

EDUCATE, INNOVATE, MOTIVATE



Operational Training Needs Analysis Law Enforcement Cooperation, Information Exchange and Interoperability



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List of abbreviations

APIS – Advanced Passenger Information System

CKC - CEPOL Knowledge Centre

CNU - CEPOL National Unit

CSDP - Common Security and Defence Policy

EES - Entry-Exit System

ECRIS – European Criminal Records Information System

EMPACT – European Multidisciplinary Platform Against Criminal Threats

EU – European Union

ETIAS – European Travel Information and Authorisation System

EU-STNA – European Union Strategic Training Needs Assessment

EURODAC – European Asylum Dactyloscopy Database

EUROSUR – European Border Surveillance system

JHA – Justice and Home Affairs

JIT – Joint Investigation Teams

LE – Law enforcement

MB - Management Board

MS - Member State

OCG - Organised Crime Group

OTNA - Operational Training Need Analysis

PNR – Passenger Name Records System

SIS - Schengen Information System

SLTD – Interpol Stolen and Lost Travel Documents

SPD – Single Programming Document

TDAWN - Interpol Travel Documents Associated with Notices

VIS - Visa Information System



Executive Summary

As defined by Article 3 of the Regulation 2015/2219, CEPOL shall support, develop, implement and coordinate training for law enforcement officials. The **Operational Training Needs Analysis (OTNA) methodology** (as adopted by the Management Board (MB) decision 32/2017/MB (15/11/2017) and 0/2020/MB (29/5/2020)) establishes a structured training needs analysis procedure taking into account deliverables of the EU Strategic Training Needs Assessment (EU-STNA) process. The methodology was piloted in 2018 with limited number of thematic priorities for CEPOL training portfolio planning 2019, namely Common Security and Defence Policy (CSDP) Missions and Counterterrorism. Building on the strategic training priorities defined by the EU-STNA, CEPOL launched the OTNA on Law Enforcement Cooperation, Information Exchange and Interoperability (CIEI) in 2020. Outcomes of the research will be used to define CEPOL's training portfolio in CIEI for 2022.

This report describes training priorities in the area of CIEI for 2022 based on the analysis of the data received from law enforcement agencies and CEPOL National Units (CNUs) and hence represents a part of the law enforcement community in the European Union. The main training topics and subtopics that respondents rated by relevance are stemming from strategic training priorities defined in the EU-STNA. Training aspects identified in the EU-STNA were discussed, validated, and finalised by a focus group of experts on Law Enforcement Cooperation, Information Exchange and Interoperability comprised of representatives of the European Commission, Justice and Home Affairs (JHA) agencies and CEPOL.

A short-term expert was contracted from the list of individual external experts to assist CEPOL in the OTNA process insteps 4 and 6, the analysis of responses and the drafting of the OTNA report.

In October 2020, CEPOL approached 26 Member States² and several EU structures to provide direct contact points dealing with the subject of the OTNA. A total number of 20³ Member States and 3 EU structures⁴ (hereinafter institutions) responded to this, resulting in the nomination of 58 experts who would fill in the survey. Further on, the questionnaire was sent to these nominated contact points and distributed via expert group members, to which a total of 23⁵ Member States and 3 EU structures⁶ responded, resulting in 64 individuals completing the questionnaire from different law enforcement (LE) agencies and EU structures. In terms of Member States, the responses indicate an 88% response rate.

All responses indicated clear relevance for the scope of activity. The **most relevant main topics** (out of the 16 individual topics) for law enforcement officials in this area were related to:

¹ European Union Strategic Training Needs Assessment aims at identifying those EU level training priorities in the area of internal security and its external aspects to help build the capacity of law enforcement officials, while seeking to avoid duplication of efforts and achieve better coordination.

² The terminology 'Member States' hereinafter refers to 26 Member States of the European Union participating in CEPOL regulation, i.e., all EU Member States excluding Denmark.

³ Responding countries: Austria, Croatia, Cyprus, Czech Republic, Estonia, Finland, France, Greece, Hungary, Italy, Latvia, Lithuania, Luxemburg, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden.

⁴ Frontex, EU Agency for Fundamental Rights (FRA), Eurojust

⁵ Responding countries: Austria, Bulgaria, Croatia, Cyprus, Czech Republic, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Poland, Portugal, Romania, Slovakia, Slovenia, Spain and Sweden.

⁶ European Commission, Frontex and Eurojust.



- Schengen Information System (SIS) and SIRENE (69% of institutions found it relevant)
- Interoperability components and processes (58% of institutions found it relevant)
- EU cooperation tools and mechanisms (53% of institutions found it relevant), and

Table 1. Relevance rate of main topics

Main Topic	Relevance
Schengen Information System (SIS) and SIRENE	69 %
Interoperability components and processes	58 %
EU cooperation tools and mechanisms	53 %
European Travel Information and Authorisation System (ETIAS)	44 %
VIS and EURODAC for the purposes of the prevention, detection, and investigation of	39 %
terrorist offences and other serious criminal offences	
Passenger Name Records System (PNR), Advanced Passenger Information System	38 %
(APIS)	
Entry-Exit System (EES)	36 %
Joint Investigation Teams (JITs)	36 %
Interpol Stolen and Lost Travel Documents (SLTD)	36 %
European Criminal Records Information System (ECRIS and ECRIS-TCN)	31 %
Visa Information System (VIS)	28 %
Interpol Travel Documents Associated with Notices (TDAWN)	28 %
European E-evidence Digital Exchange System	19 %
European Border Surveillance system (EUROSUR)	19 %
European Asylum Dactyloscopy Database (Eurodac)	17 %

As per methodology, training topics with a relevance rate of more than 50% are to be considered for further analysis in terms of their content, urgency, proficiency level and number of participants.

Examining the three most relevant main topics it can be said that they are all considered relatively urgent, ranging from 58% to 63%. This means that, optimally, training activities should be delivered within a year's period⁷. The distribution of main topics based on relevancy, urgency and indicated number of trainees is illustrated in Table 2.

Table 2. Relevance and urgency of prioritised main topics

Main Topic	Relevance	Urgency	Trainees
Schengen Information System (SIS) and SIRENE	69 %	63%	31 248
Interoperability components and processes	58 %	66%	868
EU cooperation tools and mechanisms	53 %	58%	377
European Travel Information and Authorisation System (ETIAS)	44 %	65%	179
VIS and EURODAC for the purposes of the prevention, detection, and investigation of terrorist offences and other serious criminal offences	39 %	61%	457

⁷ See explanation of Urgency levels in Annex 2.

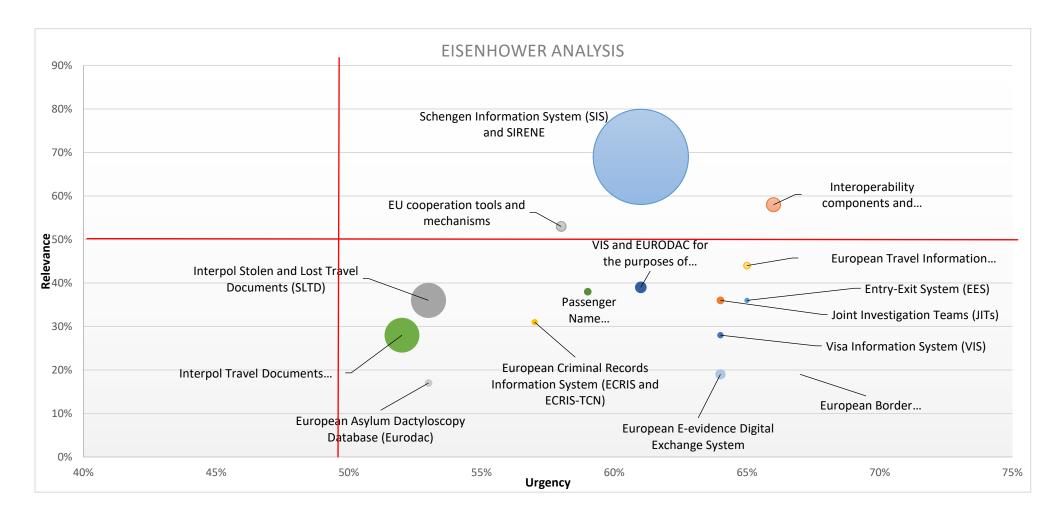


Passenger Name Records System (PNR), Advanced Passenger Information System (APIS)	38 %	59%	195
Entry-Exit System (EES)	36 %	65%	93
Joint Investigation Teams (JITs)	36 %	64%	203
Interpol Stolen and Lost Travel Documents (SLTD)	36 %	53%	4 141
European Criminal Records Information System (ECRIS and ECRIS-TCN)	31 %	57%	132
Visa Information System (VIS)	28 %	64%	136
Interpol Travel Documents Associated with Notices (TDAWN)	28 %	52%	4 085
European E-evidence Digital Exchange System	19 %	64%	352
European Border Surveillance system (EUROSUR)	19 %	67%	1
European Asylum Dactyloscopy Database (Eurodac)	17 %	53%	196
Total			42 663

The Eisenhower decision method was applied to demonstrate the distribution of main topics by urgency and relevance rate. The Eisenhower Decision Principle evaluates tasks using the criteria important/unimportant and urgent/not urgent and places them according to quadrants in an Eisenhower Matrix. The order of implementation of tasks should be 1. Important/Urgent 2. Important/Not Urgent 3. Unimportant/Urgent 4. Unimportant/Not Urgent. Chart 1. displays main topics according to this logic giving a clear overview of priorities for training design.



Chart 1. Relevance and urgency rate of the prioritised main topics (size of the bubble indicates number of trainees indicated by respondents.8)



⁸ Number of trainees requiring awareness, practitioner, advanced practitioner, expert, and train-the-trainer level training.



In reference to the findings of open suggestions under prioritised topics, the following thematic contents can be summarized:

Schengen Information System (SIS) and SIRENE:

- The new SIS regulations (GENERAL)
- New Training on the new SIRENE manual and procedures for exchange of supplementary information (including factsheets, the new SIS regulations and filling in questionnaires)
- Training on the new data and alert categories in SIS: return alerts, alert on unknown wanted person, inquiry check alert, preventive alerts

Interoperability components and processes:

- General information about and using the system
- Databases, related systems

EU cooperation tools and mechanisms:

- EU cooperation tools and mechanisms
- Specific tools

Respondents indicated that **for the prioritised topics 32 493 participants would need training in 2022 from the 23 responding MSs and EU structures, which would mean 22 568 potential trainees from the European Union**⁹. It should be noted that due to the method of extrapolation in cases where the response rate is almost 100% (88,5% in this case), the statistical median-based calculation does indeed flatten the calculated total trainees in all EU.

The highest common need indicated by respondents is in the proficiency levels of **practitioner/advanced practitioner,** and, to a certain extent, **expert,** while train-the-trainer and awareness level training are lower on the priority scale (Table 3). Please find the details of training dimensions in the Analysis section of this report.

Table 3. Proficiency levels objectives under each topic.

Proficiency level	1 st priority	2 nd priority
Schengen Information System (SIS) and SIRENE	Practitioner	Advanced practitioner
Interoperability components and processes	Practitioner	Advanced practitioner
EU cooperation tools and mechanisms	Advanced practitioner	Expert

Table 4. Number of trainees in each proficiency level extrapolated to EU level¹⁰.

	Schengen Information Interoperability System (SIS) and SIRENE components and processes		•	EU cooperation tools and mechanisms		
Proficiency levels	Number of	EU	Number of	EU	Number of	EU
	trainees		trainees		trainees	
Awareness	127	403	109	637	65	338
Practitioner	6 037	4 030	227	1 521	50	650

⁹ Median of number of indicated participants was calculated in order to be able to calculate the potential number of attendees should 26 MS be interested in training.

¹⁰ To be noted that due to inconsistency of data per proficiency level, total number of trainees differ.



Advanced practitioner	24 251	1 950	216	1 313	96	1 586
Expert	415	1 339	154	507	94	897
Train-the-trainer	180	1 872	126	780	30	78
TOTAL		9 594		4 758		3 549

The OTNA questionnaire included a question to identify the **profiles of LE officials who would need training** in different topics. Most references were given to **investigators and systems operators** (e.g., SIRENE), but also to analysts; these are the target groups that should be provided with the opportunity to be trained first. Lower priority was indicated for managers and experts.

Few respondents provided data on training available on national level. The analysis suggests that national level training is mostly available on the use of Schengen Information System (SIS) and SIRENE. These training activities cover the use of national applications being complementary to EU-level training in the same area.



Background

As defined by Article 3 of the Regulation 2015/2219, CEPOL shall support, develop, implement and coordinate training for law enforcement officials, while putting special emphasis on the protection of human rights and fundamental freedoms in the context of law enforcement, in particular in the areas of prevention of and fight against serious crime affecting two or more Member States and terrorism, maintenance of public order, international policing of major events, and planning and command of Union missions, which may also include training on law enforcement leadership and language skills.

The SPD 2019-2021 describes Operational Training Needs Analysis as a process to help to the realisation of strategic goals through the implementation of operational training activities.

The OTNA methodology (as adopted by the MB decision 32/2017/MB (15/11/2017)) was piloted in 2018 with limited number of thematic priorities for CEPOL training portfolio planning 2019, namely CSDP missions and Counter-terrorism. OTNA methodology was updated in 2020 (9/2020/MB (29/05/2020)) based on CEPOL's experience and the feedback of Member States.

The methodology consists of a series of seven steps, encompassing close and dynamic cooperation with the Member States, in particular the CEPOL National Units and LE agencies, and involving CEPOL Knowledge Centres (CKC) in the design of the training portfolio. The overall OTNA process entails data collection and analysis, conducted via and corroborated by introductory surveys, detailed questionnaires and expert interviews. The target group referred to in this methodology is law enforcement officials, as defined in Article 2 of Regulation 2015/2219¹¹.

Building on the strategic training priorities defined by the EU-STNA and the experience gained from previous OTNA studies, CEPOL launched the OTNA on Law Enforcement Cooperation, Information Exchange and Interoperability in 2020. Outcomes of the research will be used to define CEPOL's training portfolio in CIEI for 2022.

This report describes training priorities in the area of CIEI for 2022 based on the analysis of the data received from law enforcement agencies and CEPOL National Units, and hence represents a part of the law enforcement community in the European Union. The main topics and subtopics of training activities that respondents rated by relevance are stemming from strategic training priorities defined in the EU-STNA. Training aspects identified in the EU-STNA were discussed, validated, and finalised by a focus group of experts on Law Enforcement Cooperation, Information Exchange and Interoperability comprised of representatives of the European Commission, Justice and Home Affairs agencies and CEPOL.

Analysis

Consolidation of data and responses

Data was processed from online survey platform *Qualtrics* to Microsoft Excel. The data was synthetized and analysed by Excel functions. Furthermore, an interview was organised with selected Member States¹² to verify and consolidate the responses on the relatively high number of potential officials to be trained working in the field of OTNA.

¹¹ https://publications.europa.eu/en/publication-detail/-/publication/c71d1eb2-9a55-11e5-b3b7-01aa75ed71a1/language-en.

¹² Estonia and Latvia.



CEPOL approached 26 Member States¹³ and several EU structures dealing with the subject of the OTNA to provide a response from their respective jurisdiction. 20¹⁴ Member States and 3 EU structures¹⁵ (hereinafter institutions) responded to this, resulting in the nomination of 58 experts who would fill in the survey. Further on, the questionnaire was sent to these nominated contact points and distributed via expert group members, to which a total of 23¹⁶ Member States and 3 EU structures¹⁷ (hereinafter institutions) responded, resulting in 64 individuals completing the surveyfrom different law enforcement (LE) agencies and EU structures. In terms of Member States, the 88,5% response rate represents the users of EU/international information systems for information exchange¹⁸ across Europe. Such a response rate can be deemed very high. Most responses (69%) represented police and border security, followed by other security institutions (13%) such as ministry departments and directorates (Romania) as well as educational institutions providing law enforcement training.

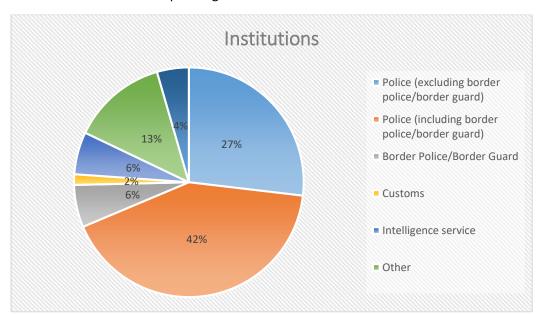


Chart 2. Distribution of responding institutions

Relevance of topics

The potential training needs were presented based on the outcomes of an expert group discussion held in November 2020 in line with the training priorities defined in the EU-STNA process. Respondents were asked whether they find a main topic arising from the EU-STNA outcomes relevant for the performance of the LE service. Main training topics in relation to CIEI are as follows:

¹³ The terminology 'Member States' hereinafter refers to 26 Member States of the European Union participating in CEPOL regulation, i.e., all EU Member States excluding Denmark.

¹⁴ Responding countries: Austria, Croatia, Cyprus, Czech Republic, Estonia, Finland, France, Greece, Hungary, Italy, Latvia, Lithuania, Luxemburg, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden.

¹⁵ Frontex, EU Agency for Fundamental Rights (FRA), Eurojust

¹⁶ Responding countries: Austria, Bulgaria, Croatia, Cyprus, Czech Republic, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, and Sweden.

¹⁷ European Commission, Frontex and Eurojust.

¹⁸ Number of officials, as indicated by the respondents, performing their duties in the area related to on Law Enforcement Cooperation, Information Exchange and Interoperability.



Interoperability¹⁹ components and processes²⁰

Schengen Information System²¹ (SIS) and SIRENE²²

Visa Information System (VIS)²³

European Criminal Records Information System²⁴ (ECRIS and ECRIS-TCN)

European Travel Information and Authorisation System²⁵ (ETIAS)

European Asylum Dactyloscopy Database²⁶ (Eurodac)

Entry-Exit System²⁷ (EES)

VIS²⁸ and EURODAC²⁹ for the purposes of the prevention, detection, and investigation of terrorist offences and other serious criminal offences

Joint Investigation Teams (JITs)

Passenger Name Records System (PNR), Advanced Passenger Information System (APIS)

EU cooperation tools and mechanisms

¹⁹ Interoperability is the ability of information systems to exchange data and enable the sharing of information. An efficient management of Europe's border security and migration relies upon large, centralised information systems including Eurodac, the Schengen Information System (SIS) and the Visa Information System (VIS).

²⁰ API, Rest, JSON, Web Services, XML, WS Sec, Access delegation, identity, trust, federation etc.

²¹ SIS is a large-scale IT system that supports public security and the exchange of information on people and objects between national law enforcement, border control, customs, visa and judicial authorities.

²² Supplementary Information Request at the National Entries. Each Member State must designate a national authority which shall be operational 24 hours a day, 7 days a week and which shall ensure the exchange and availability of all supplementary information (the SIRENE Bureau) in accordance with the SIRENE Manual. Supplementary information shall be exchanged in accordance with the provisions of the SIRENE Manual and using the Communication Infrastructure.

²³ VIS allows Schengen States to exchange visa data. VIS connects consulates in non-EU countries and all external border-crossing points of Schengen States. It processes data and decisions relating to applications for short-stay visas to visit, or to transit through, the Schengen Area.

²⁴ ECRIS provides an electronic exchange of criminal record information on a decentralised basis between Member States. It allows Member State's criminal records authorities to obtain complete information on previous convictions of EU nationals from the Member State of that person's nationality.

²⁵ ETIAS is a pre-travel authorisation system for visa exempt travellers. Its key function is to verify if a third country national meets entry requirements before travelling to the Schengen area. The information submitted, via an online application ahead of their arrival at borders enabling pre-travel assessment of irregular migration risks, security or public health risk checks.

²⁶ Eurodac is a large-scale IT system that helps with the management of European asylum applications since 2003, by storing and processing the digitalised fingerprints of asylum seekers and irregular migrants who have entered a European country. In this way, the system helps to identify new asylum applications against those already registered in the database.

²⁷ The system will electronically register the time and place of entry and exit of third country nationals and calculate the duration of their authorised stay. It will replace the obligation to stamp the passports of third-country nationals which is applicable to all Member States.

²⁸ COUNCIL DECISION 2008/633/JHA of 23 June 2008 concerning access for consultation of the Visa Information System (VIS) by designated authorities of Member States and by Europol for the purposes of the prevention, detection and investigation of terrorist offences and of other serious criminal offences
²⁹ REGULATION (EU) No 603/2013 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 26 June 2013

on the establishment of 'Eurodac' for the comparison of fingerprints for the effective application of Regulation (EU) No 604/2013 establishing the criteria and mechanisms for determining the Member State responsible for examining an application for international protection lodged in one of the Member States by a third-country national or a stateless person and on requests for the comparison with Eurodac data by Member States' law enforcement authorities and Europol for law enforcement purposes, and amending Regulation (EU) No 1077/2011 establishing a European Agency for the operational management of large-scale IT systems in the area of freedom, security and justice.



European E-evidence Digital Exchange System
Interpol Stolen and Lost Travel Documents (SLTD)
Interpol Travel Documents Associated with Notices (TDAWN)
European Border Surveillance system (EUROSUR)
Other training suggestions

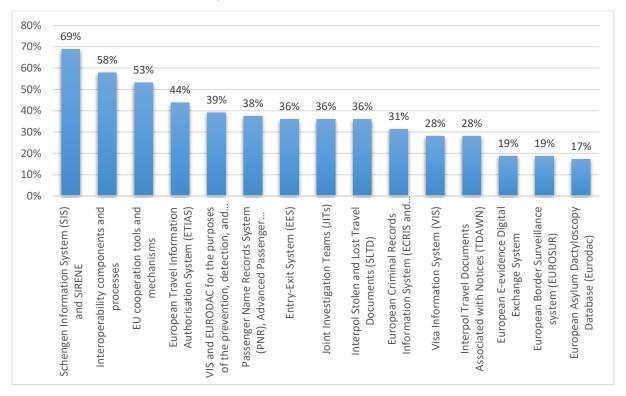
The final relevance rate of a given main topic was calculated by summing up how many Member States found each topic relevant. Where several LE agencies submitted identical answers from the same Member State, entries were consolidated. The ratio of relevance was calculated by dividing the sum of Member States that found the topic relevant by the number of responding Member States. If more than 50% of the Member States find a certain topic relevant, it is considered relevant and it will be processed for further analysis as per the OTNA methodology. Four of all main topics passed the 50% threshold of the relevance rate.

Table 5. Relevance rate of main topics

Main Topic	Relevance
Schengen Information System (SIS) and SIRENE	69 %
Interoperability components and processes	58 %
EU cooperation tools and mechanisms	53 %
European Travel Information and Authorisation System (ETIAS)	44 %
VIS and EURODAC for the purposes of the prevention, detection, and investigation of terrorist offences and other serious criminal offences	39 %
Passenger Name Records System (PNR), Advanced Passenger Information System (APIS)	38 %
Entry-Exit System (EES)	36 %
Joint Investigation Teams (JITs)	36 %
Interpol Stolen and Lost Travel Documents (SLTD)	36 %
European Criminal Records Information System (ECRIS and ECRIS-TCN)	31 %
Visa Information System (VIS)	28 %
Interpol Travel Documents Associated with Notices (TDAWN)	28 %
European E-evidence Digital Exchange System	19 %
European Border Surveillance system (EUROSUR)	19 %
European Asylum Dactyloscopy Database (Eurodac)	17 %



Chart 3. Relevance rate of main topics



Training dimensions

The average urgency rates for the main topics, as well as the number for potential trainees are represented in the table below:

Table 6. Relevance and urgency of prioritised main topics

Main Topic	Relevance	Urgency	Trainees
Schengen Information System (SIS) and SIRENE	69 %	63%	31248
Interoperability components and processes	58 %	66%	868
EU cooperation tools and mechanisms	53 %	58%	377
European Travel Information and Authorisation System (ETIAS)	44 %	65%	179
VIS and EURODAC for the purposes of the prevention, detection, and investigation of terrorist offences and other serious criminal offences	39 %	61%	457
Passenger Name Records System (PNR), Advanced Passenger Information System (APIS)	38 %	59%	195
Entry-Exit System (EES)	36 %	65%	93
Joint Investigation Teams (JITs)	36 %	64%	203
Interpol Stolen and Lost Travel Documents (SLTD)	36 %	53%	4141
European Criminal Records Information System (ECRIS and ECRIS-TCN)	31 %	57%	132
Visa Information System (VIS)	28 %	64%	136



Interpol Travel Documents Associated with Notices (TDAWN)	28 %	52%	4085
European E-evidence Digital Exchange System	19 %	64%	352
European Border Surveillance system (EUROSUR)	19 %	67%	1
European Asylum Dactyloscopy Database (Eurodac)	17 %	53%	196
Total			42663

CEPOL's training activities address law enforcement officials of the 26 EU Member States. The number of participants indicated in the responses to the survey are considered as the number of participants who would need training from responding Member States. To estimate the total number of LE officials who would need training in a certain topic at a certain proficiency level is calculated via identifying the central tendency or middle value (statistical median)³⁰ of the number of trainees per topic per proficiency level. The estimate of the number of participants on EU-level is calculated by multiplying the median with 26 (as per the number of Member States). Since the median excludes the extremes of the data set, it might happen that the rank of proficiency levels in each topic is different on the EU-level to the rank which is based on the responses given to the survey.

The number of participants was calculated as the sum of the participants indicated by each Member State. The median of participants was calculated to be able to calculate the potential number of attendees should all Member States³¹ take part in the training.

Respondents indicated that 32 493 participants would need training in 2022 from the 23 responding Member States and EU structures for the prioritised topics, which would mean 22 568 potential trainees from 26 Member States and the European Union³². It should be noted that due to the method of extrapolation in cases where one response indicates a high number distant from numbers indicated by the rest of respondents, the statistical median-based calculation does indeed flatten the calculated total trainees in all EU by ruling out the extreme data from the dataset.

Moreover, the number of potential trainees under the topic of Schengen Information System (SIS) and SIRENE is high compared to the other topics (31 248 trainees indicated these topics versus 714 trainees for the next highest number, Interoperability). This is due to two Member States reporting a rather high demand even comparable to the total amount of LE officials employed by the institutions in question. As the biggest numbers for officials to be trained on the prioritised topics was reported by Estonia and Latvia, the issue of the difference of needs in the field of OTNA compared to other, e.g., bigger Member States' law enforcement institutions was clarified by interviews. Although Estonian respondents were not available for an interview, the reported numbers correspond with the total number of officials operating in the area of Law Enforcement Cooperation, Information Exchange and

³⁰ The median is a simple measure of central tendency, the 'middle value' of the list. The basic advantage of the median in describing data compared to the mean (often simply described as the "average") is that it is not skewed so much by extremely large or small values, and so it may give a better idea of a 'typical' value. For example, in understanding statistics like household income or assets which vary greatly, a mean (average) may be skewed by a small number of extremely high or low values. Median income, for example, may be a better way to suggest what a 'typical' income is. E.g. 1, 2, 2, 3, 4, 7, 9. The middle value separating the greater and lesser halves of a data set is 3 (https://en.wikipedia.org/wiki/Median).

³¹ All EU member States, not including Denmark.

³² Median of number of indicated participants was calculated in order to be able to calculate the potential number of attendees should 26 MS be interested in training.



Interoperability, and also to the total size of the Estonian Police and Border Guard. Estonia has indicated the same number, 4 000 officials, for all the subtopics Schengen Information System (SIS) and SIRENE. Hence, it can be safely noted that the responses reflect the interest of Estonia to offer training and capacity development in each subtopic under the topic of SIS and SIRENE.

Regarding Latvia, the issue of interoperability is seen as an important factor in operational law enforcement, thus there are a high number of SIS users within LE institutions in Latvia. The total number of trainees is comprised of ten different LE organizations. However, as noted by a Latvian representative, it is not expected that all trainees would receive training at the EU-level. It is considered that there should be a cascading model for training for Latvia to be able to offer training for different users (also with local language) via different methods from online solutions to onsite training.

Table 7. Indicative target group per Member State and EU structure

MS / EU	Approximated officials assigned to the area	Trainees SIS/SIRENE	Trainees Interoperability	Trainees EU Cooperation
Staff of Union bodies	800	60	10	2
Austria	40 000	0	0	0
Bulgaria	123	60	5	12
Croatia	6 000	0	0	0
Cyprus	0	160	45	0
Czech Republic	45 000	24	80	8
Estonia	4 000	24 000	85	0
Finland	720	12	61	33
France	50 000	16	14	2
Germany	5 500	360	0	0
Greece	95	265	0	80
Hungary	150	210	130	20
Ireland	25	103	0	0
Italy	213	4	5	4
Latvia	3 551	5 270	0	6
Lithuania	7000	180	0	70
Luxembourg	35	0	5	0
Poland	80	0	0	0
Portugal	15 000	216	118	67
Romania	25	6	166	60
Slovakia	63	174	25	3
Slovenia	70	18	19	0
Spain	40	110	100	10
Sweden	500	0	0	0
TOTAL	178 990	31 248	868	377

Respondents were asked to indicate the proficiency level of training needed under each main topic. The levels of proficiency were the following: Awareness, Practitioner, Advanced practitioner, Expert and Train-the-trainer. (Please find detailed description of proficiency levels in Annex 1.) Each



proficiency level under each main topic has related data such as urgency level and the number of requested participants per profile.

Where the same proficiency level was indicated by several LE agencies of the same Member State, the attributes of the training were calculated as follows. For urgency level, the highest rate indicated was taken into consideration, and, for number of participants, the sum of the indicated numbers.

The Likert-type scale of urgency levels (Training need is low – not urgent at all, Training need is secondary – not urgent, Training need is moderate – somewhat urgent, Training need is urgent, Training need is crucial – very urgent) was converted into numerical scale from 1-5, five meaning Training need is crucial – very urgent. The highest urgency score under each proficiency level was taken into account. Please find the detailed description of urgency levels in Annex 2.

The highest common need indicated by respondents is in the proficiency levels of **Practitioner/Advanced practitioner,** and, to a certain extent, **Expert** while Train-the-trainer and Awareness level training are lower on the priority scale (Table 9).

Table 8. Proficiency level objectives under each topic.

Proficiency level	1 st priority	2 nd priority
Schengen Information System (SIS) and SIRENE	Practitioner	Advanced practitioner
Interoperability components and processes	Practitioner	Advanced practitioner
EU cooperation tools and mechanisms	Advanced practitioner	Expert

Table 9. Number of trainees in each proficiency level extrapolated to EU level.³³

	Schengen Information System (SIS) and		Interoperability components and		EU cooperation tools and	
	SIRENE	T	processes		mechanism	IS
Proficiency levels	Number of	EU	Number of	EU	Number	EU
	trainees		trainees		of	
					trainees	
Awareness	127	403	109	637	65	338
Practitioner	6 037	4030	227	1 521	50	650
Advanced	24 251	1 950	216	1 313	96	1 586
practitioner						
Expert	415	1 339	154	507	94	897
Train-the-trainer	180	1 872	126	780	30	78

The OTNA questionnaire was complemented with an additional question to identify the profiles of LE officials who would need training in different topics. Most references were given to investigators and system operators (e.g., SIRENE), but also to analysts. These are the target groups that should be

³³ Total numbers per proficiency level do not match the total numbers per profile due to respondents not indicating the same numbers for the two questions.



provided with the opportunity to be trained first. Lower priority was indicated for managers and experts.

Training dimensions for main topics

With the aim of better understanding the training needs, law enforcement officials' suggestions on various **subtopics** were requested. This chapter presents more detailed training needs related to each main topic. Such sub-topics can be used to determine respondents' interests to be addressed in possible training activities. Analysing the suggestions, the following collation of thematic areas were identified:

Schengen Information System (SIS) and SIRENE³⁴

- The new SIS regulations (GENERAL)
- Training per each SIS alert category (including preventive alerts)
- Training on the new alert categories in SIS: return alerts, alert on unknown wanted person, inquiry check alert, preventive alerts
- Training on new data categories in SIS alerts
- Training on the dactyloscopic data in SIS
- Training on the new SIRENE manual and procedures for exchange of supplementary information (including factsheets, the new SIS regulations and filling in questionnaires)

Interoperability components and processes³⁵

- General information about the system (e.g., overall introduction to the system, legislative background, data security and quality)
- Use of the system (e.g., entering data in the system, hits/search in databases, return links, MID, biometrics, ensuring quality of data, data analysis, use of system for investigations and analysis, practical exercises)
- Databases and related systems
- Cooperation (e.g., operational management, with EU-LISA)
- Links to other types of crime (e.g., Visa fraud, human trafficking, cybercrime)

EU cooperation tools and mechanisms³⁶

- EU cooperation tools and mechanisms
- Specific tools
- Interoperability

Each of the three prioritised main topics was analysed in terms of level of proficiency³⁷ and job profiles. For each level of proficiency, respondents indicated the potential number of participants per profile. Due to the need to approximate several open suggestions for sub-topics and consequent interpretative clustering, the urgency rate is not mathematically calculated for Interoperability and EU

³⁴ Open suggestions concerning SIS/SIRENE converge with the pre-set topics and are hence combined below.

³⁵ Categories based on convergence of various open suggestions.

³⁶ Categories based on convergence of various open suggestions.

³⁷ Levels of proficiency are: Awareness, Practitioner, Advanced practitioner, Expert and Train-the-trainer.



cooperation tools and mechanisms. However, the categorical urgency is illustrated in Tables 11 and 12. The following analysis for the themes of interest is based on collating the suggestions above:



Table 10. Analysis of topics on Schengen Information System (SIS) and SIRENE (prioritised sub-topics in green highlight).

	The new SIS regulations (GENERAL)		Training per of alert category preventive al	y (including	Training on the		Training on new categories in SIS		Training on the dactyloscopic SIS		and procedures for supplementary in	
Urgency	67 %		59 %		68 %		68 %		61 %		69 %	
Proficiency levels	Number of	EU ³⁸	Number of	EU	Number of	EU	Number of	EU	Number of	EU	Number of	EU
	trainees		trainees		trainees		trainees		trainees		trainees	
Awareness	60	78	11	143	2	26	2	26	5	26	42	78
Practitioner	74	390	1 595	715	176	715	3 675	780	382	780	115	650
Advanced practitioner	4 069	455	4 100	780	4 012	78	4 059	130	4 005	52	4 007	130
Expert	111	195	35	260	118	390	40	130	40	130	68	260
Train-the-trainer	17	156	36	468	36	468	36	468	6	156	49	156
TOTAL	4 331	1 274	5 777	2 366	4 344	1 677	7 812	1 534	4 438	1 144	4 281	1 274

Number of trainees by profile	39				Number of trainees by profile ³⁹								
	The new SIS regulations	Training per each SIS alert category	Training on the new alert categories in SIS	Training on new data categories in SIS alerts	Training on the dactyloscopic data in SIS	Training on the new SIRENE manual	Total						
Operators	30	157	199	217	183	192	978						
Analyst, evaluator	224	25	29	29	28	27	362						
Investigator, prosecutor	15	1 558	72	3 061	181	66	4 953						
Experts (IT, forensics, other)	83	5	15	518	42	54	717						
Management	16	4	9	9	9	9	56						
Others	5	22	77	568	149	48	869						
TOTAL	373	1 771	401	4 402	592	396							

³⁸ Extrapolation.

³⁹ Total numbers per proficiency level do not match the total numbers per profile due to respondents not indicating the same numbers for the two questions.



 Table 11. Analysis of open topics on Interoperability.

	General informat system	ion about the	Use of the system	1	Databases, relate	d systems	Cooperation		Links to other ty	pes of crime
Proficiency levels	Number of trainees	EU	Number of trainees	EU	Number of trainees	EU	Number of trainees	EU	Number of trainees	EU
Awareness	74	442	35	195	0	0	0	0	0	0
Practitioner	147	481	55	390	25	650	0	0	0	0
Advanced practitioner	0	0	126	442	35	156	55	715	0	0
Expert	50	130	66	169	5	130	0	0	33	78
Train-the-trainer	0		86	260	40	520	0	0	0	0
	271	1 053	368	1 456	105	1 456	55	715	33	78

Number of trainees by profile							
	General information	Use of the system	Databases, related	Cooperation	Links to other types of	Total	
	about the system		systems		crime		
Operators	82	586	25	50	0	743	
Analyst, evaluator	59	275	15	5	0	354	
Investigator, prosecutor	60	250	17	0	6	333	
Experts (IT, forensics, other)	30	64	0	0	0	94	
Management	10	21	33	0	0	64	
Others	12	0	0	0	0	12	
TOTAL	253	1 196	90	55	6		

Table 12. Analysis of open topics on EU cooperation tools and mechanisms.



	EU cooperation tools	and mechanisms	Specific tools		Interoperability		Others	
Proficiency levels	Number of trainees	EU	Number of trainees	EU	Number of trainees	EU	Number of trainees	EU
Awareness	62	260	3	78	0	0	0	0
Practitioner	50	650	0	0	0	0	0	0
Advanced practitioner	55	520	30	780	3	78	8	208
Expert	14	182	43	559	1	26	36	130
Train-the-trainer	30	78	0	0	0	0	0	0
	211	1 690	76	1 417	4	104	44	338

	EU cooperation tools and mechanisms	Specific tools	Interoperability	Others	Total
Operators	62	0	50	0	112
Analyst, evaluator	0	55	0	1	56
Investigator, prosecutor	24	25	50	0	99
Experts (IT, forensics, other)	9	3	0	0	12
Management	16	0	0	0	16
Others	2	52	1	3	58
TOTAL	113	135	101	4	



The urgencies were reliably measurable only with the pre-set subtopics and are illustrated above in Table 10. While considering the need to group somewhat differing open topics together, the trend concerning open topics within "Interoperability" and "EU cooperation tools and mechanisms" was reported as less urgent. Based on the combination of urgency and number of trainees, the following conclusions were made (Table 13).

Table 13. Most interesting subtopics for the institutions

Main topic	Subtopic	Urgency	Trainees
Schengen	Training on the new SIRENE manual and procedures for exchange of supplementary information	1 years' time	12 276
Information System (SIS) and SIRENE	Training on the new alert and data categories in SIS	1 years' time	1 60540
SINLINL	The new SIS regulations (GENERAL)	1 years' time	1 274
Interoperability	General information about and using the system	2-3 years' time	1 25441
components and processes	Databases, related systems	2-3 years' time	1 456
EU cooperation	EU cooperation tools and mechanisms	2-3 years' time	1 690
tools and mechanisms	Specific tools	2-3 years' time	1 417

The following tables illustrate the number of participants who need training in different proficiency levels and the urgency level of training to be delivered. The median of participants was calculated to be able to assess how many potential participants can be expected at a certain proficiency level from the 26 Member States that fall under the scope of this analysis. The column titled 'Extrapolation for all MSs' contains the potential number of participants from 26 Member States.

1. Schengen Information System (SIS) and SIRENE

Schengen Information System (SIS) and SIRENE is the most relevant main topic as indicated by the Member States. Within this main topic, training should focus on most relevant subtopics as indicated below.

Relevancy	Urgency	Proficiency level	Profile focus	Number of participants extrapolated to EU
69%	63%	Practitioner/Advanced practitioner	Operators/ Investigators	2 827 ⁴²

⁴⁰ Average number from the sub-topics of "Training on the new alert categories in SIS: return alerts, alert on unknown wanted person, inquiry check alert, preventive alert", and "Training on new data categories in SIS alerts".

⁴¹ Average number from the sub-topics of "General information about the system", and "Use of the system".

⁴² Average of the two Proficiency levels "Practitioner" and "Advanced practitioner" referred in Table 10.



	The new SIS regulations (GENERAL)
	New Training on the new SIRENE manual and procedures for
Subtopic(s)	exchange of supplementary information (including factsheets, the new SIS regulations and filling in questionnaires)
	Training on the new data and alert categories in SIS: return alerts, alert on unknown wanted person, inquiry check alert, preventive alerts

2. Interoperability components and processes

Interoperability components and processes is the second most relevant main topic as indicated by the Member States. Within this main topic, training should focus on the most relevant subtopics as indicated below.

Relevancy	Urgency	Proficiency level	Profile focus	Number of participants extrapolated to EU
58%	66%	Practitioner	Operators	1 521
Subto	oic(s)	General informationDatabases, related st	J	ne system

3. EU cooperation tools and mechanisms

EU cooperation tools and mechanisms is the third most relevant main topic as indicated by the Member States. Within this main topic, training should focus on the most relevant subtopics as indicated below. Training need is relatively urgent, and it would be advantageous to receive training within a year's period.

Relevancy	Urgency	Proficiency level	Profile focus	Number of participants extrapolated to EU		
53%	58%	Advanced Practitioner	Operators	1 586		
Subtopic(s)		EU cooperation tools and mechanismsSpecific tools				

4. National level training

Reports on training provided at national or regional level for law enforcement officials are rarely available, therefore the questionnaire had a section with a question referring to data on previous training activities organised/attended. Twenty-three answers were provided with highly heterogenic content. Therefore, data on training provided on national level is scattered and not apt for statistical analysis. However, data on sufficient training available at national level or regional level that "would make CEPOL training activities redundant" highlights the topics of "Schengen Information System (SIS) and SIRENE" (18% of all respondents, indicated the topic). It can be further noted that the emphasis of the national level training is on practical training on the use of national applications, and on e-learning for relevant personnel. The limited data available suggests that the training available extends on average from few hours to few working days. The analysis suggests that only some Member States institutions, and only to a certain extent and level, are maintaining training



capacities for the above-mentioned topic. While the same topic is also identified as the most relevant and urgent to training need, it can be concluded that an EUlevel training portfolio is needed to supplement national efforts.

Conclusion

This OTNA report describes training priorities in the area of Law Enforcement Cooperation, Information Exchange and Interoperability for 2022. The high number of respondents and Member States, and their representation of LE institutions indicates a clear interest in both the themes and topics under OTNA, and towards the training services provided by CEPOL.

The outcomes of the Operational Training Needs Analysis on CIEI show that 25% of the main topics are both relevant and relatively urgent for law enforcement officials. Schengen Information System (SIS) and SIRENE; Interoperability components and processes; and EU cooperation tools and mechanisms should be given the highest priority when designing training activities, without excluding the other main topics. Training should focus on LE personnel at levels ranging from practitioner to advanced practitioner for investigators and system administrators. Naturally, the amount of focus on the train-the-trainer level depends on the varied competencies present in Member States.

Sufficient training available at national level or regional level that "would make CEPOL training activities redundant" can only be said on the topic of "Schengen Information System (SIS) and SIRENE". However, it can be noted that the emphasis of the national level training is seemingly on practical training on the use of national applications, and on e-learning for relevant personnel. The analysis suggests that only some Member State institutions, and only to certain extent and level, are maintaining training capacities for the above-mentioned topic. Although the same priority topic is also reported as the most relevant and urgent to training need, the analysis suggests that an EU-level training portfolio is seen as a timely and relevant supplement to national activities.



Annex 1. Proficiency levels

	Level 1 – Awareness	Level 2- Practitioner	Level 3 – Advanced Practitioner	Level 4 - Expert	Level 5 – Train-the-trainer
Definition	Refers to those who only need an insight into the particular topic, they do not need specific skills, competences and knowledge to perform the particular tasks, however require general information in order to be able efficiently support the practitioners working in that particular field.	Refers to those who independently perform their everyday standard duties in the area of the particular topic.	Has increased knowledge, skills and competences in the particular topic because of the extended experience, or specific function, i.e. team/unit leader.	Has additional competences, highly specialised knowledge and skills. Is at the forefront of knowledge in the particular topic.	Officials who are to be used as trainers for staff
Description	Has a general factual and theoretical understanding of what the topic is about, understands basic concepts, principles, facts and processes, and is familiar with the terminology and standard predictable situations. Taking responsibility for his/her contribution to the performance of practitioners in the particular field.	Has a good working knowledge of the topic, is able to apply the knowledge in the daily work, and does not require any specific guidance in standard situations. Has knowledge about possible situation deviations and can practically apply necessary skills. Can assist in the solution development for abstract problems. Is aware of the boundaries of his/her knowledge and skills, is motivated to develop self-performance.	Has broad and in-depth knowledge, skills and competences involving a critical understanding of theories and principles. Is able to operate in conditions of uncertainty, manage extraordinary situations and special cases independently, solve complex and unpredictable problems, direct work of others. Is able to share his/her knowledge with and provide guidance to less experienced colleagues. Is able to debate the issue with a sceptical colleague, countering sophisticated denialist talking points and arguments for inaction.	Has extensive knowledge, skills and competences, is able to link the processes to other competency areas and assess the interface in whole. Is able to provide tailored advice with valid argumentation. Is able to innovate, develop new procedures and integrate knowledge from different fields. Is (fully or partially) responsible for policy development and strategic performance in the particular area.	Has knowledge and skills to organise training and appropriate learning environment using modern adult training methods and blended learning techniques. Is familiar with and can apply different theories, factors and processes of learning in challenging situations. Experienced with different methods and techniques of learning. Can prepare and conduct at least one theoretical and one practical training session for law enforcement officials.
EQF equivalent	EQF Level 3-4	EQF Level 5	EQF Level 6	EQF Level 7	n/a

EQF levels – Descriptors defining levels in the European Qualifications Framework, more information is available at https://ec.europa.eu/ploteus/en/content/descriptors-page

Images from https://askfortheworld.wordpress.com/levels/



Annex 2. Urgency levels

Urgency in the context of this questionnaire refers to the criticality of timely training intervention and its impact to the operational performance.

Urgency scale level	1	2	3	4	5
Training need is	Low	Secondary	Moderate	Urgent	Crucial
Training impact	Training has a minor role in the performance boost, it would refresh the knowledge, officials could benefit from training, and however, it is not essential.	It would be useful if the training would be delivered, however, the need is not urgent. Training can be delivered in (predictable) 2-3 years' time, it is needed to stay updated.	It would be advantageous to receive training within a year's period, it would improve the performance, however, not significantly.	Training is essential, it is necessary to be delivered within a year's period, it is important to perform qualitatively.	Training is critical, it is necessary as soon as possible, it is crucial for the successful performance of duties.