STARLIGHT

Sustainable Autonomy and Resilience for
LEAs using AI against High Priority Threats

Newsletter Issue #4, January 2026

www.starlight-h2020.eu

MESSAGE FROM THE PROJECT COORDINATOR

As our project reaches its conclusion on 31 January 2026, this final edition of our annual newsletter offers an opportunity to reflect on a journey that began in October 2021 and has spanned 52 months of close collaboration between research, industry, and Law Enforcement Agencies (LEAs) across Europe.
It is a chance to reflect not only on what STARLIGHT has delivered, but on how it has shaped collaboration, practice, and thinking around responsible AI for security.

Throughout the project, the STARLIGHT consortium pursued a shared ambition: to support the responsible adoption of Artificial Intelligence (AI) in law enforcement by combining innovation with accountability, transparency, and respect for fundamental rights. Guided by its five strategic goals, Understand, Exploit, Protect, Combat, and Boost, the project progressed from identifying operational needs to delivering, testing, and validating AI-based solutions in real and near-operational environments.

Through co-development cycles, ToolFests, and pilots, the consortium jointly developed, refined, and evaluated 50 operational tools, ensuring that innovation was shaped not in isolation, but through continuous dialogue with practitioners.

This work would not have been possible without the commitment of our 50 partners from 18 countries, and in particular the 15 participating LEAs, whose sustained engagement ensured that STARLIGHT remained firmly grounded in real investigative contexts.

The Final Event, held in Paris on 14-15 January, marked both the conclusion of the project and a moment of collective reflection. More than an endpoint, it signalled STARLIGHT's transition from a funded research initiative to a lasting contribution to the European security research landscape.

The STARLIGHT project leaves behind a substantial body of technical and methodological results, a strong foundation for continued cooperation, and a community committed to advancing trustworthy, human-centred AI in support of European security.

I would like to thank all project partners, law enforcement agencies, external advisors, and colleagues whose commitment and expertise contributed to the successful delivery of STARLIGHT.

Warmest regards,
Dr Nizar Touleimat, Project Coordinator
CEA-List

This project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under Grant Agreement No. 101021797.

STARLIGHT'S IMPACT: FROM RESEARCH TO OPERATIONAL RELEVANCE

From its beginnings, the STARLIGHT project consortium aimed to bridge the gap between AI research and the operational realities of law enforcement. Instead of developing technology in isolation, we focused on understanding LEA needs, translating them into concrete use cases, and supporting their implementation through structured co-development (CODEV) and continuous dialogue with practitioners.

Throughout the project lifetime, we demonstrated how responsible, human-centred AI can support the understanding of complex, rapidly evolving data environments, enable the responsible use of advanced analytics, protect investigations, data, and operational systems, and strengthen the fight against serious and organised crime. At the same time, the project reinforced collaboration, capability, and trust among European stakeholders working across disciplines and borders.

Together, these elements reflect our project's overarching approach: innovation grounded in operational relevance, strengthened through partnership, and guided by shared European values.

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FROM CO-DEVELOPMENT TO OPERATIONAL VALIDATION

The heart of the STARLIGHT methodology was its co-development approach, which placed law enforcement practitioners at the centre of the innovation process. Rather than delivering finished solutions, the project fostered continuous exchange between LEAs, researchers, and industry partners, allowing operational needs, constraints, and feedback to shape development at every stage.

Through iterative testing, eight hands-on ToolFests and operational pilots, emerging capabilities were examined in realistic scenarios and refined in close collaboration with end users. This process ensured that solutions were assessed not only for technical performance, but also for their usability, accountability, and relevance within real investigative contexts.

By embedding validation into the development process, STARLIGHT moved beyond proof-of-concept experimentation, laying the groundwork for responsible uptake and long-term use. This collaborative approach also fostered shared learning across disciplines and organisations.

Investigators, technical experts, legal and ethics specialists, and policy stakeholders worked side

by side, gaining insight into each other's perspectives and constraints.

These exchanges helped align expectations, clarify responsibilities, and strengthen mutual understanding, reinforcing the idea that effective innovation in law enforcement depends as much on dialogue and trust as on technology itself.

By the end of the project, co-development had become more than a methodology; it had shaped a common way of working. The experience demonstrated that responsible AI for security emerges through sustained engagement, openness to scrutiny, and a willingness to adapt. This collective process not only strengthened the maturity of the solutions developed but also contributed to a shared culture of cooperation that will continue to support innovation beyond the lifetime of the project.

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TRUST, ETHICS, AND ACCOUNTABILITY BY DESIGN

Throughout the project, ethical and legal considerations were embedded as core principles rather than treated as add-on requirements. Dedicated governance mechanisms accompanied the full project lifecycle, supporting dataset assessments, pilot approvals, and the evaluation of AI-based tools.

Particular emphasis was placed on human oversight, transparency, and accountability, reflecting the understanding that AI tools must support, not replace, professional judgement. Human-in-the-loop approaches were consistently applied across development and testing activities, ensuring that responsibility and decision-making remained with practitioners.

The AP4AI framework played a central role in translating regulatory and ethical expectations into practical guidance for developers and users, supporting alignment with the requirements and spirit of the emerging EU AI Act. This sustained focus on trust and responsibility strengthened the legitimacy and acceptance of STARLIGHT's outcomes. It reinforced a shared understanding of how responsible AI can be developed and applied in sensitive law enforcement contexts.

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FROM PROJECT TO PLATFORM: ENSURING SUSTAINABILITY

As STARLIGHT draws to a close, significant effort has been dedicated to ensuring that its results do not end with the project. Uptake workshops, engagement with European platforms, and collaboration with Europol, CEPOL, and EACTDA/Tools4LEAs have supported the transition of selected solutions, practices, and knowledge into sustainable environments.

Rather than focusing on the sustainability of individual technologies, STARLIGHT has focused on enabling continuity through shared approaches. Methodological guidance, best practices, and governance-aware development processes were produced to support reuse, adaptation, and future integration. These help ensure that lessons learned through co-development, validation, and ethical oversight remain accessible to both practitioners and researchers.

Through these efforts, STARLIGHT has evolved from a time-bound research project into a foundation for ongoing collaboration, supporting future innovation, interoperability, and responsible AI adoption across the European security research ecosystem.

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THE SU-AI CLUSTER: FROM RESEARCH TO POLICY-AWARE PRACTICE

STARLIGHT was funded as part of the European Commission's first SU-AI (Security Union–Artificial Intelligence) research cluster, alongside ALIGNER and popAI projects. The cluster was designed to bring together complementary perspectives on artificial intelligence for civil security, covering governance, societal expectations, strategic planning, and operational implementation.

Rather than working in isolation, the three projects formed a coordinated ecosystem addressing the full lifecycle of AI in law enforcement: from policy principles and ethical safeguards, through strategic road mapping, to hands-on development, testing, and validation of AI-based solutions. This clustering approach strengthened coherence across research activities, reduced duplication, and supported a clearer pathway from European policy objectives to practical application.

Within the SU-AI cluster, popAI focused on legal, ethical, societal, and privacy considerations, fostering dialogue between policymakers, law enforcement, industry, and civil society. Its policy roadmaps and ethics toolbox articulated shared expectations around transparency, accountability, human oversight, and public trust, aligned with the implementation of the EU AI Act.

ALIGNER complemented this work by developing a strategic research and policy roadmap for AI in policing and law enforcement. Through structured exchanges with practitioners, policymakers, researchers, and civil society, ALIGNER translated operational needs into forward-looking recommendations on AI governance, literacy, interoperability, and collaboration.

STARLIGHT provided the operational pillar of the cluster. Building on the principles and recommendations emerging from popAI and ALIGNER, STARLIGHT co-developed, tested, and validated AI-based tools in close collaboration with law enforcement practitioners. Through its co-development cycles, ToolFests, pilots, and the application of the AP4AI framework, STARLIGHT demonstrated how policy and ethical requirements can be embedded into real research and innovation processes, not as constraints, but as enablers of responsible uptake.

Together, the SU-AI cluster illustrated how coordinated European research can support both technological innovation and societal legitimacy. Joint activities, shared events, and aligned messaging, including engagement with DG HOME and wider EU security initiatives, reinforced the cluster's contribution to building a secure, ethical, and trustworthy AI ecosystem for civil security.

Beyond the immediate cluster, STARLIGHT engaged with a wider ecosystem of EU security and AI initiatives. Collaboration with projects such as LAGO and TESSERA supported improved data access and governance, while engagement with EACTDA and Tools4LEAs helped bridge the gap between research outputs and operational uptake.

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THE IMPACT OF STARLIGHT AND THE PATH AHEAD

Over its lifetime, the STARLIGHT project operated within a rich and collaborative European research environment, drawing on shared lessons, recommendations, and partnerships across the AI and security landscape. The project has generated a substantial body of open-access scientific work, that contributes to a broader understanding of artificial intelligence, security, ethics, and innovation in law enforcement.

The resulting publications and resources, made available through the STARLIGHT Zenodo community and the project website, reflect the collective expertise of the consortium and form a lasting knowledge base for researchers, practitioners, and policymakers.

As STARLIGHT concludes as a funded initiative, its influence continues beyond individual outputs: technical results, datasets, co-development methodologies, and governance-aware development practices remain accessible for reuse, adaptation, and further research.

Alongside these technical outcomes, the experience gained through sustained collaboration with law enforcement agencies, policymakers, and researchers provides important guidance for future European efforts that aim to reconcile innovation, responsibility, and operational needs in AI for security.

Beyond technology alone, STARLIGHT's legacy lies in the shared insights, practical know-how, and enduring partnerships it has built, reinforcing Europe's capacity to deploy AI in security contexts responsibly, transparently, and with a consistent focus on trust and accountability.

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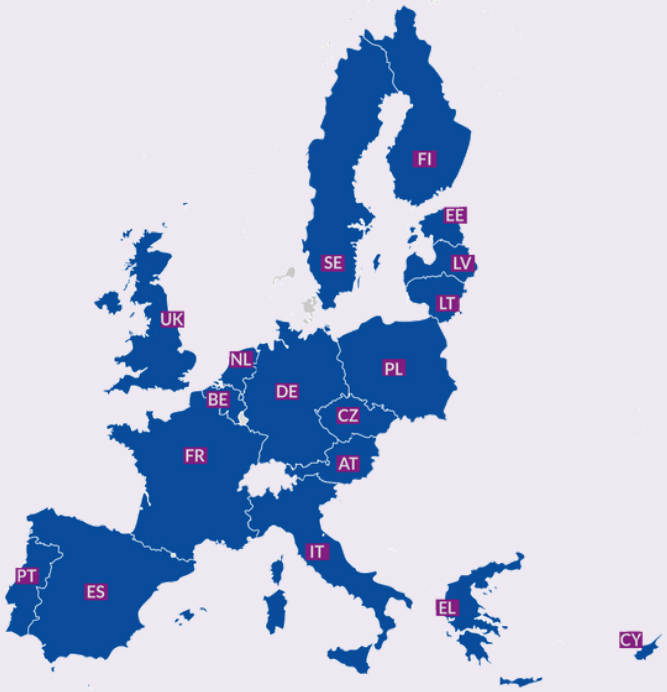

Project Details

- **Project title:** Sustainable Autonomy and Resilience for LEAs using AI against High priority Threats.
- **Starting date:** 01/10/2021.
- **Duration in months:** 52.
- **Topic:** SU-AI02-2020, Secure and resilient Artificial Intelligence technologies, tools and solutions in support of Law Enforcement and citizen protection, cybersecurity operations and prevention and protection against adversarial Artificial Intelligence.

Strategic Goals

- Improve the widespread **UNDERSTAND**ing of AI across LEAs.
- Provide opportunities to LEAs to **EXPLOIT** AI tools and solutions.
- Ensure that LEAs can **PROTECT** their own AI systems.
- Raise LEAs' expertise and capacity to **COMBAT** the misuse of AI-supported crime and terrorism.
- **BOOST** AI for LEAs in Europe.

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