

# The European Cluster for Securing Critical Infrastructures – ECSCI

*The 4th International Workshop on Cyber-Physical Security for  
Critical Infrastructures Protection (CPS4CIP 2023) co-located  
with ESORICS 2023*

*– The Hague, The Netherlands, September 25-29, 2023*

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# ECSCI Overview: ECSCI Liaison Plan

- European Commission encourages collaboration among funded projects
- The Liaison Plan
  - create the ECSCI cluster of EU projects dealing with cyber and physical security of critical infrastructures and underpinning complex architectures
- ECSCI's main high-level objectives are:
  - Scientific Collaboration
  - Technical Collaboration
  - Communication & Dissemination (Workshops, Press, Web Presence,... )
  - Stakeholder Alliance
  - Marketplace



# ECSCI Specific Objectives

- Create synergies and foster emerging disruptive security solutions via cross-projects collaboration and innovation
- Focus on the different approaches between the clustered projects
- Establish tight and productive connections with closely related and complementary projects
- Promote the activities of the cluster
  - international scientific conferences/workshops
  - national or international stakeholders' workshops, involving both policy makers, industry and academic practitioners, and representatives from the European Commission





# ECSCI: Share, Consolidate and Focus

- ECSCI projects share experiences and best practices about CIP in different sectors
- ECSCI tries to consolidate and reflect a European approach for Cyber-Physical Threat Intelligence in Critical Infrastructure Protection
- The cluster is focused on research that protects and secures critical infrastructures and services
  - respecting the differences between individual projects, such as the different approaches, sectors of interest, or target groups,
  - while establishing tight and productive connections with closely related or complementary Horizon 2020 projects



# ECSCI Founding and Current Members

- ECSCI was originally a collaboration between three H2020 funded projects, which became the founding members:
  - FINSEC (<https://www.finsec-project.eu/>)
  - ANASTASIA (<http://www.anastacia-h2020.eu/>)
  - DEFENDER (<https://defender-project.eu/>)
- ECSCI cluster currently counts over 34 EU-funded projects focusing on various sectors:
  - finance
  - air transport
  - healthcare
  - energy
  - communication
  - gas and water

# ECSCI Member Projects & Collaborations



# ECSCI Cluster Status

ECSCI running projects

- **AI4CYBER**
- **ATLANTIS**
- **CyberSEAS**
- **DYNABIC**
- **eFORT**
- **EU-HYBNET**
- **FeatureCloud**
- **HARPOCRATES**
- **HERON**
- **IRIS**
- **PRAETORIAN**
- **PRECINCT**
- **SECANT**
- **SUNRISE**

ECSCI ended projects supported by coordinators

- **7SHIELD**
- **FINSEC**
- **ANASTACIA**
- **CyberSANE**
- **DEFENDER**
- **EnergyShield**
- **ENSURESEC**
- **IMPETUS**
- **InfraStress**
- **PHOENIX**
- **PHOENIX**
- **RESISTO**
- **SAFECARE**
- **SAFETY4RAILS**
- **SATIE**
- **SealedGRID**
- **SecureGas**
- **SmartResilience**
- **SOTER**
- **SPHINX**
- **STOP-IT**

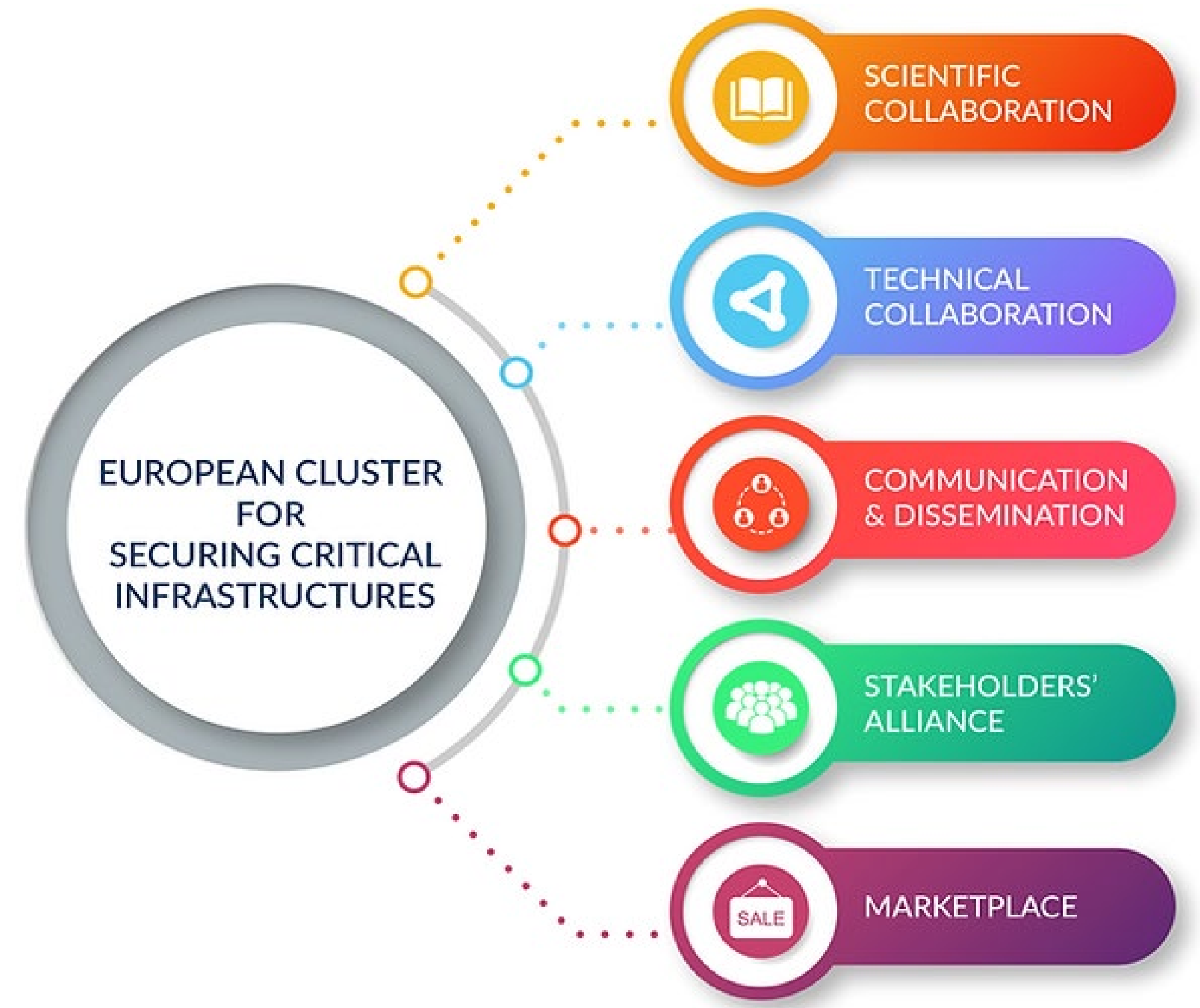
Supporting projects national projects

- **NORCICS**
- **RESTABILISE4.0**
- **CybAlliance**



# ECSCI Members Activities

- Members of the cluster engage in various activities:
  - Scientific collaborations, in the form of joint workshops and conferences, co-writing of academic publications
  - Technical collaborations, such as sharing approaches on cyber-physical security, risk assessment, and predictive analytics
  - Communication and dissemination of information about the cluster's activities and outputs through common web and social media presence as well as joint events
  - Building and fostering stakeholders' alliances, allowing for the mobilisation of local ecosystems
  - Marketplace extensions of members and their products/services across various sectors





# ECSCI Common Activities

## A platform for combined safety and security for European Critical Infrastructures

- Convergence of safety and security standards, and the pre-establishment of certification mechanisms.
- Combined Risk Assessment Process
- Combined Safety & Security Catalogue
- Supporting multi-dimensional decisions on safety and security
- Ontologies

## European Common Platform for cascading effects on the different Critical Infrastructures

- Cross-sectoral and multi-risk approach to cascading effects
- A platform for a common picture of cascading effects affecting multiple critical infrastructures
- Knowledge models and ontologies
- Interfaces between the different Critical Infrastructures
- Common Cause Failures and Cascading Failures

## Contribution to standards and regulations on the protection of Critical Infrastructures

- Securing the supply chain in different Critical Infrastructure sectors
- Guidelines on risk management in CIP
- Standards for threat intelligence sharing
- EU Standardizations in safety and security
- Overcoming the separation between Security and Safety
- Links between safety & security and international organizations

# ECSCI Collaboration & Information Sharing

- The Open Access Book I: Cyber-Physical Threat Intelligence for Critical Infrastructures Security
  - Structured in Five Parts: Finance, Energy, Healthcare, Communications, Sector Agnostic Topics
  - Collaboration of five (5) Projects
- The Open Access Book II: Cyber-Physical Threat Intelligence for Critical Infrastructures Security: Securing Critical Infrastructures
  - Structured in Seven Parts: Air Transport, Water, Gas, Healthcare, Finance and Industry
  - Collaboration of eight (8) Projects
- The Finsecurity.eu Market Platform
  - Early Contributors: DEFENDER / Energy, STOP-IT / Water, RESISTO / Communications
  - Register with Finsecurity.eu – it takes 1'

# ECSCI Stakeholders Workshops

- 1st ECSCI Workshop on Critical Infrastructure Protection, virtual workshop, 24-25 June 2020,
  - <https://www.finsec-project.eu/ecsci-virtual-workshop>
- 2nd ECSCI Workshop on Critical Infrastructure Protection, virtual workshop, 27-29 April 2022,
  - <https://www.finsec-project.eu/second-ecsci-virtual-workshop>
- 1st Annual Conference On Critical Infrastructure Resilience: “Reinventing Resilience” – Co-organised by the EU-CIP Project & the ECSCI Cluster, 20-21 September 2023, Brussels –
  - <https://www.eucip.eu/2023/06/06/1st-annual-conference-on-critical-infrastructure-resilience-reinventing-resilience-coorganised-with-the-ecsci-cluster-20-21-09-2023-brussels/>



# ECSCI Scientific Workshops

- **FINSEC 2019**
  - The 1st International Workshop on Security for Financial Critical Infrastructures and Services Co-located with ESORICS 2019, Luxembourg, September 27, 2019
- **CPS4CIP 2020**
  - The 1st International Workshop on Cyber-Physical Security for Critical Infrastructures Protection Co-located with ESORICS 2020, Guildford, United Kingdom, September 14-18, 2020
- **CPS4CIP 2021**
  - The 2nd International Workshop on Cyber-Physical Security for Critical Infrastructures Protection Co-located with ESORICS 2021, Darmstadt, Germany, October 04-08, 2021
- **CPS4CIP 2022**
  - The 3rd International Workshop on Cyber-Physical Security for Critical Infrastructures Protection Co-located with ESORICS 2022, Copenhagen, Denmark, September 26-30, 2022
- **CPS4CIP 2023**
  - The 4th International Workshop on Cyber-Physical Security for Critical Infrastructures Protection Co-located with ESORICS 2023, The Hague, The Netherlands, September 25-29, 2023

# ECSCI Contributions to Proceedings/Newsletters

- 1st ECSCI Virtual Workshop, Virtual, 24-25, June 2020
  - [Consolidated Proceedings of the 1st ECSCI Workshop on Critical Infrastructure Protection](#)
- 2nd ECSCI Virtual Workshop, Virtual, 27-29, April 2022
  - [Consolidated Proceedings of the 2nd ECSCI Workshop on Critical Infrastructure Protection](#)
- ECSCI Contributions to [Newsletter on Critical Infrastructure Resilience](#)
  1. [The European Cluster for Securing Critical Infrastructures \(ECSCI\)](#)
  2. Report on [The 2nd ECSCI Workshop on Critical Infrastructure Protection](#)
- Contributions to Proceedings
  1. [Computer Security: ESORICS 2019 International Workshops, IOSec, MSTECC, and FINSEC](#)
  2. [Cyber-Physical Security for Critical Infrastructures Protection, 1st International Workshop, CPS4CIP 2020](#)
  3. [Computer Security. ESORICS 2021 International Workshops: CyberICPS, SECPRE, ADIoT, SPOSE, CPS4CIP, and CDT&SECOMANE](#)
  4. [ESORICS 2022 Workshops \(ADIoT, CDT&SECOMANE, CPS4CIP, CyberICPS, EIS, SecAssure, SECPRE, SP-MIoT, SPOSE\)](#)
  5. ESORICS 2023 International Workshops (CyberICPS, DPM, CBT, SECPRE, CPS4CIP, ADIoT, SecAssure, WASP, TAURIN, PriST-AI, SECAI) under preparation



# ECSCI Remote Workshop (ECSCI SPM Workshop)

*Collaborative Standardisation  
and Policy Making For Greater CI  
Resilience in Europe*

**Save The Date**  
**Tuesday, December 5th**  
**9am-5pm**



The ATLANTIS project has received funding from the European Union's Horizon Europe framework programme under grant agreement No. 101073909

## Upcoming events

- Understand the EC's long-term vision on CI resilience.
- Share **experiences** and lessons learnt from closed EU-funded projects.
- Recognise the **gaps and needs** in the standardisation and policy making areas.
- Identify **opportunities** within running EU-funded projects.
- Establish a **joint, actionable strategy** for efficient and effective collaborative standardisation and policy making.

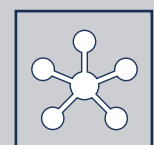


# ECSCI

## Key Takeaways



Stimulate the uptake of project results, spinoffs



Exploit synergies



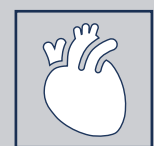
Share best practices



Stimulate network and alliance formation



Become Collaborative platform



Selected by EC DG Home & CoU/CERIS as a success story of synergy building



# More information

If you are interested in ECSCI activities...

You can visit ECSCI official [website](#)

Read ECSCI publication, such as

[Consolidated Proceedings of the 1<sup>st</sup> ECSCI Workshop on Critical Infrastructure Protection](#)

[Consolidated Proceedings of the 2<sup>nd</sup> ECSCI Workshop on Critical Infrastructure Protection](#)

[A Guide to Integrated Cyber-Physical Protection of Modern Critical Infrastructures](#)

[Securing Critical Infrastructures in Air Transport, Water, Gas, Healthcare, Finance and Industry](#)

# Today's Agenda: Friday, 29th September 2023

09:00 – 09:10	Opening Session: Introduction to the Workshop Chair: Habtamu Abie
09:10 – 10:10	SESSION 4: <a href="#">ECSCI Supporting Projects</a> Presentations I Chair: Isabel Praça
10:10 – 10:40	Coffee break
10:40 – 11:40	SESSION 5: <a href="#">ECSCI Supporting Projects</a> Presentations II Chair: Habtamu Abie
11:40 – 12:00	Closing Session: Conclusion & Planning Chairs: Habtamu Abie and Isabel Praça





THANK YOU!



Q&A