

# ATLANTIS

Newsletter #6

September 2025

## From Vision to Reality: ATLANTIS Demonstrates a More Resilient Europe

In an era defined by the increasing digitalization and interconnection of our essential services, the vulnerability of Europe's Critical Infrastructures (CIs) to large-scale, systemic risks has never been more apparent. From sophisticated cyber-attacks to physical threats and human factors, the potential for cascading failures across borders is a pressing concern for the security of our society. It was with this challenge in mind that, three years ago, the ATLANTIS project embarked on its ambitious mission: to fundamentally enhance the resilience of these vital, interconnected systems.

To address this complexity, ATLANTIS adopted a holistic approach, uniting a consortium of 37 leading technology providers, research institutions, and the critical infrastructure operators themselves. Our strategy was twofold: first, to develop a new generation of innovative, AI-powered tools for threat detection, response, and resilience; and second, to foster an ecosystem of deep collaboration. We understood that technology alone is not enough; true resilience is built on shared knowledge, coordinated procedures, and trust between all stakeholders.

Today, as our journey concludes, we are proud to report that this vision has been transformed into a powerful, validated reality. The ATLANTIS framework is not a single tool, but a synergistic ecosystem of integrated solutions, delivering advanced threat intelligence, AI-driven decision support, and unprecedented capabilities for cross-border collaboration. Its effectiveness has been confirmed not just in theory, but in the field, through demanding, realistic, and high-stakes scenarios. Our guiding principle has always been to move beyond academic research to create tangible, end-user-focused solutions—a sustainable set of tools designed to empower the operators who protect Europe's essential services and citizens every day.

This final edition of our newsletter is a testament to that success. Inside, we invite you to delve into the detailed outcomes from our conclusive Large-Scale Pilots, where you will see how the ATLANTIS framework performed under pressure in three of Europe's most critical domains: **transport**, **healthcare**, and **finance**. Beyond these demonstrations, we look to the future with a detailed preview of our **joint Final Event in Brussels**.

Improved resilience of critical infrastructures against large scale transnational and systemic risks

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***A cornerstone of the ATLANTIS strategy was to validate our solutions in real-world environments. Our Large-Scale Pilots (LSPs) serve as the ultimate testbed, demonstrating the framework's capabilities in diverse and critical sectors.***

## Highlights from the ATLANTIS Large-Scale Pilots

### LSP #1: Protecting Cross-Border Infrastructure at the Fréjus Tunnel

In June 2025, ATLANTIS staged a scenario at the vital Fréjus Tunnel connecting France and Italy. The exercise simulated a severe hybrid threat: a coordinated cyber-attack combined with a physical, weaponized drone strike designed to disable the tunnel for days. The goal was not to simulate the attack itself, but to rigorously test the management of its consequences among multiple stakeholders and government agencies on both sides of the border.



*The ATLANTIS project team during the live simulation at Large-Scale Pilot #1*

The pilot successfully showcased the power of the ATLANTIS **Hypervision Tool**, which acted as a unified Command and Control system. It proved instrumental in facilitating rapid, complex, and coordinated responses between French and Italian authorities. The Hypervision Tool served as the main end-user interface, integrating crucial information from a suite of specialized ATLANTIS components, including:

- **Situation Awareness For Enhancing CI Resilience (SAFER) (by Engineering):** A sophisticated tool for data fusion, threat detection, and assessing interdependencies between systems.
- **Risk Reduction & Incidents Mitigation Framework (RRIM) (by Siemens):** An AI-based Decision Support System designed to aid operators in complex crisis management scenarios.
- **EO analytics (by RESALLIENCE):** Providing crucial analytical capabilities based on satellite and environmental data.
- **SNIFER (by CEA):** An advanced air quality sensor used to monitor environmental conditions during a crisis.

The seamless integration of these tools demonstrated that the ATLANTIS framework is a true game-changer for future pan-European crisis management.

## LSP #2: Enhancing Resilience at HYGEIA Hospital

The ATLANTIS framework was put to the test in the critical healthcare sector during an **invitation-only** LSP#2 Pilot Day on May 26, hosted at HYGEIA Hospital. The event brought together 62 participants including hospital IT experts, solution providers, and management staff from the healthcare industry —to witness a series of business-oriented presentations focused on the value proposition of the ATLANTIS tools against cyber, physical, and human-related threats.



*Engaging with healthcare stakeholders: A presentation during the LSP#2 workshop where the project's innovative solutions were demonstrated against realistic threat scenarios.*

A key highlight was the presentation of the HYGEIA scenario: a simulated "Terrorist attack on the healthcare system of Greece". This realistic threat was contextualized by a special presentation from the EU Agency for Cybersecurity (ENISA), which was represented by three experts and outlined the current regulatory framework and challenges facing the sector. Participants saw demonstrations of several key ATLANTIS components designed to manage such a crisis, including:

- **SAFER** for threat detection.
- **Hypervision** for unified command and control.
- **Risk Reduction & Incidents Mitigation Framework (RRIM)** .
- **Humans in critical infrastructure vicinity (HIVIC)** to address human-related factors.
- **Truly Media**, a tool designed to identify disinformation campaigns.

The day concluded with an interactive session featuring hands-on demos, allowing stakeholders to provide valuable feedback on the practical application of the ATLANTIS solutions.

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### LSP #3: A Focus on the Financial Sector in Barcelona

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Our final Large-Scale Pilot, the LSP#3 Open Day, took place yesterday, September 9, 2025, hosted by CaixaBank in Barcelona. This event showcased cutting-edge innovations in cybersecurity and resilience specifically tailored for the financial sector.

Experts from CaixaBank and JRC Capital presented use cases and live demonstrations focused on solving critical industry challenges, including:

- **Combating Disinformation:** Countering reputational risk and market volatility caused by false information and deepfakes.
- **Mitigating Advanced Cyber Threats:** Protecting against intricate attacks through real-time IT risk monitoring and identifying cascading effects across systems.
- **Ensuring Service Continuity:** Addressing vulnerabilities in critical systems like time synchronization (GNSS) and responding to physical disruptions such as power blackouts.

Participants also had an exclusive opportunity to visit the **CaixaBank Security Operations Center (iSOC)**. This event was ideal for CISOs, Risk Managers, cybersecurity professionals, CI operators, and policymakers.





## An Invitation to Shape the Future: The ATLANTIS, EU-CIP & SUNRISE Final Event

We are excited to formally invite you to our grand finale, "**Collaborate, Innovate, Anticipate, Protect: A European Blueprint for Resilient Infrastructure**," a landmark event held in collaboration with the EU-CIP and SUNRISE projects. Join us in Brussels on **September 29, 2025**, for a day dedicated to unveiling the future of European critical infrastructure protection.

This conference is more than a presentation; it's an opportunity to engage with the minds shaping European resilience. By bringing together three complementary Horizon Europe projects, we offer a unique, holistic view of the challenges and solutions facing our continent.

### Why you should attend:

- **Exclusive Demonstrations:** Witness live, integrated demonstrations of the final tools and platforms developed by all three projects.
- **High-Level Panels:** Hear directly from front-line end-users who have tested our solutions and engage with policymakers and strategists discussing the future of European security regulations.
- **Strategic Insights:** Be the first to receive the consolidated policy recommendations derived from three years of intensive research, development, and real-world validation.
- **Unrivalled Networking:** Connect with a diverse community of industry leaders, researchers, EU officials, and CI operators during our networking lunch and closing reception.

This event is a must-attend for CI operators, national authorities, policymakers, security professionals, and researchers. Join us to contribute to the dialogue and help build a more resilient Europe.



**Registration Link:** <https://www.eventbrite.co.uk/e/atlantiseu-cipsunrise-joint-final-event-tickets-1472493420459>

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