

# Operational Training

## Needs Analysis

Law enforcement cooperation,

information exchange and interoperability

Stay ahead of crime



European Union Agency for Law Enforcement Training – CEPOL  
1101 Budapest, Üllői út 114-116,  
Email: [info@cepol.europa.eu](mailto:info@cepol.europa.eu)  
[www.cepol.europa.eu](http://www.cepol.europa.eu)

OPERATIONAL TRAINING NEEDS ANALYSIS – LAW ENFORCEMENT COOPERATION,  
INFORMATION EXCHANGE AND INTEROPERABILITY (2025)

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## List of abbreviations

AFA	Application for Action
AI	Artificial Intelligence
API	Advanced Passenger Information
CEPOL	European Union Agency for Law Enforcement Training
CJEU	Court of Justice of the European Union
CNU	Cepol National Unit
CKC	Cepol Knowledge Centre
ECRIS-TCN	European Criminal Records Information System for Third-Country Nationals
EES	Entry/Exit System
EJTN	European Judicial Training Network
EMPACT	European Multidisciplinary Platform Against Criminal Threats
ETIAS	European Travel Information and Authorisation System
EU	European Union
EUIPO	European Union Intellectual Property Office
eu-LISA	European Union Agency for the Operational Management of Large-Scale IT Systems in the Area of Freedom, Security and Justice
EURODAC	European Travel Information and Authorisation System
e-CODEX	e-Justice Communication via Online Data Exchange
FIU	Financial Intelligence Unit
FRONTEX	European Border and Coast Guard Agency
IP	Intellectual Property
IPEP	Intellectual Property Enforcement Portal
IT	Information Technology
JIT	Joint Investigation Team
LE	Law Enforcement
MB	Management Board
MENA	Middle East and North Africa
MS	Member States
OTNA	Operational Training Needs Analysis
OSINT	Open-Source Intelligence
PIU	Passenger Information Unit
PNR	Passenger Name Record
SPD	Single Programming Document
SIS	Schengen Information System
SIRENE	Supplementary Information Request at the National Entries
SIU	Special Intervention Unit
SPOC	Single Point of Contact
TCN	Third-Country National
TTT	Train-the-Trainer
UK	United Kingdom
VIS	Visa Information System

## Executive Summary

Between December 2024 and February 2025, CEPOL conducted an Operational Training Needs Analysis (OTNA) on Law Enforcement Cooperation, Information Exchange and Interoperability, using an online questionnaire as the primary data collection tool. The questionnaire explored 17 main topics through two dedicated survey lines: one focusing on law enforcement cooperation and the other on Information exchange and interoperability. The OTNA received 67 contributions from 23 European Union (EU) Member States (MS), Switzerland (a non-EU partner country) and one EU body, with the majority of responses coming from police authorities, while customs, border police, judicial authorities, and other services were also represented. Nearly 40% of respondents addressed both dimensions, while the rest focused on either information exchange and interoperability or law enforcement cooperation as standalone areas.

Across the 17 topics surveyed, eight emerged as priorities for EU-level training, having been identified as relevant by over half of the responding MS in line with the OTNA methodology, which considers a topic as relevant for EU-level intervention when it is prioritised by at least 50% of responding countries.



**In the area of law enforcement cooperation**, training on Cross-border Operational Cooperation and Information Exchange, Single Point of Contact (SPOC), the European Multidisciplinary Platform Against Criminal Threats (EMPACT) mechanism, and Joint Investigation Teams (JIT) stood out as key areas where capacity-building is required.

Main topics for training - law enforcement cooperation	Relevance (%)
Cross-border operational cooperation and information exchange	80.0%
SPOC training including all existing and new systems, actual problems, sharing best practices	60.0%
EMPACT mechanism	56.0%
Joint Investigation Teams	56.0%
Law enforcement access to non-law enforcement system - Visa Information system (VIS), European Travel Information and Authorisation System (ETIAS), European Asylum Dactyloscopy Database (EURODAC), Entry/Exit System (EES)	48.0%
Joint operations and joint patrols (Prüm decision)	44.0%
Passenger Name Record System exchange at Passenger Information Units (PIU)	44.0%

**Eight subtopics were reviewed for each main topic**, including cooperation and data sharing within and outside the EU, cross-border operational cooperation, fundamental rights and data protection, digital skills and artificial intelligence, judicial cooperation, multidisciplinary and administrative approaches, and the use of special tactics and initiatives such as witness protection, undercover operations, and controlled deliveries. While **these subtopics were broadly considered relevant across the main topics**, some variations emerged. Cooperation and data sharing were consistently identified as the most important, followed by cross-border operational cooperation, digital skills and AI, and judicial cooperation. Other topics, such as fundamental rights and data protection, multidisciplinary and administrative approaches, and the use of special tactics, were also deemed relevant for training. However, in the case of JITs, the multidisciplinary and administrative approach subtopic fell below the usual 50% relevance threshold.



**On information exchange and interoperability**, the most relevant topics included the training on Interoperability (components and tools), the Schengen Information System (SIS), the EES, and the ETIAS.

Main topics for training – information exchange and interoperability	Relevance (%)
Interoperability (components and tools)	72.0%
Schengen Information System (SIS)	72.0%
Use of EES for law enforcement	60.0%
Use of ETIAS for law enforcement	60.0%
Use of VIS for law enforcement	44.0%
Use of Eurodac for law enforcement	40.0%
European Criminal Records Information System – Third Country Nationals (ECRIS-TCN)	40.0%
Passenger Name Record System/Advanced Passenger Records (API)	40.0%
Automated data exchange (Prüm II)	36.0%
e-Justice Communication via Online Data Exchange (e-CODEX)	16.0%

Although Eurodac did not initially reach the statistical threshold for prioritisation, its relevance is expected to grow in light of upcoming regulatory changes. It should, therefore, be considered in the context of future training planning<sup>1</sup>. Conversely, joint operations and joint patrols governed by the Prüm framework would likely be less relevant EU-level training interventions, as they are typically regulated through bilateral or multilateral agreements and best addressed through national-level training initiatives.

**In information exchange and interoperability, five common subtopics were assessed:** interoperability features, general information on large-scale IT systems, fundamental rights and data protection, biometric identification, and quality standards for storing data in EU information systems and interoperability components. Among the information exchange priority topics (SIS, EES, and ETIAS), interoperability features stood out as the most relevant subtopic, though the others remained consistently important for training. Within Interoperability (components and tools), interoperability features again held the highest priority, followed closely by biometric identification, general information on IT systems, and data quality standards.



**Training needs across these priority areas were generally rated as urgent**, with urgency levels reaching 69.3% for law enforcement cooperation, 71.04% for information exchange, and 67.8% for interoperability. These figures indicate that, in accordance with CEPOL’s OTNA methodology, training in all these areas is considered urgent and should ideally be delivered within a year to ensure operational effectiveness.



Based on the data analysis, **training in law enforcement cooperation topics could be required by up to 24 765 professionals**, with demand spread across various professional profiles but most frequently targeting investigators and analysts. While practitioner-level training appears to be the most sought-after, awareness-level training is also widely needed, along with a notable demand for advanced practitioner-level training. In contrast, **in information exchange and interoperability, the estimated EU-wide training need is significantly higher, potentially reaching 70 668 professionals**. In these areas, the focus shifts more strongly towards awareness-level training, with end users identified as the primary target group. However, particularly in the case of SIS, statistical extrapolation has significantly inflated

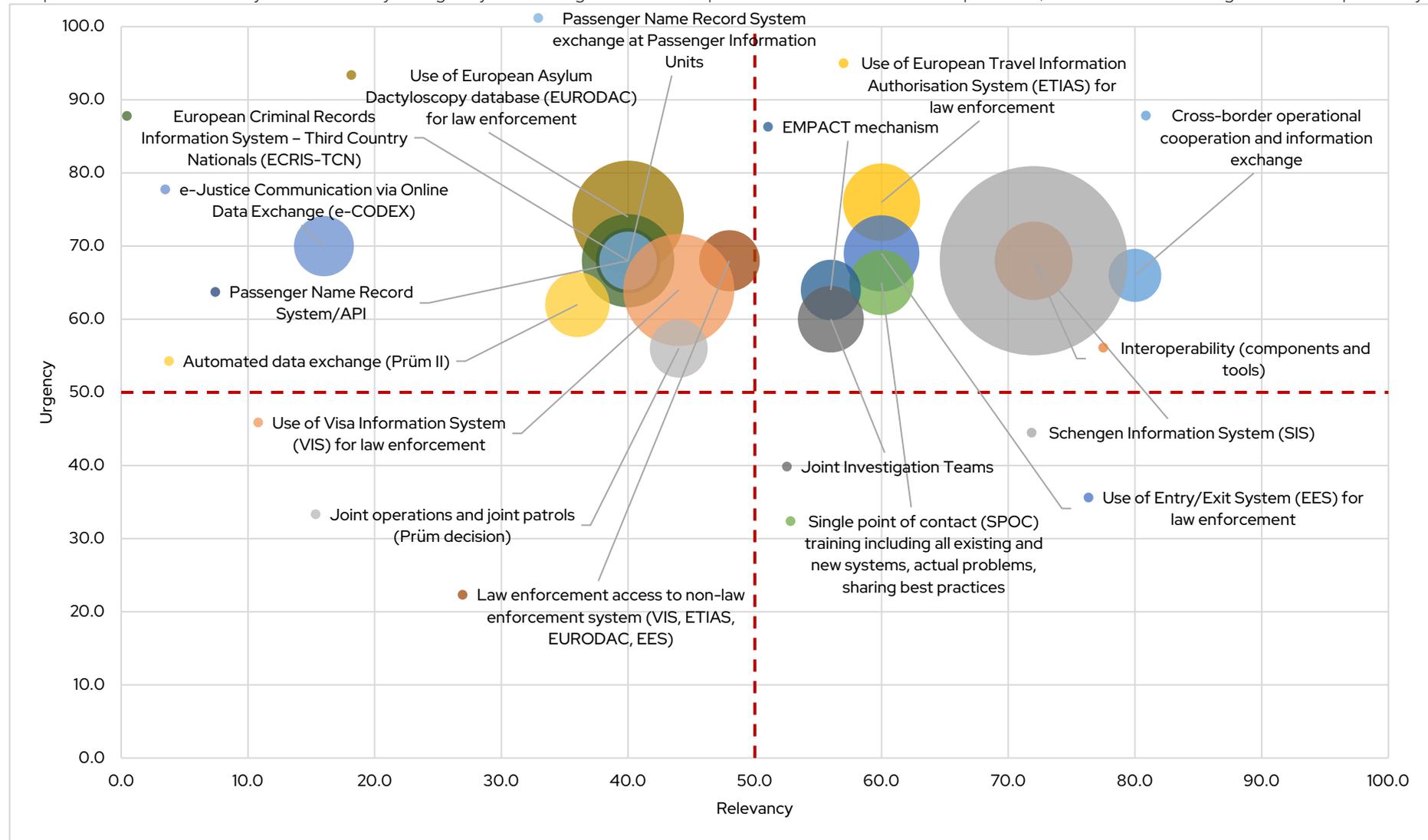
<sup>1</sup> Regulation (EU) 2024/1358 aims to transform the existing Eurodac database into a comprehensive asylum and migration database with more accurate and complete data on various categories of migrants, including applicants for asylum and people arriving irregularly in the European Union. The regulation applies from **12 June 2026**. However, the articles relating to the collection and transmission of the biometric data of beneficiaries of temporary protection apply from 12 June 2029.

end-user estimates due to high participant figures reported by a few MS. While the need for end-user training remains evident, the actual number of participants requiring training is likely lower than the statistical estimates suggest, and the required proficiency level may shift towards practitioner and advanced practitioner training. The Interoperability dimension presents a different distribution of training needs, with requirements balancing between investigators, end users, and analysts. Here, training should primarily be provided at the practitioner and advanced practitioner levels, ensuring that professionals working in these fields develop the necessary expertise to manage and utilise interoperability tools effectively.



Amongst the priority main topics of law enforcement cooperation, **regional training could be considered for geographically focused capacity-building, particularly where cross-border cooperation and shared operational challenges require a coordinated approach.** Training needs relate to Baltic, Southern, and South-eastern European cooperation for Cross-border operational cooperation and information exchange and SPOC training. For EMPACT, some responses pointed to a pan-European training approach, while others identified regional clusters in Southern, Nordic, and Western Europe. Similarly, for JITs, regional training needs were identified across Central, Western, and South-eastern Europe, with additional emphasis on cooperation with non-EU partners, including the Middle East and North Africa (MENA) region and the Western Balkans.

Graphic 1 - Eisenhower analysis – relevancy & urgency of training on all main topics of law enforcement cooperation, information exchange and interoperability



## Introduction

As defined under Article 3 of Regulation 2015/2219<sup>2</sup>, CEPOL's objectives are to support, develop, implement, and coordinate training for law enforcement officials, particularly on protecting human rights and fundamental freedoms in the LE context. The agency facilitates the prevention and fight against serious and organised crime, terrorism, and emerging security threats by enhancing cross-border cooperation through vocational training.

To design its training portfolio, CEPOL builds on the outcomes of OTNAs, which are regularly conducted on the priority topics defined by the EU-STNA. As outlined in the Single Programming Document (SPD) 2023-2026<sup>3</sup>, the OTNA plays a crucial role in supporting CEPOL's strategic goals by aligning training activities with the operational needs of EU MS. The OTNAs are implemented using a structured seven-step process that involves close cooperation with CEPOL National Units (CNU), CEPOL Knowledge Centres (CKC), and various LE agencies. First piloted in 2018 and officially adopted by CEPOL's Management Board (MB) in Decision 32/2017/MB, the OTNA methodology was updated in 2020 to reflect evolving needs and feedback from MS<sup>4</sup>. The target group for the OTNA consists of LE officials, as defined in Article 2 of Regulation 2015/2219<sup>5</sup>.

The OTNA on law enforcement cooperation, information exchange and interoperability presented a total of 17 main topics through two dedicated lines of survey. The domain of law enforcement cooperation covers key operational frameworks, collaborative mechanisms, and legal and institutional tools that facilitate cross-border and inter-agency cooperation. Information exchange refers to the use of large-scale IT systems that support data sharing for law enforcement purposes. Interoperability, in turn, focuses on the interconnection of these systems, addressing how different databases and tools interact to improve operational effectiveness and information accessibility.

The seven main topics covered by **law enforcement cooperation** were:

- Cross-border operational cooperation and information exchange
- SPOC training, including all existing and new systems, actual problems, and sharing best practices
- EMPACT mechanism
- Joint Investigation Teams
- Law enforcement access to non-law enforcement system (VIS, ETIAS, EURODAC, EES)
- Joint operations and joint patrols (Prüm decision)
- Passenger Name Record System exchange at PIUs

The domains of **information exchange and interoperability** were examined through a separate survey line, covering the following ten main topics:

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<sup>2</sup> Available on: <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32015R2219&from=EN>

<sup>3</sup> <https://www.cepol.europa.eu/about/key-documents?pg=1>, Annex to Management Board Decision 17/2022/MB, CEPOL Single Programming Document for 2024-2026, (13 December 2022), p. 5.

<sup>4</sup> Since then, CEPOL has conducted numerous OTNAs across various training topics within the EU-STNA, supplemented by extraordinary assessments where necessary.

<sup>5</sup> [Regulation \(EU\) 2015/2219 of the European Parliament and of the Council of 25 November 2015 on the European Union Agency for Law Enforcement Training \(CEPOL\) and replacing and repealing Council Decision 2005/681/JHA - Publications Office of the EU \(europa.eu\)](https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32015R2219&from=EN)

- Interoperability (components and tools)
- Schengen Information System (SIS)
- Use of EES for law enforcement
- Use of ETIAS for law enforcement
- Use of VIS for law enforcement
- Use of EURODAC for law enforcement
- ECRIS-TCN
- PNR System/API
- Automated data exchange (Prüm II)
- e-CODEX

The OTNA survey, conducted between December 2024 and February 2025, invited 26 EU MS, relevant partner countries, and EU institutions to provide insights into training needs on these topics, addressing either both survey lines or only one. The survey gathered 67 responses from different LE agencies across 23 MS, Switzerland (a non-EU country with long-standing cooperation with CEPOL under a formal working arrangement<sup>6</sup>), and one EU body<sup>7</sup>. The strongest participation came from Poland and Romania, followed by Finland, Portugal, and Sweden. Based on the identified additional information needs, requests for clarification and interest in further exploring certain aspects during the analysis process, respondents from four countries<sup>8</sup> were invited for a follow-up interview.

The overall representation of different countries<sup>9</sup> in the OTNA data collection is presented in **Table 1** below. After the country name, the first column displays the number of responses (n), while the second column presents the share (%), indicating the proportion of responses from each country relative to the total number of responses (N) in the study.

Table 1 - Responding countries

<b>PL</b>	Poland	8	11.9%	<b>LT</b>	Lithuania	2	3.0%
<b>RO</b>	Romania	7	10.4%	<b>ES</b>	Spain	2	3.0%
<b>FI</b>	Finland	5	7.5%	<b>LV</b>	Latvia	1	1.5%
<b>PT</b>	Portugal	5	7.5%	<b>BG</b>	Bulgaria	1	1.5%
<b>SE</b>	Sweden	5	7.5%	<b>DK</b>	Denmark	1	1.5%
<b>HR</b>	Croatia	4	6.0%	<b>MT</b>	Malta	1	1.5%
<b>DE</b>	Germany	4	6.0%	<b>LU</b>	Luxembourg	1	1.5%
<b>SI</b>	Slovenia	3	4.5%	<b>CY</b>	Cyprus	1	1.5%
<b>IT</b>	Italy	3	4.5%	<b>HU</b>	Hungary	1	1.5%
<b>CH</b>	Switzerland	3	4.5%	<b>SK</b>	Slovakia	1	1.5%
<b>EE</b>	Estonia	2	3.0%	<b>AT</b>	Austria	1	1.5%
<b>GR</b>	Greece	2	3.0%	<b>EU</b>	EU bodies <sup>10</sup>	1	1.5%
<b>CZ</b>	Czechia	2	3.0%	<b>Total</b>	<b>25</b>	<b>67</b>	<b>100%</b>

<sup>6</sup> Switzerland's cooperation with CEPOL is based on a working arrangement established pursuant to Article 34 of Regulation (EU) 2015/2219, which enables the participation of Swiss LE authorities in CEPOL training activities and expert exchanges. For analytical purposes, Switzerland was treated as a participating country equivalent to one EU MS in order to ensure methodological compliance and consistency in the analysis.

<sup>7</sup> In the analysis, EU institutions as respondents are considered equivalent to a MS to ensure consistency in the assessment.

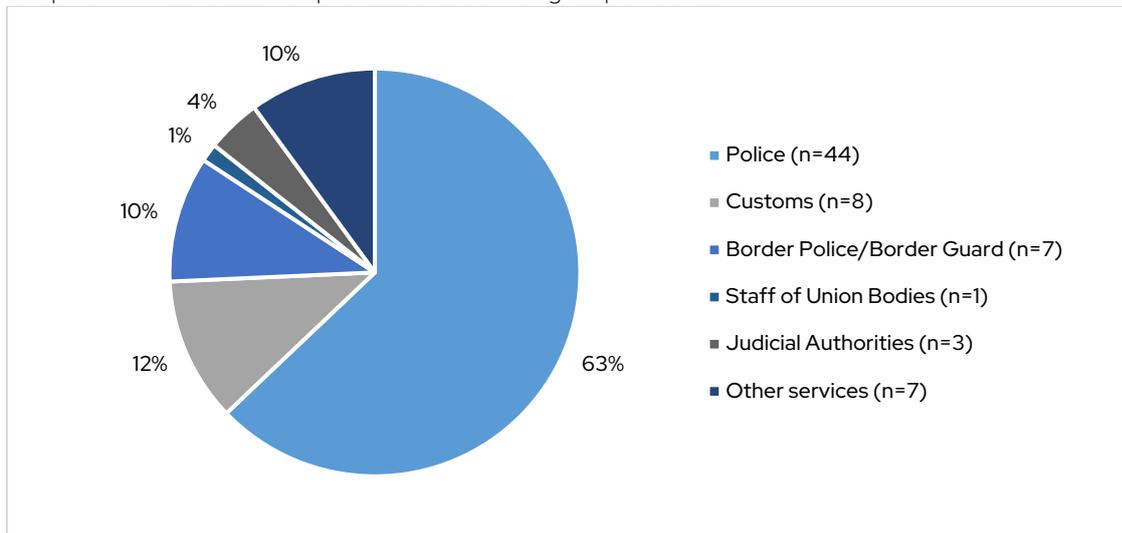
<sup>8</sup> Estonia, Malta, Portugal, and Spain

<sup>9</sup> For readability, later references to 'MS' in this report may also encompass non-EU participating countries i.e., Switzerland, as well as the EU institutional respondent included in the OTNA.

<sup>10</sup> European Union Intellectual Property Office (EUIPO)

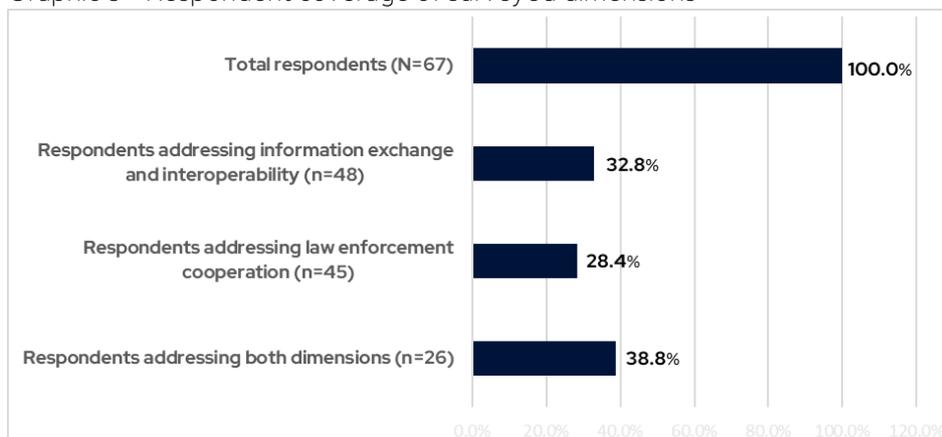
As summarised in **Graphic 2**, the majority of responding services in the OTNA survey were from police authorities, followed by customs and border police/border guard services. A smaller proportion of responses came from judicial authorities, staff of Union bodies, and other services, reflecting a diverse representation of law enforcement and related agencies involved in cross-border cooperation, information exchange, and interoperability.

Graphic 2 - Distribution of professionals among respondents<sup>11</sup>



Out of all 67 respondents, the majority addressed information exchange and Interoperability<sup>12</sup> (32.8%), and 28.4% contributed to law enforcement cooperation<sup>13</sup>. 38.8% of respondents covered both dimensions. In terms of the number of responding MS, both surveyed dimensions were addressed equally, with each being covered by 20 MS, one partner country<sup>14</sup>, and the EU body respondent. However, there were slight variations in the specific countries that contributed to each dimension.

Graphic 3 - Respondent coverage of surveyed dimensions



<sup>11</sup> While the survey received responses from 67 individual respondents, three respondents, namely from the Police and Border Guard Board of Estonia and the Swedish Police Authority, indicated representing two services. As a result, the total count of reported services equals 70, which is higher than the number of responding individuals.

<sup>12</sup> The following countries addressed the dimension of information exchange and interoperability: Spain, Portugal, Estonia, Malta, Finland, Bulgaria, Poland, Romania, Slovakia, Italy, Hungary, Greece, Czechia, Lithuania, Sweden, Luxembourg, Austria, Slovenia, Germany, Croatia, and Switzerland, along with an EU body respondent.

<sup>13</sup> The following countries addressed the dimension of law enforcement cooperation: Spain, Portugal, Estonia, Malta, Romania, Finland, Bulgaria, Poland, Switzerland, Cyprus, Greece, Lithuania, Slovakia, Sweden, Germany, Croatia, Slovenia, Latvia, Czechia, Denmark, and Italy, along with an EU body respondent.

<sup>14</sup> Switzerland having a working arrangement with CEPOL.

## Analysis

The OTNA survey process primarily collected quantitative data, complemented by qualitative text-based feedback to gain deeper insights into training needs related to the topic. To determine the most essential training topics in the domains of law enforcement cooperation, information exchange, and interoperability for 2026–2028, the OTNA questionnaire included multiple-choice questions, allowing respondents to select one or more choices from a list of 17 main topics. The survey data were processed using Qualtrics® and analysed following CEPOL’s established OTNA methodology, applying a combination of quantitative analysis and text interpretation. Additionally, four respondents from different MS were invited for interviews to clarify specific aspects of their submissions<sup>15</sup>. Together, these findings form the foundation for CEPOL’s upcoming training initiatives, aiming to ensure that the most relevant and urgent areas are addressed effectively.

### Relevance of topics and subtopics

In line with the OTNA methodology, any topic deemed relevant by more than 50% of the responding MS is classified as a priority and included in the subsequent analysis. The relevance of each topic was determined by calculating the proportion of MS that identified it as relevant. This was done by aggregating the number of MS that selected the topic and dividing it by the total number of responding MS. In cases where multiple law enforcement agencies from the same MS provided responses, the data was consolidated to reflect a single national perspective. Based on this approach, eight main topics exceeded the relevance threshold.

In light of the relevance assessment at the main topic level, the **law enforcement cooperation** dimension suggests as primary training priorities the main topics of **Cross-border operational cooperation and information exchange**, **SPOC training** (including all existing and new systems, actual problems, and best practices), the **EMPACT mechanism**, and **JITs**.

Within the **information exchange and interoperability** dimensions, the topics of **Interoperability (components and tools)**, **SIS**, the use of the **ETIAS** and the **EES** for law enforcement should be prioritised for EU-level training.

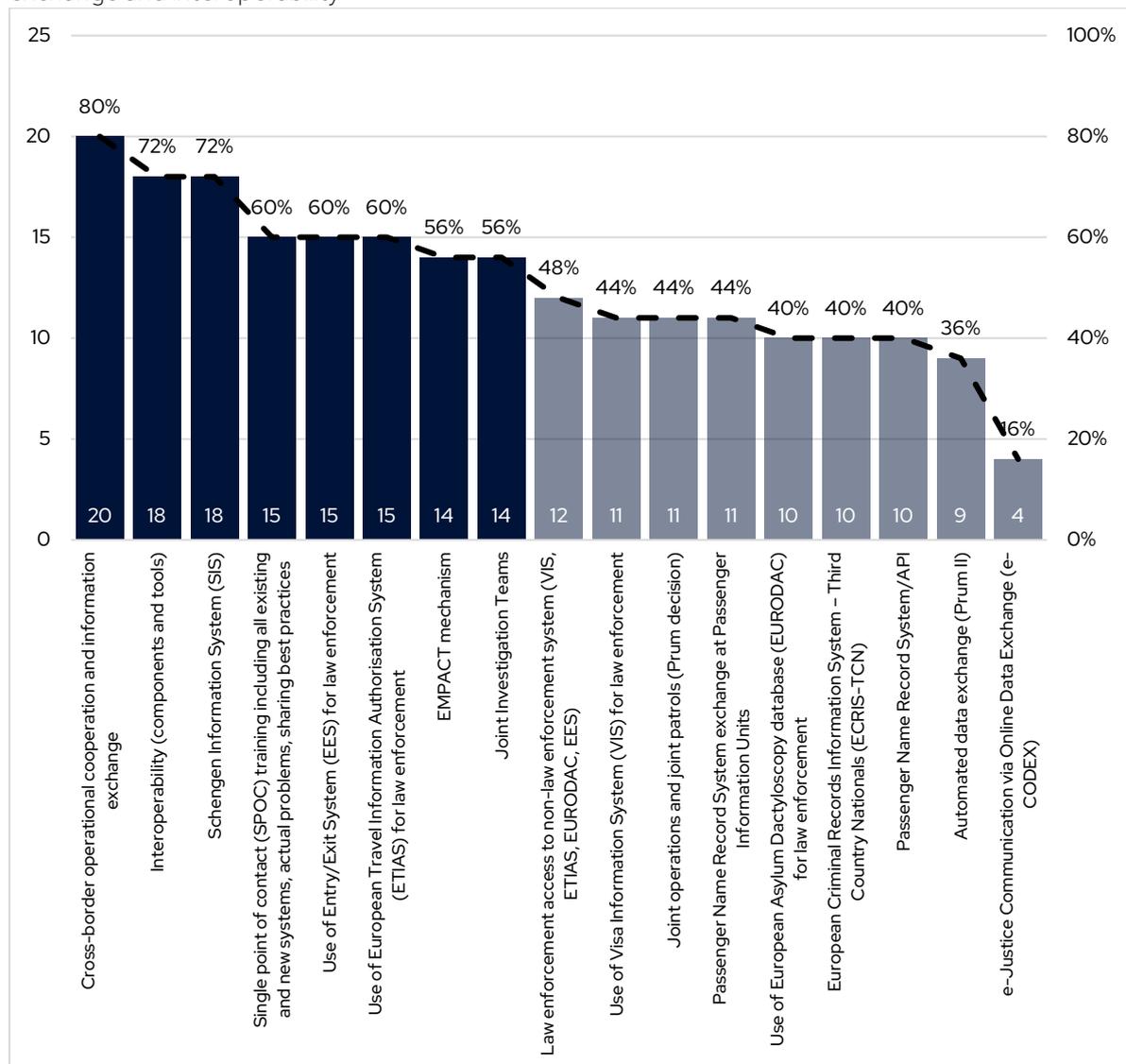
While all surveyed topics have been analysed and their results presented in this report, those identified as relevant by more than 50% of the responding MS should, in line with the methodology, be considered the primary training priorities for EU-level training.

The OTNA questionnaire also included a series of subtopics under each main topic surveyed. Within the two dimensions of the questionnaire, **i) law enforcement cooperation and ii) information exchange and interoperability**, the main topics largely encompassed the same subtopics defined for these two areas. In a few cases, certain subtopics were excluded from specific main topics where they were not deemed relevant to the context under review.

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<sup>15</sup> Estonia, Malta, Portugal, and Spain

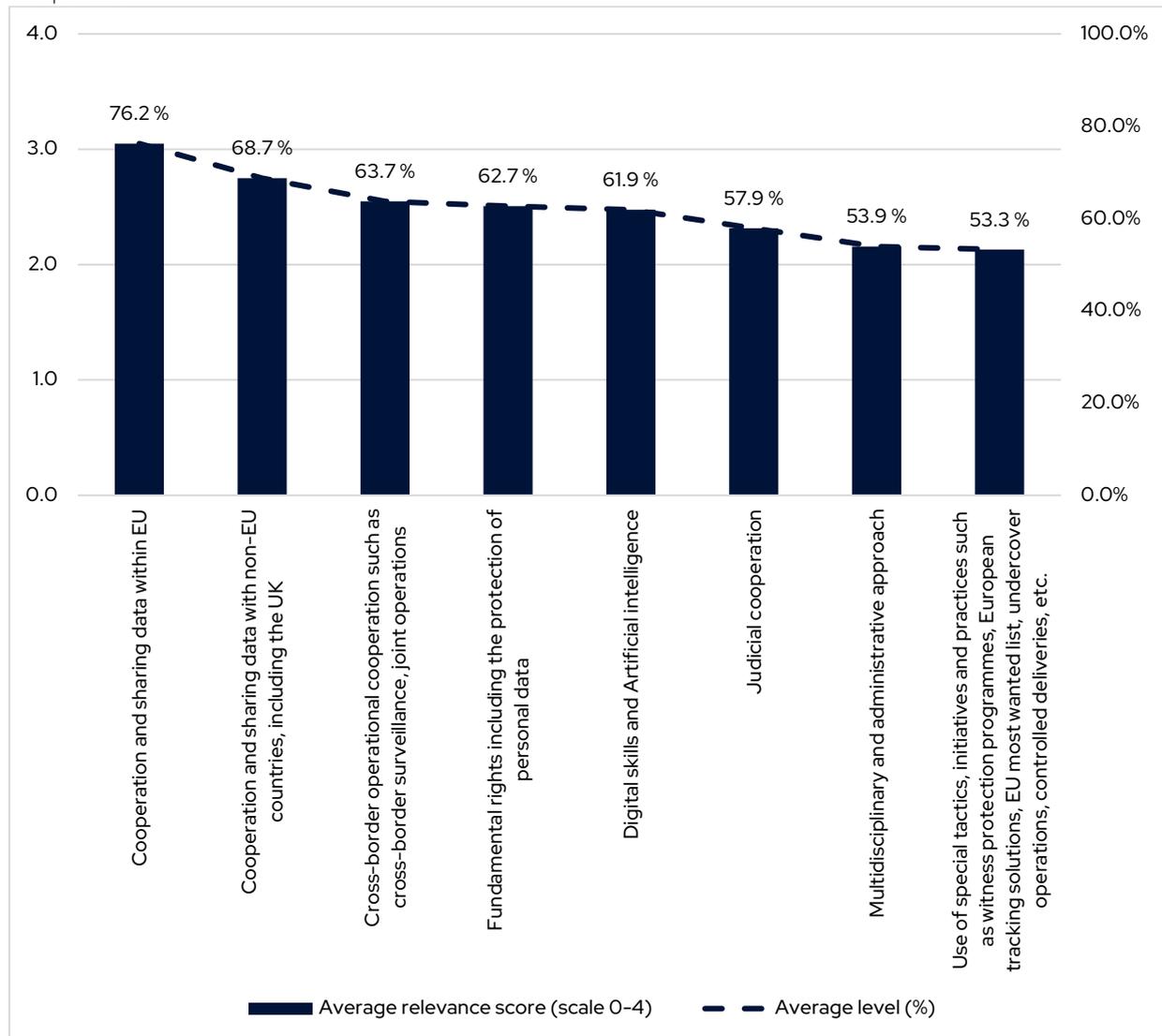
Graphic 4 - Ranked relevance of main topics surveyed in law enforcement cooperation, information exchange and interoperability



Under the **law enforcement cooperation** dimension, the OTNA questionnaire surveyed eight subtopics: cooperation and data sharing within the EU, cooperation and data sharing with non-EU countries, including the UK, cross-border operational cooperation, including cross-border surveillance and joint operations, fundamental rights and the protection of personal data, digital skills and artificial intelligence, judicial cooperation, multidisciplinary and administrative approaches, and the use of special tactics, initiatives, and practices, such as witness protection programmes, European tracking solutions, the EU Most Wanted list, undercover operations, and controlled deliveries.

**Graphic 5** below presents the overall (average) relevance of the subtopics across all areas of law enforcement cooperation. Based on the 50% relevance threshold, all subtopics are considered relevant for training in this domain.

Graphic 5 - Average relevance of subtopics across all main topics surveyed - law enforcement cooperation



On average, the highest emphasis is placed on cooperation and data sharing both within and outside the EU, as well as cross-border operational cooperation, though all other subtopics follow closely. This indicates a broad and consistent need for training across all surveyed areas.

In more detail, **Table 2** provides a comprehensive overview of the relevance of subtopics across the main topics of law enforcement cooperation. The main topics identified as training priorities based on the OTNA results are highlighted in bold.

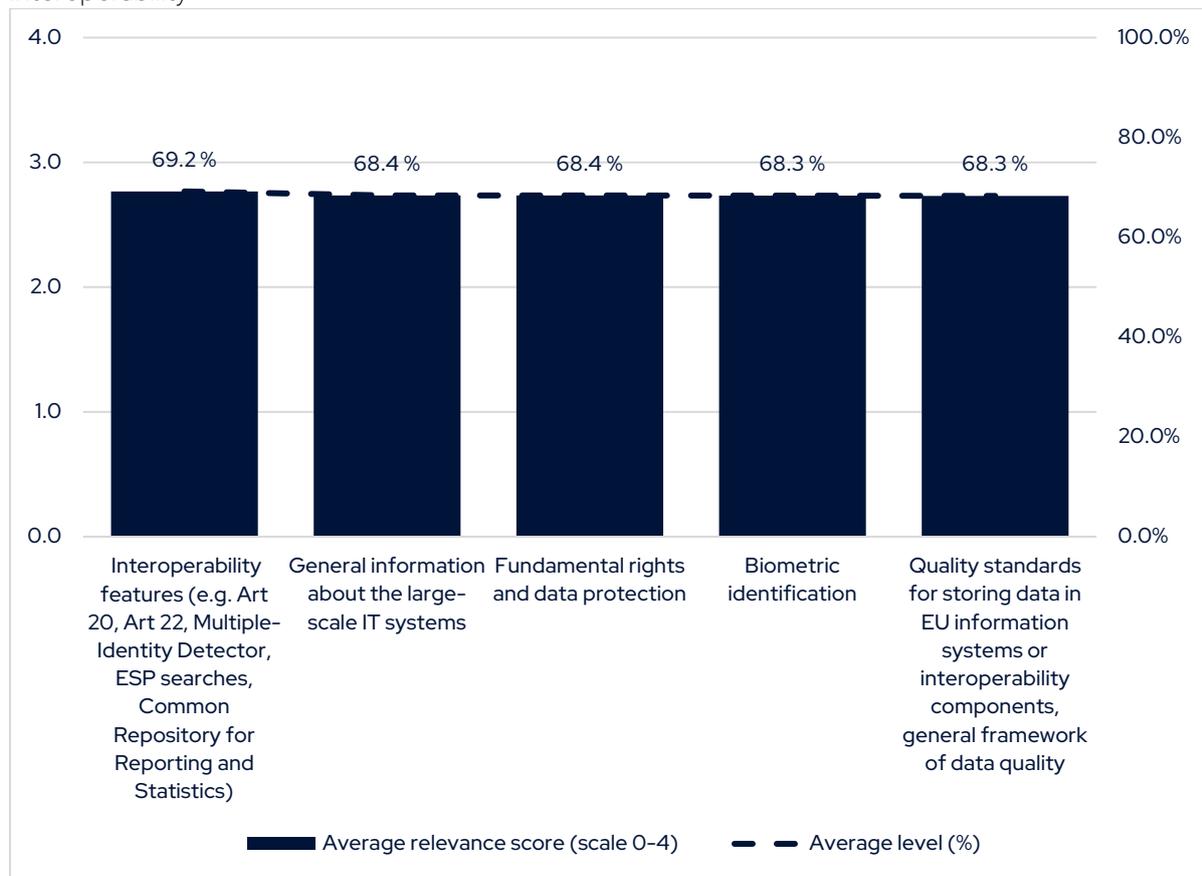
Table 2 - Detailed relevance of subtopics across all main topics surveyed - law enforcement cooperation

	Cooperation and sharing data within EU	Cooperation and sharing data with non-EU countries, including the UK	Cross-border operational cooperation such as cross-border surveillance, joint operations	Fundamental rights including the protection of personal data	Digital skills and Artificial intelligence	Judicial cooperation	Multidisciplinary and administrative approach	Use of special tactics, initiatives, and practices such as witness protection programmes, European tracking solutions, EU most wanted list, undercover operations, controlled deliveries, etc.
Cross-border operational cooperation and information exchange	73.8%	67.5%	71.3%	62.5%	60.0%	60.0%	58.8%	63.8%
SPOC training including all existing and new systems, actual problems, sharing best practices	80.0%	71.7%	58.3%	58.3%	53.3%	50.0%	51.7%	50.0%
EMPACT mechanism	76.8%	73.2%	71.4%	60.7%	69.6%	67.9%	58.9%	N/A
Joint Investigation Teams	76.8%	75.0%	53.6%	57.1%	69.6%	62.5%	48.2%	57.1%
Law enforcement access to non-law enforcement system (VIS, ETIAS, EURODAC, EES)	85.4%	N/A	68.8%	75.0%	62.5%	N/A	66.7%	N/A
Joint operations and joint patrols (Prüm decision)	72.7%	59.1%	65.9%	59.1%	54.5%	52.3%	47.7%	54.5%
PNR System exchange at PIUs	68.2%	65.9%	56.8%	65.9%	63.6%	54.5%	45.5%	40.9%
<b>Average relevance (%)</b>	<b>76.2%</b>	<b>68.7%</b>	<b>63.7%</b>	<b>62.7%</b>	<b>61.9%</b>	<b>57.9%</b>	<b>53.9%</b>	<b>53.3%</b>

Looking at the priority main topics of law enforcement cooperation (i.e., cross-border operational cooperation and information exchange, SPOC training, the EMPACT mechanism, and JITs), the findings suggest that all subtopics meet the relevance threshold for training, except for the Multidisciplinary and Administrative Approach under the JITs main topic, which remains slightly below 50%.

Similarly, when reviewing all **information exchange and interoperability** main topics together, all subtopics presented under them appear highly relevant for training, as shown in **Graphic 6**.

Graphic 6 – Average relevance of subtopics across all main topics surveyed – information exchange and interoperability



At the detailed level, as displayed in **Table 3**, only one subtopic, namely Biometric Identification under the Passenger Name Record System/API main topic, falls below the 50% threshold, indicating that it is less relevant for training.

Table 3 – Detailed relevance of subtopics across all main topics surveyed – information exchange and interoperability

Main Topic	Interoperability features (e.g., Art 20, Art 22, Multiple-Identity Detector, ESP searches, Common Repository for Reporting and Statistics)	General information about the large-scale IT systems	Fundamental rights and data protection	Biometric identification	Quality standards for storing data in EU information systems or interoperability components, general framework of data quality
Interoperability (components and tools)	79.2%	75.0%	65.3%	76.4%	73.6%
Schengen Information System (SIS)	77.8%	70.8%	68.1%	73.6%	70.8%
Use of EES for law enforcement	68.3%	65.0%	63.3%	68.3%	65.0%
Use of ETIAS for law enforcement	76.7%	71.7%	68.3%	63.3%	70.0%

	Interoperability features (e.g., Art 20, Art 22, Multiple-Identity Detector, ESP searches, Common Repository for Reporting and Statistics)	General information about the large-scale IT systems	Fundamental rights and data protection	Biometric identification	Quality standards for storing data in EU information systems or interoperability components, general framework of data quality
Use of VIS for law enforcement	68.2%	65.9%	70.5%	68.2%	63.6%
Use of EURODAC for law enforcement	72.5%	70.0%	77.5%	82.5%	75.0%
ECRIS-TCN	62.5%	62.5%	62.5%	65.0%	57.5%
PNR System/API	57.5%	67.5%	70.0%	45.0%	72.5%
Automated data exchange (Prüm II)	66.7%	66.7%	69.4%	72.2%	72.2%
e-CODEX	62.5%	68.8%	68.8%	68.8%	62.5%
<b>Average relevance (%)</b>	<b>69.2%</b>	<b>68.4%</b>	<b>68.4%</b>	<b>68.3%</b>	<b>68.3%</b>

For the four prioritised main topics, i.e., Interoperability (components and tools), the use of SIS, EES and ETIAS for law enforcement, which are highlighted in bold in the above table, the general relevance of subtopics is high. Each of these prioritised topics places particular emphasis on the subtopic of Interoperability features (e.g., Art 20, Art 22, Multiple-Identity Detector, ESP searches, Common Repository for Reporting and Statistics), with only minor variations in how the subtopics are ranked in terms of relevance across the main topics.

## Additional subtopics

The OTNA survey included an option for respondents to submit additional subtopics for training under each main topic they addressed.

Within the **law enforcement cooperation** dimension, additional suggestions were provided for six main topics. **Table 4** below provides a summarised overview of the analysed additional suggestions<sup>16</sup>.

Table 4 - Suggested additional subtopics - law enforcement cooperation

Main topic	Suggested subtopics
<b>Cross-border operational cooperation and information exchange</b>	<ul style="list-style-type: none"> <li>- Investigation of cryptocurrency-related crimes in cross-border contexts, including tracking, freezing, and seizing virtual assets.</li> <li>- Strengthening cooperation between financial intelligence units, law enforcement, and judicial authorities in financial crime investigations.</li> <li>- Asset recovery and confiscation, with a focus on improving information exchange mechanisms between MS.</li> <li>- Training on the new EU regulation on screening third-country nationals (TCN) (Article 16, Paragraph 8), which defines responsibilities and cooperation between MS when screening TCNs at external borders and within the Schengen area.</li> <li>- Investigation of Intellectual Property (IP) crimes and their links to other forms of organised crime.</li> <li>- Use of the Intellectual Property (IP) Enforcement Portal (IPEP) tool, mandatory since</li> </ul>

<sup>16</sup> The additional subtopics are not presented verbatim as originally submitted by respondents; rather, they have been interpreted and structured during the analysis process. As a result, wording and formulation may differ from the original submissions while preserving the intended meaning.

Main topic	Suggested subtopics
	2024, to complete electronic Applications for Action (AFA), enabling customs authorities to detain counterfeit goods at the border. - Enhancing information-sharing between customs, police, and rights holders to strengthen enforcement measures against IP crime.
<b>SPOC training</b>	- Cooperation between SIRENE offices and migration, immigration, and border control authorities. - Training on cooperation in connection with Regulation (EU) 2018/1860, which governs the use of the SIS for the return of illegally staying third-country nationals. - Training on cooperation in connection with Regulation (EU) 2018/1861, which defines the operation and use of SIS in the field of border checks.
<b>EMPACT Mechanism</b>	- Training on environmental crime investigations under the EMPACT framework. - Investigation of IP crime and its connections to other criminal activities. - Introduction to the EMPACT IP crime Investigation Handbook and its practical application. - Understanding the EMPACT process for defining priorities and developing EMPACT actions. - Use of the IPEP for data exchange between enforcement authorities and rights holders.
<b>JITs</b>	- Training on detecting labour exploitation in seasonal agriculture work - Investigation of environmental crime within JIT operations. - Securing digital evidence in investigative proceedings, ensuring admissibility in court. - Decrypting data on electronic devices as part of cross-border investigations. - Use of Open-Source Intelligence (OSINT) for intelligence gathering and case-building. - Data recovery from damaged evidence to support forensic investigations.
<b>Joint operations and joint patrols (Prüm decision)</b>	- Training for investigation departments, officers conducting inspections, implementation departments, and heads of units on information exchange under the Prüm framework. - Fast-track information exchange methods to enhance operational efficiency in cross-border cooperation. - Development of common standards of action for cooperation within joint teams. - Application of the Prüm mechanism in investigations related to environmental crime.
<b>PNR System exchange at PIUs</b>	- Training for investigators across the EU on how to request and utilise PNR data from PIUs, potentially as part of broader law enforcement training. - Training for PIU members (experts, analysts, data protection officers) to enhance understanding of each other's capabilities, requirements, and challenges, improving cooperation. - Operational knowledge of PIUs: Understanding how PIUs operate, both in the EU and third countries, including their capabilities (historical data requests, watchlisting, profiling). - Process for law enforcement officers on how to request PNR data, including legal safeguards and operational challenges when PIUs respond to requests. - Understanding the limitations and expectations regarding PNR data retrieval and processing. - Online training for PIU members: Introduction to key principles set out in the PNR Directive and relevant Court of Justice of the European Union (CJEU) rulings, concluding with a test and certification. - On-site training for PIU analysts and experts, shifting focus towards specialised topics such as PNR data analysis software, data enrichment (including OSINT), and profiling methods (rules-based targeting and software tools). - Best practices for using PNR data in investigations, including case studies demonstrating how passenger data supplements investigations. - Watchlisting methodologies, including handling known aliases, partial or missing identifiers, and rule-based targeting case studies and success stories from MS. - Analysis of identity misuse, including passenger name changes, complex travel routes, and divided travel legs. - Passenger data matching across databases, including best practices for integration with MS databases, Interpol DB Matrics, and reducing unconfirmed matches. - Training for PIU management on passenger data collection services (e.g., PNRGo), data storage and retention policies, and legal compliance with CJEU rulings. - Insights on technical changes under the new API regulations, ensuring MS are aware of necessary adjustments.

Main topic	Suggested subtopics
	<ul style="list-style-type: none"> <li>- Managing airline compliance, particularly for charter and general aviation carriers, sharing best practices from MS.</li> <li>- PNR data’s role in sanctions evasion detection and improving overall PNR data quality.</li> <li>- Risk analysis training, covering the determination of risk criteria and reporting on national and EU-level threats.</li> <li>- Encouragement of CEPOL exchange opportunities for PIU members, facilitating direct knowledge-sharing to address cooperation challenges arising from variations between PIU systems across MS.</li> </ul>

Through the **information exchange and interoperability** questionnaire, additional subtopics were submitted for only two main topics. These have been compiled and summarised in **Table 5** below.

Table 5 - Suggested additional subtopics - information exchange and interoperability

Main topic	Suggested subtopics
<b>Interoperability (components and tools)</b>	<ul style="list-style-type: none"> <li>- Training for SIRENE operators on manual verification of yellow links and appropriate follow-up procedures for white or red links in the SIS.</li> <li>- Training on parallel processes in SIS, including how to handle linked alerts and hits effectively.</li> <li>- Understanding the role of biometrics in interoperability: The importance of biometric data in relation to alerts and searches in SIS, ensuring officers can utilise biometric functionalities effectively.</li> <li>- Training on communication tools: While not classified as interoperability components under the regulation, these tools are essential for cross-border communication between Member States and should be included in training efforts.</li> </ul>
<b>SIS<sup>17</sup></b>	<ul style="list-style-type: none"> <li>- Innovations in SIS: Understanding new developments and best practices in SIS operations.</li> <li>- Comparative approach to SIS workflows: How working processes are implemented in different MS to enhance cross-border cooperation.</li> <li>- Use of alerts under Regulation (EU) 2018/1860 (Article 3): Training on the correct application of alerts for the return of illegally staying third-country nationals.</li> <li>- Alert deletion and conversion processes under Regulation (EU) 2018/1861 (Article 24): Understanding procedures for deleting alerts and converting them into new alert types in compliance with SIS regulations.</li> </ul>

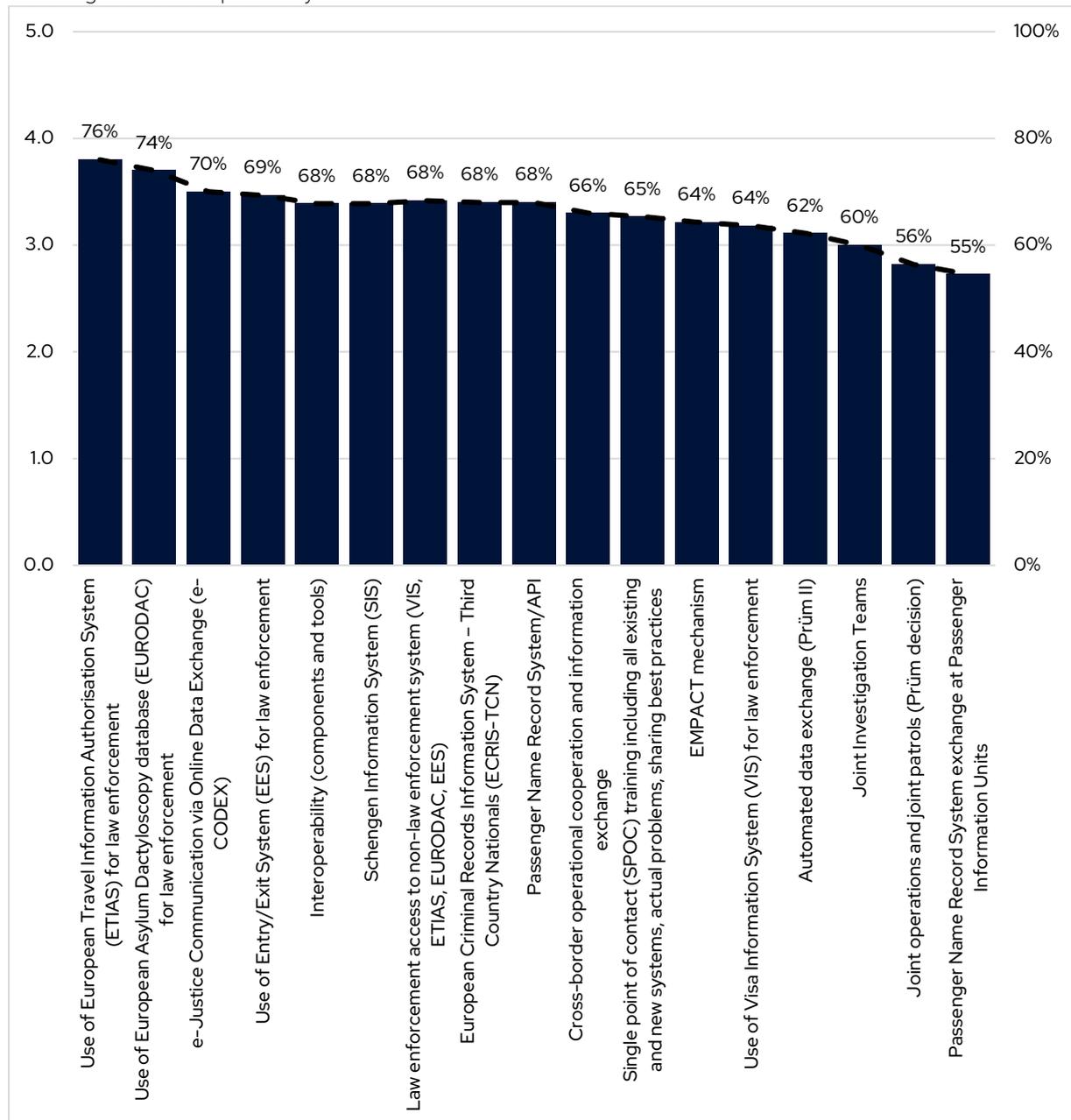
## Urgency and volume of training needs

In the OTNA questionnaire, the urgency was assessed on a 1–5 scale, where 1 represented the lowest urgency (not urgent), and 5 indicated the highest urgency (very urgent).

The urgency levels across all main topics are presented in **Graphic 7** below. The white numbers inside the bars indicate the average urgency score for each main topic, while the dotted line represents the same data in a percentage view.

<sup>17</sup> The table presents the training suggestions largely as they were provided by the respondents. During the Expert Group consultation on 17 March 2025, it was noted that several SIS-related subtopics had also been referenced under the main topic of Interoperability (components and tools) as well as within the law enforcement cooperation domain. For the purposes of training design, these suggestions should be reviewed and taken into account when designing any SIS-related training.

Graphic 7 - Urgency of training on main topics surveyed in law enforcement cooperation, information exchange and interoperability



In general, the urgency of training across all surveyed main topics appears high. When considering the average urgency score across all main topics combined, the overall score settles at 3.3, which refers to an urgent training need. This means that training is considered essential and should be delivered within a year to ensure operational effectiveness and maintain qualitative performance.

Looking at the prioritised main topics across both dimensions, law enforcement cooperation, and information exchange and interoperability, the urgency findings align with the overall assessment, suggesting that training should be delivered as a priority within the next year.

In assessing the scope of European law enforcement professionals that training should reach, the OTNA methodology relies on the statistical median, i.e., the middle value in a dataset when arranged in ascending order, which provides a balanced estimate less influenced by extreme variations. This median

is then extrapolated to the EU level by multiplying it with the number of MS participating in the CEPOL regulation.

**Table 6** below presents the overall participant volumes identified at the main topic level, offering a comparative view between the median-based EU-level estimation and the actual total submissions provided by all respondents, which remain unprocessed statistically.

Table 6 - Number of potential participants per main topic - median-based EU estimate vs raw data submissions

Main topic	Median-based at EU level	Total
Cross-border operational cooperation and information exchange	3 705	3 315
Interoperability (components and tools)	8 086	4 630
Schengen Information System (SIS)	47 021	9 203
Use of ETIAS for law enforcement	7 930	3 975
Use of EES for law enforcement	7 631	4 101
SPOC training including all existing and new systems, actual problems, sharing best practices	5 551	3 493
EMPACT mechanism	4 810	2 516
JITs	5 798	3 600
Law enforcement access to non-law enforcement system (VIS, ETIAS, EURODAC, EES)	4 901	2 433
Use of EURODAC for law enforcement	16 588	4 186
PNR System/API	5 590	1 954
ECRIS-TCN	11 401	2 408
PNR System exchange at PIUs	4 433	1 280
Use of VIS for law enforcement	16 458	3 322
Joint operations and joint patrols (Prüm decision)	4 459	1 464
Automated data exchange (Prüm II)	5 538	2 389
e-CODEX	4 784	289
<b>Total</b>	<b>164 684</b>	<b>54 558</b>

Based on median-based EU-level participant volumes, the total estimated number of participants could reach 164 684 individuals, which is approximately three times higher than the total actual submissions (54 558). For the eight prioritised main topics, the estimated participant volume at the EU level is **90 532**, with **23 231** participants related to law enforcement cooperation and up to **69 680<sup>18</sup>** participants for information exchange and interoperability. The findings suggest that training on large-scale IT systems and their interoperability is expected to engage the highest number of law enforcement professionals across Europe.

The SIS, ETIAS, and EES systems, in particular, stand out as areas where extensive training is required. However, notable variations between the median-based estimation and total reported figures occur in several cases, particularly for the SIS. In this case, participant numbers are notably inflated due to high submissions from Estonia and Malta, where awareness-level and practitioner-level end-user training figures reached up to 2 000 individuals across multiple subtopics. This distorts the overall data, resulting in an artificially high share of end users, while in other MS, the projected training need at these levels and in these profiles remains more moderate.

<sup>18</sup> The estimation for information exchange and interoperability may have been inflated in the median-based calculation, potentially due to high submissions from individual countries, leading to an overrepresentation of training needs in certain areas.

## Profiles and proficiency levels

When considering all main topics across the three dimensions (law enforcement cooperation, information exchange and interoperability) together, the distribution of potential participants by proficiency level, as shown in **Table 7**, suggests a strong emphasis on awareness-level training.

Table 7 - Proficiency levels and number of participants – all main topics of law enforcement cooperation, information exchange and interoperability

Proficiency level	Number of participants (at EU level)	Share (%)
Awareness	78 715	47.8%
Practitioner	36 738	22.3%
Advanced practitioner	25 350	15.4%
Expert	15 483	9.4%
Train-the-trainer	8 398	5.1%
<b>Total</b>	<b>164 684</b>	<b>100%</b>

Based on this combined view, nearly half of all participants fall under the awareness level, indicating a broad need for introductory and general knowledge training across the surveyed areas. The practitioner level accounts for 22.3% (36 738 participants), followed by advanced practitioners (15.4%, 25 350 participants) and experts (9.4%, 15 483 participants), suggesting that while in-depth operational training remains essential, the majority of training demand is concentrated at foundational and operational levels. Finally, train-the-trainer programmes represent 5.1% (8 398 participants), reflecting a more limited but critical need for capacity-building initiatives aimed at sustaining knowledge transfer within law enforcement agencies.

A detailed examination of the **main topics of law enforcement cooperation** reveals a notable shift in the distribution of proficiency levels compared to the overall participant breakdown across all three dimensions. While the overall ranking order remains the same, the balance between proficiency levels shifts significantly, as shown in **Table 8**.

Table 8 - Proficiency levels and number of participants – all main topics of law enforcement cooperation

Proficiency level	Number of participants (at EU level)	Share (%)
Awareness	10 712	31.9%
Practitioner	8 190	24.3%
Advanced practitioner	6 760	20.1%
Expert	5 356	15.9%
Train-the-trainer	2 639	7.8%
<b>Total</b>	<b>33 657</b>	<b>100%</b>

While the above table provides median-based estimations extrapolated to the EU level, the actual submissions reviewed indicate less emphasis on awareness-level training. Although the overall ranking order of proficiency levels remains the same, the gaps between awareness, practitioner, and advanced practitioner levels are relatively narrower compared to the median-based calculations. This discrepancy suggests that, in practice, the demand for operational and advanced training may be more evenly distributed than the extrapolated estimates suggest.

On the four prioritised main topics of law enforcement cooperation, the distribution of participants across awareness, practitioner, and advanced practitioner levels is relatively balanced, with practitioner-level training estimated for 6 227 participants, awareness-level

training needs concerning 5 941 participants, and advanced practitioner training 5 473 participants.

As shown in **Table 9**, compared to law enforcement cooperation, training needs in the **information exchange and interoperability** domains appear more top-heavy, with over half of the estimated participants falling under the awareness level and the overall distribution suggesting that the primary demand remains at introductory and operational levels.

Table 9 - Proficiency levels and number of participants – all main topics of information exchange and interoperability

Proficiency level	Number of participants (at EU level)	Share (%)
Awareness	68 003	51.9%
Practitioner	28 548	21.8%
Advanced practitioner	18 590	14.2%
Expert	10 127	7.7%
Train-the-trainer	5 759	4.4%
<b>Total</b>	<b>131 027</b>	<b>100%</b>

However, in these domains, a comparison between the actual figures provided by responding MS and the statistical median-based extrapolation to the EU level reveals a significant gap in volume estimations. Instead of awareness-level training being the largest category (as indicated by the median-based estimates), the actual total submissions place practitioner-level training (12 389 participants) as the highest priority, followed by awareness-level training (10 022 participants) and advanced practitioner training (8 232 participants). This shift suggests that, based on actual reporting, operational-level training may be in higher demand than broad introductory-level training.

When focusing on the priority main topics (i.e., those identified by >50% of responding MS) within the information exchange and interoperability domains, the impact of notably high awareness-level participant submissions from individual countries further skews the distribution, particularly inflating the share of awareness-level participants in the SIS main topic. Otherwise, the demand remains more balanced, with practitioner-level training foreseen as required for 9 282 participants and advanced practitioner training for 8 905 participants.

In terms of professional profiles, the law enforcement cooperation and information exchange and interoperability dimensions applied different categorisations to indicate training needs. Due to these distinct profile classifications, the following tables present the data both within their respective categories and in separate compilations.

**Table 10 presents** the profiles of potential participants across all law enforcement cooperation main topics, highlighting a strong concentration of training needs among investigators and analysts.

Table 10 - Profiles of potential participants – all main topics of law enforcement cooperation

Category	Number of participants	Share % of all trainees
Investigators	12 597	37.4%
Analysts	9 048	26.9%
Managers	5 941	17.7%
Experts	4 862	14.4%
Other	1 209	3.6%
<b>Total</b>	<b>33 657</b>	<b>100.0%</b>

For law enforcement cooperation, the emphasis on training across different professional levels remains consistent when analysed at the prioritised main topics’ level. The distribution of participant profiles follows a similar pattern to the overall findings, suggesting that, across priority topics, training demand is balanced between investigative, analytical, and managerial roles, suggesting that all key professional levels should be addressed in capacity-building efforts.

Table 11 presents the profiles of potential participants for training on Information exchange and interoperability, revealing a strong emphasis on end-user training compared to other professional categories.

Table 11 - Profiles of potential participants - all main topics of information exchange and interoperability

Category	Number of participants	Share % of all trainees
Managers	7 176	5.5%
Operators	15 132	11.5%
End users	67 821	51.8%
Experts	8 723	6.7%
Investigators	19 318	14.7%
Analysts	10 543	8.0%
Other	2 314	1.8%
<b>Total</b>	<b>131 027</b>	<b>100.0%</b>

However, as mentioned in the earlier sections of this report, while end users consistently emerge as the priority profile for training regardless of the method of analysis, their overall share may be somewhat inflated due to high estimations from individual countries, which potentially distort the proportional distribution of participant profiles.

For the top training topics in interoperability and information exchange, end users make up a large majority—about 60.9% (around 38 220 people) of all trainees. This is mostly due to high demand for training on the SIS (Schengen Information System). However, if we look only at the raw data before any statistical adjustments, end users still represent the largest group, but the number is much lower—around 7 295 people. This shows that end-user training is clearly important, but the way the data is processed can make their share seem bigger than it really is. So, it is important to keep a balanced view when planning training for different professional roles.

## Trainees per country

As part of the data analysis, the distribution of participant volumes per responding country was examined. Table 12 below provides a summarised overview of the participant levels reported by each responding country, combining data across all main topics within the domains of law enforcement cooperation, information exchange, and interoperability. These figures represent the actual submissions, meaning the number of participants reported directly by the responding MS, without any statistical processing or extrapolation.

Table 12 - Volume of potential trainees per responding country - law enforcement cooperation, information exchange and interoperability

Country/topic	Total number of participants	Share (%) of participants
Spain	18 080	33.14%
Portugal	16 873	30.93%
Estonia	7 981	14.63%
Malta	6 410	11.75%
Finland	1 622	2.97%
Romania	1 004	1.84%
Bulgaria	574	1.05%
Poland	452	0.83%
Slovakia	342	0.63%
Greece	188	0.34%
Italy	152	0.28%
Hungary	128	0.23%
Lithuania	126	0.23%
Switzerland <sup>19</sup>	122	0.22%
Sweden	112	0.21%
Czechia	88	0.16%
Cyprus	80	0.15%
Luxembourg	52	0.10%
Slovenia	51	0.09%
Austria	46	0.08%
Germany	42	0.08%
Croatia	16	0.03%
Latvia	12	0.02%
Denmark	5	0.01%
EU	0	0.00%
<b>Total</b>	<b>54 558</b>	<b>100%</b>

Overall, the data indicates that Spain and Portugal are the leading contributors in terms of reported training needs, while Estonia and Malta also demonstrate consistent training demands<sup>20</sup>.

At a more detailed level, when examining all main topics under **law enforcement cooperation**, Table 13 below shows that Spain, Portugal, Estonia, and Malta emerge as the most participant-intensive contributors.

<sup>19</sup> Switzerland is included in the OTNA as a non-EU country cooperating with CEPOL under a formal working arrangement.

<sup>20</sup> All these countries have been selected and invited for interviews to further examine their training needs and participant volume submissions.

Table 13 – Volume of potential trainees per responding country – all main topics of law enforcement cooperation

Country/topic	Cross-border operational cooperation and information exchange	SPOC training including all existing and new systems, actual problems, sharing best practices	EMPACT mechanism	JITs	Law enforcement access to non-law enforcement system (VIS, ETIAS, EURODAC, EES)	Joint operations and joint patrols (Prüm decision)	PNR System exchange at PIUs	Total per country	Share of all participants (%)
Spain	<b>840</b>	<b>840</b>	<b>840</b>	<b>840</b>	840	840	840	<b>5 880</b>	<b>32.5%</b>
Portugal	<b>1 369</b>	<b>1 850</b>	<b>842</b>	<b>1 029</b>	400	179	5	<b>5 674</b>	<b>31.3%</b>
Estonia	<b>569</b>	<b>570</b>	<b>125</b>	<b>588</b>	576	0	231	<b>2 659</b>	<b>14.7%</b>
Malta	<b>136</b>	<b>58</b>	<b>343</b>	<b>813</b>	244	277	26	<b>1 897</b>	<b>10.5%</b>
Romania	<b>133</b>	<b>35</b>	<b>133</b>	<b>92</b>	215	57	57	<b>722</b>	<b>4.0%</b>
Finland	<b>13</b>	<b>56</b>	<b>110</b>	<b>99</b>	72	35	20	<b>405</b>	<b>2.2%</b>
Bulgaria	<b>28</b>	<b>31</b>	<b>29</b>	<b>28</b>	32	26	28	<b>202</b>	<b>1.1%</b>
Poland	<b>70</b>	<b>0</b>	<b>0</b>	<b>12</b>	0	42	0	<b>124</b>	<b>0.7%</b>
Switzerland <sup>21</sup>	<b>0</b>	<b>0</b>	<b>43</b>	<b>72</b>	7	0	0	<b>122</b>	<b>0.7%</b>
Cyprus	<b>25</b>	<b>30</b>	<b>25</b>	<b>0</b>	0	0	0	<b>80</b>	<b>0.4%</b>
Greece	<b>21</b>	<b>0</b>	<b>0</b>	<b>0</b>	0	0	50	<b>71</b>	<b>0.4%</b>
Lithuania	<b>10</b>	<b>6</b>	<b>10</b>	<b>0</b>	16	4	20	<b>66</b>	<b>0.4%</b>
Slovakia	<b>35</b>	<b>0</b>	<b>0</b>	<b>0</b>	29	0	0	<b>64</b>	<b>0.4%</b>
Sweden	<b>24</b>	<b>0</b>	<b>12</b>	<b>20</b>	0	0	0	<b>56</b>	<b>0.3%</b>
Germany	<b>22</b>	<b>0</b>	<b>0</b>	<b>0</b>	0	0	3	<b>25</b>	<b>0.1%</b>
Croatia	<b>8</b>	<b>3</b>	<b>0</b>	<b>5</b>	0	0	0	<b>16</b>	<b>0.1%</b>
Slovenia	<b>0</b>	<b>13</b>	<b>0</b>	<b>0</b>	0	0	0	<b>13</b>	<b>0.1%</b>
Latvia	<b>2</b>	<b>0</b>	<b>4</b>	<b>2</b>	2	2	0	<b>12</b>	<b>0.1%</b>
Czechia	<b>8</b>	<b>0</b>	<b>0</b>	<b>0</b>	0	0	0	<b>8</b>	<b>0.0%</b>
Denmark	<b>2</b>	<b>1</b>	<b>0</b>	<b>0</b>	0	2	0	<b>5</b>	<b>0.0%</b>
Italy <sup>22</sup>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	0	0	0	<b>0</b>	<b>0.0%</b>
EU bodies <sup>23</sup>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	0	0	0	<b>0</b>	<b>0.0%</b>
<b>Total per main topic</b>	<b>3 315</b>	<b>3 493</b>	<b>2 516</b>	<b>3 600</b>	<b>2 433</b>	<b>1 464</b>	<b>1 280</b>	<b>18 101</b>	<b>100%</b>

When focusing on the prioritised main topics (addressed by more than 50% of responding MS and in Table 13 highlighted with bold) within the law enforcement cooperation domain, Portugal accounts for the largest share of participants, representing nearly 40%. This is followed by Spain, contributing over a quarter of all participants, with Estonia adding more than 14% to the total.

<sup>21</sup> Switzerland is included in the OTNA as a non-EU country cooperating with CEPOL under a formal working arrangement.

<sup>22</sup> Italy addressed the dimension of law enforcement cooperation but did not provide numerical estimations of potential participants.

<sup>23</sup> The respondent representing an EU body, namely EUIPO, did not provide specified participant details."

Shifting to the main topics of **information exchange and interoperability**, as demonstrated in **Table 14**, Spain again accounts for the highest number of potential participants, with stable numbers across most main topics<sup>24</sup>. This consistency may also indicate overlaps, suggesting that the same individuals could be targeted for multiple training activities. Estonia and Malta follow in participant volume<sup>25</sup>.

Table 14 - Volume of potential trainees per responding country - all main topics of information exchange and interoperability

Country/ topic	Interoperability (components and tools)	SIS	Use of EES for law enforcement	Use of ETIAS for law enforcement	Use of VIS for law enforcement	Use of EURODA) for law enforcement	ECRIS-TCN	PNR System/API	Automated data exchange (Prüm II)	e-Justice Communication via Online Data Exchange (e-CODEX)	Total per country	Share of all participants (%)
Spain	1520	1560	1520	1520	0	1520	1520	1520	1520	0	12 200	33.5%
Portugal	1960	2 310	1493	1583	1852	1468	255	45	233	0	11199	30.7%
Estonia	291	3 151	244	194	493	735	39	0	175	0	5 322	14.6%
Malta	322	1 301	501	450	386	363	460	158	331	241	4 513	12.4%
Finland	83	573	81	82	220	42	44	24	30	38	1 217	3.3%
Bulgaria	48	42	48	48	42	48	0	48	48	0	372	1.0%
Poland	56	15	16	10	51	10	52	56	52	10	328	0.9%
Romania	98	4	0	0	180	0	0	0	0	0	282	0.8%
Slovakia	5	62	72	25	92	0	22	0	0	0	278	0.8%
Italy	60	0	70	22	0	0	0	0	0	0	152	0.4%
Hungary	64	64	0	0	0	0	0	0	0	0	128	0.4%
Greece	0	52	0	0	0	0	0	65	0	0	117	0.3%
Czechia	80	0	0	0	0	0	0	0	0	0	80	0.2%
Lithuania	0	11	31	12	6	0	0	0	0	0	60	0.2%
Sweden	0	12	12	0	0	0	16	16	0	0	56	0.2%
Luxembourg	13	13	13	13	0	0	0	0	0	0	52	0.1%
Austria	30	16	0	0	0	0	0	0	0	0	46	0.1%
Slovenia	0	0	0	16	0	0	0	22	0	0	38	0.1%
Germany	0	17	0	0	0	0	0	0	0	0	17	0.0%
Croatia	0	0	0	0	0	0	0	0	0	0	0	0.0%
Switzerland <sup>26</sup>	0	0	0	0	0	0	0	0	0	0	0	0.0%

<sup>24</sup> This requires further clarification through interviews to determine whether participant overlaps exist within Spain's submissions.

<sup>25</sup> Estonia is in the interview process to further validate their reported training needs.

<sup>26</sup> Switzerland is included in the OTNA as a non-EU country cooperating with CEPOL under a formal working arrangement.

Country/ topic	Interoperability (components and tools)	SIS	Use of EES for law enforcement	Use of ETIAS for law enforcement	Use of VIS for law enforcement	Use of EURODA for law enforcement	ECRIS-TCN	PNR System/API	Automated data exchange (Prüm II)	e-Justice Communication via Online Data Exchange (e-CODEX)	Total per country	Share of all participants (%)
EU	0	0	0	0	0	0	0	0	0	0	0	0.0%
<b>Total per main topic</b>	<b>4 630</b>	<b>9 203</b>	<b>4 101</b>	<b>3 975</b>	<b>3 322</b>	<b>4 186</b>	<b>2 408</b>	<b>1 954</b>	<b>2 389</b>	<b>289</b>	<b>36 457</b>	<b>100%</b>

When focusing on the four prioritised main topics within the information exchange and interoperability dimensions, Portugal surpasses Spain, accounting for over 33% of all participants, with Spain following closely behind. Meanwhile, Estonia and Malta<sup>27</sup>, despite their smaller size, have submitted relatively notable participant proposals.

Based on the information received through interviews and written consultations, in the case of Spain, there may be repetition in the reported numbers, with overlapping figures across different topics potentially inflating the total estimated participant volume. The Spanish respondent clarified that the figures provided refer to the same personnel, whose roles are highly cross-functional, making them potential recipients of several training topics. Thus, the similar numbers across different domains reflect the versatility and broad scope of responsibilities rather than distinct groups of participants. The Maltese respondent further specified that where hundreds or thousands of participants were indicated, the former referred to specialised police branches (e.g., Criminal Investigation Department, Financial Crime Department), while the latter referred to the wider police audience, including district officers who use systems like SIS in their daily work. Some uncertainties in identifying the intended training target groups were also noted in their submission.<sup>28</sup>

Table 15-Summary of all main topics of law enforcement cooperation, information exchange and interoperability - relevance, urgency and participant estimation at EU level

Main topic	Relevancy	Urgency	Trainees (EU level)
Cross-border operational cooperation and information exchange	80.0%	66.0%	3 705
Interoperability (components and tools)	72.0%	67.8%	8 086
SIS	72.0%	67.8%	47 021
Use of ETIAS for law enforcement	60.0%	76.0%	7 930
EES for law enforcement	60.0%	69.3%	7 631
SPOC training including all existing and new systems, actual problems, sharing best practices	60.0%	65.3%	5 551
EMPACT mechanism	56.0%	64.3%	4 810
JITs	56.0%	60.0%	5 798

<sup>27</sup> Estonia is in the interview process to further validate their reported training needs.

<sup>28</sup> Respondents from Estonia and Portugal were still in the interview process at the time of finalising the current version of the report.

Main topic	Relevancy	Urgency	Trainees (EU level)
Law enforcement access to non-law enforcement system (VIS, ETIAS, EURODAC, EES)	48.0%	68.3%	4 901
Use of European Asylum Dactyloscopy database (EURODAC) for law enforcement	40.0%	74.0%	16 588
Passenger Name Record System/API	40.0%	68.0%	5 590
European Criminal Records Information System – Third Country Nationals (ECRIS-TCN)	40.0%	68.0%	11 401
Passenger Name Record System exchange at Passenger Information Units	40.0%	68.0%	4 433
Use of Visa Information System (VIS) for law enforcement	44.0%	63.6%	16 458
Joint operations and joint patrols (Prüm decision)	44.0%	56.4%	4 459
Automated data exchange (Prüm II)	36.0%	62.2%	5 538
e-Justice Communication via Online Data Exchange (e-CODEX)	16.0%	70.0%	4 784
<b>Total/average</b>	<b>50.8%</b>	<b>66.8%</b>	<b>164 684</b>

## Further training suggestions

The OTNA questionnaire provided respondents with the opportunity to suggest additional training needs beyond the main topics and subtopics covered in the survey. This option was separate from the dedicated sections where respondents could propose subtopics related to specific main topics. However, only 8.5% (n=4) of respondents utilised this opportunity, and of these, only three provided details that could be analysed. The suggested training areas included:

- "Communication tool" training for 50 Estonian police officers and 50 border guards, both at the practitioner level.
- VAT evasion, smuggling, intra-community acquisition, and supply training for 10 + 10 Polish customs officers at the awareness level.
- Training for Portuguese police on sharing information through secure channels, targeting 10 participants at the expert and train-the-trainer levels.
- Classified information handling and supply training for 15 participants, covering awareness, expert, and train-the-trainer levels.

Given the low response rate and the fragmented nature of these suggestions, they do not indicate systematic gaps in the surveyed topics but may reflect specific national or agency-level training needs.

## Existing training on the national and international level

Through the surveys, 17 countries provided information on training activities attended at the national and international levels in the areas of law enforcement cooperation, information exchange, and interoperability. Several countries reported attending training focused on large-scale EU IT systems, including the SIS, EES, ETIAS and their interoperability features. The majority of reported training activities were conducted at the practitioner level, indicating a strong emphasis on capacity development for operational knowledge and hands-on application of these IT systems and cooperation frameworks. Regarding training delivery modes, while webinars and online courses were mentioned, on-site training remains the dominant format. This preference highlights the importance of interactive and practical learning environments, which are particularly relevant for law enforcement personnel who require applied skills. Some countries also reported attending more specialised training, such as PNR

data exchange and API regulations, while others participated in broader awareness-level training covering interoperability and law enforcement cooperation as overarching themes. Additionally, a few indicated engagement in train-the-trainer (TTT) programmes, suggesting an effort to build sustainable in-house training capacity within their national law enforcement agencies. The list below provides further details on country-specific submissions.

- **Czechia** reported participation in training on Interoperability for Supplementary Information Request at the National Entries (SIRENE officers), focusing on the impact of interoperability features on the SIS and SIRENE operations. The training was conducted on-site at the practitioner level, ensuring that officers understood how to apply interoperability components in operational settings. Additionally, Czechia reported participation in an online practitioner-level course on an unspecified topic related to information exchange.
- **Denmark** participated in ATLAS Maritime training, an advanced practitioner-level course designed for Special Intervention Units (SIU). Conducted on-site, this training aimed to enhance best practices, cooperation, and joint exercises related to maritime law enforcement operations.
- **Estonian** law enforcement officers attended awareness-level online training on interoperability, designed to introduce the functionalities and importance of interconnected EU-wide law enforcement IT systems. The training targeted professionals involved in operational and administrative aspects of information exchange.
- **Finland** participated in multiple training activities in interoperability and operational analysis. An on-site awareness-level session was held to introduce key interoperability tools, while a practitioner-level online course targeted analysts, aiming to enhance skills in operational analysis and intelligence processing. The varied nature of Finland's training engagements suggests a balanced approach between foundational knowledge-building and specialised analytical training.
- **Germany** reported multiple training engagements, including: data analysis training (Advanced practitioner, on-site) aimed at improving technical data-processing capabilities, International Cooperation at the BKA (Advanced practitioner, on-site), targeting officials responsible for cross-border cooperation and intelligence sharing, and SPOC 54/2024 Training (Advanced practitioner, on-site), focusing on the SPOC framework to streamline law enforcement communication and cooperation.
- **Greek** authorities attended practitioner-level on-site training on PNR Data Exchange.
- **Italy** participated in an Exchange Programme 2025, consisting of awareness-level webinars for law enforcement agencies, aiming to enhance cross-border cooperation and familiarisation with EU-level security mechanisms.
- **Latvia** reported participation in TTT training sessions, with a specialised online module targeting advanced practitioners and trainers. The goal was to improve the effectiveness of law enforcement training design and delivery methods across EU MS.
- **Lithuania** participated in awareness-level EMPACT activities (on-site), as well as practitioner-level training on the EES, delivered through an online course. The EES training aimed to increase awareness among officials about the use of biometric and entry/exit data for law enforcement purposes.
- **Malta** engaged in awareness-level on-site interoperability training focusing on SIS, SIRENE, VIS, ETIAS, EES, ECRIS, and EURODAC users. This training provided a broad introduction to the operational use of interoperability tools across different law enforcement platforms.
- **Poland** participated in advanced practitioner-level on-site training on international cooperation, aiming to strengthen cross-border coordination mechanisms, and an awareness-

level webinar on counterfeit goods and new smuggling routes, addressing risks and enforcement strategies.

- **Portugal** attended practitioner-level on-site training on environmental crime, targeting professionals working in environmental law enforcement. An awareness-level online course on the SIS was also reported, structured as a TTT for managerial staff.
- **Romania** reported engagement in multiple training activities, including, an expert-level webinar on countering trafficking in human beings, aimed at strengthening law enforcement capacity to combat human trafficking. Awareness-level on-site training on the Google Remote Procedure Call (gRPC) protocol, targeting members of interoperability teams from different EU MS, was reported, as well as a TTT on-site training for law enforcement agencies aimed at developing training capabilities within national institutions.
- **Slovenia** attended various expert-level and practitioner-level on-site training courses, including a workshop on the Information Exchange Directive for SPOC officers, supporting the implementation of the new directive, awareness-level training on the New API regulation, introducing updated rules on API systems, and practitioner-level training on ETIAS Screening Board, focusing on risk assessment and information exchange processes in the ETIAS framework.
- **Spain** participated in TTT on-site training on interoperability, targeted at management-level officials, preparing senior officers to train others on interoperability tools and data-sharing platforms.
- **Sweden** conducted practitioner-level SIS/SIRENE training to increase SIS functionality knowledge among SIRENE operators, and practitioner-level Europol Information System (EIS) training for law enforcement, with a focus on information exchange and cross-border case coordination.
- **The EU respondent** reported participation in a practitioner-level online course on Intellectual Property (IP) crime investigation. This training targeted IP crime investigators, customs officers, and EU agency staff, providing fundamental knowledge on intellectual property crime.

## Regional training needs on law enforcement cooperation

The OTNA questionnaire on **law enforcement cooperation** provided respondents with the opportunity to indicate whether training on the main topics should be conducted at a regional level, either within the EU or in non-EU countries. Regional training needs were identified for six out of the seven main topics.

For the topic of **Cross-border operational cooperation and information exchange**, contributions were received from Estonia, Malta, Poland, and Romania, indicating that several countries perceive shared operational challenges that may benefit from regionally coordinated training approaches. The Estonian response indicated that regional training would be relevant in cooperation with Finland, Latvia, Lithuania, and Poland, reflecting cooperation needs within the Baltic and neighbouring regions. Malta identified Italy and Spain, as well as the MENA region and the Western Balkans, as non-EU partners for cross-border operational cooperation requirements. Two respondents from Poland pointed to Cyprus, Czechia, Germany, Lithuania, Slovakia, Sweden, and the United Kingdom. Romania identified Austria and Bulgaria, as well as Finland, France, Greece, Hungary, Italy, and the United Kingdom, as relevant partners for regional training.

For the **SPOC training**, a response from Malta indicated that training would likely be needed together with Cyprus, Greece, Italy, and Spain, suggesting a focus on Southern European cooperation in SPOC-related activities. Additionally, the response referenced potential regional training needs in the MENA

region and the Western Balkans, highlighting the importance of broader international engagement in SPOC coordination and information exchange.

For the topic of the **EMPACT Mechanism**, Malta, Romania, Sweden, and an EU institution respondent identified a need for regional training. The Maltese response indicated that training would likely be needed together with Cyprus, Greece, Italy, and Spain, as well as potential regional training needs in the MENA region and the Western Balkans. Romania, along with the EU institution respondent, proposed the implementation of regional training programs across all EU countries. This highlights the importance and relevance of capacity-building initiatives related to EMPACT on a pan-European scale. By fostering such training, the aim is to enhance collaborative efforts and strengthen the overall capabilities of EU member states in addressing shared challenges effectively. Sweden pointed to Belgium, Denmark, Finland, Germany, the Netherlands, and Poland, reflecting a broader interest in enhancing EMPACT-related cooperation across multiple regions.

For the topic of **JITs**, five countries addressing this topic identified a need for regional training, with contributions from Malta, Portugal, Romania, Sweden, and Switzerland. The Maltese response indicated that regional training would likely be relevant for Bulgaria, Croatia, Cyprus, Greece, Italy, Malta, Romania, Slovenia, and Spain, while also highlighting potential training needs in the MENA region and the Western Balkans. Portugal referred to France and Italy, as well as non-EU countries, without further specification. Romania pointed to Austria, Bulgaria, Germany, Hungary, and Italy, suggesting a focus on strengthening cooperation in Central and Southeastern Europe. Sweden's response listed Denmark, Finland, Germany, the Netherlands, and Poland, indicating a Nordic-Baltic and Western European regional cooperation perspective. The Swiss response indicated the need for training involving Austria, France, Germany, and Italy, reflecting a focus on regional collaboration within Central and Western Europe.

Regional training needs related to the **Prüm Decision** were indicated by Malta, Poland, and Romania. Malta referred to Italy and the MENA region. Poland identified Czechia, Germany, Slovakia, and Sweden. Romania indicated Bulgaria, Croatia, Greece, and Hungary, as well as Serbia and Bosnia and Herzegovina as non-EU countries.

For the topic of **PNR System exchange at PIUs**, four countries, namely Estonia, Lithuania, Malta and Romania, indicated a need for regional training. Estonia referred to Finland, Latvia, Lithuania, and Sweden, noting that neighbouring countries are exposed to similar international criminal networks, crime types, and travel patterns, which creates a strong need for cooperation and shared training. Lithuania identified Belgium, France, and Germany. Malta referred to Italy and Spain, and also mentioned the MENA region and the Western Balkans. Romania identified Austria, Bulgaria, Denmark, France, Germany, Greece, Hungary, Ireland, Italy, Malta, Spain, and Sweden.

**Table 16** below provides a summary of the geographical coverage of the regional training needs indications.

Table 16 - Summary of regional training needs

	Cross-border operational cooperation & information exchange	SPOC training	EMPACT mechanism	JITs	Joint Operations and Joint Patrols (Prüm Decision)	PNR system exchange at PIUs
Austria	✓			✓		✓
Belgium			✓			✓
Bulgaria	✓			✓	✓	✓
Croatia				✓	✓	

	Cross-border operational cooperation & information exchange	SPOC training	EMPACT mechanism	JITs	Joint Operations and Joint Patrols (Prüm Decision)	PNR system exchange at PIUs
Cyprus	✓	✓	✓	✓		
Czechia	✓				✓	
Denmark			✓	✓		✓
Estonia	✓					✓
Finland	✓		✓	✓		✓
France	✓			✓		✓
Germany	✓		✓	✓	✓	✓
Greece	✓	✓	✓	✓	✓	✓
Hungary	✓			✓	✓	✓
Ireland						✓
Italy	✓	✓	✓	✓	✓	✓
Latvia	✓					✓
Lithuania	✓					✓
Luxembourg						
Malta	✓	✓	✓	✓	✓	✓
Netherlands			✓	✓		
Poland	✓		✓	✓	✓	
Portugal				✓		
Romania	✓		✓	✓	✓	
Slovakia	✓				✓	
Slovenia				✓		
Spain	✓	✓	✓	✓		✓
Sweden	✓		✓	✓	✓	✓
Non-EU countries	✓ <sup>29</sup>	✓ <sup>30</sup>	✓ <sup>31</sup>	✓ <sup>32</sup>	✓ <sup>33</sup>	✓ <sup>34</sup>

## Training dimensions for main topics – law enforcement cooperation

### Cross-border operational cooperation and information exchange

Cross-border operational cooperation and information exchange was the most addressed topic in the survey, with 80% of responding countries (20 MS<sup>35</sup>) identifying it as relevant. The urgency of training is high, with 66% of respondents rating it as urgent or very urgent. The urgency of training on this topic is rated as urgent (66% urgency level), indicating that training is considered essential and should be delivered within a year to ensure qualitative performance.

<sup>29</sup> MENA region, Western Balkans, UK

<sup>30</sup> MENA region, Western Balkans

<sup>31</sup> MENA region, Western Balkans

<sup>32</sup> MENA region, Western Balkans, Switzerland

<sup>33</sup> MENA region, Serbia, Bosnia and Herzegovina

<sup>34</sup> MENA region, Western Balkans

<sup>35</sup> Bulgaria, Croatia, Cyprus, Czechia, Denmark, Estonia, Finland, Germany, Greece, Latvia, Lithuania, Malta, Poland, Portugal, Romania, Slovakia, Spain, Sweden, Switzerland (non-EU partner country), EU (20)

All subtopics under this area were deemed relevant for training, highlighting the broad need for capacity-building. The estimated participant volume reaches up to 3 705 individuals, with the awareness level being the most requested, followed by advanced practitioner training.

Table 17 – Relevance of subtopics – cross-border operational cooperation and information exchange

Subtopic	Relevance (%)
Cooperation and sharing data within EU	73.8%
Cross-border operational cooperation such as cross border surveillance, joint operations	71.3%
Cooperation and sharing data with non-EU countries, including the UK	67.5%
Use of special tactics, initiatives and practices such as witness protection programmes, European tracking solutions, EU most wanted list, undercover operations, controlled deliveries, etc.	63.8%
Fundamental rights including the protection of personal data	62.5%
Digital skills and Artificial intelligence	60.0%
Judicial cooperation	60.0%
Multidisciplinary and administrative approach	58.8%

Table 18 – Profiles and number of potential participants – cross-border operational cooperation and information exchange

Profile/ level	Awareness	Practitioner	Advanced practitioner	Expert	TTT	Median total	Actual total
Investigators	650	208	156	130	52	1196	1 486
Analysts	260	143	325	130	65	923	869
Managers	130	104	130	104	130	598	490
Experts	195	91	130	130	52	598	450
Other <sup>36</sup>	0	130	260	0	0	390	20
<b>Total</b>	<b>1 235</b>	<b>676</b>	<b>1 001</b>	<b>494</b>	<b>299</b>	<b>3 705</b>	<b>3 315</b>

## Single Point of Contact training

SPOC training was addressed by 15 countries<sup>37</sup>, with all subtopics identified as relevant for training. The estimated training demand at the EU level reaches 5 551 professionals, with the practitioner level being the most requested, particularly for analysts.

Table 19 – Relevance of subtopics – Single Point of Contact training

Subtopic	Relevance (%)
Cooperation and sharing data within EU	80.0%
Cooperation and sharing data with non-EU countries, including the UK	71.7%
Cross-border operational cooperation such as cross border surveillance, joint operations	58.3%
Fundamental rights including the protection of personal data	58.3%
Digital skills and Artificial intelligence	53.3%

<sup>36</sup> Other participants as reported include officials in charge, intelligence gathering officers or operatives, surveillance officers, and computer forensics specialists.

<sup>37</sup> Bulgaria, Croatia, Cyprus, Denmark, Estonia, Finland, Germany, Lithuania, Malta, Portugal, Romania, Slovenia, Spain, Sweden, Switzerland (15)

Subtopic	Relevance (%)
Use of special tactics, initiatives and practices such as witness protection programmes, European tracking solutions, EU most wanted list, undercover operations, controlled deliveries, etc.	50.0%
Judicial cooperation	50.0%
Multidisciplinary and administrative approach	51.7%

Table 20 - Profiles and number of potential participants – Single Point of Contact training

Profile/ level	Awareness	Practitioner	Advanced practitioner	Expert	TTT	Median total	Actual total
Investigators	260	195	585	325	78	1 443	1 601
Analysts	260	2 080	325	130	78	2 873	1 073
Managers	195	260	130	208	104	897	456
Experts	91	91	52	78	26	338	363
Other	0	0	0	0	0	0	0
<b>Total</b>	<b>806</b>	<b>2 626</b>	<b>1 092</b>	<b>741</b>	<b>286</b>	<b>5 551</b>	<b>3 493</b>

## European Multidisciplinary Platform Against Criminal Threats mechanism

The EMPACT mechanism was addressed by 56% of responding countries (14 MS<sup>38</sup>), with all subtopics considered relevant for training. The urgency of training is rated as urgent (64.3% urgency level), indicating that training is essential and should be delivered within a year to support operational effectiveness.

The estimated need for training at the EU level encompasses 4 810 professionals. This demand is relatively evenly distributed across various levels, including awareness, practitioner, and advanced practitioner stages. By addressing these training needs, the EU aims to ensure a well-rounded development of skills and competencies among professionals, thereby enhancing their ability to meet the diverse challenges faced at different levels of expertise.

Table 21 - Relevance of subtopics - EMPACT mechanism

Subtopic	Relevance (%)
Cooperation and sharing data within EU	76.8%
Cooperation and sharing data with non-EU countries, including the UK	73.2%
Cross-border operational cooperation such as cross border surveillance, joint operations	71.4%
Digital skills and Artificial intelligence	69.6%
Judicial cooperation	67.9%
Fundamental rights including the protection of personal data	60.7%
Multidisciplinary and administrative approach	58.9%

<sup>38</sup> Bulgaria, Cyprus, Estonia, Finland, Italy, Latvia, Lithuania, Malta, Portugal, Romania, Spain, Sweden, Switzerland, EU (14)

Table 22 - Profiles and number of potential participants – EMPACT mechanism

Profile/ level	Awareness	Practitioner	Advanced practitioner	Expert	TTT	Median total	Actual total
Investigators	260	364	390	390	104	1 508	1 123
Analysts	260	260	325	130	130	1 105	700
Managers	260	130	130	143	130	793	322
Experts	520	325	195	130	130	1 300	367
Other <sup>39</sup>	0	104	0	0	0	104	4
<b>Total</b>	<b>1 300</b>	<b>1 183</b>	<b>1 040</b>	<b>793</b>	<b>494</b>	<b>4 810</b>	<b>2 516</b>

## Joint Investigation Teams

The JITs were addressed by 56% of responding countries (14 MS<sup>40</sup>), with all subtopics considered relevant for training.

The urgency of training is rated at 60.0%, indicating a moderate to urgent need, with training being advantageous within a year to enhance operational performance. The estimated training demand at the EU level is 5 798 professionals, with needs evenly distributed across awareness, practitioner, advanced practitioner, and expert levels, covering a wide range of professional profiles.

Table 23 - Relevance of subtopics – Joint Investigation Teams

Subtopic	Relevance (%)
Cooperation and sharing data within EU	76.8%
Cooperation and sharing data with non-EU countries, including the UK	75.0%
Digital skills and Artificial intelligence	69.6%
Judicial cooperation	62.5%
Fundamental rights including the protection of personal data	57.1%
Use of special tactics, initiatives and practices such as witness protection programmes, European tracking solutions, EU most wanted list, undercover operations, controlled deliveries, etc.	57.1%
Cross-border operational cooperation such as cross border surveillance, joint operations	53.6%
Multidisciplinary and administrative approach	48.2%

Table 24 - Profiles and number of potential participants – Joint Investigation Teams

Profile/ level	Awareness	Practitioner	Advanced practitioner	Expert	TTT	Median total	Actual total
Investigators	780	390	520	364	104	2 158	1 569
Analysts	390	260	221	182	130	1 183	798

<sup>39</sup> Other participants as reported include intelligence gathering officers, operatives, and other officials of the State Border Guard.

<sup>40</sup> Bulgaria, Croatia, Estonia, Finland, Italy, Latvia, Lithuania, Malta, Poland, Portugal, Romania, Spain, Sweden, Switzerland (14)

Profile/ level	Awareness	Practitioner	Advanced practitioner	Expert	TTT	Median total	Actual total
Managers	390	260	195	234	130	1 209	882
Experts	260	260	104	130	130	884	337
Other <sup>41</sup>	0	52	0	312	0	364	14
<b>Total</b>	<b>1 820</b>	<b>1 222</b>	<b>1 040</b>	<b>1 222</b>	<b>494</b>	<b>5 798</b>	<b>3 600</b>

## Joint operations and joint patrols (Prüm decision)

Joint operations and joint patrols under the Prüm Decision were addressed by 44% of responding countries (11 MS<sup>42</sup>). As this falls below the 50% relevance threshold, the topic would not constitute a priority for EU-level training. The urgency of training is rated as moderate (56.4%), suggesting that while training would be advantageous within a year, it is not critical for immediate operational performance.

Most subtopics under this area were deemed relevant for training, except for the Multidisciplinary and Administrative Approach, which fell below the relevance threshold when reviewed at the subtopic level. The estimated training need at the EU level is 4 459 potential participants, with demand primarily at the awareness level, particularly among investigators.

Table 25 - Relevance of subtopics - Joint operations and patrols

Subtopic	Relevance (%)
Cooperation and sharing data within EU	72.7%
Cross-border operational cooperation such as cross border surveillance, joint operations	65.9%
Cooperation and sharing data with non-EU countries, including the UK	59.1%
Fundamental rights including the protection of personal data	59.1%
Use of special tactics, initiatives and practices such as witness protection programmes, European tracking solutions, EU most wanted list, undercover operations, controlled deliveries, etc.	54.5%
Digital skills and Artificial intelligence	54.5%
Judicial cooperation	52.3%
Multidisciplinary and administrative approach	47.7%

Table 26 - Profiles and number of potential participants – Joint operations and patrols

Profile/ level	Awareness	Practitioner	Advanced practitioner	Expert	TTT	Median total	Actual total
Investigators	1 560	338	260	260	78	2 496	720
Analysts	260	130	130	130	26	676	422
Managers	260	130	78	130	130	728	168
Experts	130	130	91	104	52	507	152

<sup>41</sup> Other participants as reported include intelligence gathering officers, operatives, and prosecutors.

<sup>42</sup> Bulgaria, Denmark, Finland, Latvia, Lithuania, Malta, Poland, Portugal, Romania, Spain, Switzerland (11)

Profile/ level	Awareness	Practitioner	Advanced practitioner	Expert	TTT	Median total	Actual total
Other <sup>43</sup>	0	52	0	0	0	52	2
<b>Total</b>	<b>2 210</b>	<b>780</b>	<b>559</b>	<b>624</b>	<b>286</b>	<b>4 459</b>	<b>1 464</b>

## Law enforcement access to non-law enforcement systems

Law enforcement access to non-law enforcement systems was addressed by 12 MS<sup>44</sup> (48%), falling slightly below the 50% threshold required to be considered a priority for EU-level training. Despite this, the urgency of training is rated as urgent (63.3%), indicating that training is essential and should ideally be delivered within a year.

All subtopics presented under this main topic were considered relevant for training, reflecting a broad need for capacity-building in this area. The estimated training demand at the EU level is 4 901 participants, with primary demand at the advanced practitioner level, followed by awareness-level training. Training needs span relatively equally across all professional profiles, highlighting the multi-disciplinary importance of this topic.

Table 27 - Relevance of subtopics - law enforcement access to non-law enforcement systems

Subtopic	Relevance (%)
Cooperation and sharing data within EU	85.4%
Fundamental rights including the protection of personal data	75.0%
Cross-border operational cooperation such as cross-border surveillance, joint operations	68.8%
Multidisciplinary and administrative approach	66.7%
Digital skills and Artificial intelligence	62.5%

Table 28 - Profiles and number of potential participants - law enforcement access to non-law enforcement systems

Profile/ level	Awareness	Practitioner	Advanced practitioner	Expert	TTT	Median total	Actual total
Investigators	260	429	390	390	104	1 573	1 216
Analysts	325	429	390	117	52	1 313	657
Managers	455	52	260	130	78	975	350
Experts	260	52	390	260	78	1 040	203
Other	0	0	0	0	0	0	0
<b>Total</b>	<b>1 300</b>	<b>962</b>	<b>1 430</b>	<b>897</b>	<b>312</b>	<b>4 901</b>	<b>2 433</b>

<sup>43</sup> Other participants as reported include intelligence gathering officers and operatives.

<sup>44</sup> Bulgaria, Estonia, Finland, Latvia, Lithuania, Malta, Portugal, Romania, Slovakia, Spain, Sweden, Switzerland (12)

## Passenger Name Record System exchange at Passenger Information Units

The PNR system exchange at PIUs was addressed by 44% of responding countries (11 MS<sup>45</sup>). As this falls below the 50% relevance threshold, the topic would not constitute a priority for EU-level training. The urgency of training is rated as moderate (54.6%), suggesting that while training would be useful, it is not an immediate priority.

Most subtopics under this area were considered relevant for training, except from Multidisciplinary and Administrative Approach, as well as Use of Special Tactics, Initiatives, and Practices (e.g., witness protection programmes, EU Most Wanted list, undercover operations, and controlled deliveries), which fell below the relevance threshold at the subtopic level. The estimated training demand at the EU level is 4 433 participants, with training primarily requested at the awareness level, particularly among investigators.

Table 29 - Relevance of subtopics - Passenger Name Record System exchange at Passenger Information Units

Subtopic	Relevance (%)
Cooperation and sharing data within EU	68.2%
Cooperation and sharing data with non-EU countries, including the UK	65.9%
Fundamental rights including the protection of personal data	65.9%
Digital skills and Artificial intelligence	63.6%
Cross-border operational cooperation such as cross border surveillance, joint operations	56.8%
Judicial cooperation	54.5%
Multidisciplinary and administrative approach	45.5%
Use of special tactics, initiatives and practices such as witness protection programmes, European tracking solutions, EU most wanted list, undercover operations, controlled deliveries, etc.	40.9%

Table 30 - Profiles and number of potential participants - Passenger Name Record System exchange at Passenger Information Units

Profile/ level	Awareness	Practitioner	Advanced practitioner	Expert	TTT	Median total	Actual total
Investigators	1365	260	260	312	26	2 223	575
Analysts	325	260	195	130	65	975	425
Managers	273	130	52	52	234	741	146
Experts	26	39	39	39	52	195	119
Other <sup>46</sup>	52	52	52	52	91	299	15
<b>Total</b>	<b>2 041</b>	<b>741</b>	<b>598</b>	<b>585</b>	<b>468</b>	<b>4 433</b>	<b>1 280</b>

<sup>45</sup> Bulgaria, Estonia, Finland, Germany, Greece, Lithuania, Malta, Portugal, Romania, Spain, Switzerland (11)

<sup>46</sup> Other participants as reported include PIU personnel, PIU operators, and Data Protection Officers

## Training dimensions for main topics - information exchange and interoperability

### Interoperability (components and tools)

Interoperability (components and tools) was the most addressed topic within the domains of Information Exchange and Interoperability, with 72% of responding countries (18 MS<sup>47</sup>) identifying it as relevant. The urgency of training is rated as urgent (67.8%), indicating that training is essential and should ideally be delivered within a year to enhance operational performance.

All subtopics under this area were considered relevant for training, demonstrating a broad and consistent need for capacity-building. The estimated EU-level training demand reaches up to 8 086 participants, with practitioner and advanced practitioner levels identified as the key priority levels. Investigators represent the largest single professional profile, although training needs remain stable across most profiles, reflecting the multi-disciplinary nature of interoperability training.

Table 31 - Relevance of subtopics - Interoperability (components and tools)

Subtopic	Relevance (%)
Interoperability features (e.g., Art 20, Art 22, Multiple-Identity Detector, ESP searches, Common Repository for Reporting and Statistics)	79.2%
Biometric identification	76.4%
General information about the large-scale IT systems	75.0%
Quality standards for storing data in EU information systems or interoperability components, general framework of data quality	73.6%
Fundamental rights and data protection	65.3%

Table 32 - Profiles and number of potential participants- Interoperability (components and tools)

Profile/ level	Awareness	Practitioner	Advanced practitioner	Expert	TTT	Median total	Actual total
Managers	130	195	91	52	130	598	407
Operators	260	455	260	130	130	1 235	950
End users	520	390	325	260	130	1 625	1 215
Experts	78	130	130	130	130	598	386
Investigators	260	780	1 040	130	130	2 340	1 012
Analysts	260	780	130	130	130	1 430	650
Other	0	0	130	130	0	260	10
<b>Total</b>	<b>1 508</b>	<b>2 730</b>	<b>2 106</b>	<b>962</b>	<b>780</b>	<b>8 086</b>	<b>4 630</b>

<sup>47</sup> Austria, Bulgaria, Czechia, Estonia, Finland, Germany, Hungary, Italy, Luxembourg, Malta, Poland, Portugal, Romania, Slovakia, Spain, Sweden, Switzerland, EU (18)

## Schengen Information System

The Schengen Information System (SIS) was addressed by 72% of responding countries (18 MS<sup>48</sup>), with all subtopics considered relevant for training. The urgency of training is rated as urgent (67.8%), indicating that training is essential and should ideally be delivered within a year to support effective system use and compliance with operational requirements.

Data analysis suggests that EU-level training needs could reach up to 47 021 participants, with a particular focus on end users and awareness-level training. While the actual total submissions from responding countries (i.e., before statistical processing) are also notably high (comparison provided below), significant variations exist between the median-based estimation and the total reported figures. In particular, training needs appear notably inflated due to high submissions from Estonia and Malta, where awareness-level and practitioner-level end-user training figures reached up to 2 000 individuals across multiple subtopics. This distorts the overall data, leading to an artificially high share of end users, whereas in most other MS, the projected training need at these levels and profiles remains more moderate.

Table 33 - Relevance of subtopics - Schengen Information System

Subtopic	Relevance (%)
Interoperability features (e.g., Art 20, Art 22, Multiple-Identity Detector, ESP searches, Common Repository for Reporting and Statistics)	77.8%
Biometric identification	73.6%
General information about the large-scale IT systems	70.8%
Quality standards for storing data in EU information systems or interoperability components, general framework of data quality	70.8%
Fundamental rights and data protection	68.1%

Table 34 - Profiles and number of potential participants – Schengen Information System

Profile/ level	Awareness	Practitioner	Advanced practitioner	Expert	TTT	Median total	Actual total
Managers	195	390	130	78	26	819	621
Operators	2 990	260	520	195	52	4 017	1 132
End users	32 500	260	1 300	325	130	34 515	5 011
Experts	1 560	156	520	130	52	2 418	449
Investigators	1 300	780	520	260	130	2 990	1 344
Analysts	910	182	520	130	130	1 872	631
Other <sup>49</sup>	0	0	260	130	0	390	15
<b>Total</b>	<b>39 455</b>	<b>2</b>	<b>3 770</b>	<b>1 248</b>	<b>520</b>	<b>47 021</b>	<b>9 203</b>

<sup>48</sup> Austria, Bulgaria, Croatia, Estonia, Finland, Germany, Greece, Hungary, Lithuania, Luxembourg, Malta, Poland, Portugal, Romania, Slovakia, Spain, Sweden, Switzerland (18)

<sup>49</sup> Other participants as reported include Officials in Charge and technical staff.

## Use of Entry/Exit System for law enforcement

The Use of the EES for law enforcement was addressed by 60% of responding countries (15 MS<sup>50</sup>), with all subtopics considered relevant for training. The urgency of training is rated as urgent (69.3%), indicating that training is essential and should ideally be delivered within a year to support the effective implementation and use of EES by law enforcement.

The estimated EU-level training need could reach up to 7 631 participants, with training primarily targeting end users. However, the data also reflects broader training needs across various proficiency levels.

Table 35 - Relevance of subtopics - Use of Entry/Exit System for law enforcement

Subtopic	Relevance (%)
Interoperability features (e.g., Art 20, Art 22, Multiple-Identity Detector, European Search Portal searches, Common Repository for Reporting and Statistics)	68.3%
Biometric identification	68.3%
General information about the large-scale IT systems	65.0%
Quality standards for storing data in EU information systems or interoperability components, general framework of data quality	65.0%
Fundamental rights and data protection	63.3%

Table 36 - Profiles and number of potential participants – Use of Entry/Exit System for law enforcement

Profile/ level	Awareness	Practitioner	Advanced practitioner	Expert	TTT	Median total	Actual total
Managers	104	130	130	195	91	650	347
Operators	260	260	520	520	130	1 690	794
End users	780	260	585	325	130	2 080	1 069
Experts	78	130	130	143	130	611	342
Investigators	260	260	520	325	130	1 495	937
Analysts	169	260	130	130	78	767	599
Other <sup>51</sup>	338	0	0	0	0	338	13
<b>Total</b>	<b>1 989</b>	<b>1 300</b>	<b>2 015</b>	<b>1 638</b>	<b>689</b>	<b>7 631</b>	<b>4 101</b>

## Use of European Travel Information Authorisation System for law enforcement

The use of the ETIAS was addressed by 60% of responding countries (15 MS<sup>52</sup>) with all subtopics considered relevant for training. The urgency of training is rated as highly urgent (76%), indicating that

<sup>50</sup> Bulgaria, Estonia, Finland, Germany, Italy, Lithuania, Luxembourg, Malta, Poland, Portugal, Romania, Slovakia, Spain, Sweden, Switzerland (15)

<sup>51</sup> Other participants as reported include those not directly affected by EES but for whom awareness is beneficial.

<sup>52</sup> Bulgaria, Estonia, Finland, Germany, Italy, Lithuania, Luxembourg, Malta, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Switzerland (15)

training is critical and should be delivered as soon as possible to ensure law enforcement agencies are fully prepared for ETIAS implementation.

The estimated EU-level training need is 7 930 participants, with training primarily targeting practitioner-level end users, reflecting the need for hands-on, operational knowledge to effectively use the system.

Table 37 - Relevance of subtopics - use of European Travel Information Authorisation System for law enforcement

Subtopic	Relevance (%)
Interoperability features (e.g., Art 20, Art 22, Multiple-Identity Detector, ESP searches, Common Repository for Reporting and Statistics)	76.7%
General information about the large-scale IT systems	71.7%
Quality standards for storing data in EU information systems or interoperability components, general framework of data quality	70.0%
Fundamental rights and data protection	68.3%
Biometric identification	63.3%

Table 38 - Profiles and number of potential participants - use of European Travel Information Authorisation System for law enforcement

Profile/ level	Awareness	Practitioner	Advanced practitioner	Expert	TTT	Median total	Actual total
Managers	130	325	130	130	52	767	324
Operators	390	195	260	520	78	1 443	802
End users	260	2 080	260	325	78	3 003	1 054
Experts	143	195	169	130	78	715	323
Investigators	260	260	455	260	52	1 287	903
Analysts	260	169	130	52	104	715	569
Other	0	0	0	0	0	0	0
<b>Total</b>	<b>1 443</b>	<b>3 224</b>	<b>1 404</b>	<b>1 417</b>	<b>442</b>	<b>7 930</b>	<b>3 975</b>

## Use of European Asylum Dactyloscopy database for law enforcement

The use of EURODAC for law enforcement was addressed by 40% of responding countries (10 MS<sup>53</sup>), falling below the 50% relevance threshold typically applied for considering topics as EU-level training priorities. Among those addressing the topic, training is considered highly relevant (74%), still indicating a strong need for capacity-building in this area.

The estimated EU-level training need reaches 16 588 participants, with a significant gap between the median-based estimation and actual submissions (without statistical processing). The primary target group is end users, while advanced practitioner training is identified as the most required proficiency level. This conclusion aligns with the actual submissions, but statistical processing and the applied methodology have increased the overall volume due to high single-country submissions from certain countries, namely Spain, Portugal and Estonia.

<sup>53</sup> Bulgaria, Estonia, Finland, Germany, Malta, Poland, Portugal, Romania, Spain, Switzerland (10)

Table 39 - Relevance of subtopics - Use of European Asylum Dactyloscopy for law enforcement

Subtopic	Relevance (%)
Biometric identification	82.5%
Fundamental rights and data protection	77.5%
Quality standards for storing data in EU information systems or interoperability components, general framework of data quality	75.0%
Interoperability features (e.g., Art 20, Art 22, Multiple-Identity Detector, ESP searches, Common Repository for Reporting and Statistics)	72.5%
General information about the large-scale IT systems	70.0%

Table 40 - Profiles and number of potential participants – Use of European Asylum Dactyloscopy for law enforcement

Profile/ level	Awareness	Practitioner	Advanced practitioner	Expert	TTT	Median total	Actual total
Managers	195	520	260	130	52	1157	239
Operators	650	910	260	325	130	2275	599
End users	2860	3900	1430	325	130	8645	1615
Experts	260	390	130	130	91	1001	354
Investigators	260	1300	455	260	52	2327	798
Analysts	260	520	195	130	78	1183	581
Other	0	0	0	0	0	0	0
<b>Total</b>	<b>4485</b>	<b>7540</b>	<b>2730</b>	<b>1300</b>	<b>533</b>	<b>16588</b>	<b>4186</b>

## Passenger Name Record System

The PNR System was addressed by 40% of responding countries (10 MS<sup>54</sup>), with all subtopics considered relevant for training, except for Biometric Identification, which fell below the relevance threshold. The urgency of training is rated as urgent (68%), indicating that training is essential and should ideally be delivered within a year to enhance the effective use of PNR data in law enforcement operations.

The estimated EU-level training need is 5 590 participants, with advanced practitioner training being the most in-demand proficiency level, and end users identified as the primary target group. However, when analysing the actual participant submissions from different countries, the distribution of professional profiles in need of training appears slightly different. While end users remain a key group, the data also highlights a notable demand for training among investigators, operators, and analysts, suggesting a broader need for multi-disciplinary training on the PNR system.

Table 41 - Relevance of subtopics - Passenger Name Record System

Subtopic	Relevance (%)
Quality standards for storing data in EU information systems or interoperability components, general framework of data quality	72.5%
Fundamental rights and data protection	70.0%
General information about the large-scale IT systems	67.5%

<sup>54</sup> Bulgaria, Finland, Greece, Malta, Poland, Portugal, Slovenia, Spain, Sweden, Switzerland (10)

Subtopic	Relevance (%)
Interoperability features (e.g., Art 20, Art 22, Multiple-Identity Detector, ESP searches, Common Repository for Reporting and Statistics)	57.5%
Biometric identification	45.0%

Table 42 - Profiles and number of potential participants – Passenger Name Record System

Profile/ level	Awareness	Practitioner	Advanced practitioner	Expert	TTT	Median total	Actual total
Managers	26	117	130	52	26	351	148
Operators	39	104	286	130	26	585	420
End users	78	78	1976	130	273	2 535	361
Experts	26	52	286	130	195	689	121
Investigators	169	182	260	130	26	767	491
Analysts	52	78	260	130	143	663	408
Other	0	0	0	0	0	0	0
<b>Total</b>	<b>390</b>	<b>611</b>	<b>3 198</b>	<b>702</b>	<b>689</b>	<b>5 590</b>	<b>1 954</b>

## European Criminal Records Information System - Third Country Nationals

The ECRIS-TCN was addressed by 40% of responding countries (10 MS<sup>55</sup>), with all subtopics considered relevant for training. The urgency of training is rated as urgent (68%), indicating that training is essential and should ideally be delivered within a year to support the effective use of ECRIS-TCN in law enforcement operations.

The estimated EU-level training need is up to 11 401 participants, according to statistical analysis. However, there is a notable gap between the median-based estimation and actual participant submissions from responding countries. End users and analysts are identified as the primary target groups, particularly at the practitioner level. While this aligns with the non-processed data, the actual number of potential participants may realistically be lower, as high single submissions from Spain and Malta have inflated the overall estimation.

Table 43 - Relevance of subtopics - European Criminal Records Information System

Subtopic	Relevance (%)
Biometric identification	65.0%
Interoperability features (e.g., Art 20, Art 22, Multiple-Identity Detector, ESP searches, Common Repository for Reporting and Statistics)	62.5%
General information about the large-scale IT systems	62.5%
Fundamental rights and data protection	62.5%
Quality standards for storing data in EU information systems or interoperability components, general framework of data quality	57.5%

<sup>55</sup> Croatia, Estonia, Finland, Germany, Malta, Poland, Portugal, Slovakia, Spain, Sweden (10)

Table 44 - Profiles and number of potential participants – European Criminal Records Information System

Profile/ level	Awareness	Practitioner	Advanced practitioner	Expert	TTT	Median total	Actual total
Managers	130	130	195	130	130	715	172
Operators	260	390	260	130	130	1170	440
End users	390	3 900	260	130	130	4 810	616
Experts	78	325	130	130	195	858	140
Investigators	260	2 080	260	130	130	2 860	605
Analysts	143	390	130	130	195	988	435
Other	0	0	0	0	0	0	0
<b>Total</b>	<b>1 261</b>	<b>7 215</b>	<b>1 235</b>	<b>780</b>	<b>910</b>	<b>11 401</b>	<b>2 408</b>

## Use of Visa Information System for law enforcement

The use of VIS for law enforcement was addressed by 44% of responding countries (11 MS<sup>56</sup>), with all subtopics considered relevant for training. The urgency of training is rated as urgent (63.64%), indicating that training is essential and should ideally be delivered within a year to ensure effective use of VIS in law enforcement operations.

The data analysis estimates that up to 16 458 professionals at the EU level could require training. However, similar to other Information Exchange and Interoperability topics, there is a notable discrepancy between the original participant submissions and the results of statistical processing, meaning the figures should be interpreted with caution. Regardless of the method of analysis, end users remain the primary target group, while awareness and practitioner-level training are nearly equally in demand. However, the actual number of end users requiring training may not reach the statistical estimation, as the figures are inflated due to high submissions from Portugal, Estonia, and Malta.

Table 45 - Relevance of subtopics - Use of VISA Information System for law enforcement

Subtopic	Relevance (%)
Fundamental rights and data protection	70.5%
Interoperability features (e.g., Art 20, Art 22, Multiple-Identity Detector, ESP searches, Common Repository for Reporting and Statistics)	68.2%
Biometric identification	68.2%
General information about the large-scale IT systems	65.9%
Quality standards for storing data in EU information systems or interoperability components, general framework of data quality	63.6%

<sup>56</sup> Bulgaria, Estonia, Finland, Germany, Lithuania, Malta, Poland, Portugal, Romania, Slovakia, Switzerland (11)

Table 46 – Profiles and number of potential participants – Use of VISA Information System for law enforcement

Profile/ level	Awareness	Practitioner	Advanced practitioner	Expert	TTT	Median total	Actual total
Managers	130	325	130	130	26	741	320
Operators	390	260	520	130	78	1 378	604
End users	7 800	1560	182	260	78	9 880	1 328
Experts	780	52	117	130	91	1 170	256
Investigators	910	260	260	130	130	1 690	518
Analysts	910	260	195	130	104	1 599	296
Other	0	0	0	0	0	0	0
<b>Total</b>	<b>10 920</b>	<b>2 717</b>	<b>1 404</b>	<b>910</b>	<b>507</b>	<b>16 458</b>	<b>3 322</b>

## Automated data exchange (Prüm II)

The Automated Data Exchange (Prüm II) was addressed by 36% of responding countries (9 MS<sup>57</sup>), with all subtopics considered relevant for training. The urgency of training is rated as urgent (62.2%) among those who addressed the topic, indicating that training should ideally be delivered within a year to enhance the operational use of automated data exchange mechanisms.

The estimated EU-level training need is up to 5 538 participants, with training needs distributed evenly across different professional profiles and proficiency levels. Due to the statistical analysis method used, the awareness-level training estimates have been extrapolated, particularly reflecting submissions from Malta, where Judicial Authorities and Prosecutors, in connection with EJTN, have emerged as the highest single group. However, a more holistic approach is recommended in determining profile priorities to ensure a balanced and representative training strategy.

Table 47 – Relevance of subtopics – Automated data exchange (Prüm II)

Subtopic	Relevance (%)
Biometric identification	72.2%
Quality standards for storing data in EU information systems or interoperability components, general framework of data quality	72.2%
Fundamental rights and data protection	69.4%
Interoperability features (e.g., Art 20, Art 22, Multiple-Identity Detector, ESP searches, Common Repository for Reporting and Statistics)	66.7%
General information about the large-scale IT systems	66.7%

<sup>57</sup> Bulgaria, Estonia, Finland, Germany, Malta, Poland, Portugal, Spain, Switzerland (9)

Table 48 - Profiles and number of potential participants – Automated data exchange (Prüm II)

Profile/ level	Awareness	Practitioner	Advanced practitioner	Expert	TTT	Median total	Actual total
Managers	130	130	130	130	130	650	171
Operators	143	169	78	130	39	559	403
End users	143	195	130	130	130	728	393
Experts	143	130	130	130	130	663	148
Investigators	260	156	130	130	130	806	793
Analysts	143	325	130	130	78	806	430
Other <sup>58</sup>	1300	0	0	0	26	1326	51
<b>Total</b>	<b>2262</b>	<b>1105</b>	<b>728</b>	<b>780</b>	<b>663</b>	<b>5538</b>	<b>2389</b>

## E-Justice Communication via Online Data Exchange

The e-CODEX was the least addressed topic, with only 16% of responding countries (4 MS<sup>59</sup>) identifying it as relevant. Despite the low number of respondents, the urgency of training is rated as high (70%). All subtopics under e-CODEX were deemed relevant for training, and the statistical analysis estimates up to 4 784 participants at the EU level. However, the actual submissions from the four responding countries are significantly lower, suggesting that the statistical estimation may not fully align with the real training demand. Training needs in this area would primarily focus on awareness-level training for investigators, suggesting of familiarising law enforcement with the use of e-CODEX for secure judicial communication and data exchange.

Table 49 - Relevance of subtopics - e-Justice communication via Online Data Exchange

Subtopic	Relevance (%)
General information about the large-scale IT systems	68.8%
Fundamental rights and data protection	68.8%
Biometric identification	68.8%
Interoperability features (e.g., Art 20, Art 22, Multiple-Identity Detector, ESP searches, Common Repository for Reporting and Statistics)	62.5%
Quality standards for storing data in EU information systems or interoperability components, general framework of data quality	62.5%

<sup>58</sup> "Other participants" as reported include judicial authorities and prosecutors, in collaboration with European Judicial Training Network.

<sup>59</sup> Croatia, Finland, Malta, Poland (4)

Table 50 - Profiles and number of potential participants – e-Justice communication via Online Data Exchange

Profile/ level	Awareness	Practitioner	Advanced practitioner	Expert	TTT	Median total	Actual total
Managers	520	78	0	130	0	728	28
Operators	520	0	0	260	0	780	30
End users	0	0	0	0	0	0	0
Experts	0	0	0	0	0	0	0
Investigators	2 730	0	0	0	26	2 756	211
Analysts	520	0	0	0	0	520	20
Other	0	0	0	0	0	0	0
<b>Total</b>	<b>4 290</b>	<b>78</b>	<b>0</b>	<b>390</b>	<b>26</b>	<b>4 784</b>	<b>289</b>

## Outcomes of the Expert Group meeting

Following the distribution of the draft OTNA report, the Expert Group<sup>60</sup> convened virtually on Wednesday, 19 March 2025, to validate the findings and discuss how the identified training needs on law enforcement cooperation, information exchange, and interoperability could be addressed through EU-level training.

The meeting began with a presentation of the OTNA results, after which participants exchanged views on the most significant findings. A representative from Frontex noted that, when considering large-scale EUIT systems, the overall target group could reach up to 131 000 officials, constituting an audience far too large to be covered through EU-level training alone. They emphasised that national-level responsibilities must be clearly defined, especially regarding awareness-level training, which should largely be delivered at the national level. While EU-level training has already equipped many officials who are expected to cascade the knowledge further, it remains difficult to determine from the survey what exactly should be delivered by the EU versus MS. From CEPOL's perspective, the need for training remains valid regardless of delivery level. EU-level actors may also serve as facilitators by developing training content or tools that can be used and localised at the national level. It was acknowledged that even though EU-level training tools exist, such as CEPOL's online portfolio, they may not always reach all relevant officials in the MS.

In the domain of law enforcement cooperation, the group confirmed the findings of the OTNA analysis. It was agreed that EU-level training is required for cross-border operational cooperation and information exchange and that the features proposed in the draft report are realistic. SPOC training was recognised as important and should be retained, possibly through additional train-the-trainer activities, with the note that the need for awareness-level training for investigators on SPOC functioning should ideally be handled at the national level. Training on the EMPACT mechanism was also seen as best suited for national-level delivery. For JITs, the group affirmed that EU-level training is needed. Training on law enforcement access to non-law enforcement systems was also supported, with a recommendation for EU involvement and awareness-raising activities. In the case of PNR data exchange, the group noted that EU-level training might be beneficial, albeit to a limited extent. On the topic of joint operations and joint patrols under the Prüm framework, it was agreed that EU-level training is not needed due to the strong reliance on bilateral and multilateral agreements. This aligned with the training demand trends identified through the OTNA.

Regarding regional training, the group supported the report's observation that such approaches are most relevant for law enforcement operational cooperation. The regional dimension was seen as promising, particularly for cross-border criminality. Participants noted that MS may be motivated to develop regional training proposals through grant applications.

In terms of information exchange and interoperability, the expert group confirmed that the OTNA's key findings closely mirror the areas already included in the 2025 training portfolio of CEPOL's CKC. Interoperability-related topics, particularly those related to detection and operational implementation, were identified as both urgent and important. The group also addressed the training topic related to Eurodac. Although it did not reach the OTNA's statistical threshold for prioritisation, participants noted that its relevance may increase in the context of upcoming regulatory changes. It was therefore suggested that Eurodac be considered for inclusion in future EU-level training planning.

With these points acknowledged, the expert group endorsed the draft OTNA findings and agreed that the feedback and proposals from the meeting should be integrated into the final report, followed by a final review round to ensure broad dissemination of the findings, and enable the onboarding of final views from the wider stakeholder community.

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<sup>60</sup> The meeting included participants from EU MS authorities, the European Commission, Frontex, and CEPOL and their short-term external expert.

## Conclusions

Effective law enforcement cooperation, seamless information exchange, and well-integrated interoperability mechanisms are essential for combatting transnational crime, ensuring border security, and responding to evolving security threats across the EU. The findings of the OTNA on law enforcement cooperation, information exchange, and interoperability uncover a pressing need for capacity-building efforts, highlight the diverse professional profiles requiring training, and suggest regional considerations that shape how law enforcement cooperation unfolds in practice.

Across the areas examined, training needs have been identified as particularly important for cross-border operational cooperation and information exchange, SPOC training, the EMPACT mechanism, and JITs within law enforcement cooperation, as well as for the SIS, the ETIAS, the EES, and interoperability (components and tools). These findings suggest that, in the coming years, these topics should be prioritised for EU-level training. The urgency expressed across these topics indicates that the need for training is timely and should ideally be delivered within a year to ensure operational effectiveness and support officials in addressing operational challenges. Furthermore, while the relevance of Eurodac did not statistically reach the prioritisation threshold based on the data collected from the MS, expert inputs gained during the process indicated that training in this area is expected to become increasingly important due to forthcoming regulatory changes. Eurodac should, therefore, be considered for inclusion in future training planning. In contrast, training on joint operations and joint patrols under the Prüm framework was not seen as requiring EU-level intervention. These activities are predominantly governed by bilateral or multilateral agreements and are best supported through national-level or cross-border arrangements rather than centralised EU-level training initiatives.

In law enforcement cooperation, training demand is largely concentrated among investigators and analysts, with additional training needs expressed for managers and experts depending on the topic. For information exchange and interoperability, end users represent the primary training audience, particularly for SIS, ETIAS, and EES. However, statistical overestimations caused by single-country submissions indicate that the actual demand for training on these systems is likely more balanced across proficiency levels, requiring a stronger focus on practitioner and advanced practitioner training rather than purely awareness-level training. Training on interoperability tools should support a combination of investigators, analysts, and end users, ensuring that these professionals can fully leverage EU-wide data-sharing systems and interconnected databases.

In terms of delivery, training responses should be adapted to both the nature of the topic and the level of expertise required. Awareness-level training could be available through online learning platforms and webinars to ensure broad accessibility, particularly for general introductions to interoperability components and information exchange frameworks. However, on certain topics - such as fundamental rights and data protection - the OTNA respondents indicated the preference for practical, hands-on formats using real-life case studies to ensure meaningful application in operational contexts. Respondents also emphasised that training plans should align with the EU interoperability roadmap adopted by Justice and Home Affairs (JHA) Councils, prioritising interoperability components before 2028. Practitioner and advanced practitioner training should ideally incorporate hands-on exercises, case studies, and operational workshops, particularly for interoperability features and investigative cooperation mechanisms where applied skills are essential.

Training efforts should also take into account the need for regionally coordinated approaches, particularly in areas where cross-border cooperation is a central component of daily operations. The findings suggest that training on cross-border operational cooperation and information

exchange would benefit from a regional focus, particularly in the Baltic, Southern, and South-eastern European regions, where shared operational challenges necessitate enhanced cooperation. Similarly, EMPACT-related training was identified as both a pan-European and a regionally relevant priority, with variations in training needs across Nordic, Western, and Southern European countries. The results further highlight the importance of multi-stakeholder and international cooperation in training for JITs, where emphasis was placed on engagement with non-EU partners, including the MENA region and the Western Balkans.

Together, these findings provide indications for further discussion and for shaping CEPOL's training portfolio development in the areas of law enforcement cooperation, information exchange, and interoperability, as well as serve the broader training ecosystem involved in the delivery of EU-level training on these domains. CEPOL's CKC on Law Enforcement Cooperation, Information Exchange, and Interoperability plays a central role in consolidating expertise, ensuring a coordinated approach to training delivery, and providing a central hub for knowledge-sharing and best practices. At the same time, the specialised role of eu-LISA in training on the technical functionalities of large-scale IT systems must be taken into account, and training efforts in these domains require high levels of coordination between CEPOL, eu-LISA, and other EU actors involved in the training landscape to ensure complementarity and avoid duplication. The OTNA also brought up the importance of maintaining training cooperation with the European Judicial Training Network (EJTN) to ensure that judicial authorities and prosecutors receive complementary training alongside law enforcement officers.



# Annexes

## Annex 1 – EU-STNA Chapter on – Law Enforcement Cooperation, Information Exchange and Interoperability

In line with the EU's integrated approach to internal security, the EU-STNA process has revealed the need for greater cooperation and information exchange among police, border and coast guard, customs, judicial, administrative and tax authorities, as well as with EU institutions, bodies, agencies and relevant networks. In the area of law enforcement cooperation, information exchange and interoperability, the capability challenges that should be addressed through training concern operational cooperation among Member States' law enforcement authorities, including information exchange as an essential aspect of ensuring internal security. The Schengen Information System – Supplementary Information Request at the National Entries (SIS-SIRENE) Committee mentioned the importance of delivering basic and advanced SIRENE seminars on how SIS could enhance the work of law enforcement and the continuous updating of officials' knowledge on new regulations concerning EU information systems. Coordination in terms of control and operations related to trade in illicit goods and services was highlighted as one of the capability challenges, which brings to light the need to extend cooperation even outside the European law enforcement community and further strengthen partnerships with the judiciary and the private sector. Furthermore, to overcome the cooperation challenges in an area relating to freedom, security and justice, more attention should be paid to interoperable law enforcement. The interoperability of information systems, which facilitate data exchange and information sharing, and the use of such systems continuously create new modes of law enforcement cooperation; therefore, they remain a core capability challenge to be addressed through training during the next cycle. Italy suggested sharing specific actions implemented in EMPACT groups to the benefit of the European law enforcement community.

### List of identified and prioritised training needs

General overview of EU cooperation tools and instruments, including Police Code
Use of international cooperation tools for prevention and administrative proceedings
Joint operational activities and regional cooperation, joint investigation teams (JITs)
Cooperation with the United Kingdom
Cooperation with non-EU countries, including EMPACT mechanisms
Cross-border surveillance
Coordinated detection measures and investigations between the judiciary and police, including operational task forces aiming at identifying and arresting high-value targets
Coordinated prosecutions
Identification, collection and sharing of good practices on judicial cooperation
Use of special tactics, initiatives and practices such as witness protection programmes, European tracking solutions, EU most wanted list, undercover operations, controlled deliveries, etc.
Promoting a multidisciplinary/administrative approach
Promoting and raising awareness of information exchange instruments
Quality standards for storing data in EU information systems or interoperability components, general framework of data quality
Minimum standards for information exchange via Prüm framework in line with actual legal and technical developments
SIS: use and possibilities offered for investigations
SIRENE: new regulations, how to work with partners, enhancing the network; basic and advanced training
General single point of contact (SPOC) training including all existing and new systems, actual problems, sharing best practices
Passenger name record (PNR): exchanging best practices in diverse implementation of PNR and passenger information units (PIUs), awareness of national regulations and practices on cooperation among PIUs; PNR and data analysis
Sharing data with non-EU countries

How to access and combine EU funds (interoperability as a horizontal aspect)
Fingerprint scanning, including shared biometric matching service (SBMS), quality and fundamental rights including data protection
Biometric identification
Components of interoperability: how they work and how they can be used in investigations
Technical training for interoperability system operators
Safeguarding fundamental rights including data protection and data subject rights

## Annex 2 - Urgency levels

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

Urgency level scale	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.

## Annex 3 – 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 they require general information in order to be able to 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 extended experience, or a specific function/role, 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. Has a duty to contribute 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 of possible situation deviations and can apply necessary skills in practice. Can assist in solution development for abstract problems. Is aware of the limits of their knowledge and skills, is motivated to develop their self-performance.	Has broad and in-depth knowledge, skills and competences including 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 the work of others. Is able to share their knowledge with and provide guidance to less experienced colleagues. Is able to discuss issues with a sceptical colleague, counter sophisticated denialist opinions and arguments for inaction.	Has extensive knowledge, skills and competences, is able to link the processes to other competency areas and assess the interface as a 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 the 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	
EQF levels – Descriptors of defining levels in the European Qualifications Framework. More information is available at <a href="https://europa.eu/europass/en/description-eight-eqf-levels">https://europa.eu/europass/en/description-eight-eqf-levels</a>					



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on our website

**European Union Agency for Law Enforcement Training (CEPOL)**

**Offices:** 1101 Budapest, Üllői út 114-116, Hungary

**Email:** [info@cepol.europa.eu](mailto:info@cepol.europa.eu)

**www.cepola.europa.eu**

Find CEPOL on:

