WELCOME TO THE 8TH CEASEFIRE PROJECT NEWSLETTER!

CEASEFIRE

Introduction

The EC-funded R&D project **Ceasefire**, a 3-year Horizon Europe Innovation Action launched in October 2022, has been designed to improve the crime-fighting ability of European nations using modern technology. It brings together 21 expert partners from across Europe, including industrial partners, Law Enforcement Agencies (LEAs) and research universities or institutions, while focusing on combatting *firearms trafficking*. Ceasefire is coordinated by the *Centre for Research and Technology – Hellas* (CERTH, Greece).

Among other activities, the project is building a system that hosts and interconnects various **digital tools**, based on state-of-the-art Artificial Intelligence (AI) and Information & Communication Technologies (ICT). Developed to address the 5 Ceasefire use-cases, these tools aim to automate and streamline the work of LEA officers in the firearms trafficking domain.

Insights from the Consortium's **second-round** Pilot Programs

The consortium has launched the second round of pilot programs across Europe to validate the tools in near-operational conditions. Building on the first-round pilots (Lisbon, Belgrade, Paris, Gdynia), the focus now is on robustness, usability, and integration in real workflows. Hands-on participation of end-users continues to provide valuable feedback for the final development cycle and the project's upcoming review.

Pilot #1 (Lisbon, Portugal)

Building on the first-round pilots (see the previous newsletter), this exercised **Use-Cases #1, #3 and #5**. Feedback from that round drove targeted updates to each module, which we integrated ahead of testing and validated across the pilot scenarios.

Pilot details

Context & goals. Cross-border intelligence and case correlation across languages and sources.

Scenario highlights. Near-real-time firearm incident monitoring (UC#1), Dark-Web marketplace/forum monitoring (UC#3), and a 3D-printed firearm blueprivnt crawler for investigators.

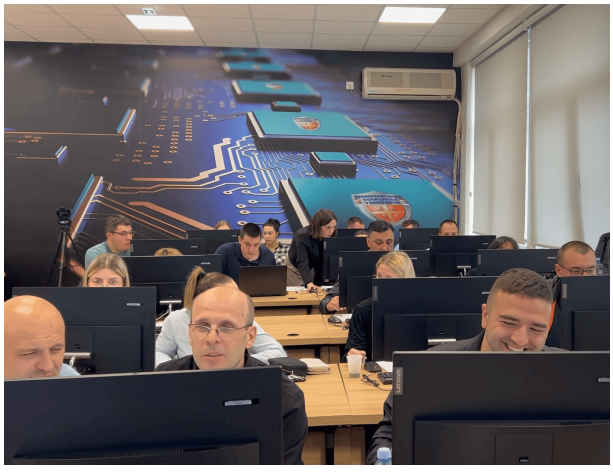
What we measured. Precision/recall of incident detection, marketplace coverage continuity, and usability of analyst dashboards/notes.

Pilot #2 (Belgrade, Serbia)

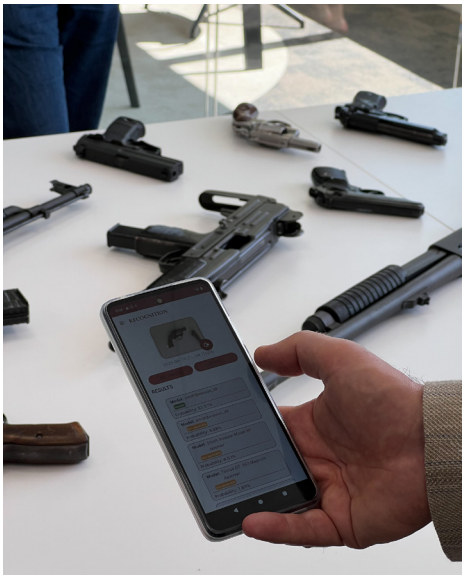
Pilot details

Context & goals. Similar to Lisbon, targets UC#1, UC#3, and UC#5 to enhance LEA capacity with Clear and Dark Web Data. Goal is to validate updates from Pilot #1 and test the analyst workflow.

Scenario highlights. UC#1: near real-time intelligence from online news; risk indicators and dashboard exploration, UC#3: Dark-Web marketplace/forum monitoring and case building, and UC#5: tracking dissemination of 3D printed firearm blueprints and related discussions.



Pilot #3 (Paris, France)



Pilot details

Context & goals. This pilot focused exclusively on Use Case #2: **on-the-spot firearm seizure registration with cross-border data searches**.

Scenario highlights. A mobile application devloped by ITTI integrated an image classification module leveraging machine-learning, developed by INPT. This application enabled officers to photograph a firearm with a mobile device and receive automated firearm recognition.

Pilot #4 (Gdynia, Poland)

Pilot details

Context & goals. This pilot focused exclusively on Use Case #4: detecting illegal firearms, critical components, and ammunition in parcels processed by postal and courier services across the EU. The objective was to validate the end-to-end screening workflows and model performance improvements in an operator-in-the-loop setting.

Scenario highlights. Operator review of X-ray detections, triage and confirmation, annotation for model feedback, and export of findings to case documentation, mirroring real postal/courier screening steps.

Hackathons

Bridging demonstration and hands-on application

Following each second-round testing pilot, the consortium hosted a dedicated **one-day hackathon** at the same venue. These activities acted as a critical **bridge between system demonstration and practical use**, allowing participants to work with the CEASEFIRE Criminal Event Analysis Suite and its integrated tools in a simulated operational context. **Mixed teams collaborated to explore realistic scenarios, share methods, and stress-test workflows end-to-end.**

Who took part

- Law Enforcement Agencies (LEA)
- Border Control & Customs authorities
- Governmental authorities

How the hackathons were run

- Scheduled as the final phase of each pilot, in the same physical location.
- Scenario packs aligned with each site's "main use-case" were prepared in advance; a multitude of scenarios ensured coverage of complementary tools.
- Technical leaders for each tool/use-case were on site to ensure smooth integration, guide teams, and capture targeted feedback.
- Teams rotated through tasks that mirrored real investigative steps, from data intake and triage to re-

Where

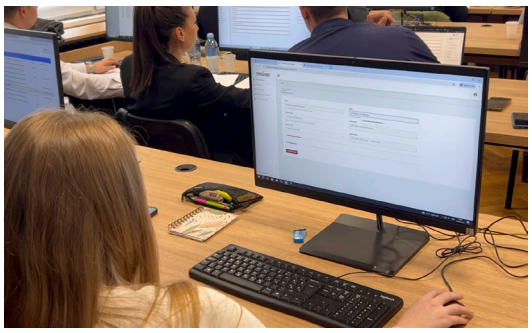
Belgrade • Gdynia • Lisbon • Paris

What we observed

Participants across all four hackathons showed high engagement, collaborative teamwork, and strong interest in the platform's operational utility. Feedback consistently highlighted the value of CEASEFIRE's integrated toolset, visual analytics, and scenario-driven structure for supporting complex investigative tasks. The immersive, practical, team-based format proved effective for both showcasing capabilities and collecting actionable insights.

Early conclusions

- The hackathon format efficiently validates usability and workflow integration immediately after pilot testing.
- Participant evaluations indicate significant potential for law-enforcement use, with particular appreciation for cross-tool continuity.
- The presence of technical leaders accelerates issue resolution and clarifies adoption pathways.



Community highlights

CEASEFIRE Public Event (May 2025)

In May, the consortium held a public event showcasing live demonstrations of all five use-case applications, with developers, LEAs, and policymakers exchanging perspectives on adoption and impact. Atendees engaded in Q&A sessions and hands-on demos that informed the final developemnt steps ahead of the project's conclusions.

SRE 2025 - Security Research Event (June 2025)

CEASEFIRE participated in SRE 2025, presenting advances in X-ray illicit object detection, Dark Web monitoring and field-ready tools for LEAs. The event enabled direct engagement with practitioners and the wider security ecosystem, supporting uptake as the project approaches completion.

Video recap - CEASEFIRE AT A GLANCE

A short, fast-paced overview of CEASEFIRE's mission, tech and field work—also showcased at the Security Research Event 2025 (Warsaw, 24–25 June).

What's inside this recap:

1. EU-wide incident & intelligence tracking
2. On-the-spot firearm seizure ID via mobile vision
3. Dark-web marketplace monitoring & actor linking
4. X-ray parcel scanning for mail/courier smuggling
5. Online tracing of 3-D-printed gun blueprints

Watch the video: https://www.youtube.com/watch?v=Cj3FyVrChWg.

The future

CEASEFIRE partners continue to publish and present research on incident intelligence, computer vision for X-ray detection, Dark Web analysis, and structured reporting for seized firearms, with an up-to-date list of outputs and datasets on the project website. As the project enters its final phase, the consortium is consolidating materials for the review: quantified pilot evidence and LEA testimonials per use-case; exploitation and sustainability pathways linked to relevant initiatives and standardisation; legal, ethical and privacy documentation across tools; and refreshed public results (factsheet, demo videos, communication materials). Second-round pilots are validating robustness, usability and integration across all five use-cases; community engagement remains strong through public demos and major EU security events; hackathon results are informing targeted refinements with end-users and researchers; and preparation for the final review is advancing with a clear focus on evidence, sustainability and compliance.

Ceasefire links

The CEASEFIRE dissemination channels will host regular updates regarding the project:

CEASEFIRE Web site:
https://ceasefire-project.eu/

CEASEFIRE LinkedIn:
https://www.linkedin.com/company/ceasefireproject/

CEASEFIRE Facebook:
https://www.facebook.com/people/Ceasefire-Project/100089862614779/

CEASEFIRE X/Twitter:
https://twitter.com/CeasefireHE

CEASEFIRE YouTube:
https://www.youtube.com/@CeasefireProject

Any relevant stakeholder (LEAs, security-related EU/national/international bodies and initiatives, related EC-funded research projects, SMEs active in security products/services, etc.) are welcome to join the CEASEFIRE community, in order to receive regular updates, news and invitations from the wider security ecosystem!

You can **subscribe easily at https://ceasefire-project.eu/community/**. *All personal information are kept internally within Ceasefire, adhering to the highest privacy standards.*

This project has received funding from *the European Union's Horizon Europe research and innovation programme* under grant agreement No 101073876.