The 4th International Workshop on Cyber-Physical Security for Critical Infrastructures Protection – CPS4CIP 2023

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ESORICS 2023, The Hague, The Netherlands
28-29/09/2023

CPS4CIP 2023

- ➢ TPC: 34 from 13 countries

- ➢ Submissions: 15

- ➢ 3 reviewers per paper

- ➢ Single-blind review

- ➢ Accepted papers: 9

- ➢ Acceptance rate of 60%

- ➢ Post-proceedings
  - ▪ Computer Security ESORICS 2023 International Workshops: CyberICPS, DPM, CBT, SECPRE, CPS4CIP, ADIoT, SecAssure, WASP, TAURIN, PriST-AI, SECAI - LNCS

- ➢ Program
  - ▪ 3 Sessions with 9 papers
  - ▪ 2 sessions with 6 ECSCI projects

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Previous Series

FINSEC 2019, ESORICS 2019, Luxembourg, September 23-27, 2019

Proceedings available, published by Springer (LNCS 11981 for ESORICS 2019 International Workshops, IOSec, MSTEC, and FINSEC, Luxembourg City, Luxembourg, September 26–27, 2019)

CPS4CIP 2020, ESORICS 2020, Guildford, UK, September 14-18, 2020

Proceedings available, published by Springer (LNCS 12618 for Cyber-Physical Security for Critical Infrastructures Protection First International Workshop, CPS4CIP 2020, Guildford, UK, September 18, 2020)

CPS4CIP 2021, ESORICS 2021, Darmstadt, Germany, Virtual, October 4-8, 2021

Proceedings available, published by Springer (LNCS 13106 for ESORICS 2021 Int. Workshops CyberICPS, SECPRE, ADIoT, SPOSE, CPS4CIP, and CDT&SECOMANE, Darmstadt, Germany, October 4–8, 2021)

CPS4CIP 2022, ESORICS 2022, Copenhagen, Denmark - 26-30, Sep., 2022

Proceedings available, published by Springer (LNCS 13785 for ESORICS 2022 Int. Workshops CyberICPS 2022, SECPRE 2022, SPOSE 2022, CPS4CIP 2022, CDT&SECOMANE 2022, EIS 2022, and SecAssure 2022, Copenhagen, Denmark, September 26–30, 2022)

Organizing committee

- ➢ General chairs
  - ▪ Habtamu Abie, Silvio Ranise
- ➢ PC Chairs
  - ▪ Luca Verderame, Enrico Cambiaso, Rita Ugarelli, Isabel Praça
- ➢ Program Committee participated in the reviewing process
  - ▪ 34 from 13 countries (https://st.fbk.eu/events/CPS4CIP2023/committees)

Supported by ECSCI - A Collaborative Ecosystem on Critical Infrastructures Protection

ECSCI

- European Cluster for Securing Critical Infrastructures - https://www.finsec-project.eu/ecsci
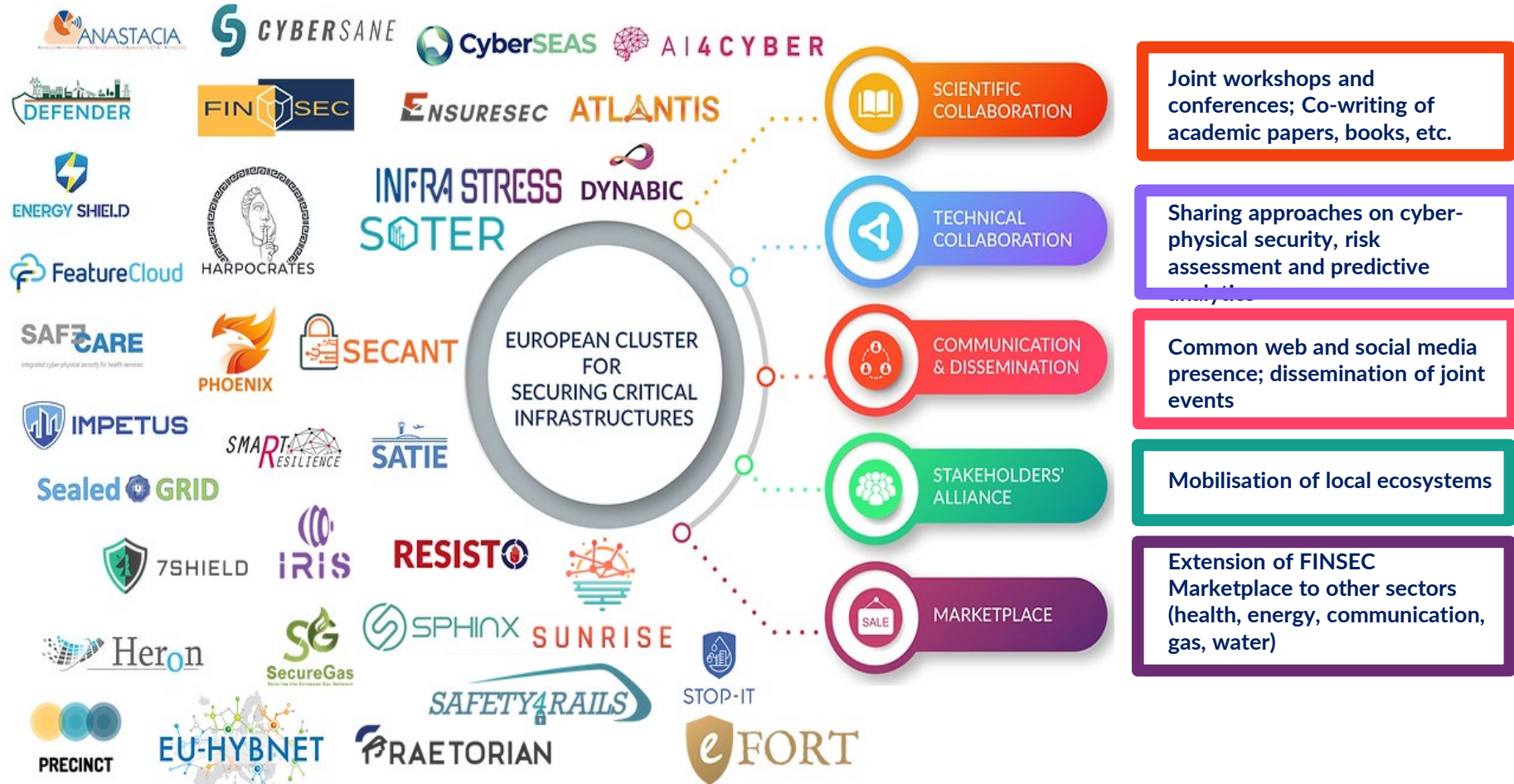- National projects

ECSCI

- cluster of 34 EU funded projects for securing critical infrastructures

Main objective

- bring about synergetic, emerging disruptive solutions to security issues via cross-projects collaboration and innovation

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ECSCI current member projects & collaborations

SCIENTIFIC COLLABORATION — Joint workshops and conferences; Co-writing of academic papers, books, etc.

TECHNICAL COLLABORATION — Sharing approaches on cyber-physical security, risk assessment and predictive analytics

COMMUNICATION & DISSEMINATION — Common web and social media presence; dissemination of joint events

STAKEHOLDERS' ALLIANCE — Mobilisation of local ecosystems

MARKETPLACE — Extension of FINSEC Marketplace to other sectors (health, energy, communication, gas, water)

ECSCI Cluster Situations

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

And also Supported by 3 National Projects

- NORCICS (Norwegian Center for Cybersecurity in Critical Sectors) project funded by the Research Council of Norway under the Center for Research-based Innovation (SFI)

- RESTABILISE4.0 (Restabilise and Energy: Specialization of Enabling Technologies for Balancing Energy Infrastructures and Systems) project cofunded by START4.0 - Competence Center for security and optimization of strategic infrastructures

- CybAlliance (International Alliance for Strengthening Cybersecurity and Privacy in Healthcare) project funded by the Research Council of Norway under the INTPART International Partnerships for Excellent Education, Research and Innovation program

Supported by EU-CIP CSA project

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

- Project Goal:
  - 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)
  - partners have already established the European Cluster for Securing Critical infrastructures (ECSCI), which brings together 25 projects that collaborate in CI Resilience
  - leverage the capacity, organization, community, and achievements of the ECSCI cluster towards establishing an EU-wide knowledge network with advanced analytical and innovation support capabilities

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

Today's Agenda: Thursday, 28th September 2023

09:00 – 09:10	Opening Session: Introduction to the Workshop Chair: Habtamu Abie
09:10 – 10:10	SESSION 1: Approaches and Methodologies for Security Risk Assessment Chair: Isabel Praça
10:10 – 11:30	SESSION 2: Methods for Intrusion and Malware Detections Chair: Habtamu Abie
11:30 – 11:40	Coffee break
11:40 – 12:20	SESSION 3: XAI for Security, Privacy and Attack Detection Chair: Isabel Praça
12:20 – 12:30	Closing Session: Conclusion & Planning Chairs: Habtamu Abie and Isabel Praça

Tomorrow'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: ECSCI Supporting Projects Presentations I Chair: Isabel Praça
10:10 – 10:40	Coffee break
10:40 – 11:40	SESSION 5: ECSCI Supporting Projects Presentations II Chair: Habtamu Abie
11:40 – 12:00	Closing Session: Conclusion & Planning Chairs: Habtamu Abie and Isabel Praça

THANK YOU!   Q&A