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A European Evidence (Air)Space? Taking Cross-Border Legal Admissibility of Forensic Evidence to a Higher Level

I. Introduction: evidence admissibility today

> *"Knowledge, once gained, casts a faint light beyond its own immediate boundaries. There is no discovery so limited as not to illuminate something beyond itself."*
>
> *— John Tyndall*
> *In "On the Methods and Tendencies of Physical Investigation", Scientific Addresses (1870), 7.*

It must be said that Tyndall could not more eloquently express the importance of looking beyond one's own borders and pushing the boundaries which are thereby revealed. The statement of the scientist should be kept in mind in as many contexts as possible. With regard to the very specific context of evidence acceptance, two boundaries seem to be—or require to be—pushed.

On the one hand, despite the fact that law has often been considered a 'soft science', law and science tend rather to be positioned at the opposite sides of almost every spectrum. Several efforts have already been made to bring both disciplines closer to one another. In this respect, organisations such as the European Network of Forensic Science Institutes (ENFSI) and the International Organisation for Standardisation (ISO) have undertaken valuable actions.[1] From a legal perspective, both legislators and courts have attempted to facilitate the cross-border exchange of forensic evidence. Whereas the legislator did so by adopting legal acts, providing for the admission of forensic evidence

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1 See for instance *ANSI-ASQ National Accreditation Board (ANAB*), ISO/IEC 17025 Accreditation Requirements for Forensic Testing Laboratories, 2015, 49 p. (http://anab.org/media/31593/ma_3011_17025_forensic_requirements.pdf) and *ENFSI Committee for Quality and Competence,* Performance based standards for forensic science practitioners, 2004, 45 p (http://.enfsi.eu/sites/default/files/documents/performance_based_standards_for_forensic_science_practitioners_0.pdf).

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from foreign jurisdictions,[2] courts within several common law jurisdictions developed criteria to determine the acceptability of such evidence.[3] Even though these initiatives should be applauded, a firmer and less fragmented[4] approach is necessary in the future.

On the other hand, the national character of legal rules on the gathering and use of evidence creates a boundary; this is potentially problematic whenever evidence could be useful in a foreign criminal procedure. In other words, nation states continue to maintain sovereign separateness in Europe at large, without the existence of any effective way to ensure cooperation on the exchange of cross-border evidence. Thus far, any attempt that has been made to facilitate transfer of such cross-border evidence without at the same time causing a concomitant erosion of legal guarantees has led only to the building of one-to-one bridges between member states. Whereas the 1959 CoE Convention[5] affirms the *locus regit actum* principle, which implies that evidence gathering abroad is to be governed by the member state in which the investigation is initiated, both the EU 2000 Convention[6] and the European Investigation Order[7] give primacy to *forum regit actum* or to the member state in which the criminal prosecution takes place. Thus far, only bilateral bridges between pairs of member states have been built. No 'European airspace' to transport forensic evidence from one member state to another has yet been created. By contrast with the situation with regard to cross-border gathering of evidence, in respect of which several legal instruments based on mutual recognition have been adopted,[8] the successful return of evidence, has not, thus far, been regulated.

II. Study on the establishment of free movement of evidence

In 2010, a study on EU cross-border gathering and use of evidence in criminal matters was conducted at Ghent University.[9] Through the use of questionnaires looking at na-

2 See for instance Council Decision 2008/616/JHA of 23 June 2008 on the implementation of Decision 2008/615/JHA on the stepping up of cross-border cooperation, particularly in combatting terrorism and cross-border crime, OJ2008 L 210/12 and Council Framework Decision 2009/905/JHA of 30 November 2009 on accreditation of forensic service providers carrying out laboratory activities, OJ 2009 L 322/14.

3 See the American 'pioneers', Frye and Daubert, and also, for instance, the English case of *Young v. HM Advocate*.

4 Most of the current initiatives focus on DNA evidence, whereas the concept of 'forensic science' covers many more disciplines.

5 Article 3.1. European Convention on Mutual Assistance in Criminal Matters of 20 April 1959, Strasbourg.

6 Article 4.1. Convention of 29 May 2000 on Mutual Assistance in Criminal Matters between the Member States of the European Union, OJ 2005 C 197.

7 Article 9.2. Directive 2014/41/EU of the European Parliament and of the Council of 3 April 2014 regarding the European Investigation Order in Criminal Matters, OJ 2014 L 130.

8 The most recent instrument being the European Investigation Order.

9 *G. Vermeulen, W. De Bondt and Y. Van Damme*, EU cross-border gathering and use of evidence in criminal matters. Towards mutual recognition of investigative measures and free movement of evidence?, 2010, p. 254.

tional legal regimes on the gathering and handling of evidence, the prospect for future criminal cooperation in this area was investigated. One pillar of this research focused on the possibility of free movement of evidence, a concept referring to a cross-border system by which evidence that corresponds to certain conditions is accepted (rendered admissible) by EU member states in reliance on the results of investigative measures executed in another member state. In order to come to a consensus on the mutual admissibility of evidence, it would however be necessary that member states would still be entitled to refuse the admissibility of evidence lawfully obtained abroad if the gathering of such evidence had taken place contrary to their fundamental principles of law.

These fundamental principles or values should be integrated into a framework of evidence-gathering principles that, if complied with, would lead to evidence admissibility in every other member state. The possibility of introducing minimum standards with regard to evidence gathering is foreseen by article 82.2 TFEU[10], a provision which is perfectly suited for this integration. More specifically, such an initiative would avoid the 'uselessness' of trying to introduce the results of investigative measures executed abroad in criminal justice systems without, at the same time, precluding the possibility of review thereof by the judicial authorities. Minimum standards comprising the fundamental principles of law could minimize the risk of foreign evidence becoming lost in the end due to review issues, without depriving the reviewing authority of its autonomy in determining the value of the evidence. Moreover, the idea of minimum standards in the struggle for mutual admissibility of evidence has been adverted to already by both scholars[11] and European institutions.[12]

10 "*To the extent necessary to facilitate mutual recognition of judgments and judicial decisions and police and judicial cooperation in criminal matters having a cross-border dimension, the European Parliament and the Council may, by means of directives adopted in accordance with the ordinary legislative procedure, establish minimum rules. Such rules shall take into account the differences between the legal traditions and systems of the Member States. They shall concern: (a) mutual admissibility of evidence between Member States* (…)".

11 See for instance *L. Bachmaier Winter*, European investigation order for obtaining evidence in the criminal proceedings. Study of the proposal for a European directive, Zeitschrift für Internationale Rechtsdogmatik (ZIS), 2010, p. 580 et seq.; *J. R. Spencer*, The Green Paper on obtaining evidence from one Member State to another and securing its admissibility: the Reaction of one British Lawyer, *ZIS* 2010, p. 602 et seq. and *S. Allegrezza*, Critical remarks on the Green Paper on obtaining evidence in criminal matters from one member state to another and securing its admissibility, *ZIS* 2010, p. 569 et seq.

12 See for instance 3.3. of the Stockholm Programme – An open and secure Europe serving and protecting citizens, OJ 2010C 115 and Paragraph 1 point 4 Communication of 20 April 2010 from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions –Delivering an area of freedom, security and justice for Europe's citizens. Action Plan Implementing the Stockholm Programme, COM (2010) 171 final.

III. Determining the content of the minimum standards: fairness and quality

Given the contributions that have already been made in the quest for free movement of evidence, the next step necessarily involves the determination of the content of the minimum standards for ensuring mutual admissibility. As this research focuses on forensic evidence, it is necessary to distinguish between fundamental principles of law that are rather well-known in the legal world and which regulate all investigative measures, and fundamental principles of law that are rather innovative, as they specifically aim to ensure the quality of the scientific evidence.

1. Fundamental principles of law derived from the 'fair balance requirement'

Criminal justice has two sides.[13] One the one hand, it stresses the need for punishment of culprits. On the other hand, the autonomy and dignity of the individual in the criminal process is required to be kept in mind. Based on the interests at stake during the execution of the investigative measures—namely the interests of the state and the individual—it seems[14] that the fundamental principles of law, on the basis of which the results of all types of investigative measures may be refused, are twofold. A fair balance should be established between flexibility (during the execution of the investigative measures by the state) and protection (whenever the investigative measures are executed). The first two categories both contain principles regarding fairness. Fairness (or creating a 'fair balance' is a broad term; not only does it refer to the limitation of states' sovereign claims (objective law), but also to the imperative of ensuring the defendant's rights (subjective rights).

a) Procedural rules to ensure a 'fair' execution of investigative measures by states

As governments pass criminal prohibition clauses to prevent, or, at least, to reduce recurring dangers, lack of safety and insecurity, there is a concomitant responsibility on governments to carry out investigations in order to establish both exactly who broke the law and in what manner it was broken. Of course, such responsibility carries certain obligations. On the one hand, the investigation cannot be unlimited or arbitrary, as fundamental human rights such as the right to respect for private life require to be

13 *A. Ashworth and L. Zedner*, Defending the Criminal Law: Reflections on the Changing Character of Crime, Procedure, and Sanctions, Criminal Law and Philosophy 2008, nr. 2, p. 21 et seq.

14 The content of both categories is based on the previous work of several authors. See for instance *J. Christoffersen*, Fair balance: a study of proportionality, subsidiarity and primarity in the European Convention on Human Rights, 2009, p. 670; *E. Ellis*, The principle of proportionality in the laws of Europe, 1999, p. 187; *E. Herlin-Karnell*, The Constitutional Dimension of European Criminal Law, 2012, p. 284; and *I. Seredyńska*, Insider dealing and criminal law: dangerous liaisons, 2012, p. 296.

respected.[15] In other words, evidence gathering cannot always occur, or, at any price, meaning that certain limits need to be imposed on states' discretionary competences (including those of the government, the police, prosecutors and criminal justices). On the other hand, the mostly national nature of both substantive criminal law (which flows from state sovereignty) and of criminal investigative measures (albeit necessarily constrained by the requirement of respect for fundamental rights) leads to different national regulations, and—possibly related thereto or maybe even as a consequence thereof—a lack of mutual trust.[16] In order to avoid arbitrariness and ensure/restore mutual trust between member states, certain limits need to be imposed on national authorities in executing investigative measures.

The limitation of states' discretionary competences is traditionally based on the general proportionality principle, a worldwide concept[17] which dates back to Aristotle.[18] By its integration into the Magna Carta in 1215—which subsequently served as a source of inspiration for many legislative acts—the proportionality principle became a well-integrated legislative principle all over Europe, and is still reflected in present-day instruments. Over the centuries, Aristotle's general principle has, of course, been defined more precisely. It was Aquinas who presented the multi-step proportionality procedure for the first time[19] which stipulates that, when used, force must be necessary (1), it must be exercised in accordance with the rules (2), and it must not be excessive (thus be proportional) (3).The EU has fashioned the proportionality principle both in its law[20] and in its jurisprudence, a construct which has been validated not only by the

15 *M. Lopez-Rey*, Institutional violence and crime, International Review of Criminal Policy 1981, nr. 37, p. 55 et seq. 'Should', as these rights are not absolute (see the provisions of the ECHR).

16 It has already been mentioned earlier that there might be a connection between the different national regulations, the substantial number of ECtHR convictions, and the lack of mutual trust (which in turn creates the impulse for a right to refuse the results of investigation measures as evidence. See also*A. Klip*, European Criminal Law. An integrative approach, 2009, p. 531.

17 *Christoffersen* (fn. 15), p. 187.

18 Book V of Aristotle's Nicomacean Ethics introduces proportionality as an abstract general principle. For an English translation of his book, see http://www.virtuescience.com/ethics5.html. See also *E. Engle*, The General Principle of Proportionality and Aristotle, in: L. Huppes-Cluysenaer/N. M.M.S. Coelho (eds.), Aristotle and the Philosophy of Law: Theory, Practice and Justice, 2013, p. 265 et seq. and *E. Engle*, The history of the general principle of proportionality: an overview, The Dartmouth Law Journal2012, vol. 10, p. 1 et seq.

19 Article (Question) 40 of the Second Part of the Second Part mentions proportionality in the context of states' self-defence. Articles 90-97 further define how one can decide whether an act is 'proportional'. An English translation of Aquinas' "Summa Theologica" can be found here: http://www.ccel.org/ccel/aquinas/summa/home.html.

20 The Convention on Human Rights stipulates that the limitations placed upon several procedural rights of the individual is not possible unless "*such as in accordance with the law and necessary in a democratic society* (…)".

European Court of Human Rights,[21] but also by the Court of Justice.[22] Scholars[23] also frequently refer to the three limbs of the proportionality test, and to the lack of a clear and consistent definition of its content.[24] In the following pages, it is intended to describe how these principles constrain states' competences in the area of investigative measures. This description will be limited to necessity and proportionality, as the subsidiarity principle is not considered an element that may be inserted into minimum standards.[25]

aa) Before acting: Necessity principle

The necessity principle means that the execution of a state action such as an investigative measure requires it to be necessary to attain its goal. The government cannot apply its competences arbitrarily: a state's competence to create criminal prohibition clauses and, consequently, to adopt investigative measures to establish whether such criminal prohibition clauses have been violated, is based on its duty to fight crime. In Klass and others v. Germany,[26] the Court stipulated that "*some compromise between the requirements for defending democratic society and individual rights is inherent in the system of the Convention (…)*". Obviously, the execution of an investigative measure should be necessary to reach the goal—in this case to gather evidence. On the other hand, the investigative measure should be adequate to reach this goal. Even though this might seem to smack of unassailable logic, scholars were correct in noting that it could occur

21 The limitation of the Convention's fundamental rights has been interpreted by the ECHR on many occasions. See for instance *Guja v. Moldova*, Application no. 14227/04, Judgment 12 February 2008, margin no. 59 (with regard to article 10) and *S.A.S. v. France*, Application no. 43835/11, Judgment 1 July 2014, margin no. 123-128 (with regard to article 9). For the interpretation of the different parts of the proportionality principle, see *infra.*

22 In its judgment of 11 December 2007, the Court stated that "*a restriction on* [a fundamental right of individuals] *can be accepted only if it pursues a legitimate aim compatible with the Treaty and is justified by overriding reasons of public interests. But even if that were the case, it would still have to be suitable for securing the attainment of the objective pursued and must not go beyond what is necessary in order to attain it*". See European Court of Justice (ECJ) 11.12.2007, case 438/05 (*International Transport Workers' Federation and Finnish Seamen's Union/Viking Line ABP and OÜ Viking Line Eesti*), [2007] ECR 772, margin no. 75.

23 *S. Tsakyrakis*, Proportionality: An assault on human rights?, International Journal of Constitutional Law (IJCL) 2009, p. 1 et seq. and *V. Negrut*, The Lisbon Treaty and the New dimensions of the Principles of Proportionality and Subsidiarity, Acta Universitatis Danubis 2010, nr. 3, p. 56 et seq.

24 For instance, with regard to the necessity principle, a structural application of this principle (in which the current 'issues' are solved so the test becomes clear for both applicants and governments) is suggested in literature. See for instance *J. Gerards*, How to improve the necessity test of the European Court of Human Rights, IJCL 2013, p. 466 et seq. and *Tsakyrakis*, IJCL 2009, p. 1 et seq.

25 Even though member states have a possibility of recourse to an investigative measure other than the one requested if this particular measure would, for instance, not be available in a similar domestic case. See *inter alia* art. 10 (1) EIO.

26 *Klass and others v. Germany*, Application no. 5029/71, Judgment 6 September 1978, margin no. 59.

that the effectiveness of an investigative measure would be based on factual, statistical or empirical information, causing difficulty in adequately assessing its suitability and/or effectiveness.[27]

At a legislative level, several European instruments incorporate the first part of the proportionality test. In the Framework decision of 27 November 2008, it was stipulated that "*Personal data may be collected by the competent authorities only for specified, explicit and legitimate purposes in the framework of their tasks and may be processed only for the same purpose for which data were collected.*"[28] Also in the area of data protection, is the issue of retention of the data, addressed by the CIS Decision of 30 November 2009: "*Data entered into the Customs Information System shall be kept only for the time necessary to achieve the purpose for which they were entered*".[29] The instruments which regulate the requests for cross-border gathering of evidence in another member state also contain certain provisions on the necessity for evidence-gathering,[30] but these relate to the attempt to avoid an abundance of mutual legal assistance requests rather than to the protection of the individual.

The ECtHR has also tried to define the conditions that need to be fulfilled before state interference can be regarded as 'necessary'. In Weber and Saravia v. Germany, the Court said[31] that "*when balancing the interest of the respondent State in protecting its national security through secret surveillance measures against the seriousness of the interference with an applicant's right to respect for his or her private life, it has consistently recognised that the national authorities enjoy a fairly wide margin of appreciation in choosing the means for achieving the legitimate aim of protecting national security. Nevertheless, in view of the risk that a system of secret surveillance for the protection of national security may undermine or even destroy democracy under the cloak of defending it, the Court must be satisfied that there exist adequate and effective guarantees against abuse. This assessment depends on all the circumstances of the case, such as the nature, scope and duration of the possible measures, the grounds required for ordering them, the authorities competent to authorise, carry out and supervise them and the kind of remedy provided by the national law*". In Handyside v. the United Kingdom,[32] the Court made it clear that the necessity principle is not fixed, but depends on the article invoked and the context of the case. As the legal instruments have already indicated, the necessity principle will mostly cause problems with regard to article 8. In other words, an investigative measure may be considered unnecessary because it is consid-

27 See for instance *J. Gerards*, IJCL 2013, p. 466 et seq.
28 Article 3.1. first sentence Framework Decision 2008/977/JHA of 27 November 2008 on the protection of personal data in the framework of police and judicial cooperation in criminal matters, OJ 2008 L 350.
29 Article 14.1 Decision 2009/917/JHA of 30 November 2009 on the use of information technology for customs purposes, OJ 2009 C 323/20.
30 See for instance article 7, (a) EEW and article 6.1.(a) EIO.
31 *Weber and Saravia v. Germany*, Application no. 54934/00, Judgment 29 June 2006, margin no. 106.
32 *Handyside v. the United Kingdom*, Application no. 5493/72, Judgment 7 December 1976, margin no. 48 et seq.

ered to be excessively invasive of privacy. An overview of some case law in which the necessity for forensic investigative measures (especially with regard to fingerprints and DNA profiles) was discussed may be found in S. and Marper v. the United Kingdom.[33]

ab) If the investigative measure is executed: Proportionality principle

The proportionality principle refers to the required balance between the interests served by the measure and the interests harmed by introducing it. The ECtHR has referred to these competing interests as the demands of general interest (aim sought) and the interest of the individual or the individuals concerned (means employed).[34] The disadvantages caused by the investigative measure (infringement of individual interests resulting from the liberty granted to states to execute an investigative measure) should be in balance with the indications that led to this.[35]

At European level, the proportionality principle is integrated into several instruments, not only in considerations,[36] but also in specific provisions. For instance, the Framework Decision of 2008 contains the principle, stating that "*Processing of personal data shall be lawful and adequate, relevant and not excessive in relation to the purposes for which they are collected*".[37] Proportionality is also mentioned as one of the conditions for issuing and transmitting an EIO: "*the issuing of the EIO is necessary and* ***proportionate*** *for the purpose of proceedings referred to* (…) *taking into account the rights of the suspected and accused persons*".[38] However, this limitation may be seen not only as a restriction on a state's competence with respect to the individual, but also as a mechanism for avoiding excessive exchange of EIO requests between member states (thereby achieving a balance between two states as opposed to between state and individual).

The ECtHR case law principally states that, even though the proportionality principle is an important principle that should be respected, "*in determining whether a fair balance exists, the Court recognises that the State enjoys a wide margin of appreciation with regard both to choosing the means of enforcement and to ascertaining whether the consequences of enforcement are justified in the general interest for the purpose of achieving the object of the law in question*".[39] With regard to the taking, and retention, of the results of forensic investigative measures, the Court has said that "*the interests of*

33 *S. and Marper v. the United Kingdom*, Application no. 30562/04 and 30566/04, Judgment 4 December 2008, margin no. 66-126.
34 *Agosi v. the United Kingdom*, Application no. 9118/80, Judgment 24 October 1986, margin no. 52.
35 Comparison shows member states prioritize differently. See *Ellis* (fn. 15), p. 187 and *T. Harbo*, The function of the proportionality principle in EU law, European Law Journal (ELJ) 2010, 158 et seq.
36 See considerations 11, 12 and 26 EIO.
37 Article 3.1. second sentence Framework Decision 2008/977/JHA of 27 November 2008 on the protection of personal data in the framework of police and judicial cooperation in criminal matters, OJ 2008 L 350.
38 Article 6.1. a) EIO.
39 *ECtHR, Agosi v. the United Kingdom* (fn. 35), margin no. 52.

data subjects and the community as a whole in protecting the personal data, including finger print and DNA information, may be outweighed by the legitimate interest in the prevention of crime. 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".[40] As was the case with the necessity principle, the proportionality principle plays its role in the context of article 8 ECHR.

b) Procedural safeguards for individuals to ensure 'fairness' of criminal proceedings

Besides limiting states' competence to execute investigative measures, individuals should also be granted sufficient defence rights to protect themselves whenever such investigative measures are executed. As it is questionable whether the substantive rights included in the Procedural Rights Roadmap are the ones (let alone the only ones) in need of minimum standards to restore mutual trust (and, consequently, mutual admissibility of evidence),[41] these cannot serve as a basis here. Instead, the ECHR will be the proper point of departure in this regard. Even though the ECHR does not ensure that all member states respect human rights, its content—which is shared by all member states—should be integrated into minimum standards to countervail states' unproductive refusals to cooperate in cases of human rights breaches.[42]

In the context of the research, it was decided to subsume the individuals' rights under the general concept 'fairness of criminal proceedings'.[43] The right to a fair trial is embedded in a great number of instruments[44] of which the ECHR is only one of many. Fairness in the criminal process is broader than the right to a fair trial as enshrined in article 6 ECHR, as it also imports other rights essential to avoid abuse and manipulation of the criminal process and the consequent reduction of individual liberties.[45] Even though the right to a fair trial is a very broad concept, which has been further broadened by ECtHR case law,[46] the breach of article 8 of the Convention can also indirectly impact the right to a fair trial. Therefore, in the context of this research,

40 *ECtHR, S. and Marper v. the United Kingdom* (fn. 34), margin no. 104.
41 *R. Loof*, Shooting from the Hip: Proposed Minimum Rights in Criminal Proceedings Throughout the EU, ELJ 2006, p. 421 et seq.
42 *C. McCartney*, Doing the Hokey Cokey with EU Policing and Judicial Cooperation, The Journal of Criminal Law 2013, 543 et seq.
43 Research can however still prove otherwise. If the requesting member states would refuse the results of investigative measures executed in another state because of a breach of individuals' rights which cannot be classified under the scope of 'fair criminal proceedings', this division would have to be revised.
44 *D. Harris*, The right to a fair trial in criminal proceedings as a human right, International and Comparative Law Quarterly 1967, p. 352 et seq.
45 *M. Cherif Bassiouni*, Human rights in the context of criminal justice: Identifying international procedural protections and equivalent protections in national constitutions, Duke Journal of Comparative and InternationalLaw (DJ)1992-93, p. 235 et seq.
46 See for instance the references in *Bassiouni* (fn. 46),p. 235 et seq.

it is preferable to refer to 'the fairness of criminal proceedings', which does—or at least should—not give the impression that this category of fundamental principles is merely based on the three paragraphs of article 6 ECHR. Evidence gathered in violation of other ECHR articles can also lead to unfairness in the sense of article 6 where it is, nonetheless, admitted in the courtroom (*i.e.* not rendered inadmissible). This has occurred in several cases adjudicated by the Strasbourg Court. In Allan v. the United Kingdom, the Court stated that the examination of the fairness of the proceedings "*involves an examination of the 'unlawfulness' in question and, where a violation of another Convention right is concerned, the nature of the violation found*".[47] In this case, the admission at the trial of evidence obtained on the basis of an illegal investigative measure constituted a breach of article 6. In Jalloh v. Germany, the impugned evidence was gathered lawfully according to domestic law, but contrary to article 3 of the Convention. Due to the violation of the right of the accused not to incriminate himself, article 6 was also breached. The Court even stated that "*the use of evidence obtained in violation of article 3 in criminal proceedings raises serious issues as to the fairness of such proceedings*"[48], a statement recapitulated in Göçmen v. Turkey.[49] In Harutyunyan v. Armenia,[50] the use of evidence obtained in violation of article 3 also rendered the procedure, as a whole, unfair (in violation of article 6). The opposite has, however, also occurred. In some cases, the gathering of certain evidence in breach of some ECHR provisions was found not to equal a breach of the right to a fair trial as embedded in article 6 ECHR. In Khan v. the United Kingdom, the Court stated that "*while article 6 guarantees the right to a fair hearing, it does not lay down any rules on the admissibility of evidence as such, which is therefore primarily a matter for regulation under national law*"[51]; the court, therefore, found that the use of contested evidence in the domestics courtroom did not breach the right to a fair trial where there had been sufficient opportunities to contest the evidence.[52] In P.G. and J.H. v. the United Kingdom,[53] the violations of articles 8 and 13, due to the use of certain investigative measures, were again found not to equate to a violation of article 6 ECHR. In Bykov v. Russia,[54] it was held that a violation of article 8 did not imply that the evidence was obtained in violation of article 6 of the Convention.

47 *Allan v. the United Kingdom*, Application no. 48539/99, Judgment 5 November 2002, margin no. 42.
48 *Jalloh v. Germany*, Application no. 54810/00, Judgment 11 July 2006, margin no. 105.
49 *Göçmen v. Turkey*, Application no. 72000/01, Judgment 17 October 2006, margin no. 73.
50 *Harutyunyan v. Armenia*, Application no. 36549/03, Judgment 28 June 2007, margin no. 66.
51 *Khan v. the United Kingdom*, Application no. 35394/97, Judgment 12 May 2000, margin no. 34.
52 *ECtHR, Khan v. the United Kingdom* (fn. 52), margin no. 38.
53 *P.G. and J.H. v. the United Kingdom*, Application no. 44787/98, Judgment 25 September 2001, margin no. 80.
54 *Bykov v. Russia*, Application no. 4378/02, Judgment 10 March 2009, margin no. 104.

2. Fundamental principles of law derived from the 'quality requirement'

Besides the 'general' requirements to ensure admissibility of the results of investigative measures, the current area of forensic research requires the meeting of a quality assurance standard to ensure admissibility. The quality of forensic evidence may be threatened in two important ways. On the one hand, several criteria are put into place to ensure the adequacy and reliability of the treatment of forensic evidence (achieving the greatest 'objectivity' possible), precluding factors such as out-dated examination methods, ambiguous evidence, or storage conditions being invoked to prevent its ultimate use in court. On the other hand, however, adequate and reliable treatment of evidence will not always lead to qualitative evidence *per se*, as some results, for instance, are rather open to interpretation.[55] To reach the desired goal, it is also necessary to ensure the competence of the actors involved in the investigative process. Not only does this refer to the persons performing the analysis, but also to the 'bigger picture' (laboratories, organisation structures) in which they are located.

a) Scientific standards to ensure the accuracy of the methods to gather forensic evidence

It may be said that a member state's examining authority receiving the results of the investigative measure will not always be able to decide whether the evidence resulting from this measure can be considered reliable as its expertise is mostly limited to legal issues. As the reliability of the evidence depends not only on legal aspects, but also on other non-legal issues such as the analysis methodology, the use of a certain method or equipment in a certain case, or other scientific elements—the reliability of which cannot be examined by a layman—two subcategories need to be distinguished within the larger category of scientific standards for actions to ensure the objectivity and reliability of forensic evidence.

On the one hand, the reliability of the forensic evidence will depend on several **legal** aspects; in this regard, compliance with the applicable legal conditions for reliability may be adjudged by the receiving authority. The Court has already given its view on the reliability of certain types of evidence, such as, for instance, hearsay evidence.[56] In one case, where charges were filed in circumstances where the prosecution witness was not available for cross-examination, the considerations of the court were quite simi-

55 *H. C. Lee*, Forensic science and the law, Connecticut Law Review (CLR)1993, p. 1117 et seq.

56 The Court has stated that, even though it admits that allowing untested hearsay evidence to be adduced as sole or decisive evidence can be dangerous, it cannot automatically be regarded as being unreliable. "*Rather, it is predicated on the principle that the greater the importance of the evidence, the greater the potential unfairness to the defendant in allowing the witness to remain anonymous or to be absent from the trial and the greater the need for safeguards to ensure that the evidence is demonstrably reliable or that its reliability can properly be tested and assessed.*" See *Al Khawaja and Tahery v. the United Kingdom*, Application no. 26766/05 and 22228/06, Judgment 15 December 2011, margin no. 139.

lar.[57] Several American cases have also laid down conditions for the use of evidence resulting from video conferences in the courtroom.[58] In this context, some national legislations have also laid down conditions to ensure the reliability of the videoconferencing of minors.[59]

Reliability does not always influence admissibility. In fact, the ECtHR has decided on several occasions that judging on the admissibility and the value of evidence (which can also be affected by reliability issues) is traditionally the preserve of the national legislative authorities and courts, leaving the ECtHR with only a right to examine whether, for instance, the proceedings were fair.[60] However, in some cases, the infringement may be considered to be so fundamental that non-observance directly causes the non-admissibility of the resulting evidence. This subcategory of legal reliability is, therefore, closely linked to the second category concerning procedural safeguards, as some of the conditions for legally reliable forensic evidence may also be regarded as a way of protecting the individual. For instance, offering the possibility of retesting a sample, such as, for instance, a DNA sample, is quite commonly accepted within the forensic community—and even considered one of the key elements[61]—of ensuring the reliability of the forensic analysis. At the same time, this retesting opportunity may be considered as a type of right to appeal, which is one of the procedural safeguards ensuring fair criminal proceedings. However, the ECtHR case law needs to be thoroughly reviewed to establish exactly in which cases the non-reliability of the execution of an investigative measure can threaten admissibility. Whereas the Court has, for instance, decided in Jalloh v. the United Kingdom that the right not to incriminate oneself is applicable with regard to drug obtaining,[62] the same fundamental right cannot be invoked when the obtaining of certain materials from an accused person such as blood or urine is done for the purpose of DNA testing.[63]

On the other hand, the **non-legal** reliability of the forensic evidence must also be guaranteed in order to ensure its admissibility. From a scientific point of view, a lack of quality equals non-scientific reliability and, as such reliability is a preliminary condition for the execution of any forensic investigation, it thereby results in the non-admissibility of the results of the scientific investigative measure.[64] As such, reliability cannot merely influence the probative value of evidence after admitting this evidence in

57 See for instance *Gani v. Spain*, Application no. 61800/08, Judgment 19 February 2013, margin no. 36-42.

58 For an overview, see *R. Kostelak*, Videoconference Technology and the Confrontation Clause, 2014, p. 7 (http://scholarship.law.cornell.edu/cgi/viewcontent.cgi?article=1049&context=lps_papers).

59 In Belgian law for instance, the court may decide the exclusion of eye contact between the minor and the defendant. See article 190bis, paragraph 4 of the Belgian Code of Criminal Procedure.

60 *Gäfgen v. Germany*, Application no. 22978/05, Judgment 1 June 2010, margin no. 162-165.

61 *J. H. DiFonzo*, The crimes of crime labs, Hofstra Law Review 2005, vol. 34, p. 1 et seq.

62 *Jalloh v. Germany*, Application no. 54810/00, Judgment 11 July 2006, margin no. 110-116.

63 *Saunders v. the United* Kingdom, Application no. 19187/91, Judgment 17 December 1996, margin no. 69.

64 *T.F. Kiely*, Forensic science and the criminal law, 2006, p. 515.

the courtroom. For instance, whenever a person is insufficiently competent to execute a certain forensic investigative measure, it cannot be said that this evidence will be deemed admissible, but it may, nonetheless, be viewed as having less probative value. The scientific community considers the proficiency of its actors a requirement for assessing reliability and scientific admissibility even before evidence can or cannot be considered admissible for legal purposes.[65] Maximising the chances of legal admissibility necessarily means the integration of the conditions for non-legal or scientific admissibility into the minimum standards. These initiatives should be developed within the scientific community itself. That mistakes have been made with regard to the reliability of forensic techniques and forensic evidence is well known.[66] Within this subcategory, the common quality standards for testing on the one hand and the standardisation of interpretation on the other hand need to be distinguished as the two main goals to reach.[67]

Firstly, **common quality standards for forensic examination** need to be developed. Even though the quality standards for testing relate to both accreditation issues and the goal of qualitative examination, this category will focus only on actions, whereas the fourth category will discuss the actors. Actions refer to both the treatment of the materials tested (before, during and after its examination) and the analytical techniques applied to gather and/or examine these materials, as these together make or break scientific reliability.[68]

With regard to the **treatment of the materials tested**, this enquiry will greatly benefit from the research that has already been conducted—and the guidelines that have been provided—by the ENFSI Quality and Competence Committee,[69] as well as its concrete effect within the ENFSI Working Groups.[70] The project coordinated by ENFSI on improving forensic methodology across Europe (IFMAE), by identifying the

65 ANAB, ISO/IEC 17025 Accreditation Requirements for Forensic Testing Laboratories, 2015, p. 49 (http://anab.org/media/31593/ma_3011_17025_forensic_requirements.pdf).

66 *J. D. Gabel*, Realizing reliability in forensic science from the ground up, Journal of Criminal Law and Criminology (JCLC) 2014, p. 283 et seq.

67 *P. Rybicki*, Standardisation in the area of scientific evidence in the European Union, in: A. Verhage/J. Terpstra/P. Deelman/E. Muylaert/P. Van Parys(eds.), Policing in Europe, Journal of Police Studies 2010, p. 91 et seq.

68 *J. E. Laurin*, Remapping the Path Forward: Toward a Systemic View of Forensic Science Reform and Oversight, Texas Law Review2013, p. 1051 et seq.

69 *Standing Committee for Quality & Competence*, Guidance on the production of best practice manuals within ENFSI, 2008, p. 27 (http:// enfsi.eu/sites/default/files/documents/bylaws/guidance_document_for_best_practice_manuals.pdf).

70 See for instance *Working Group for Forensic Speech & Audio Analysis*, Best practice guidelines for ENF analysis in forensic authentication of digital evidence, 2009, p. 10. (http://enfsi.eu/sites/default/files/documents/forensic_speech_and_audio_analysis_wg_-_best_practice_guidelines_for_enf_analysis_in_forensic_authentication_of_digital_evidence_0.pdf) and *Working Group Forensic IT*, Guidelines for best practice in the forensic examination of digital technology, 2009, 30 p. (http://enfsi.eu/sites/default/files/documents/forensic_it_best_practice_guide_v 6_0.pdf).

best methodologies for specific forensic examinations[71]—which will conclude in December 2015—will play a vital role in this contribution. Also, the work done by the FBI Scientific Working Groups[72] will be useful for exploring, not only the best practices in the United States, but also the elements that such practices have in common with their European counterparts. Other existing comparative researches, such as the project 'Safeguarding the use of expert evidence in the European Union'[73] will also be taken into account.

With regard to the **analytical techniques used to gather or examine certain materials**, it may be said that the criteria for acceptance or refusal of new scientific techniques for forensic use have already been subject to extensive discussion, which has taken place at a global level.[74] In the United States, this battle has been fought at both the level of the courts and in a scholarly context. There have been several cases on the reliability, and consequent admissibility, of forensic evidence, which has led to discussions[75] and critiques[76] in literature. The well-known 2009 Report of the National Academy of Sciences also emphasised that much more research needs to be done to ensure the validity of the methods used by several forensic evidence disciplines.[77] At a European level, no similar courtroom judgments exist. Nevertheless, the European plan is, quite similar to its American counterpart—to strengthen the empirical scientific basis of forensic science and even to develop complete process standards.[78]

71 For more information, see http://ec.europa.eu/dgs/home-affairs/financing/fundings/projects/stories/ifmae_en.htm.

72 For an overview, see http://nij.gov/topics/forensics/lab-operations/Pages/scientific-working-groups.aspx.

73 *The Law Society of England and Wales*, Safeguarding the use of expert evidence in the European Union, 2009, p. 33. (http://ecba.org/extdocserv/projects/expertwit/SafeguardingExpertEvidenceEUProjectRep2009.pdf).

74 *Y. Vermylen*, The role of the forensic expert in criminal procedures according to Belgian Law, Forensic Science International (FSI) 2010, nr. 201, p. 8 et seq.

75 Some for instance stated that lab forensic disciplines (for instance toxicology and DNA), leading to quantitative results are more reliable than disciplines based on the interpretation of patterns observed (for instance fingerprints, toolmarks), leading to qualitative results. See *Gabel*, JCLC 2014,p. 283 et seq. Similar remarks are made in *P. Traest*, Judicial control on the gathering and reliability of technical evidence in a continental criminal justice system, 16th International Conference of the International Society for the Reform of Criminal Law Charleston, USA, 2002, p. 13.

76 For an overview, see amongst others *J.L. Mnookin, S. A. Cole, I. E. Dror, B. A. J. Fisher, M. M. Houck, K. Inman, D. H. Kaye, J. J. Koehler, G. Langenburg, D. M. Risinger, N. Rudin, J. Siegel and D. A. Stoney*, The Need for a Research Culture in the Forensic Sciences, UCLA Law Review2011, p. 725 et seq. and *Office of the Attorney-General*, Improving the Practice and Use of Forensic Evidence, p. 32. (http://ag.ca.gov/meetings/tf/pdf/Justice_Project_Report.pdf).

77 *Committee on Identifying the Needs of the Forensic Sciences Community and National Research Council,* Strengthening Forensic Science in the United States: A Path Forward, 2009, p. 352.

78 ENFSI Strategic Plan 2014-2017, 2014, p. 1. (http://enfsi.eu/sites/default/files/documents/reports_and_plans/enfsi_strategic_plan_2014-2017.pdf).

Secondly, the **interpretation** of the forensic findings should also be subjected to standards. Outsiders' impressions[79] of the forensic examination 'scene' reveal that there might be some doubts about the quality of the forensic analyses conducted. This critique refers to a broad range of aspects related to the investigation measure, such as the basis for the estimation of the error rates. At the same time, it has been observed that the interpretation and appreciation of forensic evidence by outsiders (such as police officers,[80] prosecution and defence attorneys[81] and the academic community[82]) is inadequate, as the meaning (and consequently, the reliability) of the findings is unclear to them.[83] Therefore, the reliability of forensic evidence partly depends on the improvement of the communications between producers of forensic evidence and the ultimate users of this evidence (by definition not scientists). Within ENFSI, some efforts have already been made to improve this cooperation. For example, the ENFSI Research and Development Committee has been created, which aims to act as a coordinator of relevant ENFSI entities on matters of research and development in a broad sense by, inter alia, "*supporting and facilitating communication between all actors involved in research and forensic and end users to affect the transfer of knowledge*".[84] More recently, in response to a project aiming to standardise and improve evaluative reporting in ENFSI laboratories, the ENFSI guideline for evaluative reporting in forensic science has been developed[85]. It remains to be seen whether the roadmap developed in this research will be followed up and whether additional standards will be necessary.

b) Proficiency conditions for the participating actors in order to ensure the objectivity and reliability of the forensic evidence

Even though this category is closely linked to the third—as the competence of the participating actors also leads to a greater reliability of the forensic results[86]—its main goal is to ensure the proficiency of the actors. By contrast with the previous category, this one focuses on the actors rather than their actions. As the competence of the actors de-

79 See for instance *X*, Science in Court, Nature 2010, p. 325; *J. H. DiFonzo*, The crime of crime labs, Hofstra Law Review 2006, p. 1 et seq. and *Gabel*, JCLC 2014,p. 283 et seq.
80 *S. Bradbury and A. Feist*, The use of forensic science in volume crime investigations: a review of the research literature, 2005, p. 92. (https:// gov.uk/government/uploads/system/uploads/attachment_data/file/115849/hoor4305.pdf).
81 *Lee*, CLR 1993, p. 1117 et seq.
82 *X*, Science in Court, Nature 2010, p. 325.
83 *M. J. Saks*, Forensic identification: From a faith-based "Science" to a scientific science, *Forensic Science International* 2010, nr. 201, p. 14 et seq.
84 Terms of Reference Standing Committee for Research & Development, 2011, p. 2. (http:// enfsi.eu/sites/default/files/documents/bylaws/terms_of_reference_rd_sc.pdf).
85 ENFSI Guideline for evaluative reporting in forensic science, 2010, p. 128. (http:// enfsi.eu/sites/default/files/afbeeldingen/enfsi_booklet_m1.pdf).
86 For instance because a better training will protect the forensic scientist from foreign influences. See *D. M. Risinger, M. J. Saks, W. C. Thompson and R. Rosenthal*, The Daubert/Kumho Implications of Observer Effects in Forensic Science: Hidden problems of Expectation and Suggestion, California Law Review2002, vol. 90, p. 3 et seq.

pends not only on the education or training of the executors, but also on several aspects relating to the bigger forensic infrastructure in which these actors function (laboratories, organisations, and so on), a distinction needs to be made between the individuals on the one hand and the larger organisations in which they function (as an employer or as a representative) on the other.

Firstly, the objectivity and reliability of forensic evidence depends on the **competence of the individual** that gathers or analyses the forensic evidence. Some studies have listed the educational requirements for some of the forensic research disciplines.[87] More general standards have also been developed and issued.[88] Besides the need for expertise in the forensic discipline of which the investigative measure is a part, there is also a need for awareness of, and protection from, extraneous, potentially making information biased and intentional/unintentional suggestion influencing an expert's opinion.[89] These critiques are also relevant as, in the future, many forensic research methods will be based on quantitative data (and thus not on 'personal probabilities'), and the focus on the actor (at least in those areas) will become irrelevant.[90] Generally speaking, the actor executing the concrete investigative measure and assessing the forensic evidence should be competent. The specific qualifications, training and evaluations that this requirement gives rise to will depend on the specific forensic research discipline.

The **competence of the laboratory** is also necessary in order to ensure the compliance of the minimum standards with all fundamental principles of law, or, more 'scientifically speaking', to ensure the quality of the evidence. The EU granted ENFSI the status of monopolist in 2009, which means that ENFSI is expected to speak in the name of the entire European forensic science community.[91] ENFSI membership requires accreditation in accordance with the ISO/IEC 17025 standard. With regard to DNA and dactyloscopic data, the EU has issued a Decision[92] on the accreditation of organisations carrying out laboratory activities, with a view to according equal reliability to foreign forensic evidence (which once more proves the close connection between

87 See for instance *Committee on Identifying the Needs of the Forensic Sciences Community and National Research Council*, Strengthening Forensic Science in the United States: A Path Forward, 2009, p. 352.

88 *ENFSI Standing Committee for Quality and Competence*, Performance based standards for forensic science practitioners, 2004, p. 45 (http:// enfsi.eu/sites/default/files/documents/performance_based_standards_for_forensic_science_practitioners_0.pdf).

89 *D. M. Risinger, M. J. Saks, W. C. Thompson and R. Rosenthal*, The Daubert/Kumho Implications of Observer Effects in Forensic Science: Hidden problems of Expectation and Suggestion, California Law Review 2002, vol. 90, p. 3 et seq. and *Vermylen*, FSI 2010, p. 8 et seq.

90 *A. C. van Asten*, On the added value of forensic science and grand innovation challenges for the forensic community, Science and Justice 2014, p. 170 et seq.

91 The ENFSI also collaborates closely with the European Cooperation of Accreditation. See *W. Neuteboom and T. Kjeldsen*, ENFSI – The European Network of Forensic 20 Years of Cooperation, 2015, http://accreditation.newsweaver.co.uk/ilac/1e5gj17ucl1xxa4lf39ywj?a=2&p=48625945&t=18371544.

92 Council Framework Decision 2009/905/JHA of 30 November 2009 on Accreditation of forensic service providers carrying out laboratory activities, PB 2009 L 322/14.

the third and fourth categories). The vision for a European Forensic Science 2020 also contemplates that forensic science institutes and laboratories should be accredited, and dedicated not only to DNA and finger prints, but to forensic science in general.[93]

The individual requirements apply not only to the personnel of the forensic laboratories, but also to the independent experts providing forensic services. However, this competence requirement also applies to such experts, as these individuals are also gathered in federations (such as the European Federation of Psychiatric Trainees[94] or the European Academy of Paediatrics[95]) which take initiatives to ensure that their members remain sufficiently proficient.

IV. Conclusion

In recent years, more and more attention has been paid to the cross-border gathering and use of evidence. Even though, thus far, this awareness has been used only to regulate the cross-border gathering of evidence, the time seems right to extend these legal actions to the subsequent transfer of the evidence and its use in the courtrooms of other member states. Member states have expressed their willingness to address the issue of evidence becoming lost due to national legal differences and have published their preconditions for accepting foreign evidence, the necessary basis for legal action being the development of minimum standards, as provided for by article 82.2 TFEU. The next step will be to integrate member states' considerations in enforceable minimum standards that can be applied throughout the entire European Union. This poses a particular challenge with regard to forensic evidence, as it combines both the fair balance requirement (a specification applicable to all investigative measures) and the quality requirement (relating to the forensic science community) as fundamental principles of law to be integrated into the minimum standards. If successful, it will, however, prove the likelihood of a (general) free movement of evidence: the bilateral bridges can be replaced by a European forensic (air)space, in which evidence can finally move freely between all member states.

93 Council of the European Union, Council conclusions on the vision for European Forensic Science 2020 including the creation of a European Forensic Science Area and the development of forensic science infrastructure in Europe, http://consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/jha/126875.pdf.

94 http://efpt.eu/wordpress/.

95 http://www.eapaediatrics.eu/about.ehtml.