Introduction

On 13 and 14 December 2011, the Council approved 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. In order to foster cooperation between police and judicial authorities across the European Union with a view to creating a European Forensic Science Area by 2020, the Council conclusions called for Member States and the Commission to work together to make progress on several areas, aiming to ensure the even-handed, consistent and efficient administration of justice and the security of citizens.
On 28 April 2015, the Commission recalled in its Communication on the European Agenda on Security (COM(2015) 185 final) that ‘forensic science is critical to law enforcement and prosecution. Law enforcement and judicial authorities must be confident that the forensic data they rely on is of high quality, including if the data comes from another Member State. It is therefore important to ensure that the forensic data exchanged through information exchange systems, such as the Prüm framework for fingerprints and DNA profiles, can be effectively used in court. A European Forensic Area, to align the processes of forensic service providers in Member States, would foster cooperation and ensure confidence. The Commission will first engage with the relevant stakeholders in a stocktaking exercise and then define priorities and possible measures to achieve this goal. This may include exchange of best practices and the definition of common minimum standards.’

As a first step in the stocktaking exercise, a questionnaire was drafted that was sent out to Member States in June 2015 to assess (i) the current status of implementation of the 2011 Council conclusions by Member States, (ii) what remains needed to achieve a European Forensic Science Area by 2020, and (iii) whether the 2011 objectives remain valid, 5 years after their adoption, or whether new/updated ones are needed. 24 Member States responded to the questionnaire. This paper contains an overview of the answers provided. As not all respondents replied to all the questions, the numbers shown in the analyses vary. Also, from one Member State two responses were received. Chapter 1 of this document gives an executive summary of the answers provided. In each paragraph of chapter 2 (Results) the answers to the questions on the different objectives of the Council conclusions of 2011 are analysed in more detail. Annexed to the document is the original questionnaire. Member States interested in the individual answers provided by the respondents, can contact Ms. Mijnije Aarts via w.m.aarts@minvenj.nl.
As part of a stocktaking exercise to the state of play on the Council Conclusions of 2011 on the creation of an European Forensic Science Area, a questionnaire was drafted and sent out to the Member States in June 2015. In answer to this request, 24 Member States responded to the questionnaire. The questionnaire was divided in general questions, questions around the objectives of the Council Conclusions and questions on other relevant items. This executive summary gives an overview of the answers provided.

**General questions**

The quality of the services provided is important to all respondents of the questionnaire. The competence of the individual experts of forensic service providers is of great importance to all respondents. Also, the accreditation of the forensic service provider and the speed of the service provided is an important element to most respondents. The respondents are somewhat divided over the importance of the possibility of contra-expertise and the price of the services: About two thirds think it of great or average importance, the other respondents see this as of little or no importance or cannot value the importance.

**Objective 1: Accreditation of forensic science institutes and laboratories.**

Accreditation of forensic science institutes and laboratories, is viewed as very important by a large majority of respondents. Whereas several respondents think accreditation could be stimulated by making it mandatory under national law or an EU directive (or equivalent), other respondents think accreditation should be reached voluntarily. The most important hurdle mentioned to achieving objective one is budget. Even so, most respondents have at least one forensic service provider that is accredited under ISO 17025.

**Objective 2: Respect for minimum competence criteria for forensic science personnel**

Respect for minimum competence criteria for forensic science personnel, is viewed as very important by a large majority of respondents. Most respondents see certification of forensic personnel by uniform competence standards as important to realise objective 2. The most important hurdle mentioned to achieving objective two is budget. Still, a large majority of respondents have at least one forensic service provider that has a certification program for their forensic personnel.
Objective 3: Establishment of common best practice manuals (BPMs) and their application in daily work of forensic laboratories and institutes

Establishment of common best practice manuals and their application in daily work of forensic laboratories and institutes, is viewed as important by almost all respondents. The majority of respondents thought that use of BPMs should be voluntary. One important hurdle mentioned to achieving objective three is budget. All respondents state that BPMs are used by their forensic service providers. Of note, several respondents mentioned the European Network of Forensic Science Institutes (ENFSI) as an external body that develops BPMs.

Objective 4: Conduct of proficiency tests /collaborative exercises in forensic science activities at international level

Proficiency tests already take place for a wide variety of topics in view of a wide range of purposes. Hurdles of budgetary, technical, legal nature etc. are encountered. Certain types of proficiency tests are still missing and ENFSI could play a role in filling the gaps. The conduct of such tests is considered important for the achievement of the European Forensic Area by 2020 by all respondents. However, only 4 of them stated that this should be made mandatory by law.

Objective 5: Application of minimum quality standards for scene-of-crime investigations and evidence management from crime scene to court room

Minimum quality standards for scene-of-crime investigations and evidence management from crime scene to court room exist in only 8 of the 22 Member States which replied to the questionnaire. However, most Members States consider that such standards, at national and international level, are of great importance for the achievement of the European Forensic Area 2020. The actions which were pointed out as relevant in this sense included, among others, harmonisation, financing, improved coordination, increased human resources etc.
Objective 6: Recognition of equivalence of law enforcement forensic activities with a view to avoiding duplication of effort through cancellation of evidence owing to technical and qualitative differences, and achieving significant reductions in the time taken to process crimes with a cross-border component

With respect to the exchanges performed in relation to this objective, respondents underlined the existence of channels like the Prüm system or the classical police channels like Interpol, Europol, Sirene etc. Respondents also mentioned legislation (national and/or international) as an instrument to achieve this objective.

Objective 7: Identification of optimal and shared ways to create, update and use forensic databases

Most respondents find this objective important. The replies identified several actions which could contribute to the creation, updating and use of forensic databases, among which: harmonisation of data generated in different countries, EU funding for IT standardised equipment or support for current initiatives regarding shared databases and information systems, such as ENFSI's project "Towards the Development of Pan-European Databases in Forensic Science".

Objective 8: Use of advances in forensic science in the fight against terrorism, organised crime and other criminal activities

Use of advances in forensic science in the fight against terrorism, organised crime and other criminal activities, is viewed as largely important by a clear majority of respondents. Whereas DNA and fingerprint technology is the basic forensic technique for all respondents, increasing importance is given to new technologies, in particular to digital forensics. The most important hurdles mentioned to achieving the objective are of budgetary and technical nature. Even so, most respondents believe that the objective can be achieved by 2020. A large majority of respondents sees the exchange and sharing of advances between the forensic providers in all Member States as pre-condition for a European Forensic Science Area.
Objective 9: Forensic awareness, in particular through appropriate education and training of the law enforcement and justice community

Forensic awareness, in particular through appropriate education and training of the law enforcement and justice community, is viewed as very important by a clear majority of respondents. The most important hurdle identified to achieve the objective is the lack of human resources. There are some doubts among respondents that the objective can be easily achieved. According to the respondents the judicial system is less prepared to absorb forensic knowledge, but better forensic awareness would be particularly beneficial for police-justice cooperation as well as for information exchange between national justice systems.

Objective 10: Research and development projects to promote further development of the forensic science infrastructure

Research and development projects to promote further development of the forensic science infrastructure, are viewed as rather important by a clear majority of respondents. A large majority of forensic providers pursues R&D projects with forensic providers in other countries. This is not so well established for cooperation with industry. A lack of qualified personnel and human resources is identified as the most important hurdle for R&D collaboration. With respect to the set-up of R&D projects the respondents assign the role in initiating and funding to a combination of actors (Commission, Member States, forensic providers, companies, etc.). With a view to its contributions to a European Forensic Science Area respondents underline the positive long-term effects of R&D activities.

Other relevant issues

Accreditation and the competence of forensic personnel are seen as the most important objectives. The forensic priority areas identified are cyber/digital forensics, DNA and fingerprints. According to most respondents networking and knowledge management will particularly support the implementation of the European Forensic Science Area 2020. For most respondents ENFSI plays a natural role in this regard, which should be further developed. The Commission is expected to launch calls for proposals and provide funding.
Chapter 2: Results

General questions

All of the 23 respondents have at least one police or state owned forensic service provider in their Member State. Only 6 respondents also mention private forensic science providers and/or private individual forensic scientists working in the criminal justice system of their Member State. The approximate budget of the individual forensic service providers ranges from € 300,000,- to € 66,000,000,-. The number of staff members of a forensic service provider ranges from 4 to over 2000 employees. Also the case load varies between the providers from 80 cases per provider per year in a small Member State to around 150,000 cases per provider per year in a large Member State.

As to the elements that are important in relation to the service provided by the forensic service providers, 21 of the 22 respondents find the quality of the service provided of great importance, only one respondent finds this of average importance. The competence of the individual expert is of great importance to all 22 respondents. The respondents were divided over the importance of the price of the services provided: 8 respondents find the price of great importance, 7 of average importance, 5 of little importance and 2 respondents find it of no importance. The availability of the services provided is of importance to the majority of the respondents, to 9 it is of great importance and to 9 of average importance. Only 4 respondents find the availability of little or no importance or could not value the importance. The speed of the service provided is important to all of the respondents (15 answered great importance, 7 answered average). When it comes to the element that a supplier provides suggestions for further forensic research if applicable, more than half of the respondents find this of average importance (13 out of 22), 5 of great importance and 4 of little importance. The importance of the possibility of contra-expertise is important to about two thirds of respondents (7 answered great and 7 answered average importance). 6 respondents think it is of little importance and 2 respondents could not value the importance. To the question whether it is important that the supplier is accredited for the services provided, a majority of respondents (14 out of 22) answered that it is of great importance and 5 answered it is of average importance. Only 3 respondents think it is of little importance.
Summary of responses on the general questions

The quality of the services provided is important to all respondents of the questionnaire. The competence of the individual experts of forensic service providers is of great importance to all respondents. Also, the accreditation of the forensic service provider and the speed of the service provided is an important element to most respondents. The respondents are somewhat divided over the importance of the possibility of contra-expertise and the price of the services: About two thirds think it of great or average importance, the other respondents see this as of little or no importance or cannot value the importance.

Objective 1: Accreditation of forensic science institutes and laboratories

A large majority of Member States (21 out of 22) responded that they have at least one forensic service provider that is accredited under ISO 17025. Only three of these 21 responding Member States also have forensic service providers accredited under ISO 17020. The providers often had very many accredited forensic activities.

For most respondents (15 of 22) there were no obligations under national law for accreditation of forensic activities (other than the implementation of the Council Decision 2009/905/JHA). Five respondents answered there were obligations under national law. One respondent mentioned that accreditation is a prerequisite for ENFSI membership, whereas one other respondent mentioned that it is indirectly implied in other legislative norms/rules.

The hurdle mentioned most to achieve objective 1 by 2020 was budget (15 of 21 respondents). Other hurdles mentioned were: lack of (qualified) personnel, time involved with accreditation, unawareness of the importance of accreditation, getting CSI units accredited, the complexity of the forensic field (different providers under different directorates), lack of uniformity in the approach of the accreditation, legal hurdles, lack of some components needed for accreditation, such as proficiency tests in certain fields of expertise. Five respondents saw no hurdles. Even so, the majority of respondents (17 of 23) mentioned objective 1 could be achieved by 2020 or is already achieved in their country. Only two respondents answered that objective 1 could not be achieved. Four respondents thought it would be difficult to achieve objective 1 or that it could only partly be achieved (for example, not for all forensic science service providers or not for all fields of expertise).
When asked what is missing or what actions need to be taken to achieve objective 1 by 2020, ten respondents mentioned difficulties, such as (lack of) budget/resources, laboratories that are too small to be able to reach the required quality level, how to combine the accreditation process with the routine activities, the lack of a central structure that manages accreditation of the whole service, infrastructure, recruitment of qualified personnel, required training, more interest from heads of police.

A large majority of respondents (20 of 23) find accreditation of forensic activities by uniform standards of great importance, 3 respondents answered it is of average importance. As to how accreditation should be stimulated if important, a small majority of respondents (15 of 25) answered accreditation should be mandatory under national law, whereas one respondent answered it should be voluntary. Two respondents considered mandatory accreditation as counterproductive. Four respondents mentioned that an EU directive (or equivalent) could be used. Other options mentioned were: a guideline in each Member State (1 respondent), ISO (1 respondent) and mandatory supreme police command (1 respondent).

A majority of respondents (16 of 23) thought accreditation, if important, should consist of minimum uniform standards, 4 answered advanced uniform standards. Other options mentioned were: accreditation should comply with Council decisions and fulfil national needs (one respondent), ENFSI standards should be used (one respondent) and existing standards (such as ISO 17020/17025, ILAC G19:08/2014 and best practice manuals) should be used (one respondent).

When asked who should assess the accreditation, 12 out of 23 respondents answered both international and national auditors, 8 answered national auditors. One respondent answered international auditors. One respondent answered national or international, whatever is available. One respondent suggested national and European auditors.

Summary of responses on objective 1

Objective 1, accreditation of forensic science institutes and laboratories, is viewed as very important by a large majority of respondents. Whereas several respondents think accreditation could be stimulated by making it mandatory under national law or by a EU directive (or equivalent), other respondents think accreditation should be reached voluntarily. The most important hurdle mentioned to achieving objective one is budget. Even so, most respondents have at least one forensic service provider that is accredited under ISO 17025.
Objective 2: Respect for minimum competence criteria for forensic science personnel

A large majority of respondents (22 out of 23) have at least one forensic service provider that has a certification program for their forensic personnel to ensure their competency, either internally and/or externally. Whereas most respondents (15 out of 23) have sufficient availability of forensic education and/or training within providers, only few respondents (6) state that they have sufficient availability of education and/or training at universities, colleges or other educational institutes. Continued professional development (CPD) is obligatory for the personnel of most or all forensic service providers according to 16 of 23 respondents. A minimum number of hours for CPD was set at all or most of the providers according to only 4 of 18 respondents.

The hurdle mentioned most to achieve objective 2 by 2020 was budget (12 out of 21 respondents). Other hurdles mentioned were lack of legal regulations requiring CPD, technical hurdles, conveying the importance of this objective to top management, time needed for continued professional development, lack of sufficient educational infrastructure, human resources, lack of attention for CPD and lack of available national training for all fields. Only 4 respondents saw no hurdles. Even so, a majority of 17 out of 23 respondents mentioned that objective 2 could be achieved by 2020. Only two respondents answered that objective 2 could not be achieved by 2020. Four respondents thought it would be difficult to achieve objective 2 or that it could only be partly achieved. When asked what is missing or what actions need to be taken to achieve objective 2 by 2020, 14 respondents mentioned difficulties, such as lack of financial or educational resources, a fragmented forensic sector, lack of sufficient support by top management and lack of common standards or minimum competency criteria. One respondent mentioned that Council decisions on the necessity of competence assurance tests would be helpful.

A large majority of respondents (21 out of 23) find respect for minimum competence criteria for forensic science personnel of great importance, 2 respondents answered it is of average importance. To realise objective 2, certification of forensic personnel by uniform competence standards was found of great importance by about half of the respondents (12 of 23). Seven respondents thought it of average importance, whereas 3 respondents thought it of little importance. One respondent could not value the importance.
As to how certification should be stimulated if important, a minority of respondents (10 out of 25) answered certification should be mandatory under national law, whereas 6 respondents thought it should be voluntary/not mandatory. Two respondents answered that they saw no need for a formal certification program for forensic personnel to ensure competence. Three respondents mentioned that an EU Regulation or a Council decision could be used. Other options mentioned were: via the accreditation process, not under national law (but each country should establish minimum competence criteria), regulated by the organisation, first develop a common starting point (such as a European or international standard).

A majority of respondents (16 out of 22) thought certification, if important, should be done with minimum uniform standards, 5 respondents preferred set uniform standards. One respondent mentioned there should be minimum generic forensic knowledge criteria and minimum generic competence criteria for the different forensic fields, which would have to be made more specific nationally or for a certain organisation.

About a third of respondents (8 out of 21) thought that certification of forensic personnel would have to be done nationally and internally by the forensic provider itself, 2 respondents preferred the certification to be done nationally and by an independent organisation, 3 respondents preferred a combination of these options (nationally and internally by the forensic provider itself and nationally by an independent organisation). Two respondents thought that certification should be done internationally by peer review. Six respondents preferred a combination of nationally or internationally, either by peer review or by an independent organisation.

Summary of responses on objective 2

Objective 2, respect for minimum competence criteria for forensic science personnel, is viewed as very important by a large majority of respondents. Most respondents see certification of forensic personnel by uniform competence standards as important to realise objective 2. The most important hurdle mentioned to achieving objective two is budget. Still, a large majority of respondents have at least one forensic service provider that has a certification program for their forensic personnel.
Objective 3: Establishment of common best practice manuals and their application in daily work of forensic laboratories and institutes

All respondents (23) mention that forensic service providers in their country use best practice manuals (BPMs), although several (6) mention that these are not used in all fields of expertise. A minority of respondents (8 out of 22) also state that BPMs are used by the accreditation/certification boards in their country, whereas 10 state they are not used. Three respondents mentioned that BPMs were linked to or referred to in quality manuals or standard operating procedures, or that standard operating procedures were based on BPMs. One respondent did not know if they were used.

About half of the respondents (11 out of 23) mentioned that the forensic providers in their country used both BPMs that were developed both internally (by the forensic provider itself) as well as BPMs that were developed externally. Other respondents mentioned the BPMs used by the providers were developed either internally or externally or did not know. Of note, 12 of 25 respondents mentioned ENFSI as an external body that develops BPMs. One respondent of these 12 also mentioned Interpol.

The hurdle mentioned most to achieve objective 3 was budget (6 out of 17 respondents). Other hurdles mentioned were the (lack of) availability of internationally developed BPMs, that BPMs would have to be quite general to be of use for the different EU countries, the time involved in developing BPMs, technical hurdles and (lack of) human resources. One respondent mentioned that there is no real need for BPMs. A majority of respondents (14 out of 23) thought it would be possible to achieve objective 3 in their country by 2020, whereas only one respondent thought it could not be achieved. Three respondents would prefer BPMs to be written at an international or European level, hence achieving objective 3 would depend on the international developments. Five respondents were not sure it could be achieved or thought it could only be partly achieved (e.g. not for all forensic service providers). When asked what is missing or what actions need to be taken to achieve objective 3 by 2020, 14 respondents mentioned issues, such as availability of internationally or European developed BPMs, BPMs that take into account national aspects, availability of forensic literature in the national language, lack of resources, establishment of a national working group to develop and update BPMs, coordination between forensic providers, more funds for ENFSI to develop BPMs and the need for a European Committee for Standardisation (CEN) standard for forensic science.
A small majority of respondents (13 out of 23) find objective 3 of great importance, whereas 9 respondents find it of average importance. One respondent answered that objective 3 is of no importance. A majority of respondents (14 out of 23) thought that use of BPMs, if important, should be voluntary. Two respondents mentioned that use of BPMs would be stimulated if accreditation of forensic service providers would be required. Other options to stimulate the use of BPMs were mentioned, such as an internal directive, recommendation, European law or national law.

### Summary of responses on objective 3

Objective 3, establishment of common best practice manuals and their application in daily work of forensic laboratories and institutes, is viewed as important by almost all respondents. The majority of respondents thought that use of BPMs should be voluntary. One important hurdle mentioned to achieving objective three is budget. All respondents state that BPMs are used by their forensic service providers. Of note, several respondents mentioned ENFSI as an external body that develops BPMs.

### Objective 4: Conduct of proficiency tests /collaborative exercises in forensic science activities at international level

Roughly half of the respondents (10 out of 22) stated that all of the providers take place in proficiency tests/collaborative exercises. 9 out of 22 stated that most of the providers take part in such tests, whereas 3 respondents of 22 stated that only few of the providers participate in proficiency tests or collaborative exercises. The replies show that such tests relate to a wide variety of topics, amongst which DNA analyses, firearms, document handwriting, fingerprints etc. Results of such tests are also used for a wide range of purposes: internal evaluation of experts and procedures, personnel training, improvement of quality, identification of gaps in expertise etc. If necessary, following such tests, changes may be implemented. One respondent stated that proficiency tests are part of the accreditation and validation system.
Six respondents declared that there are no or very few hurdles related to the participation of forensics providers in proficiency tests/collaborative exercises. The rest indicated a wide range of factors (budget, human resources, technical aspects etc) that can be considered hurdles in this area. Some Member States even indicated more than one factor (for example budgetary and technical aspects). Respondents also indicated that many proficiency tests are still missing (wide variety of examples). Reference was made to a list produced by ENFSI which contains the proficiency tests available worldwide and which also indicates the missing one. In terms of actions needed for the achievement of this objective by 2020, most respondents referred to non-binding elements like joint efforts and funding at EU level, systemised approach to proficiency tests, collaboration at international level especially for small countries, organisation of such tests by ENFSI etc. In relation to ENFSI, it was also indicated that, because more suppliers were needed in Europe, ENFSI could get involved and become a supplier for certain disciplines. Only one respondent stated that these tests should be required by law whereas two replies indicated that no further actions were necessary.

A large majority of the respondents (22) indicated that objective 4 is of great importance for the achievement of the European Forensic Area by 2020 whereas one of them considered it was an average importance. The development of field specific forensic proficiency tests as an instrument towards the realisation of objective 4 was considered of great importance by 18 respondents. Two replies stated that it was of average importance and one stated that was of little importance. Only 4 respondents considered the use of such tests should be mandatory. The rest stated that this should be done on a voluntary basis or should be included in other categories (it was pointed out for example that accreditation according to ISO 17025 already required forensic providers to have quality control measures in place.

<table>
<thead>
<tr>
<th>Summary of responses on objective 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proficiency tests already take place for a wide variety of topics in view of a wide range of purposes. Hurdles of budgetary, technical, legal nature etc. are encountered. Certain types of proficiency tests are still missing and ENFSI could play a role in filling the gaps. The conduct of such tests is considered important for the achievement of the European Forensic Area by 2020 by all respondents. However, only 4 of them stated that this should be made mandatory by law.</td>
</tr>
</tbody>
</table>
Objectives 5: Application of minimum quality standards for scene-of-crime investigations and evidence management from crime scene to court room

Almost one third of the respondents (8 out of 22) stated that crime scene investigations are subject to minimum quality standards. 9 respondents stated that there were no such minimum quality standards whereas 6 replies referred to other types of situations like a uniform national standard of training for scene of crime investigators but without a formally accredited standards. Different stakeholders are responsible for setting the standards in question: police, criminalistics services, institutes of legal medicine, ENFSI etc. 9 out of 22 respondents stated that minimum quality standards existed for evidence management from crime scene to court room. 10 of them said there were no such standards and 4 of them referred to other type of situations like general rules set in the criminal code. Different stakeholders are responsible for setting the standards in question: Ministry of Interior, police, criminalistics services etc.

Four respondents considered there were no hurdles related to the achievement of this objective by 2020. The rest of the replies indicated hurdles regarding budgetary and legal aspects, the fact that the field is governed by national law and does not take into account the international context etc. 13 of 22 respondents consider that this objective can be achieved by 2020, 3 consider that this cannot be done and 4 referred to other aspects like the need of a complete reorganisation of national regulations. Among the actions that still need to be taken for the realisation of this objective by 2020, the following were mentioned: harmonisation, financing, improved coordination, agreed formal standards, increased human resources etc.

The application of minimum quality standards for scene-of-crime investigations and evidence management from crime scene to court room was considered of great importance for the achievement of objective 5 by 20 respondents. 3 respondents thought is was of average importance. In terms of means for the achievement of this objective, the results were the following:

- development of country specific minimum standards for crime scene investigation: 15 respondents thought this was of great importance, 5 thought is was of average importance, 2 thought it was of little importance and one did not know;
- development of country specific minimum standards for evidence management: 15 respondents thought this was of great importance, 5 thought is was of average importance, 2 thought it was of little importance and one did not know;

- development of international minimum standards for crime scene investigation: 17 respondents thought this was of great importance, 2 thought is was of average importance and 2 thought it was of little importance;

- development of international minimum standards for evidence management: 14 respondents thought this was of great importance, 4 thought is was of average importance and 2 thought it was of little importance.

**Summary of responses on objective 5**

Minimum quality standards for scene-of-crime investigations and evidence management from crime scene to court room exist in only 8 of the 22 Member States which replied to the questionnaire. However, most respondents consider that such standards, at national and international level, are of great importance for the achievement of the European Forensic Area 2020. The actions which were pointed out as relevant in this sense included, among others, harmonisation, financing, improved coordination, increased human resources etc.

**Objective 6: Recognition of equivalence of law enforcement forensic activities with a view to avoiding duplication of effort through cancellation of evidence owing to technical and qualitative differences, and achieving significant reductions in the time taken to process crimes with a cross-border component**

All respondents (22) stated that the exchange of forensic evidence or forensic information between countries is allowed. There is a wide variety of types of forensic evidence and information that are being exchanged: fingerprints, DNA profiles, information related to counterfeit currency, drugs, stolen vehicles, ballistic data etc. For this objective, all respondents underlined the role played by the Prüm system and by other exchange channels like the classical police channels (Interpol, Europol, Sirene).
Five respondents stated that there were no hurdles to achieve this objective by 2020 where the rest mentioned, among others, obstacles like technical, legal, budgetary aspects as well as a lack of human resources. 14 respondents stated that it was possible to achieve this objective by 2020 whereas 2 thought the contrary. 4 respondents referred to other aspects like the political will or the availability of funding. Among the actions that should be envisaged for the achievement of this objective, the respondents mentioned training for police, investigators, prosecutors and judges, updating of legislation, adequate financing, international legal regulations etc. One respondent underlined the need to strengthen mutual trust between Member States by advancing with respect to the other objectives in order to increase the quality of forensic evidence and operations from crime scene to court room. Another respondent mentioned the need of an EU legal instrument in this area.

Sixteen respondents considered this objective was of great importance for the creation of the European Forensic Area by 2020 whereas 5 thought it was of average importance. As an instrument in this regard, a uniform quality assurance system(s) is considered to be of great importance by 15 respondents, of average importance by 3 respondents, of little importance by 2 respondents and of no importance by one respondent. In the same sense, the exchange of databases with a view to realise uniformity is considered of great importance by 17 respondents, of average importance by 2 respondents, of little importance by one respondent and of no importance by one respondent.

**Summary of responses on objective 6**

With respect to the exchanges performed in relation to this objective, respondents underlined the existence of channels like the Prüm system or the classical police channels like Interpol, Europol, Sirene etc. Respondents also mentioned legislation (national and/or international) as an instrument to achieve this objective.
Objective 7: Identification of optimal and shared ways to create, update and use forensic databases

The respondents mentioned a wide variety of forensic and reference databases used in the Member States, among which the following: DNA, fingerprints, ballistic, firearms, coins, banknotes, weapons etc. 17 respondents stated that these databases (and their content) are exchanged with other countries and 4 respondents stated this was not the case. The replies showed that basically all information contained in these databases is currently exchanged.

Three respondents stated that there were no hurdles to achieve this objective by 2020 whereas the rest of the respondents mentioned obstacles of technical, legal or budgetary nature.

17 respondents out of 23 considered this objective as achievable by 2020, whereas 6 other gave more nuanced replies, underlying for example the future funding possibilities or the way databases which exist in other countries are controlled.

In terms of actions needed for the achievement of this objective, the replies mentioned, among others, the need of harmonising the data generated in different countries, the need of funding and personnel in order for the forensic databases to be created and constantly updated, legal acts that would make the exchange of forensic data mandatory, reinforcement and support of the current initiatives regarding shared databases and information systems, such as ENFSI 2014 Monopoly Project "Towards the Development of Pan-European Databases in Forensic Science", EU funding for standardised IT equipment etc.

20 respondents considered that this objective is of great importance in view of the creation of a European Forensic Area by 2020, one respondent thought it was of average importance and 2 respondents thought it was of little importance. In terms of means to achieve this objective:

- a uniform quality assurance system(s) was considered of great importance by 17 respondents, of average importance by 3 respondents and of little importance by 2 respondents; one respondent stated it did not know;

- the exchange of databases with a view to realise uniformity was considered of great importance by 18 respondents, of average importance by 2 respondents, of little importance by 2 respondents and of no importance by one respondent.
Summary of responses on objective 7

Most respondents find this objective important. The replies identified several actions which could contribute to the creation, updating and use of forensic databases, among which: harmonisation of data generated in different countries, EU funding for IT standardised equipment or support for current initiatives regarding shared databases and information systems, such as ENFSI's project "Towards the Development of Pan-European Databases in Forensic Science".

Objective 8: Use of advances in forensic science in the fight against terrorism, organised crime and other criminal activities

Many respondents (13 out of 22) refer to the entire set of forensic techniques used in the fight against terrorism, organised crime and other criminal activities. DNA and fingerprint analysis is the basic technique for most countries. All other available technologies and methods, such as ballistics, handwriting analysis, documents examination, drugs, CBRN and explosives trace analysis, are used as well. Several respondents (7 out of 22) refer to the importance of digital evidence and the increasing role of ICT (telephone, computer, video, audio…) in forensics.

With regard to any useful advances in forensic techniques the respondents listed the increased use of automated systems and advanced data analysis, including statistical analysis and automated pattern recognition. Several respondents (6 out of 21) underline the importance of exchanging data and sharing databases, in particular for DNA and fingerprint data. Technological advancements, such as fibre optics systems, could help facilitating this information exchange between countries. One respondent puts less emphasis on technological innovations than on improvements in collaboration and networking and the robustness of methods and routines. Another respondent pleads for taking the model of Prüm in the exchange of DNA and fingerprint data and extend it to other types of forensic information (ballistics, trace evidence, explosives…).
Half of the respondents (8 out of 16) mention budgetary and financial constraints as the biggest hurdle to achieve objective 8 by 2020. This is followed by technical hurdles (6 respondents), such as to keep pace with new technological developments (e.g. digital forensics). Two respondents refer to legal hurdles, in particular the restrictions imposed by national data protection law. Three respondents could not identify any hurdles. No respondent thinks objective 8 cannot be achieved by 2020. The large majority of respondents (15 out of 21) is optimistic that it can be achieved, although for some respondents certain conditions need to be fulfilled, such as to overcome the budget and resource constraints and to improve training and education, as well as the uptake of the latest R&D developments. One respondent particularly refers to a better dissemination of results from the EU Horizon 2020 research programme. Another one asks for prioritisation of research according to threat scenarios.

For a clear majority of respondents (16 out of 22) the use of advances in forensic science in the fight against terrorism, organised crime and other criminal activities is of great importance towards the realisation of the European Forensic Area 2020. Three respondents regard it as of little and another three as of average importance. Again, a large majority presents the joint use of these advances, as well as the exchange and sharing of information as prerequisite for achieving this objective. 18 out of 22 respondents see the exchange of (technical) advances in forensic science between providers in all Member States as greatly important, three as of average and one as of little importance.

**Summary of responses on objective 8**

Objective 8, use of advances in forensic science in the fight against terrorism, organised crime and other criminal activities, is viewed as largely important by a clear majority of respondents. Whereas DNA and fingerprint technology is the basic forensic technique for all respondents, increasing importance is given to new technologies, in particular to digital forensics. The most important hurdles mentioned to achieving the objective are of budgetary and technical nature. Even so, most respondents believe that the objective can be achieved by 2020. A large majority of respondents sees the exchange and sharing of advances between the forensic providers in all Member States as pre-condition for a European Forensic Science Area.
Objective 9: Forensic awareness, in particular through appropriate education and training of the law enforcement and justice community

Regarding the availability of basic forensic training for public prosecutors and magistrates, out of 22 respondents 16 refer to some and five to several training courses in their respective countries. One respondent has no knowledge about such courses in his Member State. A majority (15 out of 22 respondents) reports that these forensic trainings are not obligatory for public prosecutors and magistrates in their countries, however, several respondents emphasize that such courses are regularly offered and frequently used by the law enforcement and justice community. Two respondents have no knowledge whether public prosecutors and magistrates are obliged to attend such training courses or not. Five respondents, however, refer to mandatory training courses for certain categories of personnel. The focus of these obligatory training courses differs from Member State to Member State. Three Member States with obligatory measures focus on initial trainings for public prosecutors and judges. Trainings also targets (fiscal) magistrates in one of these three countries. One respondent refers to courses for police inspectors in his country who can act as prosecutors in certain proceedings. One respondent does not specify the target group/s of obligatory forensic trainings.

One respondent whose country provides obligatory trainings states that there are no hurdles with a view to achieving objective 9 by 2020. Six (of 18) respondents refer to the lack of human resources and time and three respondents to budgetary constraints as major hurdles. One of those respondents adds that in some areas forensic awareness is now facilitated through the work of EU agencies, such as Europol (e.g. the EC3). Another three respondents mention the lack of legal obligation to establish trainings as main obstacle to improve forensic awareness. Another four respondents describe that the educational focus areas of the justice community are traditionally different, that either it has always played a small role in the education of prosecutors, the justice community has little interest in the area, or that a general change of the existing framework must be done. One respondent mentions that forensic science has greatly advanced over the last years and the judiciary does not have the required knowledge base for further trainings. Another respondent present a similar hurdle with a view to prosecutors. Finally, one respondent explains that forensic training for the justice community is not taken forward because prosecutors tend to confuse forensic findings at court instead of clarifying them.
Half of the respondents (10 out of 20) think that objective 9 can be achieved by 2020. This includes all the five respondents whose countries provide obligatory trainings to the justice community. Three respondents state that is not possible to achieve this and another seven respondents underline that it is impossible to assess the likelihood to achieve the objective. For most of these respondents the difficulties lie in the coverage of different sectors, since responsibilities throughout the law enforcement and justice community cannot be easily steered. Respondents emphasise that it will also depend on the interest of prosecutors and magistrates in the trainings already offered.

As additional measures to achieve the objective and improve forensic awareness five respondents suggest to make training courses obligatory for both law enforcement and justice community. One respondent pleads for general guidelines, which should be issued by ENFSI, or a respective Council Decision. Further suggestions by other respondents refer to adequate resources and structures, such as a forensic science school, to broader dissemination and more available courses, and to take into account more practical cases.

With a view to realising the European Forensic Science Area by 2020 a clear majority of respondents (16 of 22) regard objective 9 as of great importance and five respondents as of average importance. One respondent was undecided. There is general support of the idea that better forensic awareness is important to improve the information exchange between national justice systems, as well as the cooperation between judicial authorities and the police. One respondent criticises the wording of objective 9 and asks for a better definition of "awareness".

**Summary of responses on objective 9**

Objective 9, forensic awareness, in particular through appropriate education and training of the law enforcement and justice community, is viewed as very important by a clear majority of respondents. The most important hurdle identified to achieve the objective is the lack of human resources. There are some doubts among respondents that the objective can be easily achieved. According to the respondents the judicial system is less prepared to absorb forensic knowledge, but better forensic awareness would be particularly beneficial for police-justice cooperation as well as for information exchange between national justice systems.
Objective 10: Research and development projects to promote further development of the forensic science infrastructure

A large majority of respondents (20 out of 22) confirm that forensic providers in their Member State collaborate on R&D projects with forensic providers in other countries. Seven of those respondents refer to collaboration via ENFSI. Two mention Horizon 2020 projects. Two further respondents mention collaboration with international partners, such as Interpol or cooperation with US partners (FBI, NIST). Only two respondents refer to no R&D collaboration because of a lack of resources or a lack of interest. On the other hand, half of the respondents (11 out of 23) declare that there are no collaborative R&D projects of forensic services with industry in other countries. One respondent underlines that such collaboration would be very difficult for legal reasons. The other half of the respondents refers to different ways of public-private collaboration, within Horizon 2020 (five respondents), ISEC (1 respondent), or ENFSI (1 respondent).

Several respondents (13 out of 20) identify a lack of human resources and qualified personnel as main hurdle for forensic providers to participate in R&D projects. Seven respondents mention budgetary constraints. One respondent refers to language barriers; another one underlines the existence of a technical hurdle because some forensic areas lack a significant foundation in the research community. A couple of respondents (three) believe more EU funding is needed to overcome major hurdles. One respondent misses an appropriate national infrastructure (National Forensic Institute) as additional requirement.

10 out of 23 respondents declare that regarding the set-up of R&D projects both initiative and funding must come from forensic providers, Member States and Commission. Five respondents assign this role to the European Commission only; four to a combination of Commission and Member States; one to forensic providers and Commission; one to forensic providers, companies and Commission; one to forensic providers, companies, Commission, Member States, and ENFSI as network; and finally one respondent to forensic providers and various not precisely defined other partners. Several respondents emphasise the role of the Commission in funding whereas the initiative for the project is expected to come from the forensic labs and companies.
With a view to realising a European Forensic Science Area by 2020 a clear majority of respondents (15 out of 23) regards objective 10 as greatly important, six as of average importance, and one as of little importance. One respondent has not assessed the importance. In order to realise objective 10 a clear majority of respondents (17 out of 23) gives great importance to initiatives for international R&D programmes, four regard it as of average importance and one respondent as of little importance.

The general feeling expressed is that R&D has a less immediate effect but considerable long-term impact on a possible establishment of a European Forensic Science Area by 2020.

**Summary of responses on objective 10**

Objective 10, research and development projects to promote further development of the forensic science infrastructure, is viewed as rather important by a clear majority of respondents. A large majority of forensic providers pursues R&D projects with forensic providers in other countries. This is not so well established for cooperation with industry. A lack of qualified personnel and human resources is identified as the most important hurdle for R&D collaboration. With respect to the set-up of R&D projects the respondents assign the role in initiating and funding to a combination of actors (Commission, Member States, forensic providers, companies, etc.). With a view to its contributions to a European Forensic Science Area respondents underline the positive long-term effects of R&D activities.

**Other relevant issues**

Four respondents believe that all 10 objectives are very important towards the realisation of the European Forensic Science Area by 2020. Among the other respondents the most important objective (12 out of 21 respondents) identified is objective 1 on accreditation. Objective 2 (competence of personnel) is highlighted by 7 respondents, objective 5 (minimum quality standards) by six, objective 3 (best practice manuals) and objective 6 (recognition of equivalence) by three respondents, objective 4 (proficiency tests), objective 7 (databases) and objective 10 (research) by two respondents, objective 8 (use of advances) and objective 9 (awareness) by one.
Eleven (of 22) respondents regard cyber/digital forensics as top priority, 10 as high priority and one as average priority. Seven refer to fingerprints as top priority, 11 as high and four as average priority. Seven respondents regard DNA analysis as top, 12 as high and three as average priority. Only one respondent sees weapons and ammunition as top priority, 11 as high and 9 as average priority. One even regards it as no priority. Several respondents mention document security, drugs, and explosives as further priority areas.

Twelve respondents plead for the establishment of a European Forensic knowledge centre, 11 for the set-up of centres of excellence for specific forensic fields. Nine respondents support that the Commission launches call for proposals (and funding) to support the implementation of the 2011 Council conclusions. Eight would like to establish national working groups with all relevant actors per country. Six respondents support the idea of new Council conclusions, and only four respondents see the need of a new forensics expert group linked to the LEWP. No respondent, however, thinks that no action is needed to stimulate the realisation of the objectives.

Several respondents emphasise the role of ENFSI. This is in particular underlined by the two respondents who have not given specific replies to the questionnaire due to the complexity of their domestic forensic science systems. ENFSI is referred to as the already existing liable European network and knowledge centre and is thus seen as the forensics hub that should be better utilised and further supported and developed. This also means that for most respondents no new forensics networks and groups are needed.

<table>
<thead>
<tr>
<th>Summary of responses on other relevant issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accreditation and the competence of forensic personnel are seen as the most important objectives. The forensic priority areas identified are cyber/digital forensics, DNA and fingerprints. According to most respondents networking and knowledge management will particularly support the implementation of the European Forensic Science Area 2020. For most respondents ENFSI plays a natural role in this regard, which should be further developed. The Commission is in particular expected to launch calls for proposals and provide funding.</td>
</tr>
</tbody>
</table>

---