

ATLANTIS

Newsletter #5

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A Collaborative Strategy for Stronger Critical Infrastructures

Recent crises have underscored the vital need for resilient Critical Infrastructures (CIs) across the EU. The ATLANTIS mission is to enhance the resilience of Europe's interconnected CIs against large-scale, systemic risks, including combined cyber-physical-human threats. We achieve this by generating new knowledge, developing sustainable solutions, and fostering collaboration among CI stakeholders across Europe.

In today's interconnected world, no single organization can manage the growing complexity of systemic risks alone. Effective collaboration is the key to a shared understanding of evolving threats, leading to improved resilience, faster crisis response, and joint development of new technologies.

Collaboration is a key part of the ATLANTIS strategy, fostered through joint R&D activities among the consortium's CI stakeholders, and by establishing scientific, technological, and policy-based collaborations with other relevant experts and communities.

To this end, ATLANTIS actively engages with existing networks and clusters of security-focused projects. A key channel for this external partnership is our active membership in the **European Cluster for Securing Critical Infrastructures (ECSCI)** whose main objective is to create synergies among complementary EU-funded projects, fostering the synchronized development of solutions for evolving security issues through collaborative innovation. This cluster brings together dozens of past and ongoing projects, creating a powerful ecosystem for sharing knowledge and organizing joint events.

Through this outreach, **our primary goals** are:

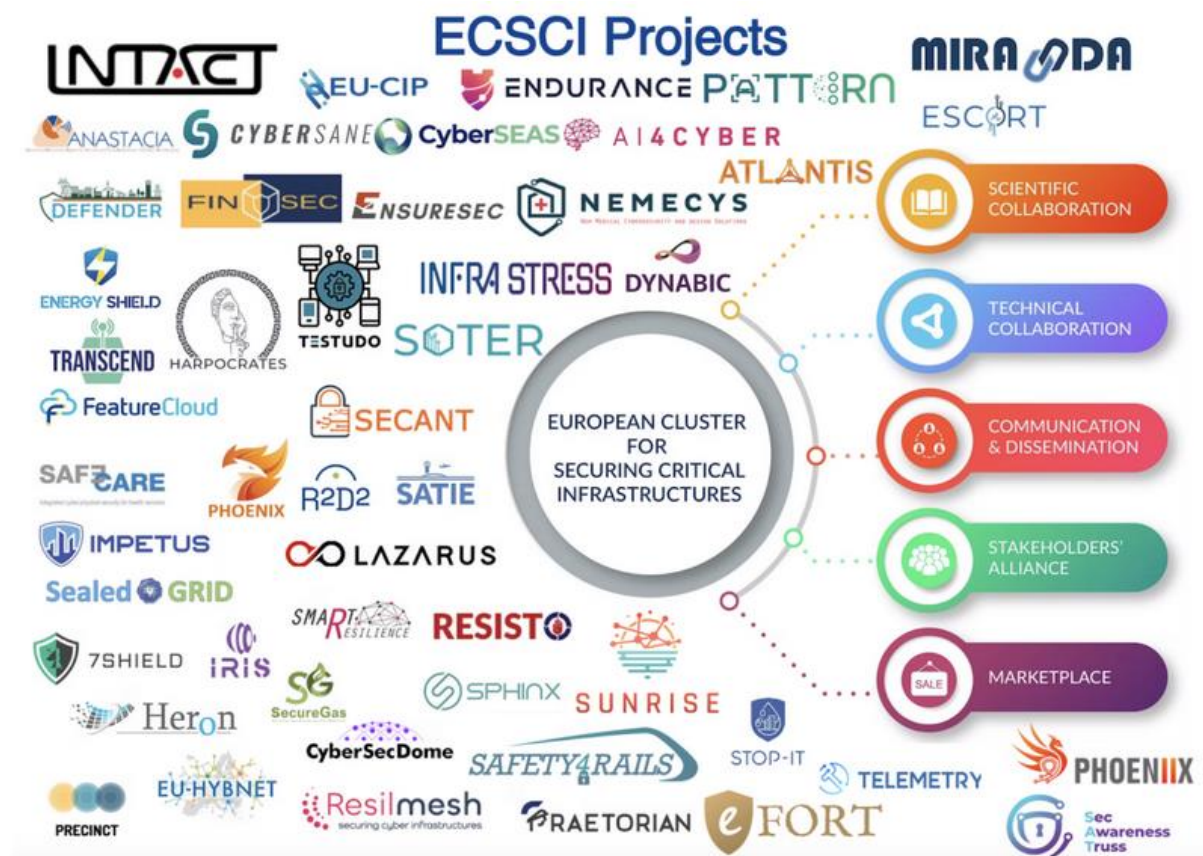
- **To build consensus** on current and emerging security issues for CIs at a cross-border and cross-domain level.
- **To raise awareness** of research gaps and drive the development of innovative new technologies to manage systemic risks.
- **To improve the shared situational awareness** across European CIs to coordinate procedures and effectively manage risks.

This commitment to collaboration is not just a strategic goal; it is demonstrated through our active engagement across the European research landscape. The following sections highlight our recent activities at joint events and our impact on shaping the future of European policy.

Joint Events and Knowledge Sharing with EU Projects

Highlights from Recent European Conferences and Workshops

A cornerstone of our collaborative strategy is engaging directly with the European research community through impactful joint events. ATLANTIS has been a key organizer and participant in major European conferences, consistently working to share knowledge and build a network dedicated to CI resilience.



ECSCI Projects

Two notable examples were the **EU-CIP Project & ECSCI Cluster Conference which took place on 20-21 September 2023** in Brussels, focused on “Reinventing European Resilience” and the **EU-CIP Project Annual Conference which took place on 13 November 2024** in Madrid, co-located with CIPRE and focused on “Resilience Reimagined: Innovating Critical Infrastructure for Tomorrow”. Our participation enabled direct knowledge exchange with a dozen other EU-funded projects, including SUNRISE, CyberSEAS, and DYNABIC.

We have also maintained a strong presence at the annual international “**Days of Corporate Security**” conference in Slovenia, where we have organized dedicated “Projects Day” sessions. These sessions have brought together a wide range of collaborators, from initial partners like PRECINCT and APPRAISE to newer ones like ARIEN2 and CEDAR3, which focus on AI and big data security. At the most recent conference in May 2025, which focused on resilience in the digital environment, ATLANTIS was a key

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co-organizer in collaboration with project partner **ICS**. A special highlight was the presentation by Dr. Marko Gerbec from the Jožef Stefan Institute, who showcased the project's innovative approaches to understanding critical infrastructure interdependencies.



*16th international conference "Days of Corporate Security 2025",
held May 19-20 in Brdo pri Kranju, Slovenia*

Furthermore, the project's leadership was further demonstrated at the **RISE-SD (Research and Innovation Symposium for European Security) conference**, where ATLANTIS partner CERTH was a member of the Core Organising Group. At this major event in Greece, CERTH presented the project's cutting-edge AI innovations, including tools for threat intelligence, GNSS interference detection, and Explainable AI (XAI).

In addition to large conferences, ATLANTIS has played an instrumental role in the **ECSCI workshop series**. This began with the creation of the annual workshop on "Collaborative Standardisation and Policy Making (SPM)," an initiative led by ATLANTIS partner ICS. The series continued with a major **joint webinar** on "Fortifying the Future," co-hosted with the EU-CIP project, which brought together over 100 policymakers and industry experts. The momentum culminated in April 2025 with the **3rd ECSCI Workshop on Critical Infrastructure Protection and Resilience** in Bilbao. This high-level event featured keynotes from ENISA, JRC, and the European Commission and brought together experts and results from 54 EU-funded projects to advance collaborative solutions for cyber-physical threats.

Across all these engagements, ATLANTIS maintained a strong visual presence with project posters, roll-up banners, and dedicated presentation slots, effectively communicating our mission to industry leaders and policymakers. Through this sustained activity, ATLANTIS continues to foster a robust and collaborative European research ecosystem.

Policy Impact: ATLANTIS & SUNRISE Joint Policy Paper

Actionable Insights for Future-Proofing European Infrastructure

Resilient Critical Infrastructure (CI) is vital for a secure and prosperous Europe, yet it faces mounting challenges from systemic risks such as pandemics, cyber threats, and climate-induced disasters. To tackle these pressing issues, two EU-funded Horizon Europe projects, ATLANTIS and SUNRISE, collaborated to present a joint policy brief released on **December 16th, 2024**: “Enhancing Resilience of Critical Infrastructures in Europe: Insights and Recommendations.”

Key Themes: The policy brief presents insights from the collaborative efforts, highlighting several key themes:

- **Collaboration Across Boundaries:** Effective CI resilience demands a united front involving organizations, industries, and governments to mitigate vulnerabilities and ensure coordinated responses.
- **Alignment with EU Policies:** Compliance with frameworks such as the CER (Critical Entities Resilience) and NIS2 (Network and Information Security) Directives is essential to enhance Europe’s CI preparedness and protection.
- **Scenario-Based Planning:** Preparing for cascading and interconnected risks requires scenario-driven strategies, ensuring readiness for complex challenges.
- **Data-Augmented Decision Support Systems (DSS):** Leveraging real-time data and AI-powered DSS can enhance situational awareness and resource optimization, crucial for managing crises effectively.

Recommendations: To secure the resilience of Europe’s CI, the projects propose the following strategic actions:

- **Harmonizing Standards Across Sectors:** A unified approach to resilience demands consistent frameworks and standards across diverse CI sectors.
- **Fostering Real-Time Data Sharing:** Seamless data exchange between stakeholders is essential for timely and informed decision-making.
- **Encouraging Joint Exercises:** Collaborative, scenario-based crisis simulations strengthen preparedness and foster inter-organizational trust.
- **Adopting AI-Enabled Tools:** Advanced DSS leveraging AI can address complex risks, enhance efficiency, and provide adaptive solutions for emerging challenges.

The increasing scale and complexity of systemic threats make swift action more critical. By adopting the findings and recommendations from the ATLANTIS and SUNRISE projects, the European Union can lead the way in building a secure and resilient future.

Highlighted Project Collaborations

Building a Network of European Resilience

ATLANTIS does not work in isolation. A key part of our strategy involves building strong partnerships with other leading EU-funded projects to share knowledge and align our efforts. Below are a few highlights of our collaborative ecosystem.



CyberSEAS (Cyber securing energy data services)

ATLANTIS actively collaborates with CyberSEAS, dedicated to improving the resilience of energy supply chains against cyber-attacks. Our partnership focuses on exchanging insights on systemic risks, exploring shared technologies, and aligning our efforts in standardization and policy-making.



SUNRISE (Strategies and technologies for united and resilient critical infrastructures and vital services in pandemic-stricken Europe)

Our collaboration with SUNRISE focuses on tackling the unique challenges posed by pandemics to Europe's critical infrastructures. By sharing insights on cascading effects and jointly promoting innovative solutions, both projects are strengthened in their missions.



EU-CIP (European Knowledge Hub and Policy Testbed for Critical Infrastructure Protection)

EU-CIP is establishing a vital pan-European knowledge network for resilient infrastructures. ATLANTIS leverages this partnership to discuss systemic risks with a broader audience, jointly promote solutions, and co-organize key events, such as the Annual Conference on CI resilience.



STARLIGHT (Sustainable autonomy and resilience for LEAs using AI against high priority threats)

With STARLIGHT, which focuses on implementing AI in European Law Enforcement Agencies (LEAs), we explore opportunities to develop shared AI-based security solutions. This collaboration allows for deep knowledge exchange on using advanced technologies to combat emerging security threats.



AI4CYBER (Trustworthy AI for cybersecurity reinforcement and system resilience)

Both ATLANTIS and AI4CYBER are developing next-generation, AI-based solutions to defend against sophisticated cyber threats. Our partnership ensures that know-how and lessons learned are transferred between the projects, often through joint events and workshops.



KINAITICS (Cyber-kinetic attacks using artificial intelligence)

KINAITICS aims to explore new attack opportunities and defence capabilities in the interconnected cyber-physical world with the introduction of AI-based control and perceptive systems, and behavioural understanding of physical systems and cyber-attacks. Our projects share insights on these emerging challenges and transfer know-how through joint events, ensuring both are at the forefront of AI-based security.



TESTUDO (Autonomous swarm of heterogeneous resources in infrastructure protection)

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TESTUDO is developing a platform that uses autonomous swarms of drones and other unmanned vehicles for the continuous monitoring and protection of critical infrastructures. ATLANTIS and TESTUDO share knowledge on R&D and piloting activities, often through collaborations coordinated by the ECSCI cluster.



ENDURANCE (Strengthening the resilience of Europe's Critical Infrastructures)

The ENDURANCE project is dedicated to strengthening CI resilience by helping organizations implement the EU's CER (Critical Entities Resilience) and NIS2 Directives. As both of our projects share this common goal, we are beginning to create synergies to share knowledge and align on best practices.

These partnerships are fundamental to our strategy, ensuring that by sharing knowledge and aligning goals, we can collectively address the complex security challenges facing Europe.

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