

European Knowledge Hub and Policy Testbed for Critical Infrastructure Protection

EU-CIP Conference Brussels, 20th September 2023 Emilia Gugliandolo (ENG)



EU-CIP Landscape

Innovation and policy development for Resilient Infrastructures and Critical Infrastructure Protection (CIP) is a complex, multi-disciplinary process involving **different stakeholders** and analysing a very **rich set of data and information** from different sources.

MAIN DRIVERS

- >> **REDUCING** information fragmentation
- >> ENSURING structured analysis
- >> **BOOSTING** evidence-based policy making

Current Challenges (setback to data-driven evidence-based policy making)

- Monitoring and analysing research outcomes, security technologies, policies and standards towards **evidence-based policy making**.
- Infrastructures' heterogeneity across different sectors
- Engaging the **required diverse stakeholders** at EU scale
- Boosting the competitiveness of innovators and providing commercialization opportunities



EU-CIP Facts & Figures



EU-CIP's <u>vision</u> is to establish a sustainable knowledge network of European CIP experts and stakeholders, with the <u>mission</u> to offer data analysis and services (knowledge, insights, foresights and guidance) for the development of evidence-based R&I policies and opportunities in the CIP domain.



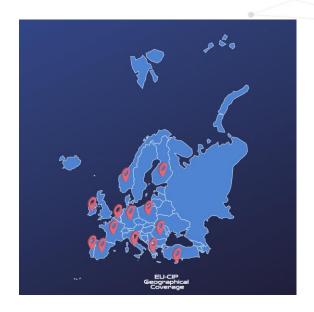
EU-CIP Coverage

Geographical Coverage

- North: Finland, Norway
- Central: Italy, France, Belgium, Germany, Ireland
- Southern-East: Greece, Cyprus, Poland, Romania
- Southern-West: Spain, Portugal

Value Chain Coverage

- CIP/CIR/security solutions for resilient infrastructures, including end-users and CI operators in various sectors (AIA, FV, FST, ORO, EDF)
- CIP/CIR solution providers for these sectors (ENG, GFT, LDO)
- Providers of research solutions and practices (LAU, NRS, SINTEF, INOV, DLR, PPHS, KUL)
- Innovative high-tech SME with security expertise (ICP, INNOV, EU-VRi).
- Standardisation (AFNOR, EOS)





































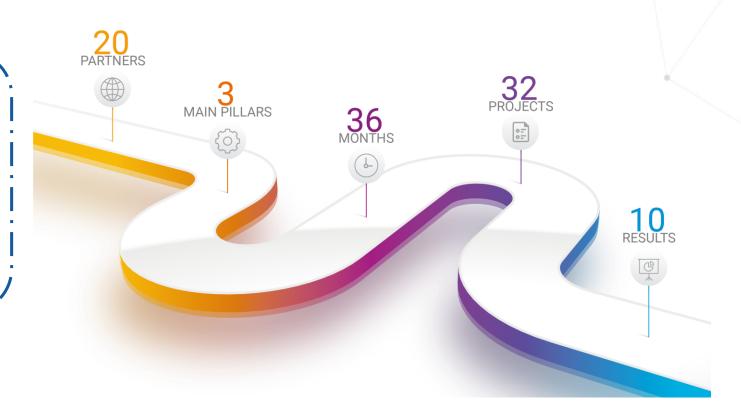






EU-CIP Main Objective

The main goal of EU-CIP is to establish a novel pan European knowledge network for Resilient Infrastructures, which will enable policy makers to shape and produce data-driven evidence-based policies, while boosting the innovation capacity of Critical Infrastructures (CI) operators, authorities, and innovators (including SMEs).





EU-CIP Objectives and Results

EU-CIP Objectives

OBJECTIVE 1 - EU-CIP-ANALYSIS:

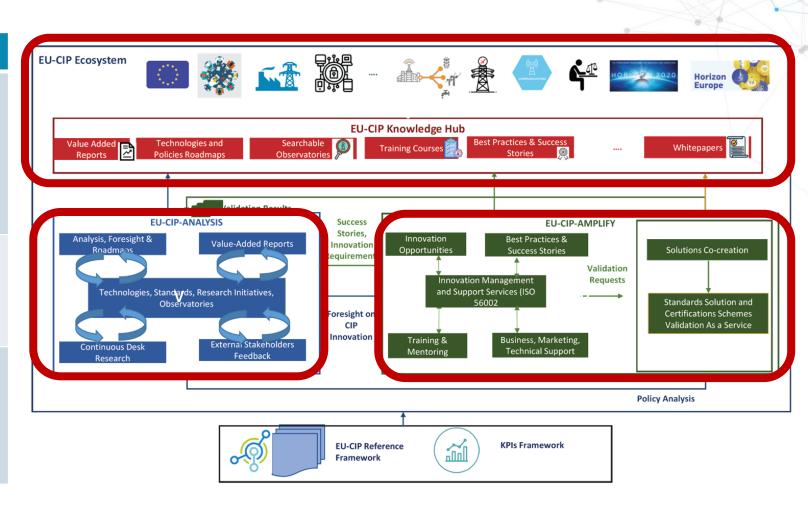
Enhance Europe's analytical capability regarding research outcomes, technologies, and policies – foster data-driven evidence-based policy and innovation development

OBJECTIVE 2 - EU-CIP-AMPLIFY: maximize the impact of R&I CIP/CIR

activities in Europe through innovation support and solution validation services

OBJECTIVE 3 - EU-CIP-ECOSYSTEM:

establish a Knowledge-Hub and create a vibrant ecosystem of interested and committed stakeholders around the project's results





EU-CIP Preliminary Findings

Some of the findings of the **EU-CIP ANALYSIS**, notably findings produced following state of the art analysis and consultation with **CIP stakeholders** within the EU-CIP consortium and the ECSCI cluster.

CIP CAPABILITIES

NOT ADEQUATELY SUPPORTED AND COVERED BY STATE-OF-THE-ART SOLUTIONS

- C1 ENHANCED ADAPTABILITY
- C2 REDUCED RESPONSE TIMES
- C3 INCREASED TRANSPARENCY
- C4 IMPROVED DETECTION CAPABILITIES
- C5 IMPROVED RISK AND IMPACT ASSESSMENT CAPABILITIES
- C6 BETTER INTEGRATION BETWEEN TELCO SECURITY AND INFORMATION SECURITY MANAGEMENT TOOLS
- C7 SOLUTIONS ADDRESSING CASCADING EFFECTS
- C8 Transformation of proactive and adaptive protection tools and methods to incorporate real-time functionalities
- **C9** BETTER EXPLOITATION OF INFORMATION FROM CRITICAL SENSORS TOWARDS AUGMENTED SITUATION AWARENESS
- C10 RISK PREDICTION AND ANTICIPATION
- C11 TRAINING, RESKILLING AND UPSKILLING

CAPABILITIES GAPS

PARTLY LINKED TO THE CAPABILITIES NEEDS

- CG1 POOR AUTOMATION
- CG2 LACK OF PROPER CONTROL OF INTERCONNECTEDNESS
- CG3 POOR ALIGNMENT OF RESILIENCE INDICATORS
- CG4 Lack of agreed Standards-based stress-testing procedures
- CG5 PROBLEMS WITH THE CLASSIFICATION OF IOT DEVICES
- CG6 SCALABILITY IN THE MITIGATION OF DDOS ATTACKS
- CG7 DEVELOPMENT AND DEPLOYMENT OF AI-BASED SYSTEMS
- CG8 LACK OF HOLISTIC SECURITY MANAGEMENT SYSTEMS.
- CG9 GAPS IN EMERGENCY MANAGEMENT PROCESSES
- CG10 INABILITY TO COPE WITH DYNAMICALLY EVOLVING THREATS
- CG11 POOR AWARENESS ABOUT MODERN CIP/CIR CHALLENGES

EU-CIP Next Activities



Knowledge Hub Launch

A key objective for the EU-CIP project is to establish a Knowledge Hub as a cornerstone of a pan-European ecosystem of CIP/CIR stakeholders.

- Who: All CIP/CIR stakeholders including critical entities and their operators and security staff, security solution providers, researchers, policymakers, NGOs and more!
- What: This Hub will facilitate stakeholders' access to the knowledge, results, services, and infrastructures developed by the project, as well as their engagement with innovation development and policy making outcomes of EU initiatives (e.g., research projects, technology initiatives, policy making initiatives).
- Why: Our Knowledge Hub will boost knowledge sharing and collaboration between the various stakeholders.
- When: The first release of the Hub is expected by the end of September 2023!

Pre-registration for the EU-CIP Knowledge Hub





EU-CIP Next Activities

First webinar of the commercialization training for the EU-CIP project (ICP)

The webinar will be held online on:

Wednesday 11/10/2023 3 pm CET

The link will be emailed to registered participants closer to the event.

The **topics** covered are:

- Unveiling the commercialization process and its significance.
- Emphasizing the role of market assessment and problem definition.
- Showcasing the power of innovation in addressing market demands.

Each webinar will be followed by access to business development template materials to assist those wishing to commercialize their solutions or services, to be followed by 1:1 advisory sessions.

To participate, please complete the registration:







CALLING ALL CIP INNOVATORS!

WIN UP TO €20,000

OPEN CALL TO ALL CIP SOLUTIONS LOOKING TO EXPLOIT AND/OR COMMERCIALIZE THEIR SOLUTION OR RESEARCH OUTCOMES:

01



Technology maturation, exploitation, deployment and/or commercialisation of innovative CIP solutions and technologies

with the aim of covering gaps and challenges identified in EU-CIP (also with the support of the experts from call #1). One of the objectives of this call is to fund projects that will exploit/commercialise high value and impactful solutions which are able to cover gaps and challenges identified in call #1.

02



Validation, standardization and/or certification of innovative CIP solutions

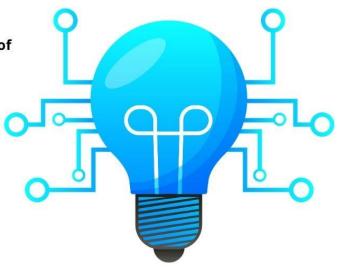
You will have the opportunity to engage with the services provided by CIP/CIR vendors on our testbed. Your expertise and feedback will play a crucial role in assessing the functionality, security, and performance of these solutions.

03



Collaboration Opportunities

We envision creating a collaborative ecosystem where CIP/CIR vendors and stakeholders can come together to exchange ideas, explore integration possibilities, and develop joint initiatives. By participating in the validation and testing process, you will have the chance to connect with other stakeholders and explore potential partnerships.







EU-CIP 1st Annual Conference - Agenda

- A **flagship event** that not only stimulates but also sustains and expands the critical infrastructure protection and resilience ecosystem
- Knowledge exchange and collaboration
- Building & expanding your project networks
- The conference is a **joint event** between EU-CIP, the ECSCI cluster project & PRAETORIAN project.
- This conference is not just an opportunity to share knowledge; it's a call to action.

Our collective actions today will define the security and resilience of Europe's critical infrastructures tomorrow.







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Emilia Gugliandolo

eu-cip.eu

ENG

emilia.gugliandolo@eng.it