



## ILEAnet

Innovation by Law Enforcement Agencies networking

### **Deliverable 5.18:**

### **Public report on the ILEAnet findings n°10**

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ILEAnet  
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# INNOVATION BY LAW ENFORCEMENT AGENCIES NETWORKING



## Public report on the ILEAnet findings n° Public Report on ILEAnet findings n°10

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## Executive Summary

This public report aims to give an insight to the work performed within ILEAnet from month 55 to 60 (December 2021 – May 2022), which was the last period of the project.

One of the great accomplishments under the reporting period has been the consolidation of the ILEAnet assets list and the reflection on the sustainability of those results as well as the ILEAnet Network+Community. The project team made sure to conduct this important discussion internally by giving voice to the ILEAnet focal points, and with European stakeholders involved in Security Research. As a consequence, the ILEAnet team ran the Final Public Workshop of the project, presenting its outputs to the European Security Research community. The event also served at further exploring the long-term sustainability of the project outputs (see chapter about WP5 and WP6).

The project worked on giving a final shape to its results and, through the development of visuals and infographics, promoting them, especially its two processes: the ILEAnet Project Intake Process (IPIP), a set of good practices to involve LEAs in security research and the ILEAnet Project Uptake Process (IPUP), a qualitative process designed to support the uptake of existing innovative solutions.

Furthermore, ILEAnet is very proud to have successfully completed the two in-depth studies with the subcontractors. The first study, which had started in April 2021, studied *Information sharing mechanisms between European Law Enforcement Agencies*. During the reporting period, the team worked on drafting the recommendations, based on the previous findings. The second study on *Age Determination assessment techniques* classified the identified techniques for different use cases and based on several criteria, and also issued recommendations. Those two studies concluded with workshops that aimed at discussing and/or sharing the

results and we got very positive feedbacks for both. The two studies have performed states of the start and explored potential solutions to either a cross-cutting (Information Sharing) or a specific (Age determination) need identified by the ILEAnet community and for which no solution had been identified. The results have been published on the project's website. They have also been forwarded to the European Commission and might be reflected in future research programmes.

The WP4 team has not been idle either and a significant work has been undertaken to draft ILEAnet final recommendations, which was a transversal activity led with the support of other work packages. WP4 also consolidated the results of its last survey and shared LEAs standard proposals for a strengthened security Research, Development and Innovation (see chapter about WP4).

WP3 was busy as well and worked on providing a sustainable development frame to the Knowledge Factory, which was the online internal database of the project containing more than 700 pieces of information. The concept of the Knowledge Factory and its content has been transmitted to Europol. Europol will also take over the ILEAnet members who wished to be involved in the follow-up of the project. WP3' other main piece of work was the finalisation of the IPUP model, the development of the IPUP-related recommendations and work on the sustainability of this asset, which can be taken over by several EU security research players.

As a wrap-up work, WP2 led a broad analysis activity, to compare the LEAs' challenges and needs identified during the course of the project, with current issues faced by practitioners. The findings are very interesting and show that most LEAs top challenges and needs are still of high importance and relevance today, except for the fast-evolving cybercrime area. On the other way round,

some priority identified by the project such as financial investigations, are of less importance today, and this might be explained by the organization of a dedicated ILEAnet Public Workshop during the course of the project.

The ILEAnet Community has continued to live and grow. In May 2022, the community counted more than 290 members connected through the ILEAnet online platform, but the participation of European practitioners and security stakeholders goes beyond their digital activities. As in the previous months, the INCs have participated in disseminating ILEAnet information but they also actively participated in the sustainability discussions, as it was a very important topic for them (see chapter about WP1).

The scientific coordination team has continued to propose a set of offers to researchers, in order to reinforce the connections among them and with practitioners. Two additional scientific newsletters were circulated to share information about security research and the last one summarises the activities led by the project for researchers and LEAs.

A detailed description of the activities performed in for the four technical WPs is provided in this report, and structured as follows:

- # Report of the general activities
- # Conclusion spanning over the 5 past years

Furthermore, an additional section presents the crosscutting activities, not necessarily visible in the four technical work packages, but nonetheless crucial for the success and sustainability of the project.

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# Introduction

## The ILEANet project

ILEANet is a European project funded by the European Union's Horizon 2020 research and innovation programme and launched on the 1st of June 2017 for a 5-year duration. The overall objective of ILEANet was to build and develop a sustainable organizational Law Enforcement Agency (LEA) practitioners' network focused on Research, Development and Innovation (RDI). ILEANet addressed LEA challenges, together with a community of individuals, including practitioners and experts from academia and industry, interesting in exchanging and collaborating in this area.

Detailed information about the project is available online ([www.ileanet.eu](http://www.ileanet.eu)).

The ILEANet Network and Community were created adopting a two-way perspective: top-down and bottom-up.

### # Top-down:

ILEANet functioned as a network of organisations. It was aligned with existing institutional structures respecting the corresponding institutional mandates and operational set-ups.

### # Bottom-up:

In addition, ILEANet functioned as a community of people who were interested in innovation-centred collaboration. Thereby, innovation was facilitated, and key LEA challenges were addressed.

The effective iterative interaction between these two approaches helped to identify needs and opportunities and prioritise suggestions with respect to future LEA-relevant RDI in the EU and national programmes, policies and standardisation efforts.



Figure 1: ILEANet involved countries

21 partners from 17 countries were involved in the project. Most of them were practitioners, together with research centers and institutes (see the table below).

Organisation	Country
Federal Ministry of the Interior	<b>Austria</b>
Ministry of Interior – Bulgaria	<b>Bulgaria</b>
Cyprus Police	<b>Cyprus</b>
Police of the Czech Republic	<b>Czech Republic</b>
Estonian Police and Border Guard Board	<b>Estonia</b>
ARTTIC	<b>France</b>
French Ministry of Interior	<b>France</b>
Ecole Nationale Supérieure de la Police	<b>France</b>
Bavarian University of Applied Sciences for Public Service, Department of Policing (in replacement of the Deutsche Hochschule der Polizei) <sup>1</sup>	<b>Germany</b>
Hungarian National police	<b>Hungary</b>
University College Dublin, Centre for Cybersecurity & Cybercrime Investigation	<b>Ireland</b>
Ministry of Public Security	<b>Israel</b>
Italian Public Safety Department, Ministry of Interior	<b>Italy</b>
State Police of Latvia	<b>Latvia</b>
European Forensic Initiatives Centre	<b>Poland</b>
Police Academy in Szczytno	<b>Poland</b>
Romanian Ministry of Internal Affairs	<b>Romania</b>
Slovakian Criminal Police, Ministry of Interior	<b>Slovakia</b>
ISEMI INSTITUTE	<b>Slovakia</b>
Unitad Central Intelligencia Criminal	<b>Spain</b>
Police Service of Northern Ireland	<b>United Kingdom</b>

Figure 2: ILEAnet Consortium

<sup>1</sup> The organisation signed a non-disclosure agreement and its application to become an ILEAnet organisation member was included in the second amendment to the Grant Agreement submitted to the European Commission in July 2021.

## The ILEAnet Workflow: “the cycle”

As laid out in the Description of the Action (DoA), ILEAnet workflow was to be implemented in annual cycles and articulated around three work packages, based on a close cooperation between inter-related work packages (WP2, WP3 and WP4). This cycle enables ILEAnet to:

1. Define practitioners’ challenges and needs
2. Monitor, collect and organise the current state of the art and existing or recent research initiatives
3. Identify gaps, requirements, opportunities and priorities
4. Provide recommendations and feed them back to the Consortium.

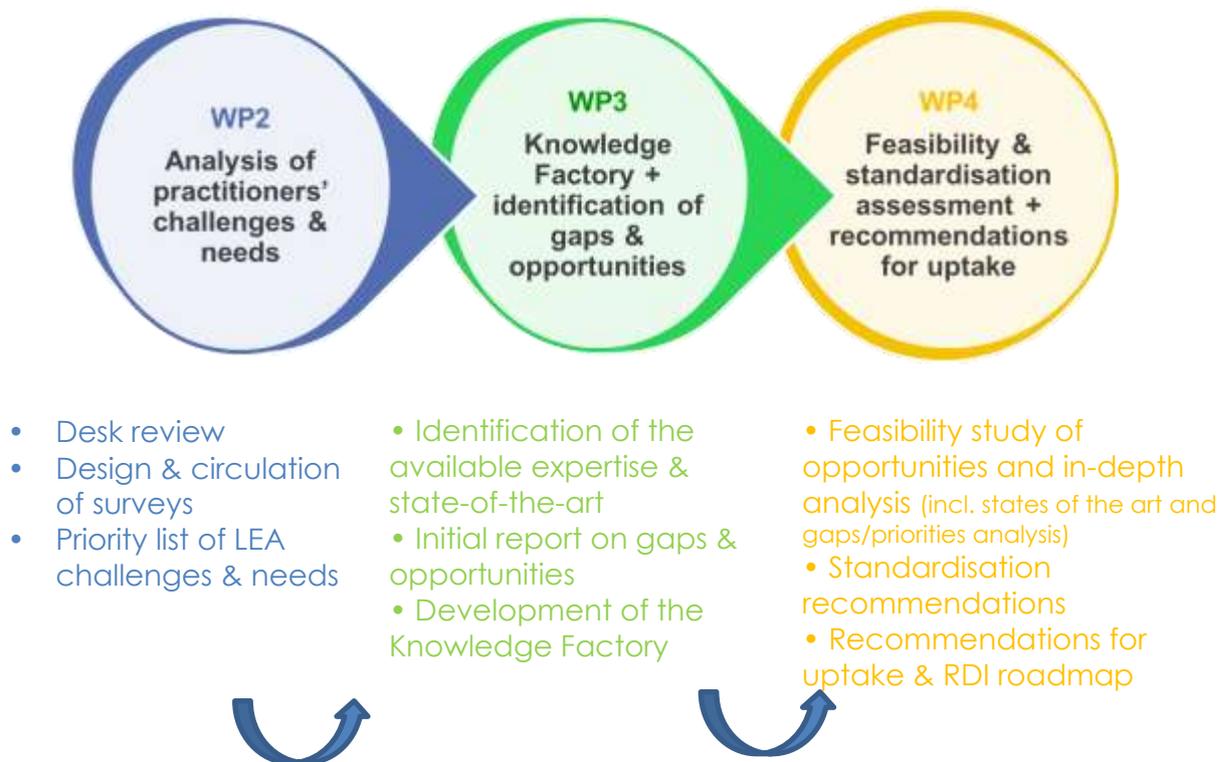


Figure 3: ILEAnet Cycle

It should be noted that the other work packages support the ILEAnet cycle, through the ILEAnet National Contacts and scientific referents’ networks, the project management and scientific coordination, as well as numerous dissemination and communication activities.

## The ILEAnet Online Platform

A collaborative space encouraging discussions between European LEAs and researchers was created at the beginning of the project. The ILEAnet Online Platform, hosted in the Community Management Tool (CMT), allowed an exchange between ILEAnet contributors. The ILEAnet Online Platform was structured with respect to the type of information to share and the members who could access it. The

interactions were monitored by several members of the ILEAnet team.

The ILEAnet Online Platform had been continuously adjusted to the needs of the ILEAnet members.

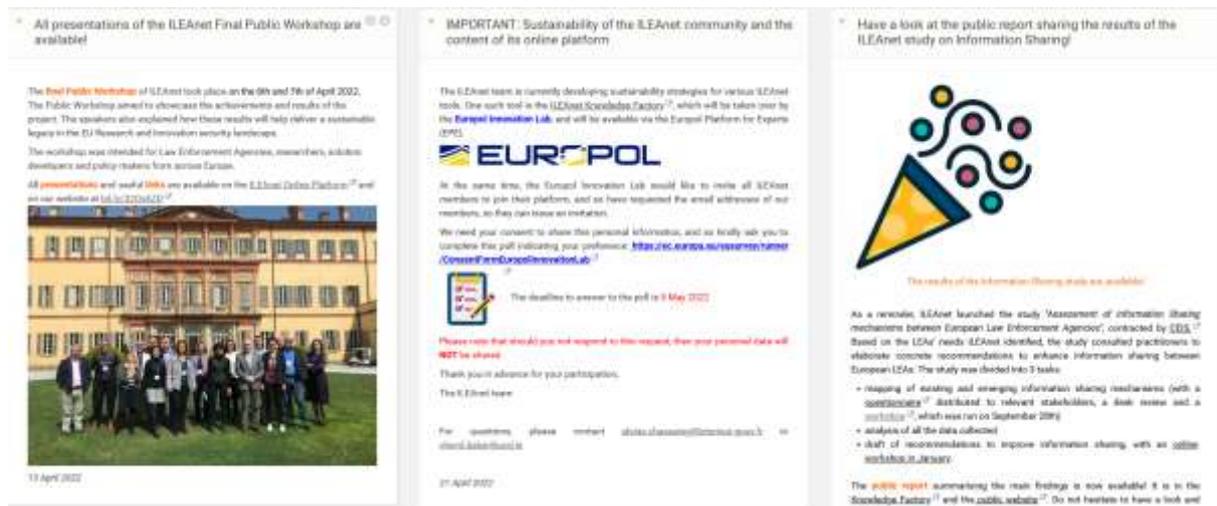


Figure 4: ILEAnet Online Platform Landing page (screenshot of 05 May 2022)

## Main findings

### WP1: ILEAnet networking, including INC role and contribution to topic strands

WP1 aims at providing the resources and inputs from the ILEAnet National Contacts (INCs) and their respective national networks of practitioners, academia, industry and other stakeholders.

#### The ILEAnet National Contacts (INCs)

As a reminder, ILEAnet is organised around ILEAnet National Contacts (INCs), who are

dedicated ILEAnet consortium members or Law Enforcement Agency (LEA) representatives from all involved member states. They are responsible for the functioning of their “national networks”. Together with the Scientific Coordination and the Community Management teams, they ensure good quality of the online exchanges. They act as a hub for the ILEAnet bottom-up and top-down oriented activities.

Organisation	Country	INC
BMI- Ministry of the Interior	Austria	Caroline Schmidt
Ministry of Interior – Bulgaria	Bulgaria	Mila Lalova
Cyprus Police	Cyprus	Chryso Angeli
Police of the Czech Republic	Czech Republic	Veronika Bouchalova
Estonian Police and Border Guard Board	Estonia	Raul Savimaa Hannes Jarvine
French Ministry of Interior	France	Thibault Heckmann
Bavarian University of Applied Sciences for Public Service, Department of Policing <sup>2</sup>	Germany	Sven-Eric Fikenscher Holger Nitsch
Hungarian National police	Hungary	Kornel Borbas Orsolya Varnai
University College Dublin, Centre for Cybersecurity & Cybercrime Investigation	Ireland	Cheryl Baker
Italian Public Safety Department, Ministry of Interior	Italy	Elisabetta Ialongo Lorenzo Rinaldi
Israel National Police -Ministry of Public Security	Israel	Tibby Roth
Latvian State Police	Latvia	Inese Voloseviča Ieva Klavina
European Forensic Initiatives Centre Foundation - EFIC	Poland	Monika Pawelec

<sup>2</sup> The organisation signed a non-disclosure agreement and its application to become an ILEAnet organisation member was included in the second amendment to the Grant Agreement submitted to the European Commission in July 2021.

Institute for Research and Development of the Police Academy in Szczytno	Poland	Jakub Muraszko
Romanian Ministry of Internal Affairs	Romania	Gabriel Iancu George Popescu
Presidium of Police Force	Slovakia	Zuzana Zachova
ISEMI INSTITUTE	Slovakia	Alena Diksova
Spanish National Police	Spain	Pablo Fernández López
Police Service of Northern Ireland	United Kingdom	<i>Under discussion</i>

## Report of general activities

INCs had three main missions within ILEAnet:

- # Coordination of the ILEAnet national networks in their respective countries
- # Facilitation of the contributions from the national networks to ILEAnet
- # Expert contributions to ILEAnet.

The WP1 activities for this six-month period can be summarised as follows:

INCs went on raising awareness about ILEAnet activities nationally. The INCs' role was significant to disseminate information about ILEAnet workshops and events, and they invited national counterparts and experts to participate in the discussions. INCs used the newsletters to share research-related news with their European counterparts and animate their own national networks. They were comfortable with using the Knowledge Factory as the main source of knowledge for the project.

The INCs functioned not only as facilitators of their national networks but also as experts participating in discussions themselves, asking questions, sharing knowledge and interacting with the members. Several discussions were launched on the online collaborative platform and brought some answers to national

networks. In addition, INCs' expertise and networks were leveraged by WP2 to study the trends in LEAs' challenges and needs (see dedicated WP2 chapter below).

Similarly to the previous reporting periods, interactions between INCs and the ILEAnet team were supported by monthly teleconferences and the ILEAnet Coordination team offered support and answer to any questions they might have.

## Conclusion on WP1 activities during the whole ILEAnet project

The last WP1 deliverable (D1.10) puts forward the impact that the activities undertaken by INCs under ILEAnet have had on their own networks and the lessons learned from their involvement in a network of practitioners since the beginning of the project.

ILEAnet has helped set up, develop and/or strengthen national networks of Law Enforcement Agency (LEA) practitioner organisations. The project has created opportunities for some national networks to widen and deepen relationships with partners all over Europe. In some countries, the ILEAnet concept was completely new and original compared to what existed and has brought new strategies for enhancing communities of

practitioners. The project has helped build cooperation between European LEAs but also with the private sector.

The project has also provided opportunities for some INCs to get or stay connected with the top management of their Ministries of the Interior and to develop/strengthen a culture of security research within their organisations.

Several initiatives and activities were highlighted as having had the most impact on INCs and the development of their networks:

- # The sharing of information on relevant research questions for LEAs via the online collaborative platform
- # The communication around the project, including dissemination of results, data shared in the Knowledge Factory (KF) and newsletters (project newsletters and scientific newsletters)
- # The organisation of Public Workshops and webinars
- # The extensive studies on standardisation, information sharing mechanisms and age assessment methodology which provided valuable contributions to under-researched security-related topics.

These activities made the project's progress visible and at the same time provided a good

opportunity for INCs to connect with their networks of experts, make them learn about projects' outputs of interest and involve them in ILEAnet activities.

The concrete outputs of the project, such as the development of the IPIP and IPUP processes, as formal frameworks for involving LEAs in RDI and identifying research opportunities and exploiting research results, should enable LEAs to better engage and collaborate with the research community, when adopted by police forces.

INCs have been much active in making the ILEAnet network and outcomes sustainable and have participated in several key discussions and meetings. Emphasised by several INCs as a very important output, the KF will be taken over by Europol (through the Europol Platform for Experts - EPE, see chapters about WP3 and WP6 below).

Finally, and despite the Covid-19 pandemic, the exchanges during the monthly meetings have helped to create links between the INCs and will be the ground for future cooperation. The wish expressed by several INCs to remain in contact and to continue the network created under ILEAnet is a further sign of the enabling environment provided by ILEAnet.

## WP2 Law Enforcement Challenges and Needs

WP2 was designed to collect and analyse challenges and needs from Law Enforcement Agencies at the national and EU level, in order to facilitate solutions to these issues through RDI (Research, Development and Innovation) activities. The outputs from WP2 fed the WP3, by determining which angle to use to identify best practices and potential subjects for an in-depth analysis.

The LEAs' challenges and needs collection was performed using three approaches:

- Top-down, by suggesting topics based on analysis of policy, strategic documents and strategic research agendas,
- Bottom-up, by collecting inputs in open surveys and non-directed interviews,
- Observation of the activities within the ILEAnet network.

During the last reporting period (December 2021-May 2022), WP2 focused on the analysis of the trends in LEAs' challenges and needs during the project activities.

### Report of general activities

In 2021, WP2 conducted its last desk review, outlining the dynamics in trends for challenges and needs for Law Enforcement Agencies concerning fighting (cyber)crimes, terrorism and illegally mediated migration. The results of this review are available in the previous public deliverable (D5.17, see the [project website](#)) and set up the background for expected results of the last ILEAnet survey.

During the current reporting period, WP2 circulated the survey #9 to capture the dynamics regarding the trends and potential new challenges and needs for LEAs and compared the results those of the initial desk

reviews and surveys (ILEAnet surveys #1 to #8). Therefore, the questions asked were directly related to the results of the previous surveys on:

- Illegally mediated migration
- Organised and serious crime
- Terrorism
- Cybercrime
- Efficient conducting of financial Investigations
- Age Determination

The survey was circulated between January and March 2022 among the ILEAnet network, including INCs, to obtain the actual opinions of LEAs. 26 answers from 12 countries were collected.

### *Potential trends in illegally mediated migration*

The analysis of the survey #9 outputs shows that in 2022, the three most important challenges related to illegally mediated migration are:

- Fraudulent documents
- Information sharing between EU agencies and LEAs
- Registration of illegally entering third country nationals

In 2018 the three most important challenges were:

- Intelligence gathering from irregular migrants
- Information sharing between EU agencies and LEAs
- Fraudulent documents

The last survey demonstrates that two challenges of 2018 top 3 are still of high relevance for LEAs in 2022 (**Fraudulent**

**Documents and Information Sharing Between EU Agencies and LEAs**). The challenge of **Registration of Illegally Entering Third Country Nationals** was on the 11<sup>th</sup> place in 2018 and is now the third highest challenge for surveyed LEAs. This can be explained by the fact that effective registration enables long term better awareness and is therefore considered as more important today. To be noted as well that the challenge of **Intelligence Gathering from Irregular Migrants**, present in 2018 top 3, is on the 4<sup>th</sup> place in 2022, so its importance is still very high.

#### *Potential trends in serious & organised crime*

In 2022, the three most important challenges related to serious and organised crime are:

- ✳ Cooperation & coordination to disrupt the trafficking in illicit drugs
- ✳ Information sharing between EU agencies and LEAs
- ✳ Forming joint investigation teams & Investigating fraudulent documents

In 2018 the three most important challenges were:

- ✳ Conducting financial investigations
- ✳ Cooperation & coordination to disrupt the trafficking in illicit drugs
- ✳ Information sharing between EU agencies and LEAs

Conducting financial investigations is not in the 2022 top 3, and this might be explained by the fact that the challenge was sufficiently addressed during the dedicated ILEAnet Public Workshop 2 in April 2019.

The challenge **Cooperation & coordination to disrupt the trafficking in illicit drugs** is still of high relevance for LEAs (it was pointed out as #2 in 2018 and is #1 in 2022). The important challenge of Information sharing (in 2018) is transferred to challenge of **having joint investigation teams** (2022). This indicates that

besides information sharing, the actual cooperation and joint (cross-border) investigation to fight serious and organised crime is of higher importance today.

#### *Potential trends in terrorism*

In 2022, according to ILEAnet survey, the three most important challenges in the fight against terrorism are:

- ✳ Information sharing
- ✳ Improved interoperability of information systems for border management and internal security
- ✳ Strengthening operational cooperation

In 2018 the three most important challenges were:

- ✳ Information sharing
- ✳ Protection of citizens and 'soft' targets
- ✳ Improved interoperability of information systems for border management and internal security

The challenges of LEAs are quite unchanged as two of the challenges remained in top 3 (**Information sharing** and **Improved Interoperability of Information Systems for Border Management and Internal Security**). The challenge **Strengthening Operational Cooperation** was pointed out as #4 in 2018 and became even more important in 2022. The other way around, the challenge Protection of citizens and 'soft' targets is less important in 2022 compared to 2018.

#### *Potential trends in cybercrime*

In 2022, the three most important challenges related to cybercrime are the following:

- ✳ Identifying the actors behind cybercrime attack tools
- ✳ Improved recording and analysis of child sexual exploitation offences

- ✳ Improving LEA response, prevention and awareness strategies

In 2018 the three most important challenges were:

- ✳ Identifying the actors behind cybercrime attack tools
- ✳ Improved monitoring, understanding and response to Darknet threats and markets
- ✳ International preparedness for cyberattacks on critical national infrastructure.

The topmost challenge remained the same in 4 years (**Identifying the actors behind cybercrime attack tools**). However, for other challenges, the top 3 has been changed. Choices in 2018 indicated the need to be better prepared for anticipated technology threats for protection critical infrastructure and for being able to operate in Darknet. In 2022, the focus is on essential needs on strategic and prevention view as well as on protection of vulnerable groups.

#### *Potential trends in the efficient conducting of financial Investigations*

In 2022, there are three equally most important challenges in the topic of Efficient conducting of financial investigations:

- ✳ Effective powers to conduct successful financial investigations using a wide variety of techniques; such as undercover operations, intercepting communications, accessing computer systems and 'controlled delivery'
- ✳ Powers to trace, freeze and confiscate criminal proceeds and instrumentalities, including the ability to quickly seize assets of the defendant (or associated third parties)
- ✳ Special investigative techniques are required for LEAs using new technology

innovations and tools (with interoperability); particularly including data analysis, decryption and communication interception technologies.

These 3 challenges were already in 2019 list of top challenges, so the most important challenges in conducting financial investigations have remained the same.

#### *Potential trends in Age Determination*

In 2022, the three most important challenges related to Age determination are the following:

- ✳ Potential misidentifications of children as adults (or adults as children) by LEAs in 'first line' contact situations
- ✳ A child-centric, child-sensitive and child-rights approach to age assessments and age determination
- ✳ 2 ex-aequo challenges: Identifying and supporting migrant children who come to the attention of LEAs that are 'missing' or victims of migrant smuggling or human trafficking; Accuracy and reliability of age assessment techniques.

In 2021 the three most important challenges were:

- ✳ Accuracy and reliability of age assessment techniques
- ✳ Lack of effective, consistent and timely procedures for age determination and age assessments within and between Member States
- ✳ Potential misidentifications of children as adults (or adults as children) by LEAs in 'first line' contact situations

Although the time between two surveys (2021 vs 2022) was relatively small, it can be observed that the focus has been changed to child-centric aspects and protection of children in that process in comparison to focus on techniques in 2021.

### *Exploitation of results*

The detailed analysis of WP2 is available in D2.10 on the [ILEAnet website](#).

### Conclusion on WP2 activities during the whole ILEAnet project

To analyse contemporary LEAs' challenges and needs, WP2 has performed desk reviews on 8 topics and circulated 9 surveys within the European LEA community. The results of this research have been extensively reported in WP2 deliverables and presented during various ILEAnet Public Workshops. Several key policy and strategic topics have been addressed such as illegally mediated migration, terrorism, cybercrime, serious & organised crime or financial investigations. At the same time, practitioners' focus topics have been monitored and analysed on ILEAnet Online Portal and used to derive suggestions for focus

topics for ILEAnet desk reviews and surveys. This has led to the investigation of topics of interest for the European LEA community such as age determination, whose technological angle has been even more covered by the dedicated ILEAnet sub-contracted study (see chapter about WP6 below).

The last research of WP2 analysed the changes and trends in LEAs' challenges and needs between the time of the first surveys and the end of the project. The final WP2 deliverable showed that most LEAs' challenges and needs previously identified are still of high relevance today, but some changes in priority have been observed in the cybercrime area for instance. Those final results are publicly available on the ILEAnet website and will be forwarded to the relevant stakeholders.

Despite the challenges to collect data from LEAs through surveys during the COVID-19 pandemic period, the tasks of WP2 were successfully fulfilled.

## WP3 ILEAnet Knowledge Factory

During the reporting period, WP3 consolidated and prepared its two assets for post project sustainability.

For the **IPUP** (ILEAnet Project Uptake Process), the following main activities were thus conducted:

- ✚ Finalisation of the IPUP process and creation of visuals presenting the process
- ✚ Development of recommendations on how the IPUP model could be better supported (in collaboration with WP4)
- ✚ Exploration of sustainability paths for IPUP

For the **Knowledge Factory (KF)**, successful conversations with the Europol Innovation Lab led to the transfer of the KF concept and content to their Platform for Experts (EPE).

Both assets were presented at the Final ILEAnet Public Workshop in April 2022.

### Report of general activities

#### *A bit of history*

The work package 3, which began as four discrete tasks, needed to evolve over time to address the overarching objective of the project, which was to develop tools that would assist practitioners in exploiting security research. The evolution of the work package has resulted in the creation of two practical and effective tools for the ILEAnet asset portfolio – **the ILEAnet Project Uptake Process** and **the ILEAnet Knowledge Factory**. This change reflected the ILEAnet progress towards the development of concrete solutions that would **support LEAs in the uptake of security research results**.

#### *IPUP (ILEAnet Project Uptake Process)*

One of the main achievements during this period has been the finalisation and consolidation of the IPUP model, as a tool that can be actively used by practitioners to help them better understand security research results and how they can be exploited. The objective of IPUP is to facilitate interaction between researchers and practitioners, with a view to accelerating practitioner uptake and exploitation of results, and identification of research gaps and further research ideas.

IPUP was an evolving initiative based on, and refined through, the ILEAnet project experiences and feedback received on the various stages. Consequently, this final model is based on real experience of using IPUP with research projects and a practitioner audience.

The final IPUP model encompasses 3 stages:

- ✚ **LEAs' needs analysis**, through a top-down and bottom-up process, reflecting the priorities and challenges as identified at a European and national policy and strategic levels and at the same time capturing what is needed to meet those challenges on the ground
- ✚ **Solution screening**, to identify research activity that may provide a solution to the needs identified in the previous stage. If there is no existing identified solution, a SoTA (state of the art) study can be initiated to draw the current and future research landscape and highlight areas where further research is needed
- ✚ **Stakeholder connection**, to identify a range of projects that are worthy of further investigation and presentation to a relevant LEA audience. In ILEAnet, this has been done thanks to a careful selection and evaluation of the solutions' suitability (see below), and those solutions were then

presented during a long showcase event, before smaller and more targeted follow-up activities (e.g. webinars).

Besides the conceptualization of IPUP, ILEAnet brought added value to the uptake of research solutions by developing and testing of a number of tools for that process:

- # For LEAs' needs analysis stage (stage 1 of the process), ILEAnet crossed a **desk review** across a range of policy and strategic documents with **surveys** distributed to a targeted LEA network via the ILEAnet Points of contact and the ILEAnet Network+Community
- # For Solution screening stage (stage 2), ILEAnet identified several **channels for solution search** that are available at a European level, but also used its Network+Community to detect national solutions
- # For Stakeholder connection (stage 3), the **TELOS template** and the **scenario simulation** developed by ILEAnet forced the solution owners to really think about the practical application of their solution to law enforcement and to answer key questions during their solution presentations, hence giving a LEA-tailored presentation, the objective being to have practitioners understand the solution being presented to them, and how they can use it. ILEAnet also tested **questionnaires** to gather feedback on a range of solutions and to begin to map out the next steps in development, whether in terms of further development, commercialisation or standardisation. The **audience** for those events needs to contain a mix of users, managers, procurers and any other personnel involved in the decision-making process. There are also other stakeholder groups to consider as participants for those match-up events (e.g. EU agencies, procurement networks

such as [iProcureNet](#) or standardisation bodies such as CEN-CENELEC).

In the end, ILEAnet developed the IPUP model and an **indicative timeframe** for each of the three stages.

This model, as well as attractive **visuals** developed during the reporting period, was presented at the ILEAnet Final Public Workshop (PW5). A **How To guide** is made freely available to any organisation that wishes to adopt and use the IPUP. The guide has been written with the law enforcement user in mind, but with adaptation, it can be deployed in another environment where there is an interest in identifying research activity that may enhance existing processes. Similarly, if there is a need to explore domestic/national needs and possible research solutions, the IPUP can be easily adapted. In this way IPUP is flexible enough to be tailored to suit the needs of the user.

Two specific recommendations regarding IPUP delivery were drafted by WP3, in collaboration with WP4:

- # **Recommendation #1: Setting up annual LEAs' challenges and needs survey.** Precisely identifying challenges and needs is the building block of the IPUP. Establishing an annual survey promoted at the EU level, for instance incorporated into existing canvassing initiatives, and making the results available to the law enforcement community, would improve the responsiveness to surveys.
- # **Recommendation #2: Setting up a database of contacts for EU-funded projects.** A difficulty encountered during the Solution screening stage was in contacting projects that had completed, with project consortia dispersed, and the contact email address no longer being monitored. To this end, a database of

contact details could be established and maintained to ensure valuable project results are not lost and their full exploitation potential can be realised. It is proposed that some responsibility for providing and maintaining a project Point of Contact should be accepted by the project consortia, and the EC should consider this as a future requirement for all funded projects as part of their sustainability plan.

Speaking of **sustainability**, ILEAnet proposes to make IPUP one tool in a toolkit of supports for LEAs wishing to engage with security research, in addition to the IPIP (that brings together a series of good practices that can be used as a process to involve LEA practitioners in research actions, so a valuable tool to manage the inclusion of LEAs from project inception to project award and implementation) and external tools. iProcureNet could also take over where IPUP ends and provide a full end-to-end service for LEAs interested in exploiting security research. Finally, ILEAnet is in close contacts with EU stakeholders (ENLETS, iLEAD, CERIS, ...) and the IPUP could support their activities.

### *Knowledge Factory*

One of the core objectives of ILEAnet was to create a sustainable law enforcement practitioner network that would enhance LEA capabilities to influence, develop and exploit RDI. In support of that objective, a further aim was to create a community of knowledge seekers and knowledge sharers, who would pool their collective experiences and expertise, thereby enhancing and extending the knowledge of all members. WP3 was responsible for ensuring that member profiles were sufficiently detailed as to provide transparency on membership, and to enable user analysis to identify the expertise held

within the group in order to map the expertise against the practitioner needs and challenges identified in WP2. Preparing, developing and testing the online platform took longer than expected at the beginning of the project, but the main achievement concerns the development of the **Knowledge Factory** (KF).

The vision for the Knowledge Factory was as an online tool to support that community by providing a dynamic repository, where members could share, search and comment on a range of resources. This tool was available to both practitioners and non-practitioners ILEAnet members and contained about 700 pieces of information at the end of project (information about national or European research projects, academic publications, reports, presentations, events, etc.). The survey of ILEAnet Points of Contact in the previous period showed that the KF was useful, mainly used to search information, and that it should be maintained after the end of the project (see the previous public report [D5.17](#) and Annex 1).

With those positive results in mind, WP3 reached out to the **Europol Innovation Lab**, who reviewed the KF and agreed to migrate the Knowledge Factory to their **EPE (Europol Platform for Experts)**. Some technical considerations were worked through, for example the data format in the Knowledge Factory and GDPR compliance. Europol will probably select the most recent and/or relevant data to be uploaded in the EPE. This is excellent news for the sustainability of the Knowledge Factory.

### **Conclusion on WP3 activities during the whole ILEAnet project**

WP3 partners were able to successfully deliver two sustainable ILEAnet assets, the IPUP and the Knowledge Factory. Further details about WP3 assets (including the IPUP model, the

visuals and the How to guide) can be found in D3.10, available on the [ILEAnet website](#).

IPUP was not part of the original project conception but has emerged as a proven and robust tool for facilitating productive discourse between LEA practitioners and the research community. On the other hand, the Knowledge Factory was part of the original project plan, and several approaches were tried out before the final version was agreed. The Knowledge Factory will be adopted by the Europol Innovation Lab, and so its future is assured.

IPUP will also be available via the Horizon Results Platform and discussions with key EU actors (CERIS, ENLETS, iLEAD) suggests that IPUP will be used again in the future.

The goal for this reporting period was to finalise both IPUP and Knowledge Factory and explore sustainability options for both tools. This goal has been achieved with both tools being presented at the final ILEAnet Public Workshop in April 2022, where the solutions were well received by the audience.

## WP4 ILEAnet Scouting activities

During the reporting period, WP4:

- ✚ Wrote the final report summarizing the standards proposals for RDI (Research, Development and Innovation) projects
- ✚ Monitored the progress of the two subcontracted studies
- ✚ Finalized the final set of ILEAnet recommendations
- ✚ Presented the recommendation and standardisation-related results during the ILEAnet Final Public Workshop in April 2022 and connected with external stakeholders.

- ✚ Dissemination
- ✚ Exploitation
- ✚ Commercialisation.

During the reporting period, WP4 further analysed the survey results and reported them in its final deliverable. The full results of the survey are available in the ILEAnet study entitled '*Law Enforcement Agencies Requirements for Strengthening Security Research and Innovation – Standards Proposals for RDI projects*'. The proposals concern the standardisation of the terms and definitions, the creation of standardised databases (of scenario, of use cases, for instance), the standardisation of joint procurement procedures, standards for security RDI Project management, for security RDI projects' intake process (supporting need identification, LEAs' participation in research projects, etc.), standards regarding data management in security RDI project (e.g. secured collaborative platforms, collaboration with non-LEA partners etc.) and standards related to the uptake of security research outputs. All results are available on the [ILEAnet website](#) (see deliverable D4.9).

WP4 recommends to integrate those results in the Executive Regulations of the Horizon Europe Civil Security for Society Work Programme as well as its content programming and more particularly its Direction #6 defined as '*Strengthened Security Research and Innovation (SSRI)*'.

### *Participation in the subcontracting activities*

WP4 has continued to dedicate time to monitor the execution of the two awarded studies, namely '*Development of mechanisms for better information sharing among law enforcement agencies*' and '*Review and classification of the*

## Report of general activities

### *IPIP*

The **IPIP** (ILEAnet Project Intake Process) is a set of good practices that can be used as a process to involve LEA practitioners in research actions. As explained in the previous public report, WP4 had asked the ILEAnet National Points of Contact what standards they would welcome to improve their participation in RDI projects and the use of the research outputs. This was the response to the task from the call ILEAnet applied to and defined as: "to express common requirements as regards innovations that could fill in capability and other gaps and improve LEAs performance in the future". WP4 had carried out a survey among LEAs representatives in order to define and express their requirements to make the realisation of security RDI projects easier and more effective. A total of 34 proposals had been received, which were then grouped into **seven categories**:

- ✚ Administration and Support
- ✚ Project Management
- ✚ Project Initiation
- ✚ Project execution

*existing and emerging age assessment techniques in the context of migration*'. Those two studies represented in-depth analyses on topics of importance for the LEA community. As explained in the previous reports, WP4 participated in meetings and workshops, providing an expert view on the deliverables and results achieved by the subcontractors. Furthermore, WP4 worked with WP6 to make subcontractors give their feedback on the tendering process and conduct of the study. Several good practices were identified by both the contractors and WP6 and they were included in the final recommendations.

### Recommendations

One of the main achievements for WP4 during the reporting period is the finalization of the ILEAnet **recommendations**. Building on the results of the subcontracting and standardisation activities, but also the work on uptake (i.e. the ILEAnet Project Uptake Process – IPUP) and on the identified good practices and standards that can be developed/promoted to involve LEA practitioners in research actions, WP4 led a transversal and in-depth work to summarise the 5 years of the project experience. Beyond the tangible results (processes, reports, ...), the recommendations are also based on project experience feedback on community management, declined in recommendations on how to build and develop a long term community of law enforcement and stakeholders interested in security RDI.

All this represents a precise, hands-on and very enlightening work allowing existing and future networks to (better) build themselves, for other key EU security research stakeholders to consider new services, for the European Commission and EU agencies to rely on the results of the project to continue building tomorrow's security research, both in terms of format (new modalities of conducting security

research) and content (new research strands). The set of ILEAnet recommendations is available on the ILEAnet website (see [here, in D4.9](#)).

*ILEAnet Final Public Workshop: connection with external stakeholders and presentation of WP4 work*

Thanks to the Final ILEAnet Public Workshop (PW5), ILEAnet connected with several EU-funded projects and networks of practitioners (NoPs) during the reporting period:

- # [EU-HYBNET](#)
- # [eNOTICE](#)
- # [INCLUDING](#)
- # [EXERTER](#)
- # [CMINE](#)

Those projects were invited to discuss the benefits and opportunities offered by NoPs at the end of the PW5.

Other representatives provided interesting inputs during the PW5, on NoPs, and community and knowledge management:

- # Jérémy Kespite, Innovation Liaison Officer, Europol Innovation Lab
- # Coralia Catana, Knowledge Management Team Leader, European Commission
- # Susanne Szkola, Community and Knowledge Manager, European Commission
- # Yves Vandermeer, Chairman at European Cybercrime Training and Education Group (ECTEG)
- # Jon Hall, Founder of the Resilience Advisors Network.

WP4 leveraged the PW5 to present the standardisation outputs (based on the results of the survey mentioned earlier), both the '*Standards proposals for RDI projects*' as presented above, and the summary of the

survey *'Standards proposals in the LEAs operational areas'* (further information can be found in D4.8, see [here](#)).

The PW5 sessions were also punctuated with the final recommendations made by the ILEAnet project.

Further information about the PW5 can be found in the deliverable D5.8 on the [ILEAnet website](#).

### Conclusion on WP4 activities during the whole ILEAnet project

The main piece of work carried out was on the final set of the ILEAnet Recommendations. After consulting the ILEAnet network and community, reviewing the past deliverables and work conducted during the 5 years of the project, WP4 developed actionable recommendations addressing the European, national, and organizational levels in security Research, Development and Innovation (RDI).

At the same time, based on the consultation of the ILEAnet network, WP4 reported on standards proposals that would improve LEAs' participation in RDI projects. WP4 also followed up the good progress of the two subcontracted in-depth studies.

All those results were disseminated during the ILEAnet Final Public Workshop (PW5), which was also an opportunity to interact with other RDI projects and initiatives.

The recommendations developed by WP4 are a first step on the road to project results' sustainability, as they provide precious advice and directions to investigate to ensure the ILEAnet results are not lost at the end of the project and are usable by other research stakeholders, in the security field but also related fields.

## Transversal activities (WP5 & WP6)

This chapter sheds a particular light on the transversal activities led within the ILEAnet project during the reporting period.

### Community management

As in the previous reporting periods, the ILEAnet Community Management team supported the development of the Network+Community by answering questions of its members, relaying information, ensuring the administration and maintenance of the online platform, etc.

### Communication & Dissemination

The ILEAnet project developed a set of graphical materials (infographics, flyers, etc.) during the reporting period. The pictorial aspect of the project tools was key to explain at a glance the tools and methodologies ILEAnet developed. Prominent examples include the visuals developed to illustrate the IPUP and IPIP processes. These visuals are available [here](#).

To communicate about the project's activities internally, the project continued circulating newsletters describing the latest news in the project to enable ILEAnet members to stay updated about the project. The project also benefitted from external communication channels (Twitter, LinkedIn, public website) to keep externals aware of the project progress.

### Scientific coordination

The Scientific coordination team continued to act as a bridge between the Law Enforcement and the research communities, and to foster exchanges between them.

One of the most tangible examples of this work was the scientific newsletter, which connected LEA and researchers' themes of interest in a single room. The scientific newsletter

showcased junior European researchers or practitioners with a research hat, with the two-fold impact of making the security research known to LEAs and promoting the work of security researchers. The very last scientific newsletter published early May 2022 recapped the achievements of the ILEAnet scientific activities during the 5 past year (you can read it [here](#)). Besides the newsletter, the Scientific Coordination continued relaying science news for LEAs and raising awareness on the research environment and brought LEAs closer to research outputs by populating the ILEAnet Knowledge Factory with information about security research projects and academic publications. A Knowledge Factory digest was circulated in the scientific newsletter on a regular basis.

### Open calls / Subcontracted studies

As explained in the previous public reports, ILEAnet initiated in-depth studies on two topics considered as important for the ILEAnet community: the '*Development of mechanisms for better information sharing among law enforcement agencies*' and a '*Review and classification of the existing and emerging age assessment techniques in the context of migration*'. The two studies, both completed, aimed at making researchers work on practitioners' needs and connect these two worlds.

The *information sharing* subcontractor completed the third and last task, which was the drafting of recommendations and their validation in front of a pool of relevant LEAs and policy makers.

The second subcontractor, working on *age determination*, classified the techniques detected according to a set of parameters (accuracy, speed, ease of use...) and use cases agreed upon. The results of the second study have been presented during a workshop in February 2022, with very good feedbacks from the expert audience (incl. Frontex).

Both studies led to the publication of a public report, available on the [ILEAnet website](#). The recommendations and results generated by the two studies will be communicated to the European Commission and might be reflected in future research programmes.

### Public Workshop

One of the main achievements of the reporting period is the organisation and hosting of its last Public Workshop (PW5), entitled '*ILEAnet and the EU security Research and Innovation landscape: Achievements and way forward*'.

The event run on 6 and 7 April 2022 and aimed at sharing an overview of the assets developed by the ILEAnet project (including best practices and recommendations) and their benefits to the LEA community. The ILEAnet team presented the two subcontracted studies, the standardisation results, the IPUP and the Knowledge Factory.

The PW5 was also an excellent opportunity to reflect on key benefits and opportunities offered by a Network of Practitioners (NoP). Thus the ILEAnet team decided to cross the perspective of ILEAnet, the European Commission and other EU NoPs. For that purpose, ILEAnet shared its lessons learnt regarding Community Management and the management of a community made of researchers and LEAs. In addition, a presentation was given by the Knowledge Managers of the European Commission who developed a very useful and practical guide ([the communities of practice playbook](#)) and ECTEG (European Cybercrime Training and Education Group) shared their views on ways to assess networks of practitioners. A roundtable with European security research projects concluded that reflection on NoPs.

Beside showcasing the project's results, the Public Workshop aimed at exploring the

question of their sustainability. Indeed, representatives of EU-funded research projects have to consider how they will ensure the sustainability of their key results and achievements after the project ends and ILEAnet was no exception. The PW5 was an important hook for discussing the issue of the project sustainability, which was then dived deep with concrete actions (see below). The ILEAnet project coordinator introductory and conclusive speeches, completed by Europol Innovation Lab keynote speech and an overview of the current European security RDI landscape, provided some answers to the question of how the ILEAnet results could contribute to the current thinking and further developments of the EU security RDI landscape.

Further information about the PW5 is available in the dedicated public deliverable D5.8, on the [ILEAnet website](#).

### Sustainability

ILEAnet developed a Network+Community prompting and facilitating interactions between the practitioners and the developers of relevant solutions for LEAs. The ILEAnet Network was organised around National Points of Contact (INCs and scientific referents) and supported by an online collaborative platform that allowed to search and share information and engage in professional social networking. The National Points of Contact acted as a hub for their respective national networks on the one hand, and as experts whose input to the ILEAnet work was needed on the other hand. A significant resource effort has been made to develop the ILEAnet Network+Community around different types of concrete activities (webinars, Public Workshops, brainstorming sessions, IPUP, subcontracting studies, standardisation activities, ...), thanks to the support of a dedicated Community manager.

For several months, the project explored how its Network+Community and its results could fit into and contribute to the EU security RDI landscape. First of all, ILEAnet set out to draw and clarify this landscape, which has evolved during the lifetime of the project, with creation of new entities and modification of the role of existing ones. The EU security RDI landscape is very dense, with EU research projects, EU-funded non-governmental organizations (CERIS, EACTDA, ENLETS, ECTEG, EMPACT, ...), institutional organizations or departments (such as EC DGs, European agencies such as Europol, Frontex, CEPOL, ...). Two recently created instances with a steering role in EU security RDI need to be considered as well: the COSI (Standing Committee on Operational Cooperation on Internal Security) and the Europol Innovation Lab. This changing environment was presented during the PW5 by the ILEAnet project coordinator to set the scene and give the key to understanding the current European context of security RDI.

In ILEAnet, the National Points of Contact (PoCs) were mostly LEA practitioners who were familiar with collaborative innovation projects. There would be a value in consolidating this network of PoCs in order to create a network of national hubs capable of connecting LEAs, identifying their operational staff and supporting their participation in European research projects. There is a need to include in the research projects contact points with a good understanding of research projects and consortium building in addition to being knowledgeable about the different law enforcement entities in their country and ILEAnet PoCs could be the precursor of this.

After a careful analysis of the EU security RDI ecosystem, ILEAnet identified the EU security actors that were the most likely to have an interest in the ILEAnet assets. Contacts were established accordingly, and discussion was enriched with the inputs of ILEAnet National PoCs. Consequently, ILEAnet is proud to say that the ILEAnet Knowledge Factory will be taken over by the Europol Innovation Lab,

through their Platform for Experts (EPE). Europol will also invite all interested ILEAnet members to join the EPE community. Similarly, some ILEAnet tools and processes could be very useful to support ENLETS activities and could be added to the ENLETS catalogue: the IPUP to help with identification of LEAs needs and the facilitation of the interactions between LEAs and solution developers; and the results and lessons learnt regarding the launch of subcontracting studies.

## Conclusion

ILEAnet's first mission was to build and develop a sustainable LEA practitioners' network focused on research and innovation addressing LEAs' challenges together with a community of individuals interested in security Research, Development and Innovation (RDI). The ultimate goal was to develop a conducive environment for innovation and facilitate practitioners' involvement into research activities and to enhance ILEAnet's legacy among academics and LEA end-users.

The last six months of the project have been oriented to provide results that would allow the development of this conducive environment, especially with the finalisation of in-depth work (e.g. subcontracted studies, standardisation, recommendations) and the long-term reflection on the sustainability of the project results, discussed during the Final ILEAnet Public Workshop – PW5.

WP4 played an important role in this final stretch by consolidating its analysis of the standards proposals for RDI projects, which provide several directions to explore regarding standardized practices that would allow for a better involvement of LEAs in security research projects. Mirroring the study on standards in operational fields, this study provides keys to better involve LEAs in RDI, and complements the good practices already identified by ILEAnet (IPIP – ILEAnet Project Intake Process).

These last 6 months have been marked by a very important work to identify the assets of the project, define the related recommendations, and explore their sustainability. This work of reflection was conducted internally, with the INC and the Steering Committee, but also externally with the stakeholders of the European security research ecosystem. That allows us to serenely ensure the sustainability of the ILEAnet community and its Knowledge Factory through

the Europol Platform for Experts managed by the Europol Innovation Lab, but also the IPUP – ILEAnet Project Uptake Process - which could be taken up and adapted by various European bodies (see chapter on WP3). ILEAnet has endeavoured to formalize and illustrate its two processes (IPUP & IPIP) with visuals, in order to make them readable by all.

Part of the recommendations drafted by ILEAnet are also based on the results and experience of the subcontracting, whose two studies were completed successfully during the reporting period. These studies have provided a very good overview of the challenges, good practices in their domains and have allowed the generation of recommendations to shape the research of the future. Thus, the ILEAnet final set of recommendations is ready and is publicly available (see the [ILEAnet website](#)).

In addition to the assets mentioned above, the Community Management team has done a lot of formalization and feedback work to initiate the PW5 reflection on networks of practitioners, their benefits and opportunities. This workshop was an opportunity to present the key results of the project, the associated recommendations but also to explore the sustainability paths deployed by the project.

The ILEAnet project intensively worked on sharing and disseminating its key results before its completion. The last research of WP2, which analysed the changes and trends in LEAs' challenges and needs between the time of the first surveys and the end of the project, demonstrated that most LEAs' challenges and needs previously identified are still of high relevance today, but some changes in priority have been observed. Those final results are publicly available on the ILEAnet website and will be forwarded to the relevant stakeholders.

The results the project achieved thanks to its Network and Community have contributed to creating a conducive environment for security RDI, from the identification of operational

challenges and needs to the implementation of practical solutions.

ILEAnet Points of Contact (PoCs, i.e. INCs and scientific referents) have played an important role in this, making the link between ILEAnet and their national networks and experts. The project has been a means for European countries to strengthen and/or develop their national security research communities, and thanks to ILEAnet, EU LEAs have now a better understanding of security RDI and concrete tools and contact list to further cooperate in the security research area.

It has been important to make the link between scientists and LEAs. This connection has been facilitated with a set of re-usable tools available to LEAs and researchers (TELOS, scenario, IPUP,

etc.). The ILEAnet Network+Community was essentially a community of LEAs but also of researchers and it was essential to involve the latter in concrete scientific activities and to promote knowledge sharing between them and the LEA community (hence the scientific newsletter). The ILEAnet project has provided multiple opportunities for LEAs to understand how researchers work and what they are studying, and for researchers to learn how to present their results with a LEA oriented approach and how to involve them in the preparation of research projects.

The ILEAnet project has worked to ensure that the EU security RDI landscape benefits from its results and experience, which will help in the development and strengthening of the European research and security communities.

# Annex 1 – Infographic summarising the Knowledge Factory survey results



For further information about the ILEAnet Knowledge Factory and/or to join the ILEAnet community, please contact [enp-ileanet@interieur.gouv.fr](mailto:enp-ileanet@interieur.gouv.fr)



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