting biological material from them, conducting molecular genetic testing and entering genomic information into the Database. Voluntary national registration of genomic information of minors is carried out on the basis of a written statement of their legal representatives. Obtaining biological material from minors is performed in the presence of their legal representatives. Voluntary national registration of genomic information of Ukrainian citizens recognized as incapacitated or legally incapacitated in accordance with the procedure stipulated by law is carried out on the basis of a written statement of their legal representatives. Obtaining biological material from persons recognized as incapacitated or deprived of civil capacity is limited in accordance with the procedure enshrined in law and carried out in the presence of their legal representatives. Voluntary national registration of genomic information of certain categories of people (for example, minors) is carried out on a fee basis (Article 6 of the Law of Ukraine: On State Registration of Human Genomic Information).

In fact, it is justified to talk about the emergence of a contractual relationship of a special kind (with a strong predominance of the public element) in relation to the processing of personal genomic information. Legislation authorizes the destruction of genomic information (e.g., Article 13 of the Law). Biological material selected

for national registration of genomic information is destroyed in the event that the Database Administrator receives a court decision to stop the imposition of coercive measures of a medical nature to relevant persons, and in the event that the Database Administrator receives information that such persons serve a sentence within eight years after the collection, but not later than within 10 years. Biological material collected for national registration of genomic information is destroyed in accordance with the procedure enshrined in the Criminal Procedure Code of Ukraine, after expiration of a storage period determined by the manufacturer of systems for collection of biological samples.

Unfortunately, a significant disadvantage of this legislative act is the lack of a provision concerning a written statement of a relevant person submitted at any time before the expiration of a specified storage periods.

The lack of this provision significantly limits the rights of individuals and contradicts international legal acts, for example, the International Declaration on Human Genetic Data. The provisions of Article 21 of the Declaration emphasize that it is appropriate to provide a person's genetic data for forensic medical purposes or for the purposes of civil proceedings only for the period for which it is necessary and for specified purposes (regarding the institution of voluntary HGR, it means an unconditional obligation to destroy genomic information at the request of the interested person). In addition, we would like to emphasize that a person submitting an application for destruction of genomic information, first of all, should not specify in it any motives or grounds for the decision, i.e., the reasons for withdrawing consent are legally irrelevant. Secondly, submitting an application as a legitimate way to terminate relevant legal relationship should not result in any negative consequences (NB, this issue was explicitly specified in Article 9 of the Declaration)[2].

If Ukraine fails to focus on this legal issue, then, most likely, it will be held accountable by the European Court of Human Rights (hereinafter referred to as the ECHR).

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[2] Article 9: Withdrawal of consent: a) In cases where human genetic data, human proteomic data or biological samples are collected for medical and scientific purposes, the person concerned may withdraw his consent, unless such data are irrevocably separated from the person who can to be identified. In accordance with the provisions of Article 6 d), the withdrawal of consent shall not entail any adverse consequences or sanctions for the person concerned. b) When an individual withdraws consent, that individual's genetic data, proteomic data and biological samples must no longer be used, unless they are irrevocably separated from the individual concerned. c) Data and biological samples, unless irreversibly separated, should be handled in accordance with the wishes of such individual. If the individual's wishes cannot be determined, cannot be implemented or are unreliable, then the data and biological samples must be irreversibly separated or destroyed.

And if we are talking about the consideration of cases at the ECHR, we would like to note that the judicial system of a particular state not always addresses such tasks in a satisfactory manner, and as a result, citizens turn to the European Court of Human Rights for protection of their rights. In recent years, the ECHR has received a large number of cases related to the collection, storage and use of human genetic material.

In this regard, it is quite useful to study individual decisions, both for the formation of standpoints in specific cases and for the sake of analyzing the considerations in this category of disputes in order to improve the content of national legislation and the activities of national judicial bodies.

Analyzing the decisions of the ECHR in the relevant category of disputes, it is appropriate to divide them into several groups related to the determination of issues associated with collection, use and storage of human biomaterials.

1. *Collection of biological materials*

When taking into account issues connected with collection of human genetic material, the ECHR puts emphasis on the legality of such a procedure in accordance with current national legislation, as well as the completeness of the content of legal regulations governing this procedure. First of all, attention is drawn to the manifestation of the will of an individual, given during his/her lifetime, in the form of consent or non-consent to the removal of organs and body tissues after his/her death, as well as consent or non-consent of a surviving spouse or other relatives to the use of the body of the deceased individual. In the case of Elberte v. Latvia, in the ECHR Resolution No. 61243/08 dated 13 January 2015, removal of organs and tissues from the body of a deceased person was considered (Case of Elberte v. Latvia; Application no. 61243/08). According to the case file, on 19 May 2011, the applicant's husband was involved in a car accident and died on the way to the hospital. On 20 May 2011, his body was taken to the Forensic Medical Center in Riga where an autopsy was performed and the cause of the man's death was determined. On 26 May 2011, during the man's funeral, his wife (the applicant) saw that his legs were tied together, and he was buried that way. Later, it was established that some organs and tissues were removed from the deceased man's body during autopsy, which were further transferred by the Latvian Forensic Center to a medical company in Germany for transforming them into bio-implants. At a later time, these bio-implants were transferred back to Latvia for transplantation purposes. The applicant found out about that two years later, during a criminal investigation into allegations of the illicit removal of body tissues and organs from her late husband. The main arguments of the applicant were reduced to the fact that before the removal she, as a wife, did not provide consent to remove organs and tissues from the body of her late husband,

and also was not informed about the removal. The Government of the Republic of Latvia stated that the Latvian law in force at that time allowed collection of organs and tissues of deceased persons in the event that the deceased did not express his/her refusal to become an organ and tissue donor during his lifetime and if no objections were raised by relatives. At the same time, the law did not require a consent of the closest relatives in such cases. In addition, the removal of organs in this case was carried out for a social purpose: saving lives of other people. During the consideration of the case, the ECHR established that the employees of the Latvian Forensic Center did not even make an attempt to check the existence of a person's consent or refusal to remove organs and tissues from the body after his death, since a relevant stamp could only be found in his identification document, and it was at his home at the time of autopsy. The analysis of the national legislation of Latvia also showed that there is a relevant law that stipulates the right of a relative to express his/her will regarding the removal of organs and tissues from the body of a deceased person. However, this law does not prescribe rules obliging relevant state bodies to seek such consent or refusal, as well as any forms of documents that would reflect the very fact of based on the expression of the will of the deceased person's relatives and its result.

When making the decision, the ECHR referred to the provisions of the Resolution of the Committee of Ministers of the Council of Europe (78) 29 On Harmonisation of Legislations of Member States Relating to Removal, Grafting and Transplantation of Human Substances of 11 May 1978, and to the national legislation of Latvia. Having considered the case, the court ruled that there was a violation of the applicant's right to respect for her personal and family life, enshrined in Article 8 of the European Convention on Human Rights dated 4 November 1950.

This case was analyzed in sufficient detail to explain the course of the ECHR's considerations in this category of cases, identified and analyzed facts and circumstances of the case, applicable acts, justification of the position of applicants and governments of states against whom the complaint was made (e.g., Annex).

2. *Collection of genomic information from persons held guilty of offenses under national law*

In these cases, as a rule, actions of state authorities regarding storage of DNA materials of a person are contested if it has been established that the applicant is guilty of a crime, motivating that there is a discrepancy between the committed act and negative consequences that may arise or follow from the storage of genomic information of applicants in databases of respective states. Among such cases, the ones of S. and Marper v. the United Kingdom are very illustrative (applications No. 30562/04 and 30566/044). These were two cases that were considered by the Grand Chamber of the European Court at the same time (Case S. and Marper v. the United

Kingdom). The judgement was issued on 4 December 2008. In the case of S., criminal prosecution was terminated with a further acquittal. He was found not guilty in the case of Marper. However, in both cases, the applicants were subjected as suspects to a coercive procedure in which DNA samples and fingerprints were taken from them. Later, this information was not deleted by police officers from databases. When researching domestic law of England and Wales, it was determined that genetic information of criminal suspects can be stored in a database for unlimited time. Although the storage of fingerprints had less impact on private life than the storage of cell samples and DNA profiles, a unique information they contain about individuals concerned and its storage without the consent of the latter cannot be viewed as neutral or insignificant and is also an interference with the right to respect for private life. It was also established that the national legislation of England and Wales in the studied aspect does not distinguish between persons whose guilt has not been proven and convicted persons. It is necessary to clearly define purposes of genomic information collection and time limit for its storage.

In this paper, we have provided only some examples of judgments by the ECHR. However, this is a very comprehensive issue, and it certainly needs a separate in-depth study.

4. Conclusions

Summarizing the above, we stress that for the development and effectiveness of measures of international cooperation of Ukrainian forensic science institutions with foreign experts in collecting, studying and processing human genomic information and conducting molecular genetic testing, the following should be undertaken:

1. It is necessary to introduce an independent system of international forensic bodies that will help identify and use internal resources of this system and all interested parties, and significantly improve its efficiency. A unified scientific and technical policy will ensure more efficient use of scientific, personnel and financial resources, minimize duplication in research planning, which, in turn, will allow directing financial and human resources to the development of new forensic technologies. Also, the efficiency of using existing opportunities relying on specialization of individual departmental, regional, state and international forensic expert groups will be enhanced.

In the general management structure of forensic science, modern high-tech, hardware-software complexes that are very expensive (e.g., equipment for DNA analysis) may be applied most effectively. And, finally, there will be a chance to

create uniform on-site sample collections for the whole system, expert data banks, identification statistics based on expert evidence for individual identification and development of modern expert technologies.

2. A comprehensive analysis of the articles of the Criminal Procedure Code of Ukraine related to forensic science indicates that the legislator has considerably enhanced the regulatory framework forensic examinations. The improvement in criminal procedural laws associated with conducting forensic examinations (and especially molecular genetic analysis) was realized in two main scopes. The first concerns the general judicial reform reflecting the entire complex of socio-economic and national political transformations (e.g., legal rules that strengthen protection of an individual's interests, including in the process of molecular genetic analysis; contribute to the implementation of the presumption of innocence principle and adversarial principle; ensure the rights of participants in proceedings when commissioning and performing forensic examination). The second is driven by the need to eliminate the shortcomings of the current legislation: a) gaps and blank spots in legislation; b) provisions interfering with the current needs of investigative and judicial practice.

3. Particular procedural shortcomings of the decision on requesting forensic examination are connected with: a) failure to grant permission to a forensic expert for complete or partial destruction of objects under study; b) failure to grant permission to use data received as a result of other forensic examinations.

It should be stressed that a permission for complete or partial destruction of objects helps a forensic expert carry out a comprehensive investigation of biological origin traces detected in the course of forensic examination. But in the case of examination of such items as clothes or wood with potential traces of blood, there is a need to make cuts and chips. If swabs taken during investigation (tampons, cotton swabs, etc.) are submitted for forensic examination, they are destroyed during the testing, since the methods of forensic DNA analysis require a destructive process. The indicated circumstances affect the actual obligation to grant permission to a forensic expert for a complete or partial destruction of investigative material.

In turn, permission to use data obtained during another examination helps a forensic expert take into account results of previous forensic examinations and, if necessary, perform a comparative analysis of the obtained data. For example, when a forensic molecular genetic analysis is ordered after immunological testing that found human blood in the tested objects, this research (establishing the presence of blood and its species) may be omitted by a geneticist referring to the conclusions of an immunologist.

4. Systematic changes in the current legislation are required, even in what has been adopted recently (we are talking about the Law of Ukraine On State Registration

of Human Genomic Information). Unfortunately, a significant disadvantage of this legislative act is that its norms lack a provision on a written statement of a relevant person submitted at any time before expiration of the specified time limits for storage of biological material. The lack of this provision significantly limits the rights of individuals and contradicts international legal acts, for example, the International Declaration on Human Genetic Data. The provisions of Article 21 of the Declaration state that it is appropriate to provide genetic data of a person for forensic medical purposes or for the purposes of civil proceedings only for the period for which it is needed for specified purposes (regarding the institution of voluntary HGR, this means an absolute necessity to destroy genomic information upon the request of an interested person). We would like to emphasize that a person submitting an application for destruction of genomic information, first of all, should not specify in it any motives or grounds for their decision, i.e., the reasons for withdrawing consent are legally irrelevant. Secondly, submitting an application as a legitimate way to terminate relevant legal relationship should not result in any negative consequences (NB, this issue was explicitly specified in Article 9 of the Declaration).

5. Analysis of the prospects for improving the legal support for molecular genetic examination, expressed in the legislative initiative, will regulate the norm on condition that participants of pre-trial investigation oppose collection of biological material. The development of legal norms reflecting the interaction of state and private forensic science institutions is a necessary direction for the development of expert activity in today's reality.

The methodological relevance of the analyzed issues is implemented both from the theoretical and the practical component. In this regard, in conditions of modern legal reality, it is vital to prioritise timely detection and objective assessment of a number of factors that negatively affect the main indicators of both law enforcement agencies and expert work in forensic science institutions of Ukraine, as well as condition of personnel training system and the development of scientific research in this field.

The practical significance of research in the field of appointment and conduct of molecular genetic examination is implementation of the developed methodology for application of specific forensic expertise while the appointment and conduct of molecular genetic examination, taking into account conditions of modern legal reality. Such an approach is aimed at creating conditions for improving the quality of the investigation of criminal offenses, will enhance work of forensic science institutions, namely will eliminate (partially or completely) negative factors associated with implementation of molecular genetic examination.

The information support of expert units is rather voluminous arrays of data, and it is inappropriate to distract specialists from research for such work. In this regard,

the question arises about coordination of specialist's actions, about integration of obtained different knowledge, therefore we believe that introduction of expert integrators (coordinators) into the staff of forensic expert units is a highly urgent task.

6. The same time, there are difficulties associated with disintegration of databases of the Ministry of Internal Affairs of Ukraine with databases of the forensic medicine bureau and forensic science institutions of the Ministry of Justice of Ukraine. Therefore, there is a pressing need to synchronize them. It is also required to improve the process of integrating genomic information of the single database of Ukrainian forensic science institutions with databases of international organizations for consolidation of information into a single DNA database, which will create conditions for enhancing the efficiency of the work of experts (minimizing the amount of work in collecting, studying and processing human genomic information and reducing terms of molecular genetic examination).

7. Studying legal regulations of the European Union and practice of the decisions of the European Court of Human Rights helps us to draw a number of conclusions about the main aspects that are important when considering cases, as well as the need for compliance with legislation and adherence to the completeness of the content of the national legislation itself in matters of collection, use and storage of genomic human information and molecular genetic examination. For this, it is crucial to observe generally recognized human rights and freedoms, ethical standards. Thus, in relation to the living, it is necessary to guarantee the prevention of unnecessary physical and mental suffering and injury during scientific research, prevention of torture, inhuman or degrading treatment or punishment. Regarding the dead: the right to inviolability of bodies of deceased persons, to respect for them. When removing organs, tissues, and using a person's body after their death, it is mandatory to define the expression of their will as a matter of consent or refusal to commit such actions given during a person's lifetime. The existence of a person's voluntary and informed consent becomes a cornerstone in cases of recognizing legality while scientific research and experiments. When collecting and storing genomic information of suspects of crimes and convicted persons, it is needed to differentiate rules for collection, storage and destruction of such information, taking into account the severity of a crime committed, distinction of measures taken in relation to persons who committed crimes and offenses, terms of storage and subsequent destruction of biological material, characteristics of the criminal's personality, etc.

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Annex 1

FOURTH SECTION
CASE OF ELBERTE v. LATVIA

(Application no. 61243/08)
JUDGMENT
STRASBOURG
13 January 2015
FINAL

13/04/2015
This judgment is final.
In the case of Elberte v. Latvia,
The European Court of Human Rights (Fourth Section), sitting as a Chamber composed of:
Päivi Hirvelä, President,
Ineta Ziemele,
George Nicolaou,
Nona Tsotsoria,
Zdravka Kalaydjieva,
Krzysztof Wojtyczek,
Faris Vehabović, judges,
and Fatoş Aracı, Deputy Section Registrar,
Having deliberated in private on 4 November and 2 December 2014,
Delivers the following judgment, which was adopted on the last-mentioned date:

PROCEDURE

1. The case originated in an application (no. 61243/08) against the Republic of Latvia lodged with the Court under Article 34 of the Convention for the Protection of Human Rights and Fundamental Freedoms ("the Convention") by a Latvian national, Ms Dzintra Elberte ("the applicant"), on 5 December 2008.

2. The applicant was represented by Ms I. Nikuļceva, a lawyer practising in Riga. The Latvian Government ("the Government") were represented by their Agents, firstly Mrs I. Reine and subsequently Mrs K. Līce.

3. The applicant alleged, in particular, that the removal of tissue from her deceased husband's body had taken place without her consent or knowledge and that he had been buried with his legs tied together.

4. On 27 April 2010 notice of the application was given to the Government under Articles 3 and 8 of the Convention. On 9 July 2013 it was decided to rule on the admissibility and merits of the application at the same time (Article 29 § 1 of the Convention).

THE FACTS

I. THE CIRCUMSTANCES OF THE CASE

5. The applicant was born in 1969 and lives in Sigulda. She is the widow of Mr Egils Elberts ("the applicant's husband"), a Latvian national who was born in 1961 and who died on 19 May 2001.

A. Events leading to the applicant knowing that tissue had been removed from her husband's body

6. On 19 May 2001 the applicant's husband was involved in a car accident in the parish of Allaži. An ambulance transported him to Sigulda Hospital but he died on the way there as a result of his injuries. He was placed in the mortuary at Sigulda Hospital. The applicant's mother-in-law, who worked at Sigulda Hospital and thereby learned about her son's death immediately, stayed with his body at Sigulda Hospital until it was transported to the State Centre for Forensic Medical Examination (Valsts tiesu medicīnas expertīžu centrs – "the Forensic Centre") in Riga.

7. At 5 a.m. on 20 May 2001 the body was delivered to the Forensic Centre in order to establish the cause of death. Between 1 p.m. and 3 p.m. an autopsy was carried out and numerous injuries were found to the deceased's head and chest, including several broken ribs and vertebrae. There were bruises on his right shoulder, thigh and knee. A forensic medical expert, N.S., classified the injuries as serious and life-threatening and established a causal link between them and his death.

8. According to the Government, after the autopsy, N.S. had verified that there was no stamp in Mr Elberts' passport denoting his objection to the use of tissue from his body and he had removed a 10 cm by 10 cm piece of dura mater (the outer layer of the meninges) from Mr Elberts' body. According to the applicant, N.S. could not have checked whether or not there was a stamp in Mr Elberts' passport because at that time it had been at their home in Sigulda. The applicant submitted that the area of tissue removed was larger than 10 cm by 10 cm and that it was not only dura mater that had been removed.

9. On 21 May 2001 the prosecutor's office issued a permit to bury the body. According to the applicant, on 21 or 22 May 2001 her sister had arrived at the Forensic Centre with a view to obtaining the certificate showing the cause of death, in rela-

tion to which she had signed the Forensic Centre's registration log. On 22 May 2001 her sister submitted that document, together with Mr Elberts' passport, to the relevant authority in Sigulda to obtain the death certificate.

10. According to the Government, on 25 May 2001 the body of Mr Elberts had been handed over to a relative. According to the applicant, his body had been handed over to another person who was merely helping with its transportation prior to the funeral.

11. On 26 May 2001 the funeral took place in Sigulda. The applicant first saw her deceased husband when his remains were transported back from the Forensic Centre for the funeral. She saw that his legs had been tied together. He was buried that way. The applicant herself was pregnant at the time with their second child.

12. The applicant was not aware that tissue had been removed from her husband's body until about two years later, when the security police (Drošības Policija) informed her that a criminal inquiry had been opened into the illegal removal of organs and tissue, and that tissue had been removed from her husband's body.

B. Criminal inquiry into the illegal removal of organs and tissue

13. On 3 March 2003 the security police opened a criminal inquiry into the illegal removal of organs and tissue for supply to a pharmaceutical company based in Germany ("the company") between 1994 and 2003. The following sequence of events was established.

14. In January 1994 the predecessor institution of the Forensic Centre concluded an agreement with the company to cooperate for the purpose of scientific research. Under the agreement, various types of tissue were to be removed from deceased persons – selected by the Forensic Centre in accordance with international standards – and sent to the company for processing. The company transformed the tissue received into bio-implants and sent them back to Latvia for transplantation purposes. The Ministry of Welfare agreed to the content of the agreement, reviewing its compliance with domestic law on several occasions. The prosecutor's office issued two opinions on the compatibility of the agreement with domestic law and, in particular, with the Law on the protection of the body of a deceased person and the use of human organs and tissue ("the Law").

15. Any qualified member of staff ("expert") of the Forensic Centre was allowed to carry out the removal of tissue on his or her own initiative. The Head of the Thanatology Department of the Forensic Centre was responsible for their training and the supervision of their work. He was also responsible for sending the tissue to Germany. The experts received remuneration for their work. Initially, the tissue removal was performed at forensic divisions located in Ventspils, Saldus, Kuldīga, Daugavpils and Rēzekne. After 1996, however, tissue removal was carried out only at the Forensic Centre in Riga and the forensic division in Rēzekne.

16. Under the agreement, experts could remove tissue from deceased persons who had been transported to the Forensic Centre for forensic examination. Each expert was to verify whether the potential donor had objected to the removal of organs or tissue during his or her lifetime by checking his or her passport to make sure that there was no stamp to that effect. If relatives objected to the removal, their wishes were respected, but the experts themselves did not attempt to contact relatives or to establish their wishes. Tissue was to be removed within twenty-four hours of the biological death of a person.

17. Experts were obliged to comply with domestic law but, according to their own testimonies, not all of them had read the Law. However, the content of it was clear to them as the Head of the Thanatology Department of the Forensic Centre had explained that removal was allowed only if there was no stamp in the passport denoting a refusal for organs or tissue to be removed and if the relatives did not object to the removal.

18. In the course of the inquiry, the investigators questioned specialists in criminal law and the removal of organs and tissue. It was concluded that, generally speaking, two legal systems exist for regulating the removal of organs and tissue – "informed consent" and "presumed consent". On the one hand, the Head of the Forensic Centre, the Head of the Thanatology Department of the Forensic Centre and the experts at the Forensic Centre were of the opinion that at the relevant time (that is to say, after the Law's entry into force on 1 January 1993) there had existed a system of "presumed consent" in Latvia. These persons were of the view that the system of presumed consent meant that "everything which is not forbidden is allowed". The investigators, on the other hand, were of the opinion that section 2 of the Law gave a clear indication that the Latvian legal system relied more on the concept of "informed consent" and, accordingly, removal was permissible only when it was (expressly) allowed, that is to say when consent had been given either by the donor during his or her lifetime or by the relatives.

19. More particularly, as regards the removal of tissue from the applicant's husband's body, on 12 May 2003 the expert N.S. was questioned. Subsequently, on 9 October 2003 the applicant was recognised as an injured party (cietušais) and she was questioned on the same date.

20. On 30 November 2005 it was decided to discontinue the criminal inquiry into the activities of the Head of the Forensic Centre, the Head of the Thanatology Department of the Forensic Centre and the Head of the Rēzekne Forensic Division in respect of the removal of tissue. The above considerations were noted down in the decision (lēmums par kriminālprocesa izbeigšanu) and differences concerning the possible interpretations of domestic law were resolved in favour of the accused. Moreover, the 2004 amendments to the Law were to be interpreted to mean that

there was a system of "presumed consent" in Latvia. It was concluded that sections 2 to 4 and 11 of the Law had not been violated and that no elements of a crime as set out in section 139 of the Criminal Law had been established.

21. On 20 December 2005 and 6 January 2006 prosecutors dismissed complaints lodged by the applicant and held that the decision to discontinue the inquiry was lawful and justified.

22. On 24 February 2006 a superior prosecutor of the Prosecutor General's Office examined the case file and concluded that the inquiry should not have been discontinued. He established that the experts at the Forensic Centre had breached provisions of the Law and that the tissue removal had been unlawful. The decision to discontinue the inquiry was quashed and the case file was sent back to the security police.

23. On 3 August 2007 the criminal inquiry, in so far as it related to the removal of tissue from the body of the applicant's deceased husband, was discontinued owing to the expiry of the statutory limitation period of five years. However, the legal ground given for this discontinuation was the absence of any elements of a crime. On 13 August 2007 the applicant was informed of that decision. On 19 September and 8 October 2007, in response to complaints lodged by the applicant, the prosecutors stated that the decision had been lawful and justified.

24. On 3 December 2007 another superior prosecutor of the Office of the Prosecutor General examined the case file and concluded that the inquiry should not have been discontinued. She established that the experts at the Forensic Centre had breached provisions of the Law and that the tissue removal had been unlawful. The decision to discontinue the inquiry was once again quashed and the case file was again sent back to the security police.

25. On 4 March 2008 a new decision to discontinue the criminal inquiry was adopted, based on the legal ground of the expiry of the statutory limitation period. On 27 March 2008, in response to a complaint from the applicant, the prosecutor once again quashed the decision.

26. A fresh investigation was carried out. During the course of that investigation it was established that in 1999 tissue had been removed from 152 people; in 2000, from 151 people; in 2001, from 127 people; and in 2002, from 65 people. In exchange for the supply of tissue to the company, the Forensic Centre had organised the purchase of different medical equipment, instruments, technology and computers for medical institutions in Latvia and the company had paid for these purchases. Within the framework of the agreement, the total monetary value of the equipment for which the company had paid exceeded the value of the removed tissue that was sent to the company. In the decision of 14 April 2008 (see paragraph 27 below) it was noted that the tissue was not removed for transplantation purposes in accordance

with section 10 of the Law but was actually removed for transformation into other products to be used for patients not only in Latvia, but also in other countries.

27. On 14 April 2008 the criminal inquiry was discontinued owing to the expiry of the statutory limitation period. In the decision it was noted that whenever an expert from the Rēzekne Forensic Division, for example, had interviewed the relatives prior to the removal of organs or tissue, he had never expressly informed them of such potential removal or indeed obtained their consent. According to the testimonies of all the relatives, they would not have consented to the removal of organs or tissue had they been informed and their wishes established. According to the experts' testimonies, they had merely checked passports for stamps and had not sought relatives' consent as they had not been in contact with them. It was also noted that with effect from 1 January 2002 information was to be sought from the population register, which the experts had failed to do. It was concluded that the experts, including N.S., had contravened section 4 of the Law and had breached the relatives' rights. However, owing to the five-year statutory limitation period (which started running on 3 March 2003), the criminal inquiry was discontinued and on 9 May and 2 June 2008 the prosecutors upheld that decision in response to complaints lodged by the applicant. The applicant lodged a further complaint.

28. In the meantime, the experts, including N.S., lodged an appeal contesting the reasons for the discontinuation of the criminal inquiry (kriminālprocesa izbeigšanas pamatojums). They contested their status as the persons against whom the criminal inquiry concerning unlawful tissue removal had been instigated because they had not at any stage been informed of this inquiry and argued that, accordingly, they had been unable to exercise their defence rights. On 26 June 2008, in a final decision, the Riga City Vidzeme District Court upheld their appeal (case no. 1840000303), quashed the 14 April 2008 decision and sent the case file back to the security police. The court found as follows.

"Notwithstanding the fact that a certain proportion of the transplants were not returned to be used for patients in Latvia, there is no evidence in the case file that they were used for processing into other products or for scientific or educational purposes. Therefore, the court considers that there is no evidence in the case file that the removed tissue was used for purposes other than transplantation …

There is no evidence in the case file demonstrating that the removal of tissue for transplantation purposes had been carried out in disregard of the deceased person's refusal, as expressed during his lifetime and recorded in accordance with the law in force at the relevant time, or in disregard of any refusal expressed by the closest relatives.

Taking into account the fact that legislative instruments do not impose any obligation on the experts who carry out the removal of tissue and organs from deceased

persons' bodies to inform persons of their right to refuse tissue or organ removal, the court considers that the experts did not have any obligation to do so; by not informing the deceased person's relatives of their intention to remove tissue, the experts did not breach the provisions of the [Law], as effective from 1994 to March 2003. Section 4 of the [Law] provides for the right of the closest relatives to refuse the removal of the deceased person's organs and/or tissue, but does not impose an obligation on the expert to explain this right to the relatives. Given that there are no legislative instruments which impose an obligation on the experts to inform relatives of their intention to remove tissue and/or organs and to explain to the relatives their right to object by refusing their consent, the court considers that a person cannot be punished for a failure to comply with an obligation which is not clearly laid down in a legislative instrument in force. Therefore, the court finds that the experts, by carrying out the tissue and organ removal from the deceased, did not breach … the [Law].

… The court finds that the experts' actions did not constitute the elements of a crime proscribed by section 139 of the Criminal Law; therefore, it is possible to discontinue the criminal proceedings for exonerating reasons – namely on the grounds of section 377(2) of the Criminal Procedure Law – owing to the absence of the elements of a crime."

29. On 2 July 2008 the superior prosecutor responded to a complaint lodged by the applicant. The superior prosecutor admitted that the inquiry had taken a long time owing to numerous complaints against the decisions. However, she did not find any particular circumstances which would indicate that it had been unduly protracted. At the same time, she informed the applicant that the court had quashed the 14 April 2008 decision upon the appeal by the experts. She further stated that a new decision to discontinue the criminal inquiry had been adopted on 27 June 2008 and that the applicant would soon be duly notified.

30. Indeed, the applicant received the 27 June 2008 decision a few days later. It was reiterated in that decision that the experts did not have any legal obligation to inform anyone about their right to consent to or refuse organ or tissue removal. Section 4 of the Law provided for the right of the closest relatives to object to the removal of the deceased person's organs and tissue, but did not impose any obligation on the expert to explain these rights to the relatives. A person could not be punished for a failure to comply with an obligation which was not clearly laid down in a legal provision; the experts had therefore not breached the Law. The applicant lodged further complaints.

31. On 15 August 2008 the prosecutor replied, inter alia, that there were no circumstances indicating the desecration of a human body. At the same time, she explained that the experts had performed actions in connection with the unlawful

tissue removal in order to use the tissue for medical purposes. After the removal of tissue, other material was commonly implanted to restore the visual integrity of dead bodies. Therefore, the criminal inquiry had concerned actions under section 139 of the Criminal Law and not under section 228, which proscribed desecration of a dead body.

32. On 10 September 2008 a superior prosecutor replied that there were no grounds for examining the actions of the persons who had proceeded with the tissue removal under section 228 of the Criminal Law as desecration of a dead body. The experts had proceeded in accordance with an instruction issued by the Ministry of Justice, implanting other material in the place of the removed tissue. According to the instruction, tissue was to be removed in such a way so as not to mutilate the body, and, if necessary, subsequent restoration was to be carried out.

33. On 23 October 2008 another superior prosecutor of the Prosecutor General's Office replied with a final negative decision.

II. RELEVANT INTERNATIONAL DOCUMENTS AND DOMESTIC LAW

A. Council of Europe documents

34. On 11 May 1978 the Committee of Ministers of the Council of Europe adopted Resolution (78) 29 on harmonisation of legislations of member States relating to removal, grafting and transplantation of human substances, which recommended that the governments of the member States ensure that their laws conform to the rules annexed to the Resolution or adopt provisions conforming to these rules when introducing new legislation.

Article 10 of this Resolution provides:

"1. No removal must take place when there is an open or presumed objection on the part of the deceased, in particular, taking into account his religious and philosophical convictions.

2. In the absence of the explicit or implicit wish of the deceased the removal may be effected. However, a state may decide that the removal must not be effected if, after such reasonable inquiry as may be practicable has been made into the views of the family of the deceased and in the case of a surviving legally incapacitated person those of his legal representative, an objection is apparent; when the deceased was a legally incapacitated person the consent of his legal representative may also be required."

35. The Convention for the Protection of Human Rights and Dignity of the Human Being with regard to the Application of Biology and Medicine: Convention on Human Rights and Biomedicine (ETS No. 164) is the first international treaty in the field of bioethics. It came into force on 1 December 1999 in respect of the States that had ratified it. Latvia signed the Convention on Human Rights and Biomedicine

on 4 April 1997, ratified it on 25 February 2010, and it came into force in respect of Latvia on 1 June 2010. The Convention on Human Rights and Biomedicine is not applicable to organ and tissue removal from deceased persons. It concerns organ and tissue removal from living donors for transplantation purposes (Articles 19-20).

36. In relation to organ and tissue removal from deceased persons, an Additional Protocol on Transplantation of Organs and Tissues of Human Origin was adopted (ETS No. 186), to which the Government referred. On 1 May 2006 it came into force in respect of the States that had ratified it. Latvia has neither signed nor ratified this Protocol.

37. The relevant Articles of the Additional Protocol read as follows.

Article 1 – Object

"Parties to this Protocol shall protect the dignity and identity of everyone and guarantee, without discrimination, respect for his or her integrity and other rights and fundamental freedoms with regard to transplantation of organs and tissues of human origin."

Article 16 – Certification of death

"Organs or tissues shall not be removed from the body of a deceased person unless that person has been certified dead in accordance with the law.

The doctors certifying the death of a person shall not be the same doctors who participate directly in removal of organs or tissues from the deceased person, or subsequent transplantation procedures, or having responsibilities for the care of potential organ or tissue recipients."

Article 17 – Consent and authorisation

"Organs or tissues shall not be removed from the body of a deceased person unless consent or authorisation required by law has been obtained.

The removal shall not be carried out if the deceased person had objected to it."

Article 18 – Respect for the human body

"During removal the human body must be treated with respect and all reasonable measures shall be taken to restore the appearance of the corpse."

The relevant parts of the Explanatory Report to the Additional Protocol read as follows.

Introduction

"2. The purpose of the Protocol is to define and safeguard the rights of organ and tissue donors, whether living or deceased, and those of persons receiving implants of organs and tissues of human origin."

Drafting of the Protocol

"7. This Protocol extends the provisions of the Convention on Human Rights and Biomedicine in the field of transplantation of organs, tissues and cells of human origin. The provisions of the Convention are to be applied to the Protocol. For ease of

consultation by its users, the Protocol has been drafted in such a way that they need not keep referring to the Convention in order to understand the scope of the Protocol's provisions. However, the Convention contains principles which the Protocol is intended to develop. Accordingly, systematic examination of both texts may prove helpful and sometimes indispensable."

COMMENTS ON THE PROVISIONS OF THE PROTOCOL PREAMBLE

"13. The Preamble highlights the fact that Article 1 of the Convention on Human Rights and Biomedicine protecting the dignity and the identity of all human beings and guaranteeing everyone respect for their integrity, forms a suitable basis on which to formulate additional standards for safeguarding the rights and freedoms of donors, potential donors and recipients of organs and tissues."

Article 1 – Object

"16. This article specifies that the object of the Protocol is to protect the dignity and identity of everyone and guarantee, without discrimination, respect for his or her integrity and other rights and fundamental freedoms with regard to transplantation of organs and tissues of human origin.

17. The term 'everyone' is used in Article 1 because it is seen as the most concordant with the exclusion of embryonic and foetal organs or tissues from the scope of the Protocol as stated in Article 2 … The Protocol solely concerns removal of organs and tissues from someone who has been born, whether now living or dead, and the implantation of organs and tissues of human origin into someone else who has likewise been born."

Article 16 – Certification of death

"94. According to the first paragraph, a person's death must have been established before organs or tissues may be removed 'in accordance with the law'. It is the responsibility of the States to legally define the specific procedure for the declaration of death while the essential functions are still artificially maintained. In this respect, it can be noted that in most countries, the law defines the concept and the conditions of brain death.

95. The death is confirmed by doctors following an agreed procedure and only this form of death certification can permit the transplantation to go ahead. The retrieval team must satisfy themselves that the required procedure has been completed before any retrieval operation is started. In some States, this procedure for certification of death is separate from the formal issuance of the death certificate.

96. The second paragraph of Article 16 provides an important safeguard for the deceased person by ensuring the impartiality of the certification of death, by requiring that the medical team which certifies death should not be the same one that is involved in any stage of the transplant process. It is important that the interests of

any such deceased person and the subsequent certification of death are, and are seen to be, the responsibility of a medical team entirely separate from those involved in transplantation. Failure to keep the two functions separate would jeopardise the public's trust in the transplantation system and might have an adverse effect on donation.

97. For the purposes of this Protocol, neonates including anencephalic neonates receive the same protection as any person and the rules on certification of death are applicable to them."

Article 17 – Consent and authorisation

"98. Article 17 bars the removal of any organ or tissue unless the consent or authorisation required by national law has been obtained by the person proposing to remove the organ or tissue. This requires member States to have a legally recognised system specifying the conditions under which removal of organs or tissues is authorised. Furthermore, by virtue of Article 8, the Parties should take appropriate measures to inform the public, namely about matters relating to consent or authorisation with regard to removal from deceased persons …

99. If a person has made known their wishes for giving or denying consent during their lifetime, these wishes should be respected after his/her death. If there is an official facility for recording these wishes and a person has registered consent to donation, such consent should prevail: removal should go ahead if it is possible. By the same token, it may not proceed if the person is known to have objected. Nonetheless, consultation of an official register of last wishes is valid only in respect of the persons entered in it. Nor may it be considered the only way of ascertaining the deceased person's wishes unless their registration is compulsory.

100. The removal of organs or tissues can be carried out on a deceased person who has not had, during his/her life, the capacity to consent if all the authorisations required by law have been obtained. The authorisation may equally be required to carry out a removal on a deceased person who, during his/her life, was capable of giving consent but did not make known his wishes regarding an eventual removal post-mortem.

101. Without anticipating the system to be introduced, the Article accordingly provides that if the deceased person's wishes are at all in doubt, it must be possible to rely on national law for guidance as to the appropriate procedure. In some States the law permits that if there is no explicit or implicit objection to donation, removal can be carried out. In that case, the law provides means of expressing intention, such as drawing up a register of objections. In other countries, the law does not prejudge the wishes of those concerned and prescribes enquiries among relatives and friends to establish whether or not the deceased person was in favour of organ donation.

102. Whatever the system, if the wishes of the deceased are not sufficiently established, the team in charge of the removal of organs must beforehand endeavour to obtain testimony from relatives of the deceased. Unless national law otherwise provides, such authorisation should not depend on the preferences of the close relatives themselves for or against organ and tissue donation. Close relatives should be asked only about the deceased persons expressed or presumed wishes. It is the expressed views of the potential donor which are paramount in deciding whether organs or tissue may be retrieved. Parties should make clear whether organ or tissue retrieval can take place if a deceased person's wishes are not known and cannot be ascertained from relatives or friends.

103. When a person dies in a country in which he/she is not normally resident, the retrieval team shall take all reasonable measures to ascertain the wishes of the deceased. In case of doubt, the retrieval team should respect the relevant applicable laws in the country in which the deceased is normally resident or, by default, the law of the country of which the deceased person is a national."

Article 18 – Respect for the human body

"104. A dead body is not legally regarded as a person, but nonetheless should be treated with respect. This article accordingly provides that during removal the human body must be treated with respect and after removal the body should be restored as far as possible to its original appearance."

38. In May 2002 the Secretary General of the Council of Europe sent a questionnaire to the Council of Europe member States concerning aspects of law and practice in relation to transplantation. The Latvian government replied in the affirmative to the question of whether removal from a living donor required authorisation and referred to Articles 19 and 20 of the Convention on Human Rights and Biomedicine and section 13 of the Law on the protection of the body of a deceased person and use of human organs and tissue. They noted that written consent was required. In their response to the question "What kind of relationships should exist between the living donor of an organ and the recipient?", they referred to Articles 19 and 20 of the Convention on Human Rights and Biomedicine. In their response to the question "What sanctions are provided for [organ-trafficking] offenders, in particular, for intermediaries and health professionals?", the Latvian government referred to section 139 of the Criminal Law (see paragraph 53 below).

B. European Union documents

39. On 21 July 1998 the European Group on Ethics in Science and New Technologies (EGE)[2] issued Opinion no. 11 on ethical aspects of human tissue banking. Its relevant parts read as follows.

"2.3 Information and consent

The procurement of human tissues requires, as a principle, the prior, informed and free consent of the person concerned. This does not apply in the case of tissue procurement ordered by a judge in the context of judicial, in particular criminal, proceedings.

While consent is a fundamental ethical principle in Europe, the procedures involved and forms of such consent (oral or in writing, before a witness or not, explicit or presumed, etc.) are a matter for national legislation based on the legal traditions of each country.

…

2.3.2 Deceased donors

Consent of a donor for retrieval of tissues after death may take different forms depending on the national systems ('explicit' or 'presumed' consent). However, no retrieval of tissues may take place, with the exception of judicial proceedings, if the party concerned formally objected while alive. Furthermore, if there has been no expression of will and the applicable system is that of 'presumed' consent, doctors must ensure as far as possible that relatives or next of kin have the opportunity to express the deceased person's wishes, and must take these into account."

40. The relevant parts of Directive 2004/23/EC of the European Parliament and of the Council of 31 March 2004 on setting standards of quality and safety for the donation, procurement, testing, processing, preservation, storage and distribution of human tissues and cells provide as follows.

Article 13 – Consent

"1. The procurement of human tissues or cells shall be authorised only after all mandatory consent or authorisation requirements in force in the Member State concerned have been met.

2. Member States shall, in keeping with their national legislation, take all necessary measures to ensure that donors, their relatives or any persons granting authorisation on behalf of the donors are provided with all appropriate information as referred to in the Annex."

ANNEX – INFORMATION TO BE PROVIDED ON THE DONATION OF CELLS AND/OR TISSUES

B. Deceased donors

"1. All information must be given and all necessary consents and authorisations must be obtained in accordance with the legislation in force in Member States.

2. The confirmed results of the donor's evaluation must be communicated and clearly explained to the relevant persons in accordance with the legislation in Member States."

C. World Health Organisation (WHO) documents

41. The WHO Guiding Principles on Human Cell, Tissue and Organ Transplantation (endorsed by the sixty-third World Health Assembly on 21 May 2010, Resolution WHA63.22) provide, in so far as relevant, as follows.

Guiding Principle 1

"Cells, tissues and organs may be removed from the bodies of deceased persons for the purpose of transplantation if:

(a) any consent required by law is obtained, and

(b) there is no reason to believe that the deceased person objected to such removal."

Commentary on Guiding Principle 1

"Consent is the ethical cornerstone of all medical interventions. National authorities are responsible for defining the process of obtaining and recording consent for cell, tissue and organ donation in the light of international ethical standards, the manner in which organ procurement is organized in their country, and the practical role of consent as a safeguard against abuses and safety breaches.

Whether consent to procure organs and tissues from deceased persons is 'explicit' or 'presumed' depends upon each country's social, medical and cultural traditions, including the manner in which families are involved in decision-making about health care generally. Under both systems any valid indication of deceased persons' opposition to posthumous removal of their cells, tissues or organs will prevent such removal.

Under a regime of explicit consent – sometimes referred to as 'opting in' – cells, tissues or organs may be removed from a deceased person if the person had expressly consented to such removal during his or her lifetime; depending upon domestic law, such consent may be made orally or recorded on a donor card, driver's license or identity card or in the medical record or a donor registry. When the deceased has neither consented nor clearly expressed opposition to organ removal, permission should be obtained from a legally specified surrogate, usually a family member.

The alternative, presumed consent system – termed 'opting (or contracting) out' – permits material to be removed from the body of a deceased person for transplantation and, in some countries, for anatomical study or research, unless the person had expressed his or her opposition before death by filing an objection with an identified office, or an informed party reports that the deceased definitely voiced an objection to donation. Given the ethical importance of consent, such a system should ensure that people are fully informed about the policy and are provided with an easy means to opt out.

Although expressed consent is not required in an opting-out system before removal of the cells, tissues or organs of a deceased person who had not objected while

still alive, procurement programmes may be reluctant to proceed if the relatives personally oppose the donation; likewise, in opting-in systems, programmes typically seek permission from the family even when the deceased gave pre-mortem consent. Programmes are more able to rely on the deceased's explicit or presumed consent, without seeking further permission from family members, when the public's understanding and acceptance of the process of donating cells, tissues and organs is deep-seated and unambiguous. Even when permission is not sought from relatives, donor programmes need to review the deceased's medical and behavioural history with family members who knew him or her well, since accurate information about donors helps to increase the safety of transplantation.

For tissue donation, which entails slightly less challenging time constraints, it is recommended always to seek the approval of the next of kin. An important point to be addressed is the manner in which the appearance of the deceased's body will be restored after the tissues are removed."

D. Domestic law

1. Law on the protection of the body of a deceased person and use of human organs and tissues

42. The Law on protection of the body of a deceased person and use of human organs and tissue (likums "Par miruša cilvēka ķermeņa aizsardzību un cilvēka audu un orgānu izmantošanu medicīnā" – "the Law"), as in force at the relevant time (with amendments effective as of 1 November 1995 and up until 31 December 2001), provides in section 2 that every living person with legal capacity is entitled to consent or object, in writing, to the use of his or her body after death. The wish expressed, unless it is contrary to the law, is binding.

43. Section 3 provides that any such refusal of or consent to the use of one's body after death has legal effect only if it has been signed by a person with legal capacity, recorded in his or her medical record and denoted by a special stamp in his or her passport. The Department of Health in the Ministry of Welfare is responsible for prescribing the procedure for recording refusal or consent in a person's medical record (contrast with the situation following legislative amendments effective as of 1 January 2002, Petrova v. Latvia, no. 4605/05, § 35, 24 June 2014).

44. Pursuant to section 4, which is entitled "The rights of the closest relatives", the organs and tissues of a deceased person may not be removed against his or her wishes as expressed during his or her lifetime. In the absence of express wishes, removal may be carried out if none of the closest relatives (children, parents, siblings or spouse) objects. Transplantation may be carried out after the biological or brain death of the potential donor (section 10).

45. More specifically, section 11 of the Law provides that organs and tissue from a deceased donor may be removed for transplantation purposes if that person has

not objected to such removal during his or her lifetime and if his or her closest relatives have not prohibited it.

46. By virtue of a transitional provision of the Law, a stamp in a person's passport added before 31 December 2001 denoting objection or consent to the use of his or her body after death has legal effect until a new passport is issued or an application to the Office of Citizenship and Migration Affairs is submitted.

47. Section 17 provides that the State is responsible for protecting the body of a deceased person and for using organs or tissues for medical purposes. At the material time this function was entrusted to the Department of Health in the Ministry of Welfare (as of 1 January 2002, the Ministry of Welfare, as of 30 June 2004, the Ministry of Health). No organisation or authority can carry out the removal of organs and tissues and use them without an authorisation issued by the Department of Health (as of 1 January 2002, the Minister of Welfare, as of 30 June 2004, the Minister of Health).

48. Section 18 prohibits the selection, transportation and use of the removed organs and tissues for commercial purposes. It also provides that the removal of organs and tissues from any living or deceased person can only be carried out with strict respect for that person's expressed consent or objection.

49. Section 21 originally provided that the prosecutor's office was to supervise compliance with this Law (paragraph 1). The Department of Health of the Ministry of Welfare and other competent bodies were responsible for monitoring the legality of the use of human tissue and organs (paragraph 2). By virtue of amendments effective from 1 January 2002, paragraph 1 was repealed; the remaining paragraph provided that the Ministry of Welfare was to bear responsibility for checking the compatibility of the use of human tissue and organs with law and other legislative instruments. From 30 June 2004 this task was entrusted to the Ministry of Health. Lastly, since 27 August 2012 this section has been repealed in its entirety.

50. On 2 June 2004 amendments to sections 4 and 11 of the Law were passed by Parliament, effective as of 30 June 2004. From that date onwards, section 4 provides that if no information is recorded in the population register about a deceased person's refusal of or consent to the use of his or her body, organs or tissue after death, the closest relatives have the right to inform the medical institution in writing of the wishes of the deceased person expressed during his or her lifetime. Section 11 provides that the organs and body tissue of a deceased person may be removed for transplantation purposes if no information is recorded in the population register about the deceased person's refusal of or consent to the use of his or her organs or body tissue after death and if the closest relatives of the deceased have not, before the start of the transplantation, informed the medical institution in writing of any

objection by the deceased person to the use of his or her organs and body tissue after death expressed during his or her lifetime. It is forbidden to remove organs and body tissue from a dead child for transplantation purposes unless one of his or her parents or his or her legal guardian has consented to it in writing.

2. Regulation of the Cabinet of Ministers no. 431 (1996)

51. This Regulation (Noteikumi par miruša cilvēka audu un orgānu uzkrāšanas un izmantošanas kārtību medicīnā) provides that removal of organs and tissue may be carried out after the biological or brain death of a person if his or her passport and medical record contain a stamp denoting consent to such removal (see paragraph 3 of the Regulation). In the absence of such a stamp, the provisions of the Law (see paragraphs 42-50 above) are to be followed.

3. Legal regulation of the MADEKKI

52. The legal regulations governing the Inspectorate of Quality Control for Medical Care and Working Capability ("MADEKKI") in Latvian law are summarised in L.H. v. Latvia (no. 52019/07, §§ 24-27, 29 April 2014). For the purposes of the present case it suffices to note that these regulations – approved by the Cabinet of Ministers (Regulation no. 391 (1999), effective from 26 November 1999 to 30 June 2004) – provided, inter alia, that one of the main functions of the MADEKKI was to monitor the professional quality of healthcare in medical institutions.

4. Criminal law provisions

53. Section 139 of the Criminal Law (Krimināllikums) provides that the unlawful removal of organs or tissues from a living or deceased human being in order to use them for medical purposes is a criminal offence if carried out by a medical practitioner.

54. The relevant provisions pertaining to the rights of civil parties in criminal proceedings under the former Code of Criminal Procedure (Latvijas Kriminālprocesa kodekss, effective until 1 October 2005) are described in Liģeres v. Latvia (no. 17/02, §§ 39-41, 28 June 2011) and Pundurs v. Latvia ((dec.), no. 43372/02, §§ 12-17, 20 September 2011).

55. In addition, the relevant provisions pertaining to the rights of civil parties in criminal proceedings under the Criminal Procedure Law (Kriminālprocesa likums, effective from 1 October 2005), as in force at the material time, read as follows.

Section 22 – Right to compensation for damage

"A person who has sustained psychological distress, physical injury or pecuniary loss as a result of a criminal offence shall be guaranteed procedural opportunities to request and receive compensation for pecuniary and non-pecuniary damage."

Section 351 – Claim for compensation

"(1) An injured party shall have the right to submit a claim for compensation for harm caused at any stage of criminal proceedings up to the commencement of

a judicial investigation in a court of first instance. The claim shall contain justification of the amount of compensation requested.

(2) A claim may be submitted in writing or expressed orally. An oral request shall be recorded in the minutes by the person directing the proceedings.

(3) During pre-trial proceedings, the public prosecutor shall indicate the submission of a claim and the amount of compensation claimed, as well as his or her opinion thereon, in the document concerning the completion of pre-trial proceedings.

(4) Failure to ascertain the criminal liability of a person shall not be an impediment to the submission of a compensation claim.

(5) An injured party shall have the right to withdraw a submitted compensation claim at any stage of criminal proceedings up to the moment when the court retires to give judgment. The refusal of compensation by a victim may not constitute grounds for the revocation or modification of charges, or for acquittal."

5. The right to receive compensation

56. Article 92 of the Constitution (Satversme) provides, inter alia, that "any person whose rights are violated without justification has a right to commensurate compensation".

57. Domestic legal provisions pertaining to compensation for pecuniary and non-pecuniary damage under the Civil Law (Civillikums), before and after the amendments that were effective from 1 March 2006, are quoted in full in Zavoloka v. Latvia (no. 58447/00, §§ 17-19, 7 July 2009). Sections 1635 and 1779 are further described in Holodenko v. Latvia (no. 17215/07, § 45, 2 July 2013).

58. Under section 92 of the Administrative Procedure Law (Administratīvā procesa likums), in force since 1 February 2004, everyone has the right to receive commensurate compensation for pecuniary and non-pecuniary damage caused by an administrative act or action of a public authority. Under section 93 of the same Law, a claim for compensation can be submitted either together with an application to the administrative courts to declare an administrative act or action of a public authority unlawful, or to the public authority concerned following a judgment adopted in such proceedings. Under section 188, an application to an administrative court regarding an administrative act or action of a public authority must be lodged within one month or one year depending on the circumstances. In relation to an action of a public authority, the one-year time-limit runs from the date on which the applicant finds out that such action has occurred. Lastly, under section 191(1) an application will be refused if more than three years have elapsed since the applicant found out or ought to have found out that such action occurred. This time-limit is not amenable to extension (atjaunots).

59. The amount of compensation and the procedure for claiming damages from a public authority on account of an unlawful administrative act or an unlawful action

of a public authority are prescribed by the Law on compensation for damage caused by public authorities (Valsts pārvaldes iestāžu nodarīto zaudējumu atlīdzināšanas likums), in force since 1 July 2005. Chapter III of the Law provides for the procedure to be followed when an individual claims damages from a public authority. Under section 15, an individual is entitled to lodge an application with the public authority that was responsible for the damage. Pursuant to section 17, such an application must be lodged not later than one year from the date when the individual became aware of the damage and, in any event, not later than five years after the date of the unlawful administrative act or unlawful action of a public authority.

THE LAW

I. ALLEGED VIOLATION OF ARTICLE 8 OF THE CONVENTION

60. The applicant complained in substance under Article 8 of the Convention, firstly, that the removal of tissue from her husband's body had been carried out without his or the applicant's prior consent. Secondly, she complained that – in the absence of such consent – his dignity, identity and integrity had been breached and his body had been treated disrespectfully.

61. Article 8 of the Convention reads as follows.

"1. Everyone has the right to respect for his private and family life, his home and his correspondence.

2. There shall be no interference by a public authority with the exercise of this right except such as is in accordance with the law and is necessary in a democratic society in the interests of national security, public safety or the economic well-being of the country, for the prevention of disorder or crime, for the protection of health or morals, or for the protection of the rights and freedoms of others."

62. The Government denied that there had been a violation of that Article.

A. Preliminary issues

63. The Court must start by examining whether it is competent ratione personae to examine the applicant's complaint; this issue calls for consideration by the Court of its own motion (see Sejdić and Finci v. Bosnia and Herzegovina [GC], nos. 27996/06 and 34836/06, § 27, ECHR 2009).

64. The Court's approach as concerns direct and indirect victims has been recently summarised in Centre for Legal Resources on behalf of Valentin Câmpeanu v. Romania ([GC], no. 47848/08, §§ 96-100, ECHR 2014) as follows (references omitted).

"(i) Direct victims

96. In order to be able to lodge an application in accordance with Article 34, an individual must be able to show that he or she was 'directly affected' by the measure complained of … This is indispensable for putting the protection mechanism of the

Convention into motion, although this criterion is not to be applied in a rigid, mechanical and inflexible way throughout the proceedings …

Moreover, in accordance with the Court's practice and with Article 34 of the Convention, applications can only be lodged by, or in the name of, individuals who are alive … Thus, in a number of cases where the direct victim has died prior to the submission of the application, the Court has not accepted that the direct victim, even when represented, had standing as an applicant for the purposes of Article 34 of the Convention …

(ii) Indirect victims

97. Cases of the above-mentioned type have been distinguished from cases in which an applicant's heirs were permitted to pursue an application which had already been lodged. An authority on this question is Fairfield and Others …, where a daughter lodged an application after her father's death, alleging a violation of his rights to freedom of thought, religion and speech (Articles 9 and 10 of the Convention). While the domestic courts granted Ms Fairfield leave to pursue the appeal after her father's death, the Court did not accept the daughter's victim status and distinguished this case from the situation in Dalban v. Romania …, where the application had been brought by the applicant himself, whose widow had pursued it only after his subsequent death.

In this regard, the Court has differentiated between applications where the direct victim has died after the application was lodged with the Court and those where he or she had already died beforehand.

Where the applicant has died after the application was lodged, the Court has accepted that the next of kin or heir may in principle pursue the application, provided that he or she has sufficient interest in the case …

98. However, the situation varies where the direct victim dies before the application is lodged with the Court. In such cases the Court has, with reference to an autonomous interpretation of the concept of 'victim', been prepared to recognise the standing of a relative either when the complaints raised an issue of general interest pertaining to 'respect for human rights' (Article 37 § 1 in fine of the Convention) and the applicants as heirs had a legitimate interest in pursuing the application, or on the basis of the direct effect on the applicant's own rights … The latter cases, it may be noted, were brought before the Court following or in connection with domestic proceedings in which the direct victim himself or herself had participated while alive.

Thus, the Court has recognised the standing of the victim's next of kin to submit an application where the victim has died or disappeared in circumstances allegedly engaging the responsibility of the State …

99. In Varnava and Others … the applicants lodged the applications both in their own name and on behalf of their disappeared relatives. The Court did not consider

it necessary to rule on whether the missing men should or should not be granted the status of applicants since, in any event, the close relatives of the missing men were entitled to raise complaints concerning their disappearance … The Court examined the case on the basis that the relatives of the missing persons were the applicants for the purposes of Article 34 of the Convention.

100. In cases where the alleged violation of the Convention was not closely linked to disappearances or deaths giving rise to issues under Article 2, the Court's approach has been more restrictive, as in Sanles Sanles v. Spain …, which concerned the prohibition of assisted suicide. The Court held that the rights claimed by the applicant under Articles 2, 3, 5, 8, 9 and 14 of the Convention belonged to the category of non-transferable rights, and therefore concluded that the applicant, who was the deceased's sister-in-law and legal heir, could not claim to be the victim of a violation on behalf of her late brother-in-law. The same conclusion has been reached in respect of complaints under Articles 9 and 10 brought by the alleged victim's daughter …

In other cases concerning complaints under Articles 5, 6 or 8 the Court has granted victim status to close relatives, allowing them to submit an application where they have shown a moral interest in having the late victim exonerated of any finding of guilt … or in protecting their own reputation and that of their family …, or where they have shown a material interest on the basis of the direct effect on their pecuniary rights … The existence of a general interest which necessitated proceeding with the consideration of the complaints has also been taken into consideration …

The applicant's participation in the domestic proceedings has been found to be only one of several relevant criteria …"

65. As regards the first part of the complaint, the Court considers that the applicant has adequately demonstrated that she has been directly affected by the removal of tissue from her deceased husband's body without her consent (see also Petrova v. Latvia, no. 4605/05, § 56, 24 June 2014). The Court is therefore satisfied that the applicant can be considered a "direct victim" in that regard (see paragraph 60 above). However, in so far as the applicant's complaint relates to the lack of consent from her deceased husband, the Court considers that it is incompatible ratione personae with the provisions of the Convention within the meaning of Article 35 § 3 (a) of the Convention and must therefore be rejected in accordance with Article 35 § 4.

66. As regards the second part of the complaint, the Court notes that the applicant conceded that it concerned her deceased husband's rights. Accordingly, it must also be rejected as incompatible ratione personae with the provisions of the Convention in accordance with Article 35 §§ 3 (a) and 4 of the Convention.

67. Lastly, the Court notes that in certain respects the second part of the complaint overlaps with the applicant's complaint under Article 3 of the Convention. Accordingly, the Court will examine it below in so far as it relates to the applicant's rights.

B. Admissibility

1. The parties' submissions

68. The Government conceded that the applicant's complaint fell within the ambit of "private life" under Article 8 of the Convention, but they did not accept that it concerned "family life".

69. First of all, relying on the Court's decision in Grišankova and Grišankovs v. Latvia ((dec.), no. 36117/02, ECHR 2003-II), the Government argued that the applicant had failed to exhaust domestic remedies. They submitted that the applicant should have lodged a complaint with the Constitutional Court since the removal of tissue from her husband's body had been carried out in accordance with the procedure laid down in sections 4 and 11 of the Law. She should have raised the issue of the compliance of these legal provisions with the Latvian Constitution.

70. Secondly, the Government argued that the applicant had not submitted a complaint to the MADEKKI. The Government pointed out that at the material time the MADEKKI had been the body with competence to examine the applicant's complaints, since its function was to monitor the professional quality of healthcare in medical institutions. It was the Government's submission that an examination by MADEKKI of the compliance of the tissue removal procedure with domestic law was a necessary precondition for instituting any civil or criminal proceedings against those responsible. They did not provide any further information in this regard.

71. Thirdly, the Government submitted that the applicant could have relied on section 1635 of the Civil Law (as effective from 1 March 2006) and claimed compensation for pecuniary and non-pecuniary damage before the civil courts. The Government provided some examples of domestic case-law pertaining to the application of section 1635 in practice. They referred to the proceedings in case PAC-714 (instituted on 7 February 2005), where a claimant had sought compensation for non-pecuniary damage from a hospital where she had given birth and where tubal ligation (surgical contraception) had been performed without her consent (referring to L.H. v. Latvia, no. 52019/07, § 8, 29 April 2014). On 1 December 2006 that claim had been upheld and the claimant had been awarded compensation for physical injury and psychological distress in the amount of 10,000 Latvian lati (LVL) in respect of the unlawful sterilisation on the basis of section 2349 of the Civil Law. This judgment had taken effect on 10 February 2007. The Government also referred to one of the "Talsi tragedy" cases (instituted on 15 September 2006), in which on 16 March 2010 the appellate court had awarded compensation payable by the State in the amount of LVL 20,000 in connection with an incident of 28 June 1997 in Talsi, in which the claimant's daughter, among other children, had died. The final decision in that case had been adopted on 28 September 2011. The Government did not provide copies of the decisions in that case.

72. The applicant disagreed. She submitted that her complaint fell within the ambit of private and family life under Article 8 of the Convention.

73. In response to the first remedy cited by the Government – recourse to the Constitutional Court – the applicant pointed out that the court's competence was limited to reviewing compliance with the Constitution of laws and other legal instruments. The applicant argued that the tissue removal had been contrary to sections 4 and 11 of the Law; she did not consider these legal provisions to be contrary to the Constitution. The decision in Grišankova and Grišankovs, cited above, concerned the wording of the Education Law. The present case, however, concerned an individual action – the removal of tissue from her husband's body. Moreover, the applicant argued that if any provisions of the Law were indeed not compatible with the Constitution, the criminal court, the Prosecutor General or the Cabinet of Ministers should and could themselves have submitted an application to the Constitutional Court.

74. In response to the second remedy cited by the Government, namely a complaint to the MADEKKI, the applicant submitted that it would not have been the competent body. Tissue removal was not healthcare. The applicant referred to section 21 of the Law and explained that at the relevant time supervision had been the responsibility of the prosecutor's office (see paragraph 49 above).

75. In response to the third remedy cited by the Government, the applicant argued that the Forensic Centre was a State institution under the supervision of the Ministry of Health. Since the entry into force of the Administrative Procedure Law on 1 February 2004, administrative acts and actions of public authorities had been amenable to judicial review by the administrative courts. Thus, an appeal against an action of a public authority – in this case, the removal of tissue from the body of the applicant's husband – could only be lodged in the administrative courts. Referring to the Forensic Centre's regulations, the applicant noted that the actions of its employees were amenable to appeal before its head, whose decisions or actions were subsequently amenable to judicial review by the administrative courts. Appeals under the Administrative Procedure Law, however, would have been time-barred in the applicant's case by the time the final decision had been taken in the criminal proceedings. The applicant concluded that the actions of the expert concerned could not be subject to judicial review by the civil courts.

76. The applicant also pointed out that the amount of compensation and the procedure for claiming damages from a public authority on account of an unlawful administrative act or unlawful action by a public authority were prescribed by the Law on compensation for damage caused by public authorities and not by the Civil Law. An action under the former law, however, would also have been time-barred.

77. Lastly, even if the applicant had, as suggested by the Government, lodged a civil claim under section 1635 of the Civil Law against the experts who had

removed tissue from her husband's body, it would have been bound to fail since in the criminal proceedings it had been established that they were not guilty. The applicant also pointed out that the examples of domestic case-law referred to by the Government were not comparable. In the first case the civil proceedings had been instituted against a private hospital and not against a State institution. The second case concerned events which dated back to 1997, long before the Administrative Procedure Law and the Law on compensation for damage caused by public authorities had come into effect. In addition, at that time, the Code of Civil Procedure contained a chapter concerning litigation in matters arising from administrative relations, which had been superseded by the entry into force of the Administrative Procedure Law.

2. The Court's assessment

(a) Non-exhaustion of domestic remedies

78. In so far as the Government referred to a constitutional complaint as a relevant remedy in the applicant's circumstances, the Court considers that such a complaint could not constitute an effective means of protecting the applicant's rights under Article 8 of the Convention for the following reasons.

79. The Court has already examined the scope of the Constitutional Court's review in Latvia (see Grišankova and Grišankovs, cited above; Liepājnieks v. Latvia (dec.), no. 37586/06, §§ 73-76, 2 November 2010; Savičs v. Latvia, no. 17892/03, §§ 113-17, 27 November 2012; Mihailovs v. Latvia, no. 35939/10, §§ 157-58, 22 January 2013; Nagla v. Latvia, no. 73469/10, § 48, 16 July 2013; and Latvijas jauno zemnieku apvienība v. Latvia (dec.), no. 14610/05, §§ 44-45, 17 December 2013).

80. The Court noted in the above cases that the Constitutional Court examined, inter alia, individual complaints challenging the constitutionality of a legal provision or its compliance with a provision having superior legal force. An individual constitutional complaint can be lodged against a legal provision only when an individual considers that the provision in question infringes his or her fundamental rights as enshrined in the Constitution. The procedure of an individual constitutional complaint cannot therefore serve as an effective remedy if the alleged violation resulted only from the erroneous application or interpretation of a legal provision which, in its content, is not unconstitutional (see Latvijas jauno zemnieku apvienība, cited above, §§ 44-45).

81. In the present case, the Court considers that the applicant's complaint concerning the removal of tissue does not relate to the compatibility of one legal provision with another legal provision having superior force. The Government argued that the tissue removal had taken place in accordance with the procedure laid down in law. The applicant, for her part, did not contest the constitutionality of this procedure. Instead, she argued that the tissue removal from her husband's body constitut-

ed an individual action that was contrary to sections 4 and 11 of the Law. The Court finds that the applicant's complaint relates to the application and interpretation of domestic law, particularly in the light of the absence of any relevant administrative regulation; it cannot be said that any issues of compatibility arise. In such circumstances the Court considers that the applicant was not required to avail herself of the proposed remedy.

82. The Court understands the Government's argument in relation to the examination by the MADEKKI (see paragraph 70 above) as chiefly pertaining to civil remedies; the Court will examine it immediately below. It is not clear from the evidence in the case file whether the MADEKKI carried out any examination in relation to the criminal proceedings in the present case (contrast Petrova, cited above, § 15). In any event, it does not appear that any examination by the MADEKKI was necessary in order to institute criminal proceedings. Be that as it may, it is irrelevant that the applicant did not lodge a separate complaint with the MADEKKI, as long as she complained of all the decisions adopted by the investigating and prosecuting authorities, whose task it is normally to establish whether any crime has been committed (ibid., § 71).

83. As regards the possibility of lodging a civil claim for damages, in Calvelli and Ciglio v. Italy ([GC], no. 32967/96, § 51, ECHR 2002-I), the Court held:

"… In the specific sphere of medical negligence the obligation may for instance also be satisfied if the legal system affords victims a remedy in the civil courts, either alone or in conjunction with a remedy in the criminal courts, enabling any liability of the doctors concerned to be established and any appropriate civil redress, such as an order for damages and for the publication of the decision, to be obtained. Disciplinary measures may also be envisaged."

84. The Court has further stated that this principle applies when the infringement of the right to life or personal integrity is not caused intentionally (see Vo v. France [GC], no. 53924/00, § 90, ECHR 2004-VIII, and Öneryıldız v. Turkey [GC], no. 48939/99, § 92, ECHR 2004-XII).

85. However, the Court has also found that, in the event of there being a number of domestic remedies which an individual can pursue, that person is entitled to choose the remedy which addresses his or her essential grievance (see Jasinskis v. Latvia, no. 45744/08, § 50, 21 December 2010). The Court observes that the applicant was originally unaware of the fact that tissue from her husband's body had been removed; she learned about it only when the security police opened a criminal inquiry into these facts. Subsequently, she availed herself of the criminal avenue of redress – she was declared an injured party in these proceedings and she pursued them by lodging various complaints with the investigating and prosecuting authorities. The criminal-law remedy could have given rise to a finding that the removal of

tissue from her husband's body had been carried out contrary to the domestic procedure and that her rights as the closest relative had been breached. It could eventually have led to a compensation award, given that the Latvian legal system recognises victims' rights to lodge civil claims in criminal proceedings and to request compensation for damage suffered as a result of a crime (see paragraphs 54-55 above). In such circumstances, there is nothing to suggest that the applicant could have legitimately expected that the criminal-law remedy would not be an effective one in her case.

86. The Court is of the view that the applicant was not required to submit to the civil courts a separate, additional request for compensation, which could also have given rise to a finding that the removal of tissue from her husband's body had been carried out contrary to the domestic procedure and that her rights as the closest relative had been breached (see also Sergiyenko v. Ukraine, no. 47690/07, §§ 40-43, 19 April 2012; Arskaya v. Ukraine, no. 45076/05, §§ 75-81, 5 December 2013; and Valeriy Fuklev v. Ukraine, no. 6318/03, §§ 77-83, 16 January 2014, where the applicants were not required to lodge separate civil claims for the alleged medical malpractice). The Court concludes that the applicant exhausted the available domestic remedies by pursuing the criminal-law remedy.

87. In the light of the above conclusion, the Court does not consider it necessary to address the Government's argument that an examination by the MADEKKI was necessary to institute civil proceedings. Nor does it consider it necessary to address the applicant's argument that her claim under the Administrative Procedure Law and the Law on compensation for damage caused by public authorities was time-barred or that her claim under the Civil Law was bound to fail.

(b) Applicability

88. The Court notes that, while the Government did not accept that the applicant's complaint concerned "family life", they did not dispute that it fell within the ambit of "private life" under Article 8 of the Convention.

89. The Court reiterates that the concepts of private and family life are broad terms not susceptible to exhaustive definition (see Hadri-Vionnet v. Switzerland, no. 55525/00, § 51, 14 February 2008). In Pannullo and Forte v. France (no. 37794/97, § 36, ECHR 2001-X), the Court considered the excessive delay by the French authorities in returning the body of their child following an autopsy to be an interference with the applicants' private and family life. It has also held that the refusal of the investigating authorities to return the bodies of deceased persons to their relatives constituted an interference with the applicants' private and family life (see Sabanchiyeva and Others v. Russia, no. 38450/05, § 123, ECHR 2013, and Maskhadova and Others v. Russia, no. 18071/05, § 212, 6 June 2013). However, that issue does not arise in the present case and no complaint has been made to that effect. The Court notes that there is no dispute between the parties that the applicant's right – established

under domestic law – to express consent or refusal in relation to the removal of tissue from her husband's body comes within the scope of Article 8 of the Convention in so far as private life is concerned. The Court sees no reason to hold otherwise and thus considers that this Article is applicable in the circumstances of the case.

(c) Conclusion

90. The Court notes that the applicant's complaint – in so far as it concerns the removal of tissue from her deceased husband's body without her consent – is not manifestly ill-founded within the meaning of Article 35 § 3 (a) of the Convention. It further notes that it is not inadmissible on any other grounds. It must therefore be declared admissible.

C. Merits

1. The parties' submissions

91. The applicant submitted that the removal of tissue from her husband's body without her consent had constituted interference with her private life. She argued that she had been prevented from expressing her wishes regarding the removal of tissue from her deceased husband's body. She had not even been informed of this intrusive fact. The applicant also submitted that the expert could not have verified the existence of a stamp in her husband's passport because it had been at their home in Sigulda and therefore unavailable to the expert.

92. First of all, relying on Hokkanen v. Finland (23 September 1994, § 55, Series A no. 299-A), the applicant argued that the interference had not been in accordance with the law and had not pursued a legitimate aim. The applicant referred to sections 4 and 11 of the Law and argued that in 2001 the system of "explicit consent" had operated in Latvia. The applicant was of the opinion that the experts should have enquired whether the closest relatives had agreed or objected to tissue removal and that they had been under an obligation to do so under the aforementioned provisions. She argued that the aim of the Law was to protect the body of a deceased person and that it was necessary for this aim to be taken into account when interpreting its provisions. In this connection she also referred to international material (see paragraph 37 above). Lastly, the 2004 amendments to the Law demonstrated that previously the system of "explicit consent" had prevailed. The discussion regarding "explicit" and "presumed" consent systems in Latvia had only started at about the time that the criminal inquiry was opened in the present case. As a result, substantive legislative amendments had been passed by Parliament in 2004 (see paragraph 50 above). The applicant submitted that even after these amendments the relevant legal provisions were still not clear enough, but their wording had been changed to establish the system of "presumed consent".

93. The applicant argued furthermore that the domestic law was not foreseeable in its application because it did not provide for the possibility for the relatives to

object to tissue removal. She referred to various findings by the domestic authorities that the legal provisions were unclear (see, for example, paragraph 28 above) and noted that several prosecutors had considered that the Law had indeed been breached (see, for example, paragraphs 22, 24 and 27 above). The applicant argued that the experts had exploited the lack of clarity for their own ends and had derived financial benefit from it. The applicant concluded that the removal of tissue from her husband's body had not been carried out in accordance with the law.

94. Secondly, the applicant submitted that "saving the lives of others" could not constitute a legitimate aim for removing tissue without consent. And, thirdly, she argued that it had not been sufficiently proved by the Government to be necessary in a democratic society.

95. The Government maintained that the interference with the applicant's private life as a result of the removal of tissue from her husband's body without his or the applicant's prior consent had complied with the criteria set out in Article 8 § 2.

96. Firstly, the Government argued that the tissue removal had been carried out in accordance with domestic law. They specifically pointed out that the Court – if it were to reject their non-exhaustion argument as regards recourse to the Constitutional Court – ought to proceed on the assumption that national law was compatible with the standard laid down in Article 8 of the Convention.

97. They referred to paragraph 3 of Regulation no. 431 (1996) and sections 4 and 11 of the Law and argued that the tissue removal had been carried out in accordance with domestic law. No prior consent had been necessary, nor had it been necessary to seek permission from the deceased person's closest relatives. It had not been unlawful to proceed with the tissue removal without the consent of the deceased person or his or her closest relatives. The Government argued that under sections 4 and 11 of the Law only "an absence of any objection by the deceased person expressed prior to his death or an absence of explicit objection by [the closest relatives] expressed prior to the tissue removal" had been required. The Government thus argued that the system of "presumed consent" had been operating in Latvia at the material time. They pointed out that the system of "presumed consent" was not innovative and that Latvia had not been the only country employing this system; it was also established in eleven other States.

98. According to the Government, the expert had verified – prior to the tissue removal – that there was no stamp in Mr Elberts' passport denoting his objection to the use of his body tissue, and this had allegedly been noted in the form of an abbreviation ("zīm. nav") in the registration log. However, in the copy of the registration log provided to the Court no such legible abbreviation could be seen.

99. At the same time, the Government acknowledged that national laws did not impose any obligation on a doctor to make specific enquiries in order to ascertain

if there were any close relatives and to inform them of possible tissue removal. In this connection they referred to the court's decision in the criminal proceedings (see paragraph 28 above).

100. Secondly, the Government argued that the tissue removal had been carried out in order to "save and/or improve the lives of others". They referred to the court's decision in the criminal proceedings (see paragraph 28 above), which had noted that "tissue [was] removed in the name of humanity with the aim of improving the health of others and prolonging their lives". They also referred to the Preamble to the Additional Protocol on Transplantation of Organs and Tissues of Human Origin to the effect that the practice of tissue donation and tissue removal for transplantation purposes "contributes to saving lives or greatly improving their quality" and that "transplantation of … tissues is an established part of the health services offered to the population". The Government concluded that the tissue removal had had a legitimate aim – namely the protection of the health and the rights of others.

101. Thirdly, the Government reiterated that the States enjoyed a margin of appreciation when determining measures to be taken in response to the pressing social need to protect the health and the rights of others. The Government relied on Dudgeon v. the United Kingdom (22 October 1981, § 52, Series A no. 45) and argued that it was for the national authorities to make the initial assessment of the pressing social need in each case and that the margin of appreciation was left to them. Tissue removal and transplantation contributed to saving lives and could greatly improve their quality. Thus, there was a "pressing social need" for tissue donation because tissue transplantation had become an established part of the health services offered to the whole population. They reiterated that Mr Elberts' tissue had been removed in order to secure bio-material for transplantation purposes to potentially improve and/or save the lives of others.

102. It was primarily the duty and responsibility of the deceased's closest relative to duly inform the medical personnel in good time of the deceased person's objection to his or her tissue removal. The national law at the time had not prevented either Mr Elberts or the applicant, as his closest relative, from expressing their wishes in relation to tissue removal. They could have objected to the donation of tissue. However, neither of them had done so before the tissue had been removed in accordance with the Law. The Government concluded that a fair balance had been struck between the applicant's "right to private life under the Convention – as national laws envisaged the closest relative's right to object to the removal of the deceased person's tissue prior to the removal procedure (which had not been exercised either by Mr Elberts or by the applicant) – and the pressing social need to secure bio--implants for tissue transplantation as part of the health services offered to the whole population".

2. The Court's assessment

(a) General principles

103. The essential object of Article 8 is to protect the individual against arbitrary interference by public authorities. Any interference under the first paragraph of Article 8 must be justified in terms of the second paragraph, namely as being "in accordance with the law" and "necessary in a democratic society" for one or more of the legitimate aims listed therein. The notion of necessity implies that the interference correlates with a pressing social need and, in particular, that it is proportionate to one of the legitimate aims pursued by the authorities (see A, B and C v. Ireland [GC], no. 25579/05, §§ 218-41, ECHR 2010).

104. The Court refers to the interpretation given to the phrase "in accordance with the law" in its case-law (as summarised in S. and Marper v. the United Kingdom [GC], nos. 30562/04 and 30566/04, §§ 95-96, ECHR 2008). Of particular relevance in the present case is the requirement for the impugned measure to have some basis in domestic law, which should be compatible with the rule of law; this, in turn, means that the domestic law must be formulated with sufficient precision and must afford adequate legal protection against arbitrariness. Accordingly, the domestic law must indicate with sufficient clarity the scope of discretion conferred on the competent authorities and the manner of its exercise (see, most recently, L.H. v. Latvia, cited above, § 47).

(b) Application in the present case

105. As to the alleged interference, turning to the circumstances of the present case, the Court notes that following a car accident the applicant's husband sustained life-threatening injuries, of which he died on the way to hospital. On the following day, his body was transported to the Forensic Centre, where an autopsy was carried out. Subsequently, some of his body tissue was removed and later sent to a company in Germany to be transformed into bio-implants with the intention that they would be sent back to Latvia for transplantation purposes. The applicant, who was one of his closest relatives, was not informed of this and could not exercise certain rights established under domestic law – notably the right to express consent or refusal in relation to the removal of tissue from her husband's body. She did not learn about the tissue removal until about two years later, when the security police opened a criminal inquiry into the illegal removal of organs and tissue between 1994 and 2003 and contacted her.

106. The Court notes that it has not been contested that the Forensic Centre was a public institution and that the acts or omissions of its medical staff, including experts who carried out organ and tissue removal, were capable of engaging the responsibility of the respondent State under the Convention (see Glass v. the United Kingdom, no. 61827/00, § 71, ECHR 2004-II).

107. The Court considers that the above-mentioned circumstances are sufficient for it to conclude that there has been an interference with the applicant's right to respect for her private life under Article 8 of the Convention.

108. As to whether the interference was "in accordance with the law", the Court observes that Latvian law at the material time explicitly provided for the right on the part of not only the person concerned but also the person's closest relatives, including his or her spouse, to express their wishes in relation to the removal of tissue after that person's death (see paragraphs 44-45 above). The parties did not contest this. However, their views differed as far as the exercise of this right was concerned. The applicant considered that the experts were obliged to establish the wishes of the closest relatives. The Government argued that the mere absence of any objection was all that was required to proceed with tissue removal. It is the Court's view that these issues relate to the quality of domestic law, in particular the question of whether the domestic legislation was formulated with sufficient precision and afforded adequate legal protection against arbitrariness in the absence of relevant administrative regulations.

109. In this context, the Court observes that the principal disagreement between the parties is whether or not the law – which in principle afforded the closest relatives the right to express consent or refusal in relation to tissue removal – was sufficiently clear and foreseeable in its application as regards the exercise of this right. The applicant argued that there had been no possibility for her as the closest relative to object to the tissue removal, but the Government were of the view that she could have nonetheless exercised that right as nothing had prevented her from expressing her wishes or her objection.

110. The Court reiterates, however, that where national legislation is in issue it is not the Court's task to review the relevant legislation in the abstract. Instead, it must confine itself, as far as possible, to examining the issues raised by the case before it (see Taxquet v. Belgium [GC], no. 926/05, § 83 in fine, ECHR 2010). The Court observes that the parties submitted detailed arguments on the dispute as to whether the system of "explicit consent" or "presumed consent" had been operating in Latvia at the material time (see also the divided views of experts and investigators in paragraph 18 above). It has to be borne in mind, however, that the issue before the Court in the present case is not the general question of whether the respondent State should provide for a particular consent system. The issue is rather the applicant's right to express wishes in connection with the removal of tissue from her husband's body after his death and the domestic authorities' alleged failure to ensure the legal and practical conditions for the exercise of that right.

111. The starting-point for the Court's analysis is the fact that the applicant was not informed of the removal of tissue from her husband's body when it was carried

out. The domestic authorities established that it was common practice at the time for the experts at the Forensic Centre who carried out such removal not to attempt to contact relatives of the deceased (see paragraph 16 above); there was also evidence that, even where the experts did have some contact with the relatives, they neither informed them of the imminent removal of tissue nor obtained their consent (see paragraph 27 above).

112. As to whether or not the domestic law was formulated with sufficient precision, the Court observes that the domestic authorities themselves held conflicting views as to the scope of the obligations enshrined in national law. On the one hand, while the security police considered that tissue removal was allowed only with prior express consent and that its absence rendered the removal unlawful, they also accepted – referring to the views held by the experts – that different interpretations of domestic law were possible, thus rendering it impossible to secure a conviction (see paragraphs 18 and 20 above). On the other hand, various supervising prosecutors concluded that by removing the tissue without prior express consent the experts had breached the law and were to be held criminally liable (see paragraphs 22, 24 and 25 above). Eventually, the security police accepted the prosecutors' interpretation of the domestic law and found that the rights of the closest relatives, including the applicant, had been breached. However, any criminal prosecution had in the meantime become time-barred (see paragraph 27 above). Lastly, a domestic court, while accepting that the closest relatives had the right to express consent or refusal in relation to the removal of tissue, overruled the view adopted by the prosecution and found that the domestic law did not impose an obligation on the experts to inform the closest relatives and explain their rights to them. The experts could not be convicted of breaching an obligation which was not clearly established by law (see paragraph 28 above).

113. The Court considers that such disagreement as to the scope of the applicable law among the very authorities responsible for its enforcement inevitably indicates a lack of sufficient clarity. In this regard, the Court refers to the domestic court's finding that, although section 4 of the Law provided for the right of the closest relatives to refuse the removal of the deceased person's organs and/or tissue, it did not impose an obligation on the expert to explain this right to the relatives (see paragraph 28 above). The Government also relied on this statement to argue that the tissue removal had not been unlawful (see paragraphs 97 and 99 above). The Court therefore concludes that, although Latvian law set out the legal framework allowing the closest relatives to express consent or refusal in relation to tissue removal, it did not clearly define the scope of the corresponding obligation or the margin of discretion conferred on experts or other authorities in this respect. The Court notes, in this connection, that the relevant European and international documents on this

matter accord particular importance to the principle that the relatives' views must be established by means of reasonable enquiries (see paragraphs 34 et seq. above). More specifically, as noted in the Explanatory Report to the Additional Protocol, whichever system a State chooses to put in place – be it that of "explicit consent" or that of "presumed consent" – appropriate procedures and registers should also be established. If the wishes of the deceased are not sufficiently clearly established, relatives should be contacted to obtain testimony prior to tissue removal (see, in particular, the commentary on Article 17 of the Additional Protocol, paragraph 37 above).

114. Furthermore, the Court reiterates that the principle of legality requires States not only to respect and apply, in a predictable and consistent manner, the laws they have enacted, but also, as a necessary element, to assure the legal and practical conditions for their implementation (see, mutatis mutandis, Broniowski v. Poland [GC], no. 31443/96, §§ 147 and 184, ECHR 2004-V). Following the death of the applicant's husband on 19 May 2001, an expert from the Forensic Centre was authorised to remove tissue from his body within twenty-four hours of verifying that his passport did not contain a special stamp denoting objection (see paragraph 16 above). However, it appears that at the material time there was no common register of stamps that had been entered in passports in order to denote refusal of or consent to the use of the passport-holder's body after death (contrast with the situation following legislative amendments effective as of 1 January 2002 and the inclusion of this information in the population register, as described in Petrova, cited above, § 35). Moreover, it appears that there was no procedure for the State institutions and experts to follow in order to request and obtain this information. The Government argued that the expert had physically checked Mr Elberts' passport prior to removing the tissue, but the applicant claimed that her husband's passport was at home. Therefore, the procedure followed by the expert to verify the information contained in his passport remains unclear. Irrespective of whether or not the expert checked Mr Elberts' passport, it remains unclear how the system of consent, as established under Latvian law at the material time, operated in practice in the circumstances in which the applicant found herself, where she had certain rights as the closest relative but was not informed how and when these rights might be exercised, still less provided with any explanation.

115. As to whether the domestic law afforded adequate legal protection against arbitrariness, the Court notes that the removal of tissue in the present case was not an isolated act as in the above-cited Petrova case, but was carried out under a State-approved agreement with a pharmaceutical company abroad; tissue removal had been carried out on a large number of people (see paragraphs 13, 14 and 26 above). In such circumstances it is all the more important that adequate mechanisms are put in place to counterbalance the wide margin of discretion conferred on the experts

to carry out tissue removal on their own initiative (see paragraph 15), but this was not done (see also the international material cited in paragraphs 34 et seq. above). In response to the Government's argument that nothing had prevented the applicant from expressing her wishes in relation to tissue removal, the Court notes the lack of any administrative or legal regulation in this regard. The applicant was, accordingly, unable to foresee what was expected from her if she wished to exercise that right.

116. In the light of the foregoing, the Court cannot find that the applicable Latvian law was formulated with sufficient precision or afforded adequate legal protection against arbitrariness.

117. The Court accordingly concludes that the interference with the applicant's right to respect for her private life was not in accordance with the law within the meaning of Article 8 § 2 of the Convention. Consequently, there has been a violation of Article 8. Having regard to this conclusion, the Court does not consider it necessary to review compliance with the other requirements of Article 8 § 2 in this case (see, for example, Kopp v. Switzerland, 25 March 1998, § 76, Reports of Judgments and Decisions 1998-II, and Heino v. Finland, no. 56720/09, § 49, 15 February 2011).

II. ALLEGED VIOLATION OF ARTICLE 3 OF THE CONVENTION

118. The applicant also complained under Article 3 of the Convention that the removal of tissue from her husband's body had been carried out without her prior consent or knowledge and that she had been forced to bury him with his legs tied together.

119. Article 3 of the Convention reads as follows:

"No one shall be subjected to torture or to inhuman or degrading treatment or punishment."

120. The Government contested that argument.

A. Admissibility

121. The Government raised the same preliminary objections pertaining to non-exhaustion of domestic remedies as already referred to above, and the applicant disagreed (see paragraphs 69-77 above). In this connection the Court refers to its assessment (see paragraphs 78-87 above) and considers it applicable also under this head.

122. Furthermore, the Government referred to an instruction issued by the Ministry of Justice (effective until 1 January 2002) concerning the procedure for post mortem forensic examinations and the Law on the order of examination of applications, complaints and suggestions by State and municipal institutions (effective until 1 January 2008). They argued that the applicant could have lodged a complaint regarding the condition of her deceased husband's body. The applicant disagreed. The Court notes that the Government did not specify the manner in which the proposed remedy could provide redress in respect of the applicant's complaint. The Court

considers it sufficient to refer to its assessment above to the effect that the applicant's recourse to a criminal-law remedy was appropriate (see paragraph 85 above). The Court would add here that the applicant also complained of acts of desecration on her husband's body after the tissue removal in the criminal proceedings concerning the allegedly unlawful tissue removal. Prosecutors at two levels examined her complaints and dismissed them, holding that there was no evidence of desecration (see paragraphs 31-32 above). The Government's objection is therefore dismissed.

123. The Government argued that the applicant had failed to comply with the six-month time-limit, given that she had found out about the condition of her deceased husband's body on 26 May 2001, the day of his funeral. The Court notes, however, that on that date the applicant was not yet aware of the removal of tissue from her husband's body; she learned about it only two years later, when the criminal inquiry was opened. She subsequently became a party to this investigation. The Court therefore regards the final decision in respect of the applicant's complaint as having been issued on 23 October 2008, when the criminal inquiry was discontinued by means of a final decision. It dismisses the preliminary objection in this respect.

124. The Government, relying on Çakıcı v. Turkey ([GC], no. 23657/94, § 98, ECHR 1999-IV), argued that the applicant could not be considered a victim under Article 3 of the Convention since neither she nor her husband had ever objected to the removal of tissue. They also argued that, since the applicant had never complained at the domestic level that she had been forced to bury her husband with his legs tied together, she could not claim to be a victim before the Court now. The applicant pointed out that Çakıcı was a disappearance case, whereas she had herself seen her husband's remains before the funeral and his legs had been tied together. She had been shocked, but at the time she was unaware of the tissue removal. The Court considers that in the present case the question of whether or not the applicant can be considered a victim is closely linked to the merits of the case. It should therefore be joined to the merits.

125. Lastly, the Government maintained that the applicant's complaint was incompatible ratione materiae with the provisions of the Convention. The Government argued that only the outer layer of the meninges (dura mater) had been removed. While they agreed that the removal of tissue from a deceased person without the consent or knowledge of that person's closest relatives might on an individual and subjective basis give rise to distress, they did not consider that this – in itself – raised an issue under Article 3 of the Convention. The Government submitted that Article 3 did not lay down a general obligation to obtain consent for or to inform the closest relatives of tissue removal. The Government considered that the applicant's complaint fell to be examined solely under Article 8 of the Convention. The Court considers that in the present case the question of whether or not the applicant's

complaint falls within the scope of Article 3 of the Convention is closely linked to the merits of the case. It should therefore be joined to the merits.

126. The Court notes that this complaint is not manifestly ill-founded within the meaning of Article 35 § 3 (a) of the Convention. It further notes that it is not inadmissible on any other grounds, subject to the questions joined to the merits. It must therefore be declared admissible.

B. Merits

1. The parties' submissions

127. The applicant submitted that the minimum level of severity for Article 3 of the Convention to apply had been reached in the present case. She had witnessed the condition of her husband's body – with the legs tied together – after the tissue removal. She had also been pregnant at the time with their second child. The applicant submitted that the unlawful tissue removal amounted to inhuman and degrading treatment prohibited by Article 3 of the Convention, since it had caused her shock and suffering. In support, she provided a written statement from her sister, who stated that she had seen Mr Elberts' body in Sigulda, after it had been transported from the Forensic Centre prior to the funeral, and that his legs had been tied together with dark tape; she had assumed that this had been due to the car accident.

128. Furthermore, the applicant stressed that throughout the criminal inquiry she had been denied the possibility of finding out which organs or tissue had been removed from her husband's body. At first, she had thought that his legs had been tied together to prevent certain consequences of the car accident. Later, she had assumed that they had been tied together following the removal of tissue from the legs and because other material had been inserted. The applicant was finally able to discover what specific body tissue had been removed from her husband's body only when she received the Government's observations in the present case.

129. The applicant, relying on Labita v. Italy ([GC], no. 26772/95, § 131, ECHR 2000-IV), argued that there had been no effective investigation. The inquiry had lasted for five years; it had been terminated because of the expiry of the statutory time-limit. The applicant pointed out that she had lodged some thirteen complaints and that four decisions had been quashed. She considered that the inquiry had not been completed within a reasonable time and that it had been unduly protracted. The applicant, together with other victims, had been left with no redress and the experts had received no punishment.

130. The Government insisted that the tissue removal had been carried out in accordance with domestic law. The applicant had failed to demonstrate that the removal of tissue from her husband's body had amounted to inhuman or degrading treatment. With reference to Selçuk and Asker v. Turkey (24 April 1998, § 78, Reports 1998-II), the Government argued that the applicant had failed to demon-

strate "anguish and suffering" on account of the removal of tissue without her prior consent. With reference to Ireland v. the United Kingdom (18 January 1978, § 167, Series A no. 25), they likewise argued that she had failed to demonstrate that she had experienced "feelings of fear, anguish and inferiority capable of humiliating and debasing" her. The Government reiterated that only dura mater had been removed from the body. Even if the applicant might have experienced a certain level of emotional suffering and distress on account of the removal of tissue without her consent or knowledge, accompanied by the suffering and distress inherent in losing a close family member, such suffering did not attain the minimum level of severity required for it to fall within the scope of Article 3 of the Convention. The Government also argued that during the autopsy, the heart had also been removed from the applicant's husband's body and that dura mater had in any event had to be removed and examined in order to assess whether his skull had been damaged. This could also be said to have caused emotional suffering, but would not attain the minimum level of severity required for Article 3 to apply.

131. The Government pointed out that the applicant had not been present at Sigulda Hospital and that it had been the responsibility of the closest relatives to inform the medical staff of their whereabouts and to contact them if they wished to object to tissue removal. They further emphasised that the removal had taken place under the agreement with the company, that tissues had been sent to the company for transformation into bio-implants and then sent back to Latvia for transplantation purposes, and that the aim behind this had been to improve and save the lives of others. The Government emphasised that tissue removal had to be carried out "very quickly" and that even the most insignificant of delays would have meant losing some of the precious time during which tissue removal was possible. The Government, relying on the fact that during his lifetime the applicant's husband had not objected to tissue removal or expressed such a view to the applicant, argued that she could not claim that it had been carried out contrary to his or her wishes.

132. The Government further submitted that the applicant's allegation that her deceased husband's legs had been tied together was false since it was not substantiated by any credible evidence. In their submission, according to the information provided by the Forensic Centre, his body had been tidied, cleansed and washed after the autopsy. They reiterated that no complaints had been registered concerning the condition of his body. According to the autopsy report, his legs had not been damaged in the car accident. In the present case, the standard of proof "beyond reasonable doubt" was not fulfilled as the applicant's allegation concerning the condition of her deceased husband's body had not been substantiated by any evidence.

2. The Court's assessment

(a) General principles

133. In Svinarenko and Slyadnev v. Russia ([GC], nos. 32541/08 and 43441/08, §§ 113-18, ECHR 2014) the Court recently summarised the applicable principles as follows.

"113. As the Court has repeatedly stated, Article 3 of the Convention enshrines one of the most fundamental values of democratic society. It prohibits in absolute terms torture or inhuman or degrading treatment or punishment, irrespective of the circumstances and the victim's behaviour (see, among many other authorities, Labita v. Italy [GC], no. 26772/95, § 119, ECHR 2000-IV).

114. Ill-treatment must attain a minimum level of severity if it is to fall within the scope of Article 3. The assessment of this minimum is relative; it depends on all the circumstances of the case, such as the duration of the treatment, its physical and mental effects and, in some cases, the sex, age and state of health of the victim (see, for example, Jalloh v. Germany [GC], no. 54810/00, § 67, ECHR 2006-IX). Although the question whether the purpose of the treatment was to humiliate or debase the victim is a factor to be taken into account, the absence of any such purpose cannot conclusively rule out a finding of violation of Article 3 (see, among other authorities, V. v. the United Kingdom [GC], no. 24888/94, § 71, ECHR 1999-IX).

115. Treatment is considered to be 'degrading' within the meaning of Article 3 when it humiliates or debases an individual, showing a lack of respect for, or diminishing, his or her human dignity, or when it arouses feelings of fear, anguish or inferiority capable of breaking an individual's moral and physical resistance (see M.S.S. v. Belgium and Greece [GC], no. 30696/09, § 220, ECHR 2011, and El-Masri v. the former Yugoslav Republic of Macedonia [GC], no. 39630/09, § 202, ECHR 2012). The public nature of the treatment may be a relevant or aggravating factor in assessing whether it is 'degrading' within the meaning of Article 3 (see, inter alia, Tyrer v. the United Kingdom, 25 April 1978, § 32, Series A no. 26; Erdoğan Yağız v. Turkey, no. 27473/02, § 37, 6 March 2007; and Kummer v. the Czech Republic, no. 32133/11, § 64, 25 July 2013).

116. In order for treatment to be 'degrading', the suffering or humiliation involved must in any event go beyond that inevitable element of suffering or humiliation connected with a given form of legitimate treatment (see V. v. the United Kingdom, cited above, § 71). …

118. Respect for human dignity forms part of the very essence of the Convention (see Pretty v. the United Kingdom, no. 2346/02, § 65, ECHR 2002-III). The object and purpose of the Convention as an instrument for the protection of individual human beings require that its provisions be interpreted and applied so as to make its safeguards practical and effective. Any interpretation of the rights and freedoms

guaranteed has to be consistent with the general spirit of the Convention, an instrument designed to maintain and promote the ideals and values of a democratic society (see Soering v. the United Kingdom, 7 July 1989, § 87, Series A no. 161)."

134. The Court further notes that in assessing evidence in connection with a claim of a violation of Article 3 of the Convention, it adopts the standard of proof "beyond reasonable doubt". Such proof may, however, follow from the coexistence of sufficiently strong, clear and concordant inferences or of similar unrebutted presumptions of fact (see Farbtuhs v. Latvia, no. 4672/02, § 54, 2 December 2004, and Bazjaks v. Latvia, no. 71572/01, § 74, 19 October 2010).

(b) Application in the present case

135. Turning to the circumstances of the instant case, the Court observes that the applicant alleged emotional suffering on account of the fact that the removal of tissue from her husband's body had been carried out contrary to domestic law without her prior consent or knowledge and that she had been forced to bury her husband with his legs tied together; the Government argued that the first of these allegations did not reach the level of severity for Article 3 of the Convention to apply and that the second was not proved "beyond reasonable doubt".

136. The Court notes that the applicant learned about the fact of tissue removal two years after her husband's funeral and that a further period of some five years elapsed before the final conclusions were reached as to the possibility of criminal acts in this respect. The applicant alleged, and the Government did not deny, that during this entire time she had not been informed what organs or tissue had been removed from her deceased husband's body; she had learned the answer only upon receiving the Government's observations in the present case. Also, the applicant had come up with several reasons as to why her husband's legs had been tied together and her submissions were further corroborated by written evidence from a family member. In view of these facts the applicant, as her husband's closest relative, may have endured emotional suffering.

137. The Court's task is to ascertain whether, in view of the specific circumstances of the case, such suffering had a dimension capable of bringing it within the scope of Article 3 of the Convention. The Court has never questioned in its case-law the profound psychological impact of a serious human rights violation on the victim's family members. However, in order for a separate violation of Article 3 of the Convention to be found in respect of the victim's relatives, there should be special factors in place giving their suffering a dimension and character distinct from the emotional distress inevitably stemming from the aforementioned violation itself (see Salakhov and Islyamova v. Ukraine, no. 28005/08, § 199, 14 March 2013). Relevant elements include the closeness of the family bond and the way the authorities responded to the relative's enquiries (see, for example, Çakıcı, cited above, § 98, where this principle

was applied in the context of enforced disappearance; Mubilanzila Mayeka and Kaniki Mitunga v. Belgium, no. 13178/03, § 61, ECHR 2006-XI, where the Court further relied on this principle in consideration of a mother's complaint regarding her suffering on account of her five-year old daughter's detention in another country; and M.P. and Others v. Bulgaria, no. 22457/08, §§ 122-24, 15 November 2011, where the relevant complaint concerned the suffering of the relatives of an abused child). In the cases cited the Court attached weight to the parent-child bond. It has held that the essence of a violation lay in the authorities' reactions and attitudes to the situation when it was brought to their attention (see Salakhov and Islyamova, cited above, § 200). Similar considerations may be said to be applicable in the present case involving the applicant and her deceased husband.

138. The Court would distinguish the present case from cases brought before the Court by family members of the victims of "disappearances" or extra-judicial killings committed by the security forces (see, for example, Luluyev and Others v. Russia, no. 69480/01, §§ 116-18, ECHR 2006-XIII), and from cases where people were killed as a result of actions of the authorities in contravention of Article 2 of the Convention (see, for example, Esmukhambetov and Others v. Russia, no. 23445/03, §§ 138-51 and 190, 29 March 2011). Nor is there any suggestion in the present case that the body had been mutilated (see Akkum and Others v. Turkey, no. 21894/93, §§ 258-59, ECHR 2005-II, and Akpınar and Altun v. Turkey, no. 56760/00, §§ 84-87, 27 February 2007) or dismembered and decapitated (see Khadzhialiyev and Others v. Russia, no. 3013/04, §§ 120-22, 6 November 2008).

139. While it cannot be said that the applicant was suffering from any prolonged uncertainty regarding the fate of her husband, the Court finds that she had to face a long period of uncertainty, anguish and distress in not knowing what organs or tissue had been removed from her husband's body, and in what manner and for what purpose this had been done. In this context, the Government's argument that only dura mater was removed is of no relevance here. In any event, the applicant discovered this only during the proceedings before the Court. At the time of the events, the applicant had no reason to question the activities carried out in the Forensic Centre, as her husband's body had been delivered there to establish the cause of death. Subsequently, a criminal inquiry was opened to determine the legality of the tissue removal carried out in the Forensic Centre and it was revealed that tissue had been removed not only from her husband's body but also from hundreds of other persons (nearly 500 people in only three years, by way of example) over a period of some nine years (see paragraphs 13-33 above). It was also established that removals had been carried out under a State-approved agreement with a pharmaceutical company abroad. This scheme had been implemented by State officials – forensic experts – who, in addition to their ordinary duties of carrying out forensic examinations, had

carried out removals on their own initiative (see paragraph 15 above). These are special factors which caused additional suffering for the applicant.

140. The Court considers that the applicant's suffering had a dimension and character which went beyond the suffering inflicted by grief following the death of a close family member. The Court has already found a violation of Article 8 of the Convention because, as the closest relative, the applicant had a right to express consent or refusal in relation to tissue removal, but the corresponding obligation or margin of discretion on the part of the domestic authorities was not clearly established by Latvian law and there were no administrative or legal regulations in this respect (see paragraphs 109-16 above). While there are considerable differences between the present case and the above-cited Petrova case as concerns the scale and magnitude of the organ or tissue removal, the Court has nonetheless noted in both cases certain structural deficiencies which have prevailed in the field of organ and tissue transplantation in Latvia. These factors are also to be taken into account in the Latvian context as far as Article 3 of the Convention is concerned. In addition, not only were the applicant's rights as the closest relative not respected, but she was also faced with conflicting views on the part of the domestic authorities as to the scope of the obligations enshrined in national law. Furthermore, while the security police and various prosecutors disagreed as to whether or not domestic law was sufficiently clear to allow a person to be prosecuted on the basis thereof, they all considered that removal without consent was unlawful (see paragraphs 18, 20, 22, 24 and 25 above). However, criminal prosecution had become time-barred by the time their disagreement had been resolved (see paragraph 27 above) and, in any event, the domestic court would not have allowed such a prosecution because the law was not sufficiently clear (see paragraph 28 above). These facts demonstrate the manner in which the domestic authorities dealt with the complaints brought to their attention and their disregard vis-à-vis the victims of these acts and their close relatives, including the applicant. These circumstances contributed to feelings of helplessness on the part of the applicant in the face of a breach of her personal rights relating to a very sensitive aspect of her private life, namely giving consent or refusal in relation to tissue removal, and were coupled with the impossibility of obtaining any redress.

141. The applicant's suffering was further aggravated by the fact that she was not informed of what exactly had been done in the Forensic Centre. She was not informed of the tissue removal and, having discovered that her deceased husband's legs were tied together on the day of the funeral, assumed this to be a consequence of the car accident. Two years later she was informed of the pending criminal inquiry and the potentially unlawful acts carried out in respect of her deceased husband's body. It is clear that at this point the applicant experienced particular anguish and realised that her husband might possibly have been buried with his legs tied together

as a consequence of the acts that had been carried out in the Forensic Centre on his body. The Government's argument that this was not proved "beyond reasonable doubt" is misplaced, since the applicant's complaint relates to the anguish resulting from precisely that uncertainty regarding the acts carried out at the Forensic Centre in respect of her deceased husband's body.

142. In the special field of organ and tissue transplantation it has been recognised that the human body must still be treated with respect even after death. Indeed, international treaties including the Convention on Human Rights and Biomedicine and the Additional Protocol, as noted in the Explanatory Report to the latter, have been drafted to safeguard the rights of organ and tissue donors, living or deceased. The object of these treaties is to protect the dignity, identity and integrity of "everyone" who has been born, whether now living or dead (see paragraph 37 above). As cited in paragraph 133 above, respect for human dignity forms part of the very essence of the Convention; treatment is considered "degrading" within the meaning of Article 3 of the Convention when, inter alia, it humiliates an individual, showing a lack of respect for human dignity. The applicant's suffering was caused not only by the breach of her rights as the closest relative and the ensuing uncertainty regarding what had been done in the Forensic Centre, but was also due to the intrusive nature of the acts carried out on her deceased husband's body and the anguish she suffered in that regard as his closest relative.

143. In these specific circumstances, the Government's objections that the applicant's complaint does not fall within the scope of Article 3 of the Convention and that she cannot be considered a victim in that regard are dismissed. The Court has no doubt that the suffering caused to the applicant in the present case amounted to degrading treatment contrary to Article 3 of the Convention. It accordingly finds a violation of that provision.

III. OTHER ALLEGED VIOLATIONS OF THE CONVENTION

144. Lastly, the applicant relied on Article 13 of the Convention in connection with her contention that there were several possible interpretations of domestic law.

145. The Government contested that argument.

146. The Court notes that this complaint is linked to the complaint examined above under Article 8 of the Convention and must therefore likewise be declared admissible.

147. The Court considers, however, that it has already examined the lack of clarity of the domestic law under Article 8 of the Convention above. Accordingly, it does not consider it necessary to examine this complaint separately under Article 13 of the Convention.

IV. APPLICATION OF ARTICLE 41 OF THE CONVENTION

148. Article 41 of the Convention provides:

"If the Court finds that there has been a violation of the Convention or the Protocols thereto, and if the internal law of the High Contracting Party concerned allows only partial reparation to be made, the Court shall, if necessary, afford just satisfaction to the injured party."

A. Damage

149. The applicant claimed 40,000 euros (EUR) in respect of non-pecuniary damage.

150. The Government argued that the applicant had not sufficiently demonstrated that she had sustained non-pecuniary damage to the extent claimed and deemed the amount claimed by her excessive and exorbitant. With reference to Shannon v. Latvia (no. 32214/03, § 84, 24 November 2009), the Government considered that the finding of a violation alone would constitute adequate and sufficient compensation.

151. Having regard to the nature of the violations found in the present case and deciding on an equitable basis, the Court awards the applicant EUR 16,000 in respect of non-pecuniary damage.

B. Costs and expenses

152. The applicant also claimed EUR 500 for the costs and expenses incurred before the Court.

153. The Government did not contest the applicant's claim under this head. They considered it sufficiently substantiated and reasonable.

154. According to the Court's case-law, an applicant is entitled to the reimbursement of costs and expenses only in so far as it has been shown that these have been actually and necessarily incurred and are reasonable as to quantum. In the present case, regard being had to the documents in its possession and the above criteria, the Court considers it reasonable to award the sum of EUR 500 covering costs under all heads.

C. Default interest

155. The Court considers it appropriate that the default interest rate should be based on the marginal lending rate of the European Central Bank, to which should be added three percentage points.

FOR THESE REASONS, THE COURT, UNANIMOUSLY,

1. Joins to the merits the Government's objections that the applicant's complaint under Article 3 is incompatible ratione materiae and ratione personae with the provisions of the Convention and dismisses them;

2. Declares the applicant's complaint under Article 8, in so far as it relates to the removal of her deceased husband's tissue without her consent, and the complaint under Article 13 admissible and the remainder of the complaint under Article 8 of the Convention inadmissible;

3. Declares the applicant's complaint under Article 3 admissible;

4. Holds that there has been a violation of Article 8 of the Convention;

5. Holds that there has been a violation of Article 3 of the Convention;

6. Holds that there is no need to examine the complaint under Article 13 of the Convention;

7. Holds

(a) that the respondent State is to pay the applicant, within three months from the date on which the judgment becomes final in accordance with Article 44 § 2 of the Convention, the following amounts:

(i) EUR 16,000 (sixteen thousand euros), plus any tax that may be chargeable, in respect of non-pecuniary damage;

(ii) EUR 500 (five hundred euros), plus any tax that may be chargeable to the applicant, in respect of costs and expenses;

(b) that from the expiry of the above-mentioned three months until settlement simple interest shall be payable on the above amounts at a rate equal to the marginal lending rate of the European Central Bank during the default period plus three percentage points;

8. Dismisses the remainder of the applicant's claim for just satisfaction.

Done in English, and notified in writing on 13 January 2015, pursuant to Rule 77 §§ 2 and 3 of the Rules of Court.

Fatoş AracıPäivi Hirvelä

Deputy RegistrarPresident

In accordance with Article 45 § 2 of the Convention and Rule 74 § 2 of the Rules of Court, the separate opinion of Judge Wojtyczek is annexed to this judgment.

P.H.

F.A.

CONCURRING OPINION OF JUDGE WOJTYCZEK

1. In the instant case, I have voted with the majority; however I have certain doubts about part of the reasoning.

2. I have already expressed my views concerning rights in respect of transplantation in my concurring opinion in Petrova v. Latvia (no. 4605/05, 24 June 2014). I should like to add some further explanations here.

In my view, the applicant's right to oppose the transplantation of her deceased husband's organs is not an autonomous right which could be exercised ad libitum. This right is derived from the right of the deceased man to decide freely on the transplantation of his organs. The surviving relative acts as the depositary of the rights of the deceased. Therefore, the applicant may agree or object to the transplantation of her deceased husband's organs only in so far as she expresses the wishes of the

deceased. Holding otherwise would transform the body of a deceased person into an object of arbitrary decisions by relatives.

3. The fact that the applicant indeed exercises a right protecting the wishes of her deceased husband does not mean that – under the Convention – this right has identical status with her husband's right. However close the connection between the two rights in question, the protection afforded to them under the Convention may be different. As I explained in my concurring opinion in Petrova, cited above, an individual's right to express the wishes of a deceased relative in respect of transplantation comes within the scope of family life, within the meaning of Article 8 of the Convention. The right under consideration ensures a multidimensional protection, since it protects not only the wishes of the deceased person but also those of the deceased person's relatives themselves, and relationships within the family. Whether the right to decide freely on the transplantation of one's own organs comes within the scope of Article 8 of the Convention is a separate issue.

4. The Court's case-law has constantly extended the scope of private life within the meaning of Article 8. Recent judgments may suggest that protection of private life is to be identified with the general freedom of decision in personal or private matters. The meaning of "private life" is thus gradually being transformed into a general freedom of action, a notion which is known as allgemeine Handlungsfreiheit in German legal science. In my view, such an extensive interpretation of Article 8 in the Court's case-law does not have a sufficient legal basis in the Convention. The provision in question is sometimes misused to fill lacunae in the Convention protection.

5. In the present case the Court has declared the complaint brought by the applicant on behalf of her deceased husband inadmissible. This is explained in the reasoning on the ground that this part of the complaint is "incompatible ratione personae".

I accept the view that Article 8 of the Convention is not applicable to the deceased husband's rights, at stake in the instant case. Such a restrictive interpretation of the Convention corresponds more closely to the applicable rules of treaty interpretation. However, in my view the application should be considered inadmissible ratione materiae rather than ratione personae. I do not see sufficiently strong arguments to consider that decisions concerning the transplantation of one's own organs are covered by the notions of private life or family life as understood under the rules of treaty interpretation established in international law. To sum up, rights in respect of transplantation are only partially protected by the Convention.

[1]. www.coe.int/T/DG3/Health/Source/CDBI_INF(2003)11_en.pdf.

[2]. Formed in December 1997, the EGE is an independent advisory body to the European Commission. Its predecessor was the Group of Advisers to the European Commission on the Ethical Implications of Biotechnology, an ad hoc advisory body.

Annex 2

GRAND CHAMBER
CASE OF S. AND MARPER v. THE UNITED KINGDOM

(Applications nos. 30562/04 and 30566/04)
JUDGMENT
STRASBOURG
4 December 2008
In the case of S. and Marper v. the United Kingdom,

The European Court of Human Rights, sitting as a Grand Chamber composed of:
Jean-Paul Costa, President,
Christos Rozakis,
Nicolas Bratza,
Peer Lorenzen,
Françoise Tulkens,
Josep Casadevall,
Giovanni Bonello,
Corneliu Bîrsan,
Nina Vajić,
Anatoly Kovler,
Stanislav Pavlovschi,
Egbert Myjer,
Danutė Jočienė,
Ján Šikuta,
Mark Villiger,
Päivi Hirvelä,
Ledi Bianku, judges,
and Michael O'Boyle, Deputy Registrar,

Having deliberated in private on 27 February and 12 November 2008,
Delivers the following judgment, which was adopted on the last- mentioned date:

PROCEDURE

1. The case originated in two applications (nos. 30562/04 and 30566/04) against the United Kingdom of Great Britain and Northern Ireland lodged with the Court under Article 34 of the Convention for the Protection of Human Rights and Fundamental Freedoms ("the Convention") by two British nationals, Mr S. ("the first applicant") and Mr Michael Marper ("the second applicant"), on 16 August 2004. The President of the Grand Chamber acceded to the first applicant's request not to have his name disclosed (Rule 47 § 3 of the Rules of Court).

2. The applicants, who were granted legal aid, were represented by Mr P. Mahy of Messrs Howells, a solicitor practising in Sheffield. The United Kingdom Government ("the Government") were represented by their Agent, Mr J. Grainger, Foreign and Commonwealth Office.

3. The applicants complained under Articles 8 and 14 of the Convention that the authorities had continued to retain their fingerprints and cellular samples and DNA profiles after the criminal proceedings against them had ended with an acquittal or had been discontinued.

4. The applications were allocated to the Fourth Section of the Court (Rule 52 § 1). On 16 January 2007 they were declared admissible by a Chamber of that Section composed of Josep Casadevall, President, Nicolas Bratza, Giovanni Bonello, Kristaq Traja, Stanislav Pavlovschi, Ján Šikuta, Päivi Hirvelä, judges, and Lawrence Early, Section Registrar.

5. On 10 July 2007 the Chamber relinquished jurisdiction in favour of the Grand Chamber, neither party having objected to relinquishment (Article 30 of the Convention and Rule 72).

6. The composition of the Grand Chamber was determined according to the provisions of Article 27 §§ 2 and 3 of the Convention and Rule 24.

7. The applicants and the Government each filed memorials on the merits. In addition, third-party submissions were received from Ms A. Fairclough on behalf of the National Council for Civil Liberties ("Liberty") and from Covington and Burling LLP on behalf of Privacy International, who had been granted leave by the President to intervene in the written procedure (Article 36 § 2 of the Convention and Rule 44 § 2). Both parties replied to Liberty's submissions, and the Government also replied to the comments by Privacy International (Rule 44 § 5).

8. A hearing took place in public in the Human Rights Building, Strasbourg, on 27 February 2008 (Rule 59 § 3).

There appeared before the Court:

(a) for the Government

MrsE. Willmott, Agent,

MrRabinder Singh QC,

MrJ. Strachan, Counsel,
MrN. Fussell,
MsP. McFarlane,
MrM. Prior,
MrS. Bramble,
MsE. Rees,
MrS. Sen, Advisers,
MrD. Gourley,
MrD. Loveday, Observers;
(b) for the applicants
MrS. Cragg,
MrA. Suterwalla, Counsel,
MrP. Mahy, Solicitor.

The Court heard addresses by Mr Cragg and Mr Rabinder Singh QC, as well as their answers to questions put by the Court.

THE FACTS

I. THE CIRCUMSTANCES OF THE CASE

9. The applicants were born in 1989 and 1963 respectively and live in Sheffield.

10. The first applicant, Mr S., was arrested on 19 January 2001 at the age of 11 and charged with attempted robbery. His fingerprints and DNA samples [1] were taken. He was acquitted on 14 June 2001.

11. The second applicant, Mr Michael Marper, was arrested on 13 March 2001 and charged with harassment of his partner. His fingerprints and DNA samples were taken. Before a pre-trial review took place, he and his partner had reconciled, and the charge was not pressed. On 11 June 2001, the Crown Prosecution Service served a notice of discontinuance on the applicant's solicitors, and on 14 June 2001 the case was formally discontinued.

12. Both applicants asked for their fingerprints and DNA samples to be destroyed, but in both cases the police refused. The applicants applied for judicial review of the police decisions not to destroy the fingerprints and samples. On 22 March 2002 the Administrative Court (Rose LJ and Leveson J) rejected the application [[2002] EWHC 478 (Admin)].

13. On 12 September 2002 the Court of Appeal upheld the decision of the Administrative Court by a majority of two (Lord Woolf CJ and Waller LJ) to one (Sedley LJ) [[2003] EWCA Civ 1275]. As regards the necessity of retaining DNA samples, Lord Justice Waller stated:

"… [F]ingerprints and DNA profiles reveal only limited personal information. The physical samples potentially contain very much greater and more personal and detailed information. The anxiety is that science may one day enable analysis of samples to go so far as to obtain information in relation to an individual's propensity to commit certain crime and be used for that purpose within the language of the present section [section 82 of the Criminal Justice and Police Act 2001]. It might also be said that the law might be changed in order to allow the samples to be used for purposes other than those identified by the section. It might also be said that while samples are retained there is even now a risk that they will be used in a way that the law does not allow. So, it is said, the aims could be achieved in a less restrictive manner … Why cannot the aim be achieved by retention of the profiles without retention of the samples?

The answer to [these] points is as I see it as follows. First the retention of samples permits (a) the checking of the integrity and future utility of the DNA database system; (b) a reanalysis for the upgrading of DNA profiles where new technology can improve the discriminating power of the DNA matching process; (c) reanalysis and thus an ability to extract other DNA markers and thus offer benefits in terms of speed, sensitivity and cost of searches of the database; (d) further analysis in investigations of alleged miscarriages of justice; and (e) further analysis so as to be able to identify any analytical or process errors. It is these benefits which must be balanced against the risks identified by Liberty. In relation to those risks, the position in any event is first that any change in the law will have to be itself Convention compliant; second any change in practice would have to be Convention compliant; and third unlawfulness must not be assumed. In my view thus the risks identified are not great, and such as they are they are outweighed by the benefits in achieving the aim of prosecuting and preventing crime."

14. Lord Justice Sedley considered that the power of a chief constable to destroy data which he would ordinarily retain had to be exercised in every case, however rare such cases might be, where he or she was satisfied on conscientious consideration that the individual was free of any taint of suspicion. He also noted that the difference between the retention of samples and DNA profiles was that the retention of samples would enable more information to be derived than had previously been possible.

15. On 22 July 2004 the House of Lords dismissed an appeal by the applicants. Lord Steyn, giving the lead judgment, noted the legislative history of section 64(1A) of the Police and Criminal Evidence Act 1984 (PACE), in particular the way in which it had been introduced by Parliament following public disquiet about the previous law, which had provided that where a person was not prosecuted or was acquitted of offences, the sample had to be destroyed and the information could not be used. In

two cases, compelling DNA evidence linking one suspect to a rape and another to a murder had not been able to be used, as at the time the matches were made both defendants had either been acquitted or a decision made not to proceed for the offences for which the profiles had been obtained: as a result it had not been possible to convict either suspect.

16. Lord Steyn noted that the value of retained fingerprints and samples taken from suspects was considerable. He gave the example of a case in 1999, in which DNA information from the perpetrator of a crime was matched with that of "I" in a search of the national database. The sample from "I" should have been destroyed, but had not been. "I" had pleaded guilty to rape and was sentenced. If the sample had not been wrongly detained, the offender might have escaped detection.

17. Lord Steyn also referred to statistical evidence from which it appeared that almost 6,000 DNA profiles had been linked with crime-scene stain profiles which would have been destroyed under the former provisions. The offences involved included 53 murders, 33 attempted murders, 94 rapes, 38 sexual offences, 63 aggravated burglaries and 56 cases involving the supply of controlled drugs. On the basis of the existing records, the Home Office statistics estimated that there was a 40% chance that a crime-scene sample would be matched immediately with an individual's profile on the national database. This showed that the fingerprints and samples which could now be retained had in the previous three years played a major role in the detection and prosecution of serious crime.

18. Lord Steyn also noted that PACE dealt separately with the taking of fingerprints and samples, their retention and their use.

19. As to the Convention analysis, Lord Steyn inclined to the view that the mere retention of fingerprints and DNA samples did not constitute an interference with the right to respect for private life but stated that, if he were wrong in that view, he regarded any interference as very modest indeed. Questions of whether, in the future, retained samples could be misused were not relevant in respect of contemporary use of retained samples in connection with the detection and prosecution of crime. If future scientific developments required it, judicial decisions could be made, when the need occurred, to ensure compatibility with the Convention. The provision limiting the permissible use of retained material to "purposes related to the prevention or detection of crime …" did not broaden the permitted use unduly, because it was limited by its context.

20. If the need to justify the modest interference with private life arose, Lord Steyn agreed with Lord Justice Sedley in the Court of Appeal that the purposes of retention – the prevention of crime and the protection of the right of others to be free from crime – were "provided for by law", as required by Article 8 of the Convention.

21. As to the justification for any interference, the applicants had argued that the retention of fingerprints and DNA samples created suspicion in respect of persons who had been acquitted. Counsel for the Home Secretary had contended that the aim of the retention had nothing to do with the past, that is, with the offence of which a person had been acquitted, but was to assist in the investigation of offences in the future. The applicants would only be affected by the retention of the DNA samples if their profiles matched those found at the scene of a future crime. Lord Steyn saw five factors which led to the conclusion that the interference was proportionate to the aim: (i) the fingerprints and samples were kept only for the limited purpose of the detection, investigation and prosecution of crime; (ii) the fingerprints and samples were not of any use without a comparator fingerprint or sample from the crime scene; (iii) the fingerprints would not be made public; (iv) a person was not identifiable from the retained material to the untutored eye; (v) the resultant expansion of the national database by the retention conferred enormous advantages in the fight against serious crime.

22. In reply to the contention that the same legislative aim could be obtained by less intrusive means, namely by a case-by-case consideration of whether or not to retain fingerprints and samples, Lord Steyn referred to Lord Justice Waller's comments in the Court of Appeal, which read as follows:

"If justification for retention is in any degree to be by reference to the view of the police on the degree of innocence, then persons who have been acquitted and have their samples retained can justifiably say this stigmatises or discriminates against me – I am part of a pool of acquitted persons presumed to be innocent, but I am treated as though I was not. It is not in fact in any way stigmatising someone who has been acquitted to say simply that samples lawfully obtained are retained as the norm, and it is in the public interest in its fight against crime for the police to have as large a database as possible."

23. Lord Steyn did not accept that the difference between samples and DNA profiles affected the position.

24. The House of Lords further rejected the applicants' complaint that the retention of their fingerprints and samples subjected them to discriminatory treatment in breach of Article 14 of the Convention when compared to the general body of persons who had not had their fingerprints and samples taken by the police in the course of a criminal investigation. Lord Steyn held that, even assuming that the retention of fingerprints and samples fell within the ambit of Article 8 of the Convention so as to trigger the application of Article 14, the difference of treatment relied on by the applicants was not one based on "status" for the purposes of Article 14: the difference simply reflected the historical fact, unrelated to any personal characteristic, that the authorities already held the fingerprints and samples of the individuals

concerned which had been lawfully taken. The applicants and their suggested comparators could not in any event be said to be in an analogous situation. Even if, contrary to his view, it was necessary to consider the justification for any difference in treatment, Lord Steyn held that such objective justification had been established: firstly, the element of legitimate aim was plainly present, as the increase in the database of fingerprints and samples promoted the public interest by the detection and prosecution of serious crime and by exculpating the innocent; secondly, the requirement of proportionality was satisfied, section 64(1A) of PACE objectively representing a measured and proportionate response to the legislative aim of dealing with serious crime.

25. Baroness Hale of Richmond disagreed with the majority, considering that the retention of both fingerprint and DNA data constituted an interference by the State in a person's right to respect for his private life and thus required justification under the Convention. In her opinion, this was an aspect of what had been called informational privacy and there could be little, if anything, more private to the individual than the knowledge of his genetic make-up. She further considered that the difference between fingerprint and DNA data became more important when it came to justify their retention as the justifications for each of these might be very different. She agreed with the majority that such justifications had been readily established in the applicants' cases.

II. RELEVANT DOMESTIC LAW AND MATERIALS

A. England and Wales

1. Police and Criminal Evidence Act 1984 (PACE)

26. PACE contains powers for the taking of fingerprints (principally section 61) and samples (principally section 63). By section 61, fingerprints may only be taken without consent if an officer of at least the rank of superintendent authorises the taking, or if the person has been charged with a recordable offence or has been informed that he will be reported for such an offence. Before fingerprints are taken, the person must be informed that the prints may be the subject of a speculative search, and the fact of the informing must be recorded as soon as possible. The reason for the taking of the fingerprints is recorded in the custody record. Parallel provisions relate to the taking of samples (section 63).

27. As to the retention of such fingerprints and samples (and the records thereof), section 64(1A) of PACE was substituted by section 82 of the Criminal Justice and Police Act 2001. It provides as follows:

"Where (a) fingerprints or samples are taken from a person in connection with the investigation of an offence; and (b) subsection (3) below does not require them to be destroyed, the fingerprints or samples may be retained after they have fulfilled

the purposes for which they were taken but shall not be used by any person except for purposes related to the prevention or detection of crime, the investigation of an offence, or the conduct of a prosecution. …

(3) If (a) fingerprints or samples are taken from a person in connection with the investigation of an offence; and (b) that person is not suspected of having committed the offence, they must, except as provided in the following provisions of this section, be destroyed as soon as they have fulfilled the purpose for which they were taken.

(3AA) Samples and fingerprints are not required to be destroyed under subsection (3) above if (a) they were taken for the purposes of the investigation of an offence of which a person has been convicted; and (b) a sample or, as the case may be, fingerprint was also taken from the convicted person for the purposes of that investigation."

28. Section 64 in its earlier form had included a requirement that if the person from whom the fingerprints or samples were taken in connection with the investigation was acquitted of that offence, the fingerprints and samples, subject to certain exceptions, were to be destroyed "as soon as practicable after the conclusion of the proceedings".

29. The subsequent use of materials retained under section 64(1A) is not regulated by statute, other than the limitation on use contained in that provision. In Attorney-General's Reference (No. 3 of 1999) [2001] 2 AC 91, the House of Lords had to consider whether it was permissible to use in evidence a sample which should have been destroyed under the then text of section 64 of PACE. The House considered that the prohibition on the use of an unlawfully retained sample "for the purposes of any investigation" did not amount to a mandatory exclusion of evidence obtained as a result of a failure to comply with the prohibition, but left the question of admissibility to the discretion of the trial judge.

2. Data Protection Act 1998

30. The Data Protection Act was adopted on 16 July 1998 to give effect to Directive 95/46/EC of the European Parliament and of the Council of 24 October 1995 (see paragraph 50 below). Under the Data Protection Act "personal data" means data which relate to a living individual who can be identified (a) from those data; or (b) from those data and other information which is in the possession of, or is likely to come into the possession of, the data controller, and includes any expression of opinion about the individual and any indication of the intentions of the data controller or any other person in respect of the individual (section 1). "Sensitive personal data" means personal data consisting, inter alia, of information as to the racial or ethnic origin of the data subject, the commission or alleged commission by him of any offence, or any proceedings for any offence committed or alleged to have been

committed by him, the disposal of such proceedings or the sentence of any court in such proceedings (section 2).

31. The Act stipulates that the processing of personal data is subject to eight data protection principles listed in Schedule 1. Under the first principle personal data shall be processed fairly and lawfully and, in particular, shall not be processed unless (a) at least one of the conditions in Schedule 2 is met; and (b) in case of sensitive personal data, at least one of the conditions in Schedule 3 is also met. Schedule 2 contains a detailed list of conditions, and provides, inter alia, that the processing of any personal data is necessary for the administration of justice or for the exercise of any other functions of a public nature exercised in the public interest by any person (§ 5 (a) and (d)). Schedule 3 contains a more detailed list of conditions, including that the processing of sensitive personal data is necessary for the purpose of, or in connection with, any legal proceedings (§ 6 (a)), or for the administration of justice (§ 7 (a)), and is carried out with appropriate safeguards for the rights and freedoms of data subjects (§ 4 (b)). Section 29 notably provides that personal data processed for the prevention or detection of crime are exempt from the first principle except to the extent to which it requires compliance with the conditions in Schedules 2 and 3. The fifth principle stipulates that personal data processed for any purpose or purposes shall not be kept for longer than is necessary for that purpose or those purposes.

32. The Information Commissioner created pursuant to the Act (as amended) has an independent duty to promote the following of good practice by data controllers and has power to make orders ("enforcement notices") in this respect (section 40). The Act makes it a criminal offence not to comply with an enforcement notice (section 47) or to obtain or disclose personal data or information contained therein without the consent of the data controller (section 55). Section 13 affords a right to claim damages in the domestic courts in respect of contraventions of the Act.

3. Retention Guidelines for Nominal Records on the Police National Computer 2006

33. A set of guidelines for the retention of fingerprint and DNA information is contained in the Retention Guidelines for Nominal Records on the Police National Computer 2006 drawn up by the Association of Chief Police Officers in England and Wales. The Guidelines are based on a format of restricting access to the Police National Computer (PNC) data, rather than the deletion of that data. They recognise that their introduction may thus have implications for the business of the non-police agencies with which the police currently share PNC data.

34. The Guidelines set various degrees of access to the information contained on the PNC through a process of "stepping down" access. Access to information concerning persons who have not been convicted of an offence is automatically "stepped down" so that this information is only open to inspection by the police. Access to information about convicted persons is likewise "stepped down" after the expiry

of certain periods of time ranging from five to thirty-five years, depending on the gravity of the offence, the age of the suspect and the sentence imposed. For certain convictions the access will never be "stepped down".

35. Chief police officers are the data controllers of all PNC records created by their force. They have the discretion in exceptional circumstances to authorise the deletion of any conviction, penalty notice for disorder, acquittal or arrest histories "owned" by them. An "exceptional case procedure" to assist chief police officers in relation to the exercise of this discretion is set out in Appendix 2. It is suggested that exceptional cases are rare by definition and include those where the original arrest or sampling was unlawful or where it is established beyond doubt that no offence existed. Before deciding whether a case is exceptional, the chief police officer is instructed to seek advice from the DNA and Fingerprint Retention Project.

B. Scotland

36. Under the 1995 Criminal Procedure Act of Scotland, as subsequently amended, the DNA samples and resulting profiles must be destroyed if the individual is not convicted or is granted an absolute discharge. A recent qualification provides that biological samples and profiles may be retained for three years, if the arrestee is suspected of certain sexual or violent offences even if a person is not convicted (section 83 of the 2006 Act, adding section 18A to the 1995 Act.). Thereafter, samples and information are required to be destroyed unless a chief constable applies to a sheriff for a two-year extension.

C. Northern Ireland

37. The Police and Criminal Evidence Order of Northern Ireland 1989 was amended in 2001 in the same way as PACE applicable in England and Wales. The relevant provisions currently governing the retention of fingerprint and DNA data in Northern Ireland are identical to those in force in England and Wales (see paragraph 27 above).

D. Nuffield Council on Bioethics' report [2]

38. According to a recent report by the Nuffield Council on Bioethics, the retention of fingerprints, DNA profiles and biological samples is generally more controversial than the taking of such bioinformation, and the retention of biological samples raises greater ethical concerns than digitised DNA profiles and fingerprints, given the differences in the level of information that could be revealed. The report referred, in particular, to the lack of satisfactory empirical evidence to justify the present practice of retaining indefinitely fingerprints, samples and DNA profiles from all those arrested for a recordable offence, irrespective of whether they were subsequently charged or convicted. The report voiced particular concerns at the policy of permanently retaining the bioinformation of minors, having regard to the requirements of the 1989 United Nations Convention on the Rights of the Child.

39. The report also expressed concerns at the increasing use of the DNA data for familial searching, inferring ethnicity and non-operational research. Familial searching is the process of comparing a DNA profile from a crime scene with profiles stored on the national database, and prioritising them in terms of "closeness" to a match. This allows possible genetic relatives of an offender to be identified. Familial searching might thus lead to revealing previously unknown or concealed genetic relationships. The report considered the use of the DNA database in searching for relatives as particularly sensitive.

40. The particular combination of alleles [3] in a DNA profile can furthermore be used to assess the most likely ethnic origin of the donor. Ethnic inferring through DNA profiles is possible as the individual "ethnic appearance" is systematically recorded on the database: when taking biological samples, police officers routinely classify suspects into one of seven "ethnic appearance" categories. Ethnicity tests on the database might thus provide inferences for use during a police investigation in order, for example, to help reduce a "suspect pool" and to inform police priorities. The report noted that social factors and policing practices lead to a disproportionate number of people from black and ethnic minority groups being stopped, searched and arrested by the police, and hence having their DNA profiles recorded; it therefore voiced concerns that inferring ethnic identity from biological samples might reinforce racist views of propensity to criminality.

III. RELEVANT NATIONAL AND INTERNATIONAL MATERIALS

A. Council of Europe texts

41. The Council of Europe Convention of 1981 for the protection of individuals with regard to automatic processing of personal data ("the Data Protection Convention"), which entered into force for the United Kingdom on 1 December 1987, defines "personal data" as any information relating to an identified or identifiable individual ("data subject"). The Convention provides, inter alia:

Article 5 – Quality of data

"Personal data undergoing automatic processing shall be

…

(b) stored for specified and legitimate purposes and not used in a way incompatible with those purposes;

(c) adequate, relevant and not excessive in relation to the purposes for which they are stored;

…

(e) preserved in a form which permits identification of the data subjects for no longer than is required for the purpose for which those data are stored."

Article 6 – Special categories of data

"Personal data revealing racial origin, political opinions or religious or other beliefs, as well as personal data concerning health or sexual life, may not be processed automatically unless domestic law provides appropriate safeguards. …"

Article 7 – Data security

"Appropriate security measures shall be taken for the protection of personal data stored in automated data files against accidental or unauthorised destruction or accidental loss as well as against unauthorised access, alteration or dissemination."

42. Recommendation No. R (87) 15 of the Committee of Ministers regulating the use of personal data in the police sector (adopted on 17 September 1987) states, inter alia:

Principle 2 – Collection of data

"2.1. The collection of personal data for police purposes should be limited to such as is necessary for the prevention of a real danger or the suppression of a specific criminal offence. Any exception to this provision should be the subject of specific national legislation.

…"

Principle 3 – Storage of data

"3.1. As far as possible, the storage of personal data for police purposes should be limited to accurate data and to such data as are necessary to allow police bodies to perform their lawful tasks within the framework of national law and their obligations arising from international law.

…"

Principle 7 – Length of storage and updating of data

"7.1. Measures should be taken so that personal data kept for police purposes are deleted if they are no longer necessary for the purposes for which they were stored.

For this purpose, consideration shall in particular be given to the following criteria: the need to retain data in the light of the conclusion of an inquiry into a particular case; a final judicial decision, in particular an acquittal; rehabilitation; spent convictions; amnesties; the age of the data subject, particular categories of data."

43. Recommendation No. R (92) 1 of the Committee of Ministers on the use of analysis of deoxyribonucleic acid (DNA) within the framework of the criminal justice system (adopted on 10 February 1992) states, inter alia:

"3. Use of samples and information derived therefrom

Samples collected for DNA analysis and the information derived from such analysis for the purpose of the investigation and prosecution of criminal offences must not be used for other purposes. …

…

Samples taken for DNA analysis and the information so derived may be needed for research and statistical purposes. Such uses are acceptable provided the identity of the individual cannot be ascertained. Names or other identifying references must therefore be removed prior to their use for these purposes.

4. Taking of samples for DNA analysis

The taking of samples for DNA analysis should only be carried out in circumstances determined by the domestic law; it being understood that in some states this may necessitate specific authorisation from a judicial authority.

…

8. Storage of samples and data

Samples or other body tissue taken from individuals for DNA analysis should not be kept after the rendering of the final decision in the case for which they were used, unless it is necessary for purposes directly linked to those for which they were collected.

Measures should be taken to ensure that the results of DNA analysis are deleted when it is no longer necessary to keep it for the purposes for which it was used. The results of DNA analysis and the information so derived may, however, be retained where the individual concerned has been convicted of serious offences against the life, integrity or security of persons. In such cases strict storage periods should be defined by domestic law.

Samples and other body tissues, or the information derived from them, may be stored for longer periods

– when the person so requests; or
– when the sample cannot be attributed to an individual, for example when it is found at the scene of an offence.

Where the security of the state is involved, the domestic law of the member State may permit retention of the samples, the results of DNA analysis and the information so derived even though the individual concerned has not been charged or convicted of an offence. In such cases strict storage periods should be defined by domestic law.

…"

44. The Explanatory Memorandum to the Recommendation stated, as regards item 8:

"47. The working party was well aware that the drafting of recommendation 8 was a delicate matter, involving different protected interests of a very difficult nature. It was necessary to strike the right balance between these interests. Both the European Convention on Human Rights and the Data Protection Convention provide exceptions for the interests of the suppression of criminal offences and the protection of the rights and freedoms of third parties. However, the exceptions are

only allowed to the extent that they are compatible with what is necessary in a democratic society.

…

49. Since the primary aim of the collection of samples and the carrying out of DNA analysis on such samples is the identification of offenders and the exoneration of suspected offenders, the data should be deleted once persons have been cleared of suspicion. The issue then arises as to how long the DNA findings and the samples on which they were based can be stored in the case of a finding of guilt.

50. The general rule should be that the data are deleted when they are no longer necessary for the purposes for which they were collected and used. This would in general be the case when a final decision has been rendered as to the culpability of the offender. By 'final decision' the CAHBI [Ad hoc Committee of Experts on Bioethics] thought that this would normally, under domestic law, refer to a judicial decision. However, the working party recognised that there was a need to set up databases in certain cases and for specific categories of offences which could be considered to constitute circumstances warranting another solution, because of the seriousness of the offences. The working party came to this conclusion after a thorough analysis of the relevant provisions in the European Convention on Human Rights, the Data Protection Convention and other legal instruments drafted within the framework of the Council of Europe. In addition, the working party took into consideration that all member States keep a criminal record and that such record may be used for the purposes of the criminal justice system … It took into account that such an exception would be permissible under certain strict conditions:

– when there has been a conviction;
– when the conviction concerns a serious criminal offence against the life, integrity and security of a person;
– the storage period is limited strictly;
– the storage is defined and regulated by law;
– the storage is subject to control by Parliament or an independent supervisory body."

B. Law and practice in the Council of Europe member States

45. According to the information provided by the parties or otherwise available to the Court, a majority of the Council of Europe member States allow the compulsory taking of fingerprints and cellular samples in the context of criminal proceedings. At least twenty member States make provision for the taking of DNA information and storing it on national databases or in other forms (Austria, Belgium, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland [4], Italy [5], Latvia, Luxembourg, the Netherlands, Norway, Poland, Spain, Sweden and Switzerland). This number is steadily increasing.

46. In most of these countries (including Austria, Belgium, Finland, France, Germany, Hungary, Ireland, Italy, Luxembourg, the Netherlands, Norway, Poland, Spain and Sweden), the taking of DNA information in the context of criminal proceedings is not systematic but limited to some specific circumstances and/or to more serious crimes, notably those punishable by certain terms of imprisonment.

47. The United Kingdom is the only member State expressly to permit the systematic and indefinite retention of DNA profiles and cellular samples of persons who have been acquitted or in respect of whom criminal proceedings have been discontinued. Five States (Belgium, Hungary, Ireland, Italy and Sweden) require such information to be destroyed ex officio upon acquittal or the discontinuance of the criminal proceedings. Ten other member States apply the same general rule with certain very limited exceptions: Germany, Luxembourg and the Netherlands allow such information to be retained where suspicions remain about the person or if further investigations are needed in a separate case; Austria permits its retention where there is a risk that the suspect will commit a dangerous offence and Poland does likewise in relation to certain serious crimes; Norway and Spain allow the retention of profiles if the defendant is acquitted for lack of criminal accountability; Finland and Denmark allow retention for one and ten years respectively in the event of an acquittal and Switzerland for one year when proceedings have been discontinued. In France, DNA profiles can be retained for twenty-five years after an acquittal or discharge; during this period the public prosecutor may order their earlier deletion, either on his or her own motion or upon request, if their retention has ceased to be required for the purposes of identification in connection with a criminal investigation. Estonia and Latvia also appear to allow the retention of DNA profiles of suspects for certain periods after acquittal.

48. The retention of DNA profiles of convicted persons is allowed, as a general rule, for limited periods of time after the conviction or after the convicted person's death. The United Kingdom thus also appears to be the only member State expressly to allow the systematic and indefinite retention of both profiles and samples of convicted persons.

49. Complaint mechanisms before data-protection monitoring bodies and/or before courts are available in most of the member States with regard to decisions to take cellular samples or retain samples or DNA profiles.

C. European Union

50. Directive 95/46/EC of 24 October 1995 on the protection of individuals with regard to the processing of personal data and on the free movement of such data provides that the object of national laws on the processing of personal data is notably to protect the right to privacy as recognised both in Article 8 of the European Convention on Human Rights and in the general principles of Community law. The

Directive sets out a number of principles in order to give substance to and amplify those contained in the Data Protection Convention of the Council of Europe. It allows member States to adopt legislative measures to restrict the scope of certain obligations and rights provided for in the Directive when such a restriction constitutes notably a necessary measure for the prevention, investigation, detection and prosecution of criminal offences (Article 13).

51. The Prüm Convention on the stepping up of cross-border cooperation, particularly in combating terrorism, cross-border crime and illegal migration, which was signed by several member States of the European Union on 27 May 2005, sets out rules for the supply of fingerprinting and DNA data to other Contracting Parties and their automated checking against their relevant databases. The Convention provides, inter alia:

Article 35 – Purpose

"2. … The Contracting Party administering the file may process the data supplied … solely where this is necessary for the purposes of comparison, providing automated replies to searches or recording … The supplied data shall be deleted immediately following data comparison or automated replies to searches unless further processing is necessary for the purposes mentioned … above."

52. Article 34 guarantees a level of protection of personal data at least equal to that resulting from the Data Protection Convention and requires the Contracting Parties to take into account Recommendation No. R (87) 15 of the Committee of Ministers of the Council of Europe.

53. The Council framework decision of 24 June 2008 on the protection of personal data processed in the framework of police and judicial cooperation in criminal matters states, inter alia:

Article 5

"Establishment of time-limits for erasure and review

Appropriate time-limits shall be established for the erasure of personal data or for a periodic review of the need for the storage of the data. Procedural measures shall ensure that these time-limits are observed."

D. Case-law in other jurisdictions

54. In the case of R. v. R.C. [[2005] 3 SCR 99, 2005 SCC 61] the Supreme Court of Canada considered the issue of retaining a juvenile first-time offender's DNA sample on the national database. The court upheld the decision by a trial judge who had found, in the light of the principles and objects of youth criminal justice legislation, that the impact of the DNA retention would be grossly disproportionate. In his opinion, Fish J observed:

"Of more concern, however, is the impact of an order on an individual's informational privacy interests. In R. v. Plant, [1993] 3 S.C.R. 281, at p. 293, the Court found

that section 8 of the Charter protected the 'biographical core of personal information which individuals in a free and democratic society would wish to maintain and control from dissemination to the state'. An individual's DNA contains the 'highest level of personal and private information': S.A.B., at paragraph 48. Unlike a fingerprint, it is capable of revealing the most intimate details of a person's biological make-up. … The taking and retention of a DNA sample is not a trivial matter and, absent a compelling public interest, would inherently constitute a grave intrusion on the subject's right to personal and informational privacy."

E. United Nations Convention on the Rights of the Child of 1989

55. Article 40 of the United Nations Convention on the Rights of the Child of 20 November 1989 states the right of every child alleged as, accused of, or recognised as having infringed the penal law to be treated in a manner consistent with the promotion of the child's sense of dignity and worth, which reinforces the child's respect for the human rights and fundamental freedoms of others and which takes into account the child's age and the desirability of promoting the child's reintegration and the child's assuming a constructive role in society.

IV. THIRD-PARTY SUBMISSIONS

56. The National Council for Civil Liberties ("Liberty") submitted case-law and scientific material highlighting, inter alia, the highly sensitive nature of cellular samples and DNA profiles and the impact on private life arising from their retention by the authorities.

57. Privacy International referred to certain core data-protection rules and principles developed by the Council of Europe and insisted on their high relevance for the interpretation of the proportionality requirement enshrined in Article 8 of the Convention. It emphasised, in particular, the "strict periods" recommended by Recommendation No. R (92) 1 of the Committee of Ministers for the storage of cellular samples and DNA profiles. It further pointed out a disproportionate representation on the United Kingdom National DNA Database of certain groups of the population, notably youth, and the unfairness that that situation might create. The use of data for familial testing and additional research purposes was also of concern. Privacy International also provided a summary of comparative data on the law and practice of different countries with regard to DNA storage and stressed the numerous restrictions and safeguards which existed in that respect.

THE LAW

I. ALLEGED VIOLATION OF ARTICLE 8 OF THE CONVENTION

58. The applicants complained under Article 8 of the Convention about the retention of their fingerprints, cellular samples and DNA profiles pursuant to section

64(1A) of the Police and Criminal Evidence Act 1984 (PACE). Article 8 provides, in so far as relevant, as follows:

"1. Everyone has the right to respect for his private … life …

2. There shall be no interference by a public authority with the exercise of this right except such as is in accordance with the law and is necessary in a democratic society … for the prevention of disorder or crime …"

A. Existence of an interference with private life

59. The Court will first consider whether the retention by the authorities of the applicants' fingerprints, DNA profiles and cellular samples constitutes an interference with their private life.

1. The parties' submissions

(a) The applicants

60. The applicants submitted that the retention of their fingerprints, cellular samples and DNA profiles interfered with their right to respect for private life as they were crucially linked to their individual identity and concerned a type of personal information that they were entitled to keep within their control. They pointed out that the initial taking of such bioinformation had consistently been held to engage Article 8 and submitted that their retention was more controversial given the wealth of private information that became permanently available to others and thus came out of the control of the person concerned. They stressed, in particular, the social stigma and psychological implications provoked by such retention in the case of children, which made the interference with the right to private life all the more pressing in respect of the first applicant.

61. They considered that the Convention organs' case-law supported this contention, as did a recent domestic decision of the Information Tribunal (Chief Constables of West Yorkshire, South Yorkshire and North Wales Police v. the Information Commissioner, [2005] UK IT EA 2005 0010 (12 October 2005), 173). The latter decision relied on the speech of Baroness Hale of Richmond in the House of Lords (see paragraph 25 above) and followed in substance her finding when deciding a similar question about the application of Article 8 to the retention of conviction data.

62. They further emphasised that the retention of cellular samples involved an even greater degree of interference with Article 8 rights as they contained full genetic information about a person, including genetic information about his or her relatives. It was of no significance whether information was actually extracted from the samples or caused a detriment in a particular case as an individual was entitled to a guarantee that such information, which fundamentally belonged to him, would remain private and not be communicated or accessible without his permission.

(b) The Government

63. The Government accepted that fingerprints, DNA profiles and samples were "personal data" within the meaning of the Data Protection Act in the hands of those who can identify the individual. They considered, however, that the mere retention of fingerprints, DNA profiles and samples for the limited use permitted under section 64 of PACE did not fall within the ambit of the right to respect for private life under Article 8 § 1 of the Convention. Unlike the initial taking of this data, their retention did not interfere with the physical and psychological integrity of the persons; nor did it breach their right to personal development, to establish and develop relationships with other human beings or the right to self-determination.

64. The Government submitted that the applicants' real concerns related to fears about the future uses of stored samples, to anticipated methods of analysis of DNA material and to potential intervention with the private life of individuals through active surveillance. It emphasised in this connection that the permitted extent of the use of the material was clearly and expressly limited by the legislation, the technological processes of DNA profiling and the nature of the DNA profile extracted.

65. The profile was merely a sequence of numbers which provided a means of identifying a person against bodily tissue, containing no materially intrusive information about an individual or his personality. The DNA database was a collection of such profiles which could be searched using material from a crime scene and a person would be identified only if and to the extent that a match was obtained against the sample. Familial searching through partial matches only occurred in very rare cases and was subject to very strict controls. Fingerprints, DNA profiles and samples were neither susceptible to any subjective commentary nor provided any information about a person's activities and thus presented no risk to affect the perception of an individual or affect his or her reputation. Even if such retention were capable of falling within the ambit of Article 8 § 1, the extremely limited nature of any adverse effects rendered the retention not sufficiently serious to constitute an interference.

2. The Court's assessment

(a) General principles

66. The Court notes that the concept of "private life" is a broad term not susceptible to exhaustive definition. It covers the physical and psychological integrity of a person (see Pretty v. the United Kingdom, no. 2346/02, § 61, ECHR 2002-III, and Y.F. v. Turkey, no. 24209/94, § 33, ECHR 2003-IX). It can therefore embrace multiple aspects of the person's physical and social identity (see Mikulić v. Croatia, no. 53176/99, § 53, ECHR 2002-I). Elements such as, for example, gender identification, name and sexual orientation and sexual life fall within the personal sphere protected by Article 8 (see, among other authorities, Bensaid v. the United Kingdom,

no. 44599/98, § 47, ECHR 2001-I with further references, and Peck v. the United Kingdom, no. 44647/98, § 57, ECHR 2003-I). Beyond a person's name, his or her private and family life may include other means of personal identification and of linking to a family (see, mutatis mutandis, Burghartz v. Switzerland, 22 February 1994, § 24, Series A no. 280-B, and Ünal Tekeli v. Turkey, no. 29865/96, § 42, ECHR 2004-X). Information about the person's health is an important element of private life (see Z v. Finland, 25 February 1997, § 71, Reports of Judgments and Decisions 1997-I). The Court furthermore considers that an individual's ethnic identity must be regarded as another such element (see, in particular, Article 6 of the Data Protection Convention quoted in paragraph 41 above, which lists personal data revealing racial origin as a special category of data along with other sensitive information about an individual). Article 8 protects, in addition, a right to personal development, and the right to establish and develop relationships with other human beings and the outside world (see, for example, Burghartz, cited above, opinion of the Commission, p. 37, § 47, and Friedl v. Austria, 31 January 1995, Series A no. 305-B, opinion of the Commission, p. 20, § 45). The concept of private life moreover includes elements relating to a person's right to their image (see Sciacca v. Italy, no. 50774/99, § 29, ECHR 2005-I).

67. The mere storing of data relating to the private life of an individual amounts to an interference within the meaning of Article 8 (see Leander v. Sweden, 26 March 1987, § 48, Series A no. 116). The subsequent use of the stored information has no bearing on that finding (see Amann v. Switzerland [GC], no. 27798/95, § 69, ECHR 2000-II). However, in determining whether the personal information retained by the authorities involves any of the private-life aspects mentioned above, the Court will have due regard to the specific context in which the information at issue has been recorded and retained, the nature of the records, the way in which these records are used and processed and the results that may be obtained (see, mutatis mutandis, Friedl, cited above, §§ 49-51, and Peck, cited above, § 59).

(b) Application of the above principles to the present case

68. The Court notes at the outset that all three categories of the personal information retained by the authorities in the present case, namely fingerprints, DNA profiles and cellular samples, constitute personal data within the meaning of the Data Protection Convention as they relate to identified or identifiable individuals. The Government accepted that all three categories are "personal data" within the meaning of the Data Protection Act 1998 in the hands of those who are able to identify the individual.

69. The Convention organs have already considered in various circumstances questions relating to the retention of such personal data by the authorities in the context of criminal proceedings. As regards the nature and scope of the information

contained in each of these three categories of data, the Court has distinguished in the past between the retention of fingerprints and the retention of cellular samples and DNA profiles in view of the stronger potential for future use of the personal information contained in the latter (see Van der Velden v. the Netherlands (dec.), no. 29514/05, ECHR 2006-XV). The Court considers it appropriate to examine separately the question of interference with the applicants' right to respect for their private lives by the retention of their cellular samples and DNA profiles on the one hand, and of their fingerprints on the other.

(i) Cellular samples and DNA profiles

70. In Van der Velden, the Court considered that, given the use to which cellular material in particular could conceivably be put in the future, the systematic retention of that material was sufficiently intrusive to disclose interference with the right to respect for private life (see Van der Velden, cited above). The Government criticised that conclusion on the ground that it speculated on the theoretical future use of samples and that there was no such interference at present.

71. The Court maintains its view that an individual's concern about the possible future use of private information retained by the authorities is legitimate and relevant to a determination of the issue of whether there has been an interference. Indeed, bearing in mind the rapid pace of developments in the field of genetics and information technology, the Court cannot discount the possibility that in the future the private-life interests bound up with genetic information may be adversely affected in novel ways or in a manner which cannot be anticipated with precision today. Accordingly, the Court does not find any sufficient reason to depart from its finding in the Van der Velden case.

72. Legitimate concerns about the conceivable use of cellular material in the future are not, however, the only element to be taken into account in the determination of the present issue. In addition to the highly personal nature of cellular samples, the Court notes that they contain much sensitive information about an individual, including information about his or her health. Moreover, samples contain a unique genetic code of great relevance to both the individual and his relatives. In this respect the Court concurs with the opinion expressed by Baroness Hale in the House of Lords (see paragraph 25 above).

73. Given the nature and the amount of personal information contained in cellular samples, their retention per se must be regarded as interfering with the right to respect for the private lives of the individuals concerned. That only a limited part of this information is actually extracted or used by the authorities through DNA profiling and that no immediate detriment is caused in a particular case does not change this conclusion (see Amann, cited above, § 69).

74. As regards DNA profiles themselves, the Court notes that they contain a more limited amount of personal information extracted from cellular samples in a coded form. The Government submitted that a DNA profile is nothing more than a sequence of numbers or a barcode containing information of a purely objective and irrefutable character and that the identification of a subject only occurs in case of a match with another profile in the database. They also submitted that, being in coded form, computer technology is required to render the information intelligible and that only a limited number of persons would be able to interpret the data in question.

75. The Court observes, nonetheless, that the profiles contain substantial amounts of unique personal data. While the information contained in the profiles may be considered objective and irrefutable in the sense submitted by the Government, their processing through automated means allows the authorities to go well beyond neutral identification. The Court notes in this regard that the Government accepted that DNA profiles could be, and indeed had in some cases been, used for familial searching with a view to identifying a possible genetic relationship between individuals. They also accepted the highly sensitive nature of such searching and the need for very strict controls in this respect. In the Court's view, the DNA profiles' capacity to provide a means of identifying genetic relationships between individuals (see paragraph 39 above) is in itself sufficient to conclude that their retention interferes with the right to the private life of the individuals concerned. The frequency of familial searches, the safeguards attached thereto and the likelihood of detriment in a particular case are immaterial in this respect (see Amann, cited above, § 69). This conclusion is similarly not affected by the fact that, since the information is in coded form, it is intelligible only with the use of computer technology and capable of being interpreted only by a limited number of persons.

76. The Court further notes that it is not disputed by the Government that the processing of DNA profiles allows the authorities to assess the likely ethnic origin of the donor and that such techniques are in fact used in police investigations (see paragraph 40 above). The possibility the DNA profiles create for inferences to be drawn as to ethnic origin makes their retention all the more sensitive and susceptible of affecting the right to private life. This conclusion is consistent with the principle laid down in the Data Protection Convention and reflected in the Data Protection Act that both list personal data revealing ethnic origin among the special categories of sensitive data attracting a heightened level of protection (see paragraphs 30-31 and 41 above).

77. In view of the foregoing, the Court concludes that the retention of both cellular samples and DNA profiles discloses an interference with the applicants' right to respect for their private lives, within the meaning of Article 8 § 1 of the Convention.

(ii) Fingerprints

78. It is common ground that fingerprints do not contain as much information as either cellular samples or DNA profiles. The issue of alleged interference with the right to respect for private life caused by their retention by the authorities has already been considered by the Convention organs.

79. In McVeigh and Others, the Commission first examined the issue of the taking and retention of fingerprints as part of a series of investigative measures. It accepted that at least some of the measures disclosed an interference with the applicants' private life, while leaving open the question of whether the retention of fingerprints alone would amount to such interference (see McVeigh and Others v. the United Kingdom (nos. 8022/77, 8025/77 and 8027/77, Commission's report of 18 March 1981, Decisions and Reports 25, p. 15, § 224).

80. In Kinnunen, the Commission considered that fingerprints and photographs retained following the applicant's arrest did not constitute an interference with his private life as they did not contain any subjective appreciations which called for refutation. The Commission noted, however, that the data at issue had been destroyed nine years later at the applicant's request (see Kinnunen v. Finland, no. 24950/94, Commission decision of 15 May 1996, unreported).

81. Having regard to these findings and the questions raised in the present case, the Court considers it appropriate to review this issue. It notes at the outset that the applicants' fingerprint records constitute their personal data (see paragraph 68 above) which contain certain external identification features much in the same way as, for example, personal photographs or voice samples.

82. In Friedl, the Commission considered that the retention of anonymous photographs that have been taken at a public demonstration did not interfere with the right to respect for private life. In so deciding, it attached special weight to the fact that the photographs concerned had not been entered in a data-processing system and that the authorities had taken no steps to identify the persons photographed by means of data processing (see Friedl, cited above, §§ 49-51).

83. In P.G. and J.H. v. the United Kingdom, the Court considered that the recording of data and the systematic or permanent nature of the record could give rise to private-life considerations even though the data in question may have been available in the public domain or otherwise. The Court noted that a permanent record of a person's voice for further analysis was of direct relevance to identifying that person when considered in conjunction with other personal data. It accordingly regarded the recording of the applicants' voices for such further analysis as amounting to interference with their right to respect for their private lives (see P.G. and J.H. v. the United Kingdom, no. 44787/98, §§ 59-60, ECHR 2001-IX).

84. The Court is of the view that the general approach taken by the Convention organs in respect of photographs and voice samples should also be followed in respect of fingerprints. The Government distinguished the latter by arguing that they constituted neutral, objective and irrefutable material and, unlike photographs, were unintelligible to the untutored eye and without a comparator fingerprint. While true, this consideration cannot alter the fact that fingerprints objectively contain unique information about the individual concerned, allowing his or her identification with precision in a wide range of circumstances. They are thus capable of affecting his or her private life and the retention of this information without the consent of the individual concerned cannot be regarded as neutral or insignificant.

85. The Court accordingly considers that the retention of fingerprints on the authorities' records in connection with an identified or identifiable individual may in itself give rise, notwithstanding their objective and irrefutable character, to important private-life concerns.

86. In the instant case, the Court notes furthermore that the applicants' fingerprints were initially taken in criminal proceedings and subsequently recorded on a national database with the aim of being permanently kept and regularly processed by automated means for criminal-identification purposes. It is accepted in this regard that, because of the information they contain, the retention of cellular samples and DNA profiles has a more important impact on private life than the retention of fingerprints. However, the Court, like Baroness Hale (see paragraph 25 above), considers that, while it may be necessary to distinguish between the taking, use and storage of fingerprints, on the one hand, and samples and profiles, on the other, in determining the question of justification, the retention of fingerprints constitutes an interference with the right to respect for private life.

B. Justification for the interference

1. The parties' submissions

(a) The applicants

87. The applicants argued that the retention of fingerprints, cellular samples and DNA profiles was not justified under Article 8 § 2. The Government were given a very wide remit to use samples and DNA profiles notably for "purposes related to the prevention or detection of crime", "the investigation of an offence" or "the conduct of a prosecution". These purposes were vague and open to abuse as they might, in particular, lead to the collation of detailed personal information outside the immediate context of the investigation of a particular offence. The applicants further submitted that there were insufficient procedural safeguards against misuse or abuse of the information. Records on the Police National Computer (PNC) were not only accessible to the police, but also to fifty-six non-police bodies, including government agencies and departments, private groups such as British Telecom

and the Association of British Insurers, and even certain employers. Furthermore, the PNC was linked to the Europe-wide "Schengen Information System". Consequently, their case involved a very substantial and controversial interference with the right to private life, as notably illustrated by ongoing public debate and disagreement about the subject in the United Kingdom. Contrary to the assertion of the Government, the applicants concluded that the issue of the retention of this material was of great individual concern and the State had a narrow margin of appreciation in this field.

88. The applicants contended that the indefinite retention of fingerprints, cellular samples and DNA profiles of unconvicted persons could not be regarded as "necessary in a democratic society" for the purpose of preventing crime. In particular, there was no justification at all for the retention of cellular samples following the original generation of the DNA profile; nor had the efficacy of the profiles' retention been convincingly demonstrated since the high number of DNA matches relied upon by the Government was not shown to have led to successful prosecutions. Likewise, in most of the specific examples provided by the Government, the successful prosecution had not been contingent on the retention of the records and in certain others the successful outcome could have been achieved through more limited retention in time and scope.

89. The applicants further submitted that the retention was disproportionate because of its blanket nature irrespective of the offences involved, the unlimited period, the failure to take account of the applicants' circumstances and the lack of an independent decision-making process or scrutiny when considering whether or not to order retention. They further considered the retention regime to be inconsistent with the Council of Europe's guidance on the subject. They emphasised, finally, that retention of the records cast suspicion on persons who had been acquitted or discharged of crimes, thus implying that they were not wholly innocent. The retention thus resulted in stigma which was particularly detrimental to children, as in the case of S., and to members of certain ethnic groups over-represented on the database.

(b) The Government

90. The Government submitted that any interference resulting from the retention of the applicants' fingerprints, cellular samples and DNA profiles was justified under Article 8 § 2. It was in accordance with the law as expressly provided for, and governed by section 64 of PACE, which set out detailed powers and restrictions on the taking of fingerprints and samples and clearly stated that they would be retained by the authorities regardless of the outcome of the proceedings in respect of which they were taken. The exercise of the discretion to retain fingerprints and samples was also, in any event, subject to the normal principles of law regulating discretionary power and to judicial review.

91. The Government further stated that the interference was necessary and proportionate for the legitimate purpose of the prevention of disorder or crime and/or the protection of the rights and freedoms of others. It was of vital importance that law enforcement agencies took full advantage of available techniques of modern technology and forensic science in the prevention, investigation and detection of crime for the interests of society generally. They submitted that the retained material was of inestimable value in the fight against crime and terrorism and the detection of the guilty, and provided statistics in support of this view. They emphasised that the benefits to the criminal-justice system were enormous, not only permitting the detection of the guilty but also eliminating the innocent from inquiries and correcting and preventing miscarriages of justice.

92. As at 30 September 2005, the National DNA Database held 181,000 profiles from individuals who would have been entitled to have those profiles destroyed before the 2001 amendments. Of those profiles, 8,251 were subsequently linked with crime-scene stains which involved 13,079 offences, including 109 murders, 55 attempted murders, 116 rapes, 67 sexual offences, 105 aggravated burglaries and 126 offences of the supply of controlled drugs.

93. The Government also submitted specific examples of the use of DNA material for successful investigation and prosecution in some eighteen specific cases. In ten of these cases the DNA profiles of suspects matched some earlier unrelated crime-scene stains retained on the database, thus allowing successful prosecution for those earlier crimes. In another case, two suspects arrested for rape were eliminated from the investigation as their DNA profiles did not match the crime-scene stain. In two other cases the retention of DNA profiles of the persons found guilty of certain minor offences (disorder and theft) led to establishing their involvement in other crimes committed later. In one case the retention of a suspect's DNA profile following an alleged immigration offence helped his extradition to the United Kingdom a year later when he was identified by one of his victims as having committed rape and murder. Finally, in four cases DNA profiles retained from four persons suspected but not convicted of certain offences (possession of offensive weapons, violent disorder and assault) matched the crime-scene stains collected from victims of rape up to two years later.

94. The Government contended that the retention of fingerprints, cellular samples and DNA profiles could not be regarded as excessive since they were kept for specific limited statutory purposes and stored securely and subject to the safeguards identified. Their retention was neither warranted by any degree of suspicion of the applicants' involvement in a crime or propensity to crime nor directed at retaining records in respect of investigated alleged offences in the past. The records were retained because the police had already been lawfully in possession of them, and their

retention would assist in the future prevention and detection of crime in general by increasing the size of the database. Retention resulted in no stigma and produced no practical consequence for the applicants unless the records matched a crime-scene profile. A fair balance was thus struck between individual rights and the general interest of the community and fell within the State's margin of appreciation.

2. The Court's assessment

(a) In accordance with the law

95. The Court notes from its well established case-law that the wording "in accordance with the law" requires the impugned measure both to have some basis in domestic law and to be compatible with the rule of law, which is expressly mentioned in the Preamble to the Convention and inherent in the object and purpose of Article 8. The law must thus be adequately accessible and foreseeable, that is, formulated with sufficient precision to enable the individual – if need be with appropriate advice – to regulate his conduct. For domestic law to meet these requirements, it must afford adequate legal protection against arbitrariness and accordingly indicate with sufficient clarity the scope of discretion conferred on the competent authorities and the manner of its exercise (see Malone v. the United Kingdom, 2 August 1984, §§ 66-68, Series A no. 82; Rotaru v. Romania [GC], no. 28341/95, § 55, ECHR 2000-V; and Amann, cited above, § 56).

96. The level of precision required of domestic legislation – which cannot in any case provide for every eventuality – depends to a considerable degree on the content of the instrument in question, the field it is designed to cover and the number and status of those to whom it is addressed (see Hasan and Chaush v. Bulgaria [GC], no. 30985/96, § 84, ECHR 2000-XI, with further references).

97. The Court notes that section 64 of PACE provides that the fingerprints or samples taken from a person in connection with the investigation of an offence may be retained after they have fulfilled the purposes for which they were taken (see paragraph 27 above). The Court agrees with the Government that the retention of the applicants' fingerprint and DNA records had a clear basis in the domestic law. There is also clear evidence that these records are retained in practice save in exceptional circumstances. The fact that chief police officers have power to destroy them in such rare cases does not make the law insufficiently certain from the point of view of the Convention.

98. As regards the conditions attached to and arrangements for the storing and use of this personal information, section 64 is far less precise. It provides that retained samples and fingerprints must not be used by any person except for purposes related to the prevention or detection of crime, the investigation of an offence or the conduct of a prosecution.

99. The Court agrees with the applicants that at least the first of these purposes is worded in rather general terms and may give rise to extensive interpretation. It reiterates that it is as essential, in this context, as in telephone tapping, secret surveillance and covert intelligence-gathering, to have clear, detailed rules governing the scope and application of measures, as well as minimum safeguards concerning, inter alia, duration, storage, usage, access of third parties, procedures for preserving the integrity and confidentiality of data and procedures for its destruction, thus providing sufficient guarantees against the risk of abuse and arbitrariness (see, mutatis mutandis, Kruslin v. France, 24 April 1990, §§ 33 and 35, Series A no. 176-A; Rotaru, cited above, §§ 57-59; Weber and Saravia v. Germany (dec.), no. 54934/00, ECHR 2006-XI; Association for European Integration and Human Rights and Ekimdzhiev v. Bulgaria, no. 62540/00, §§ 75-77, 28 June 2007; and Liberty and Others v. the United Kingdom, no. 58243/00, §§ 62-63, 1 July 2008). The Court notes, however, that these questions are in this case closely related to the broader issue of whether the interference was necessary in a democratic society. In view of its analysis in paragraphs 105-26 below, the Court does not find it necessary to decide whether the wording of section 64 meets the "quality of law" requirements within the meaning of Article 8 § 2 of the Convention.

(b) Legitimate aim

100. The Court agrees with the Government that the retention of fingerprint and DNA information pursues the legitimate purpose of the detection and, therefore, prevention of crime. While the original taking of this information pursues the aim of linking a particular person to the particular crime of which he or she is suspected, its retention pursues the broader purpose of assisting in the identification of future offenders.

(c) Necessary in a democratic society

(i) General principles

101. An interference will be considered "necessary in a democratic society" for a legitimate aim if it answers a "pressing social need" and, in particular, if it is proportionate to the legitimate aim pursued and if the reasons adduced by the national authorities to justify it are "relevant and sufficient". While it is for the national authorities to make the initial assessment in all these respects, the final evaluation of whether the interference is necessary remains subject to review by the Court for conformity with the requirements of the Convention (see Coster v. the United Kingdom [GC], no. 24876/94, § 104, 18 January 2001, with further references).

102. A margin of appreciation must be left to the competent national authorities in this assessment. The breadth of this margin varies and depends on a number of factors, including the nature of the Convention right in issue, its importance for the individual, the nature of the interference and the object pursued by the interference.

The margin will tend to be narrower where the right at stake is crucial to the individual's effective enjoyment of intimate or key rights (see Connors v. the United Kingdom, no. 66746/01, § 82, 27 May 2004, with further references). Where a particularly important facet of an individual's existence or identity is at stake, the margin allowed to the State will be restricted (see Evans v. the United Kingdom [GC], no. 6339/05, § 77, ECHR 2007-I). Where, however, there is no consensus within the member States of the Council of Europe, either as to the relative importance of the interest at stake or as to how best to protect it, the margin will be wider (see Dickson v. the United Kingdom [GC], no. 44362/04, § 78, ECHR 2007-V).

103. The protection of personal data is of fundamental importance to a person's enjoyment of his or her right to respect for private and family life, as guaranteed by Article 8 of the Convention. The domestic law must afford appropriate safeguards to prevent any such use of personal data as may be inconsistent with the guarantees of this Article (see, mutatis mutandis, Z v. Finland, cited above, § 95). The need for such safeguards is all the greater where the protection of personal data undergoing automatic processing is concerned, not least when such data are used for police purposes. The domestic law should notably ensure that such data are relevant and not excessive in relation to the purposes for which they are stored; and preserved in a form which permits identification of the data subjects for no longer than is required for the purpose for which those data are stored (see Article 5 of the Data Protection Convention and the Preamble thereto and Principle 7 of Recommendation No. R (87) 15 of the Committee of Ministers regulating the use of personal data in the police sector). The domestic law must also afford adequate guarantees that retained personal data were efficiently protected from misuse and abuse (see notably Article 7 of the Data Protection Convention). The above considerations are especially valid as regards the protection of special categories of more sensitive data (see Article 6 of the Data Protection Convention) and more particularly of DNA information, which contains the person's genetic make-up of great importance to both the person concerned and his or her family (see Recommendation No. R (92) 1 of the Committee of Ministers on the use of analysis of DNA within the framework of the criminal justice system).

104. The interests of the data subjects and the community as a whole in protecting the personal data, including fingerprint and DNA information, may be outweighed by the legitimate interest in the prevention of crime (see Article 9 of the Data Protection Convention). However, the intrinsically private character of this information calls for the Court to exercise careful scrutiny of any State measure authorising its retention and use by the authorities without the consent of the person concerned (see, mutatis mutandis, Z v. Finland, cited above, § 96).

(ii) Application of these principles to the present case

105. The Court finds it to be beyond dispute that the fight against crime, and in particular against organised crime and terrorism, which is one of the challenges faced by today's European societies, depends to a great extent on the use of modern scientific techniques of investigation and identification. The techniques of DNA analysis were acknowledged by the Council of Europe more than fifteen years ago as offering advantages to the criminal-justice system (see Recommendation No. R (92) 1 of the Committee of Ministers, paragraphs 43-44 above). Nor is it disputed that the member States have since that time made rapid and marked progress in using DNA information in the determination of innocence or guilt.

106. However, while it recognises the importance of such information in the detection of crime, the Court must delimit the scope of its examination. The question is not whether the retention of fingerprints, cellular samples and DNA profiles may in general be regarded as justified under the Convention. The only issue to be considered by the Court is whether the retention of the fingerprint and DNA data of the applicants, as persons who had been suspected, but not convicted, of certain criminal offences, was justified under Article 8 § 2 of the Convention.

107. The Court will consider this issue with due regard to the relevant instruments of the Council of Europe and the law and practice of the other Contracting States. The core principles of data protection require the retention of data to be proportionate in relation to the purpose of collection and insist on limited periods of storage (see paragraphs 41-44 above). These principles appear to have been consistently applied by the Contracting States in the police sector in accordance with the Data Protection Convention and subsequent Recommendations of the Committee of Ministers (see paragraphs 45-49 above).

108. As regards, more particularly, cellular samples, most of the Contracting States allow these materials to be taken in criminal proceedings only from individuals suspected of having committed offences of a certain minimum gravity. In the great majority of the Contracting States with functioning DNA databases, samples and DNA profiles derived from those samples are required to be removed or destroyed either immediately or within a certain limited time after acquittal or discharge. A restricted number of exceptions to this principle are allowed by some Contracting States (see paragraphs 47-48 above).

109. The current position of Scotland, as a part of the United Kingdom itself, is of particular significance in this regard. As noted above (see paragraph 36), the Scottish parliament voted to allow retention of the DNA of unconvicted persons only in the case of adults charged with violent or sexual offences and even then, for three years only, with the possibility of an extension to keep the DNA sample and data for a further two years with the consent of a sheriff.

110. This position is notably consistent with Recommendation No. R (92) 1 of the Committee of Ministers, which stresses the need for an approach which discriminates between different kinds of cases and for the application of strictly defined storage periods for data, even in more serious cases (see paragraphs 43-44 above). Against this background, England, Wales and Northern Ireland appear to be the only jurisdictions within the Council of Europe to allow the indefinite retention of fingerprint and DNA material of any person of any age suspected of any recordable offence.

111. The Government lay emphasis on the fact that the United Kingdom is in the vanguard of the development of the use of DNA samples in the detection of crime and that other States have not yet achieved the same maturity in terms of the size and resources of DNA databases. It is argued that the comparative analysis of the law and practice in other States with less advanced systems is accordingly of limited importance.

112. The Court cannot, however, disregard the fact that, notwithstanding the advantages provided by comprehensive extension of the DNA database, other Contracting States have chosen to set limits on the retention and use of such data with a view to achieving a proper balance with the competing interests of preserving respect for private life. The Court observes that the protection afforded by Article 8 of the Convention would be unacceptably weakened if the use of modern scientific techniques in the criminal-justice system were allowed at any cost and without carefully balancing the potential benefits of the extensive use of such techniques against important private-life interests. In the Court's view, the strong consensus existing among the Contracting States in this respect is of considerable importance and narrows the margin of appreciation left to the respondent State in the assessment of the permissible limits of the interference with private life in this sphere. The Court considers that any State claiming a pioneer role in the development of new technologies bears special responsibility for striking the right balance in this regard.

113. In the present case, the applicants' fingerprints and cellular samples were taken and DNA profiles obtained in the context of criminal proceedings brought on suspicion of attempted robbery in the case of the first applicant and harassment of his partner in the case of the second applicant. The data were retained on the basis of legislation allowing for their indefinite retention, despite the acquittal of the former and the discontinuance of the criminal proceedings against the latter.

114. The Court must consider whether the permanent retention of fingerprint and DNA data of all suspected but unconvicted people is based on relevant and sufficient reasons.

115. Although the power to retain fingerprints, cellular samples and DNA profiles of unconvicted persons has only existed in England and Wales since 2001, the

Government argue that their retention has been shown to be indispensable in the fight against crime. Certainly, the statistical and other evidence, which was before the House of Lords and is included in the material supplied by the Government (see paragraph 92 above) appears impressive, indicating that DNA profiles that would have been previously destroyed were linked with crime-scene stains in a high number of cases.

116. The applicants, however, assert that the statistics are misleading, a view supported in the Nuffield Council on Bioethics' report. It is true, as pointed out by the applicants, that the figures do not reveal the extent to which this "link" with crime scenes resulted in convictions of the persons concerned or the number of convictions that were contingent on the retention of the samples of unconvicted persons. Nor do they demonstrate that the high number of successful matches with crime-scene stains was only made possible through indefinite retention of DNA records of all such persons. At the same time, in the majority of the specific cases quoted by the Government (see paragraph 93 above), the DNA records taken from the suspects produced successful matches only with earlier crime-scene stains retained on the database. Yet such matches could have been made even in the absence of the present scheme, which permits the indefinite retention of DNA records of all suspected but unconvicted persons.

117. While neither the statistics nor the examples provided by the Government in themselves establish that the successful identification and prosecution of offenders could not have been achieved without the permanent and indiscriminate retention of the fingerprint and DNA records of all persons in the applicants' position, the Court accepts that the extension of the database has nonetheless contributed to the detection and prevention of crime.

118. The question, however, remains whether such retention is proportionate and strikes a fair balance between the competing public and private interests.

119. In this respect, the Court is struck by the blanket and indiscriminate nature of the power of retention in England and Wales. The material may be retained irrespective of the nature or gravity of the offence with which the individual was originally suspected or of the age of the suspected offender; fingerprints and samples may be taken – and retained – from a person of any age, arrested in connection with a recordable offence, which includes minor or non-imprisonable offences. The retention is not time-limited; the material is retained indefinitely whatever the nature or seriousness of the offence of which the person was suspected. Moreover, there exist only limited possibilities for an acquitted individual to have the data removed from the national database or the materials destroyed (see paragraph 35 above); in particular, there is no provision for independent review of the justification for the retention according to defined criteria, including such factors as the seriousness of

the offence, previous arrests, the strength of the suspicion against the person and any other special circumstances.

120. The Court acknowledges that the level of interference with the applicants' right to private life may be different for each of the three different categories of personal data retained. The retention of cellular samples is particularly intrusive given the wealth of genetic and health information contained therein. However, such an indiscriminate and open-ended retention regime as the one in issue calls for careful scrutiny regardless of these differences.

121. The Government contend that the retention could not be considered as having any direct or significant effect on the applicants unless matches in the database were to implicate them in the commission of offences on a future occasion. The Court is unable to accept this argument and reiterates that the mere retention and storing of personal data by public authorities, however obtained, are to be regarded as having a direct impact on the private-life interest of an individual concerned, irrespective of whether subsequent use is made of the data (see paragraph 67 above).

122. Of particular concern in the present context is the risk of stigmatisation, stemming from the fact that persons in the position of the applicants, who have not been convicted of any offence and are entitled to the presumption of innocence, are treated in the same way as convicted persons. In this respect, the Court must bear in mind that the right of every person under the Convention to be presumed innocent includes the general rule that no suspicion regarding an accused's innocence may be voiced after his acquittal (see Rushiti v. Austria, no. 28389/95, § 31, 21 March 2000, with further references). It is true that the retention of the applicants' private data cannot be equated with the voicing of suspicions. Nonetheless, their perception that they are not being treated as innocent is heightened by the fact that their data are retained indefinitely in the same way as the data of convicted persons, while the data of those who have never been suspected of an offence are required to be destroyed.

123. The Government argue that the power of retention applies to all fingerprints and samples taken from a person in connection with the investigation of an offence and does not depend on innocence or guilt. It is further submitted that the fingerprints and samples have been lawfully taken and that their retention is not related to the fact that they were originally suspected of committing a crime, the sole reason for their retention being to increase the size and, therefore, the use of the database in the identification of offenders in the future. The Court, however, finds this argument difficult to reconcile with the obligation imposed by section 64(3) of PACE to destroy the fingerprints and samples of volunteers at their request, despite the similar value of the material in increasing the size and utility of the database. Weighty reasons would have to be put forward by the Government before the Court

could regard as justified such a difference in treatment of the applicants' private data compared to that of other unconvicted people.

124. The Court further considers that the retention of the unconvicted persons' data may be especially harmful in the case of minors such as the first applicant, given their special situation and the importance of their development and integration in society. The Court has already emphasised, drawing on the provisions of Article 40 of the United Nations Convention on the Rights of the Child of 1989, the special position of minors in the criminal-justice sphere and has noted, in particular, the need for the protection of their privacy at criminal trials (see T. v. the United Kingdom [GC], no. 24724/94, §§ 75 and 85, 16 December 1999). In the same way, the Court considers that particular attention should be paid to the protection of juveniles from any detriment that may result from the retention by the authorities of their private data following acquittals of a criminal offence. The Court shares the view of the Nuffield Council on Bioethics as to the impact on young persons of the indefinite retention of their DNA material and notes the Council's concerns that the policies applied have led to the over-representation in the database of young persons and ethnic minorities who have not been convicted of any crime (see paragraphs 38-40 above).

125. In conclusion, the Court finds that the blanket and indiscriminate nature of the powers of retention of the fingerprints, cellular samples and DNA profiles of persons suspected but not convicted of offences, as applied in the case of the present applicants, fails to strike a fair balance between the competing public and private interests and that the respondent State has overstepped any acceptable margin of appreciation in this regard. Accordingly, the retention at issue constitutes a disproportionate interference with the applicants' right to respect for private life and cannot be regarded as necessary in a democratic society. This conclusion obviates the need for the Court to consider the applicants' criticism regarding the adequacy of certain particular safeguards, such as too broad an access to the personal data concerned and insufficient protection against the misuse or abuse of such data.

126. Accordingly, there has been a violation of Article 8 of the Convention in the present case.

II. ALLEGED VIOLATION OF ARTICLE 14 TAKEN TOGETHER WITH ARTICLE 8 OF THE CONVENTION

127. The applicants submitted that they had been subjected to discriminatory treatment as compared to others in an analogous situation, namely other unconvicted persons whose samples had still to be destroyed under the legislation. This treatment related to their status and fell within the ambit of Article 14 of the Convention, which had always been liberally interpreted. For the reasons set out in their submissions under Article 8, there was no reasonable or objective justification for

the treatment, nor any legitimate aim or reasonable relationship of proportionality to the purported aim of crime prevention, in particular as regards the samples which played no role in crime detection or prevention. It was an entirely improper and prejudicial differentiation to retain materials of persons who should be presumed to be innocent.

128. The Government submitted that as Article 8 was not engaged, Article 14 of the Convention was not applicable. Even if it were, there was no difference of treatment as all those in an analogous situation to the applicants were treated the same and the applicants could not compare themselves with those who had not had samples taken by the police or those who consented to give samples voluntarily. In any event, any difference in treatment complained of was not based on "status" or a personal characteristic but on historical fact. If there was any difference in treatment, it was objectively justified and within the State's margin of appreciation.

129. The Court refers to its conclusion above that the retention of the applicants' fingerprints, cellular samples and DNA profiles was in violation of Article 8 of the Convention. In the light of the reasoning that has led to this conclusion, the Court considers that it is not necessary to examine separately the applicants' complaint under Article 14 of the Convention.

III. APPLICATION OF ARTICLE 41 OF THE CONVENTION

130. Article 41 of the Convention provides:

"If the Court finds that there has been a violation of the Convention or the Protocols thereto, and if the internal law of the High Contracting Party concerned allows only partial reparation to be made, the Court shall, if necessary, afford just satisfaction to the injured party."

131. The applicants requested the Court to award them just satisfaction for non-pecuniary damage and for costs and expenses.

A. Non-pecuniary damage

132. The applicants claimed compensation for non-pecuniary damage in the sum of 5,000 pounds sterling (GBP) each for distress and anxiety caused by the knowledge that intimate information about each of them had been unjustifiably retained by the State, and in relation to anxiety and stress caused by the need to pursue this matter through the courts.

133. The Government, referring to the Court's case-law (see, in particular, Amann v. Switzerland [GC], no. 27798/95, ECHR 2000-II), submitted that a finding of a violation would in itself constitute sufficient just satisfaction for both applicants and distinguished the present case from those cases where violations had been found as a result of the use or disclosure of the personal information (see, in particular, Rotaru v. Romania [GC], no. 28341/95, ECHR 2000-V).

134. The Court notes that it has found that the retention of the applicants' fingerprint and DNA data violates their rights under Article 8 of the Convention. In accordance with Article 46 of the Convention, it will be for the respondent State to implement, under the supervision of the Committee of Ministers, appropriate general and/or individual measures to fulfil its obligations to secure the right of the applicants and other persons in their position to respect for their private life (see Scozzari and Giunta v. Italy [GC], nos. 39221/98 and 41963/98, § 249, ECHR 2000-VIII, and Christine Goodwin v. the United Kingdom [GC], no. 28957/95, § 120, ECHR 2002-VI). In these circumstances, the Court considers that the finding of a violation, with the consequences which will ensue for the future, may be regarded as constituting sufficient just satisfaction in this respect. The Court accordingly rejects the applicants' claim for non-pecuniary damage.

B. Costs and expenses

135. The applicants also requested the Court to award GBP 52,066.25 for costs and expenses incurred before the Court and attached detailed documentation in support of their claim. These included the costs of the solicitor (GBP 15,083.12) and the fees of three counsel (GBP 21,267.50, GBP 2,937.50 and GBP 12,778.13 respectively). The hourly rates charged by the lawyers were as follows: GBP 140 in respect of the applicants' solicitor (increased to GBP 183 as from June 2007) and GBP 150, GBP 250 and GBP 125 respectively in respect of three counsel.

136. The Government qualified the applicants' claim as entirely unreasonable. They submitted in particular that the rates charged by the lawyers were excessive and should be reduced to no more than two-thirds of the level claimed. They also argued that no award should be made in respect of the applicants' decision to instruct a fourth lawyer at a late stage of the proceedings as it had led to the duplication of work. The Government concluded that any cost award should be limited to GBP 15,000 and in any event, to no more than GBP 20,000.

137. The Court reiterates that only legal costs and expenses found to have been actually and necessarily incurred and which are reasonable as to quantum are recoverable under Article 41 of the Convention (see, among other authorities, Roche v. the United Kingdom [GC], no. 32555/96, § 182, ECHR 2005-X).

138. On the one hand, the present applications were of some complexity as they required examination in a Chamber and in the Grand Chamber, including several rounds of observations and an oral hearing. The application also raised important legal issues and questions of principle requiring a large amount of work. It notably required an in-depth examination of the current debate on the issue of retention of fingerprint and DNA records in the United Kingdom and a comprehensive comparative research of the law and practice of other Contracting States and of the relevant texts and documents of the Council of Europe.

139. On the other hand, the Court considers that the overall sum of GBP 52,066.25 claimed by the applicants is excessive as to quantum. In particular, the Court agrees with the Government that the appointment of the fourth lawyer in the later stages of the proceedings may have led to a certain amount of duplication of work.

140. Making its assessment on an equitable basis and in the light of its practice in comparable cases, the Court awards the sum of 42,000 euros (EUR) in respect of costs and expenses, less the amount of EUR 2,613.07 already paid by the Council of Europe in legal aid.

C. Default interest

141. The Court considers it appropriate that the default interest rate should be based on the marginal lending rate of the European Central Bank, to which should be added three percentage points.

FOR THESE REASONS, THE COURT UNANIMOUSLY

1. Holds that there has been a violation of Article 8 of the Convention;

2. Holds that it is not necessary to examine separately the complaint under Article 14 of the Convention;

3. Holds that the finding of a violation constitutes in itself sufficient just satisfaction for the non-pecuniary damage sustained by the applicants;

4. Holds

(a) that the respondent State is to pay the applicants, within three months, EUR 42,000 (forty-two thousand euros) in respect of costs and expenses (inclusive of any tax which may be chargeable to the applicants), to be converted into pounds sterling at the rate applicable at the date of settlement, less EUR 2,613.07 already paid to the applicants in respect of legal aid;

(b) that from the expiry of the above-mentioned three months until settlement simple interest shall be payable on the above amount at a rate equal to the marginal lending rate of the European Central Bank during the default period plus three percentage points;

5. Dismisses the remainder of the applicants' claim for just satisfaction.

Done in English and in French, and delivered at a public hearing in the Human Rights Building, Strasbourg, on 4 December 2008.

Michael O'Boyle Jean-Paul Costa

Deputy Registrar President

[1]. DNA stands for deoxyribonucleic acid; it is the chemical found in virtually every cell in the body and the genetic information therein, which is in the form of a code or language, determines physical characteristics and directs all the chemical processes in the body. Except for identical twins, each person's DNA is unique. DNA samples are cellular samples and any subsamples or part samples retained from these after analysis. DNA profiles are digitised information which is stored

electronically on the National DNA Database together with details of the person to whom it relates.

[2]. The Nuffield Council on Bioethics is an independent expert body composed of clinicians, lawyers, philosophers, scientists and theologians established by the Nuffield Foundation in 1991. The present report was published on 18 September 2007 under the following title, The Forensic Use of Bioinformation: Ethical Issues.

[3]. An allele is one of two or more alternative forms of a particular gene. Different alleles may give rise to different forms of the characteristic for which the gene codes (World Encyclopedia, Philip's, 2008, Oxford Reference Online: Oxford University Press).

[4]. The law and practice in Ireland are presently governed by the Criminal Justice (Forensic Evidence) Act 1990. A new bill has been approved by the government with a view to extending the use and storage of DNA information in a national database. The bill has not yet been approved by Parliament.

[5]. The legislative decree of 30 October 2007 establishing a national DNA database was approved by the Italian government and the Senate. However, the decree eventually expired without having been formally converted into a statute as a mistake in the drafting was detected. A corrected version of the decree is expected to be issued in 2008.