



European Reference Network for Critical Infrastructure Protection (ERNCIP)

Over 10 years of pre-standardisation impact



ATLANTIS & EU-CIP SPM Workshop
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Joint
Research
Centre

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The Joint Research Centre



Science for policy

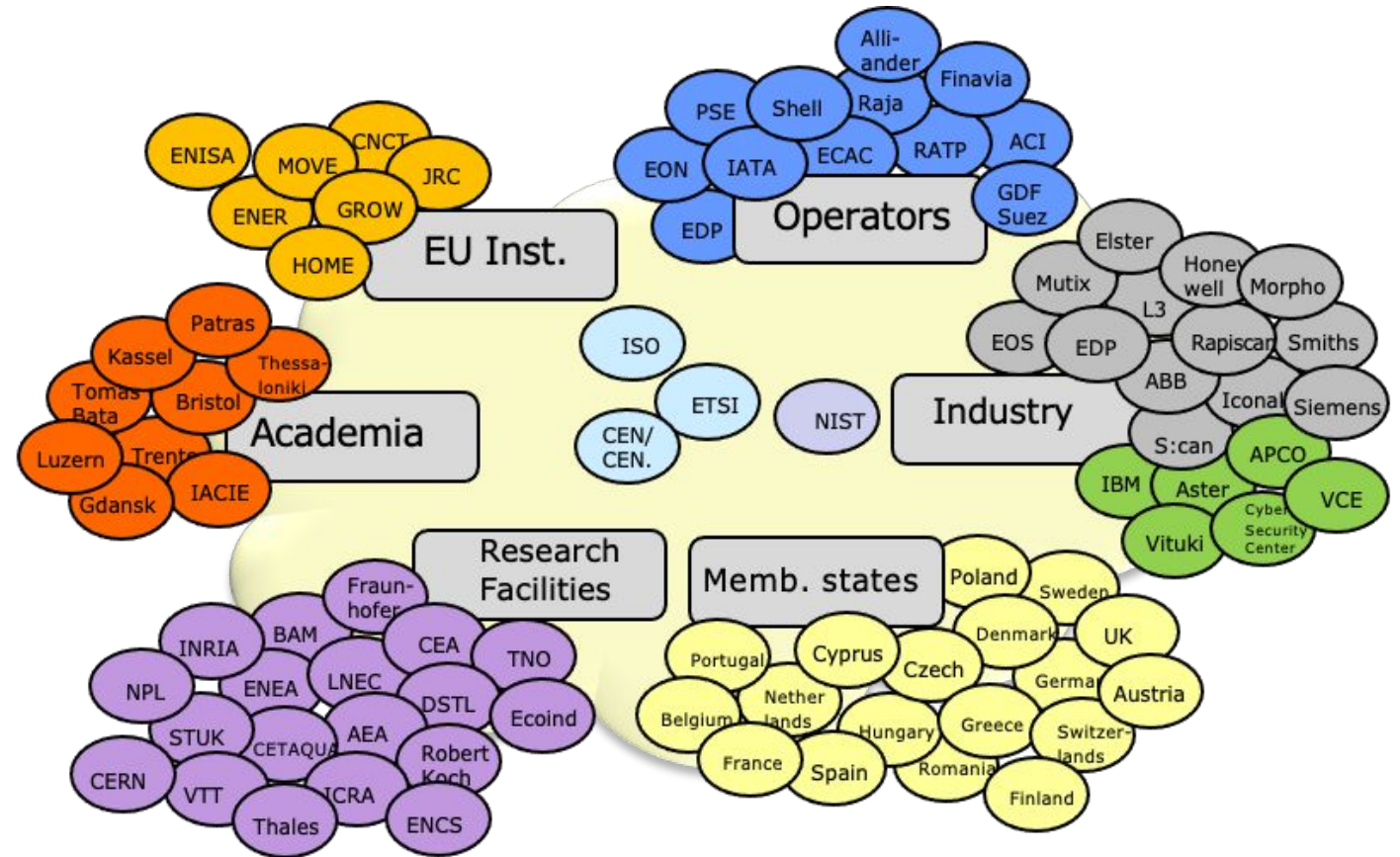
The JRC provides **independent, evidence-based science** and knowledge, supporting **EU policies**.



Headquarters in **Brussels** and
research facilities located in **5 EU
Countries**

ERNCIP - Establishment and mission

- Established under the **European Programme for Critical Infrastructure Protection (EPCIP)**.
- A JRC-facilitated **network of experts** volunteering to address issues of **pre-standardisation at EU-level**.
- Foster the development of innovative and competitive **security solutions**.



ERNCIP - Workstreams

- Improve **protection (and resilience)** of critical infrastructure in Europe.
- **Collaboration** with CIP stakeholders focusing on technical solutions.
- **Thematic groups (TGs)** to develop common testing protocols, standards and guidelines.
- Workshops, trainings and webinars to improve **dissemination** and raise **awareness**.

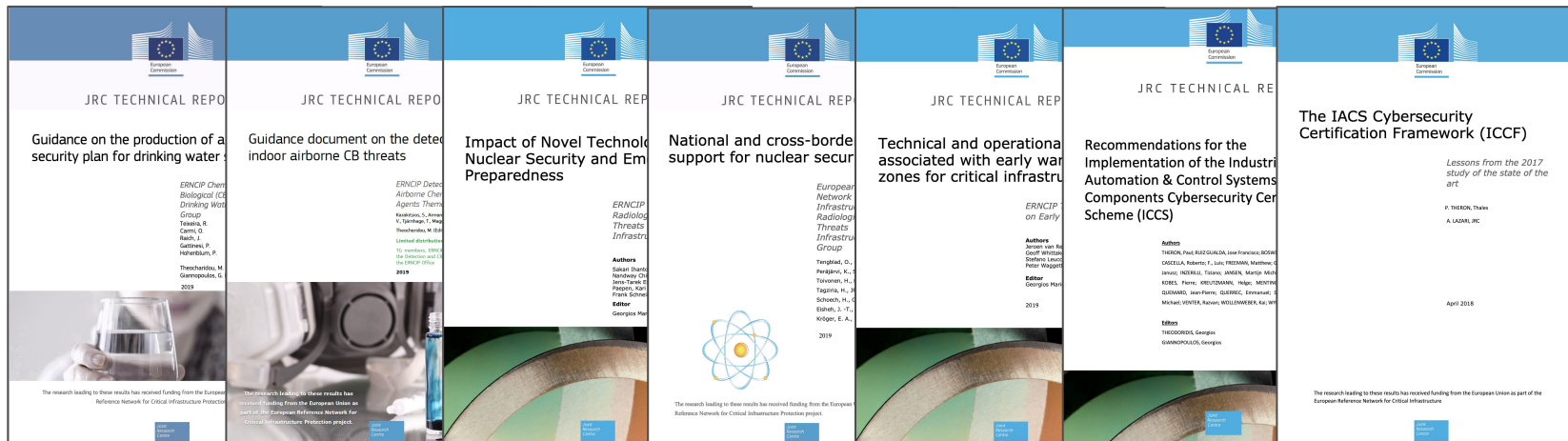


ERNCIP - Deliverables

■ **Guidance and best practices** to infrastructure operators

■ **Recommendations for standardisation and research activities**

■ **Recommendations for policy actions**

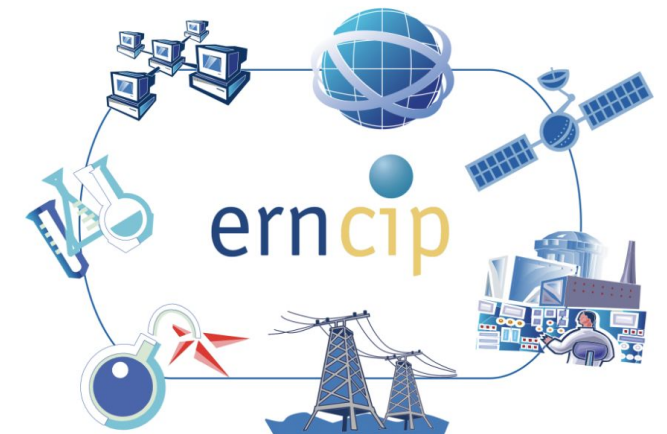


ERNCIP - Activities

- **Response to deliberate** chemical and/or biological **contamination** of drinking water
- **Response to deliberate** chemical and/or biological **airborne agents** of enclosed infrastructures (and outdoor interfaces)
- **Response to deliberate radiological contamination** affecting CI
- **Technical and operational issues** associated with providing an early warning zone
- **Certification framework** for ICT products, services and processes

IEC 63047:2018

Nuclear instrumentation - Data format for list mode digital data acquisition used in radiation detection and measurement



From ERNCIP to ENCER

JRC support & Way ahead

Paradigm Shift

COUNCIL DIRECTIVE 2008/114/EC

DIRECTIVE (EU) 2022/2557 & Commission Delegated Regulation (EU) 2023/2450

23.12.2008	EN	Official Journal of the European Union	L 345/79
COUNCIL DIRECTIVE 2008/114/EC of 8 December 2008 on the identification and designation of European critical infrastructures and the assessment of the need to improve their protection (Ten with EEA relevance)			
<p>THE COUNCIL OF THE EUROPEAN UNION,</p> <p>Having regard to the Treaty establishing the European Community, and in particular Article 308 thereof,</p> <p>Having regard to the proposal from the Commission,</p> <p>Having regard to the opinion of the European Parliament (1),</p> <p>Having regard to the opinion of the European Central Bank (2),</p> <p>Whereas:</p> <p>(1) In June 2004 the European Council asked for the preparation of an overall strategy to protect critical infrastructures. In response, on 20 October 2004 the Commission adopted a Communication on critical infrastructure protection in the light of terrorist threats which put forward suggestions as to what would enhance European protection of, and preparedness for, responses to terrorist attacks involving critical infrastructures.</p> <p>(2) On 17 November 2005 the Commission adopted a Green Paper on a European programme for critical infrastructure protection which provided policy options on the establishment of the programme and the Critical Infrastructure Warning Information Network. The responses received to the Green Paper emphasised the added value of a Community framework concerning critical infrastructure protection. The need to increase the critical infrastructure protection capability in Europe and to help reduce vulnerabilities concerning critical infrastructures was acknowledged. The importance of the key principles of subsidiarity, proportionality and complementarity, as well as of structured dialogue was emphasised.</p> <p>(3) In December 2005 the Justice and Home Affairs Council called upon the Commission to make a proposal for a European programme for critical infrastructure protection.</p>			
<p>(1) OJ C 116, 26.5.2007, p. 1.</p>			

Critical Infrastructure

Critical Entities

Protection

Resilience

- All hazards & dynamic threats landscape
- Interdependencies & cross-border effects
- Coherent approach with NIS2
- Encourage the use of European and international standards
- Cross-border cooperation & communication
- Voluntary Information sharing
- Exchange of best practices
- Etc.

23.12.2022	EN	Official Journal of the European Union	27.12.2022
DIRECTIVE (EU) 2022/2557 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 14 December 2022 on the resilience of critical entities and repealing Council Directive 2008/114/EC (Ten with EEA relevance)			
<p>THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION,</p> <p>Having regard to the Treaty on the Functioning of the European Union, and in particular Article 114 thereof,</p> <p>Having regard to the proposal from the European Commission,</p> <p>After transmission of the draft legislative act to the national parliaments,</p> <p>Having regard to the opinion of the European Economic and Social Committee (1),</p> <p>Having regard to the opinion of the Committee of the Regions (2),</p> <p>Acting in accordance with the ordinary legislative procedure (3),</p> <p>Whereas:</p> <p>(1) Critical entities, as providers of essential services, play an indispensable role in the maintenance of vital societal functions or economic activities in the internal market in an increasingly interdependent Union economy. It is therefore essential to set out a Union framework with the aim of both enhancing the resilience of critical entities in the internal market by laying down harmonised minimum rules and assisting them by means of coherent and dedicated support and supervision measures.</p> <p>(2) Council Directive 2008/114/EC (4) provides for a procedure for designating European critical infrastructure in the energy and transport sectors the disruption or destruction of which would have a significant cross-border impact on at least two Member States. That Directive focuses exclusively on the protection of such infrastructure. However, the evaluation of Directive 2008/114/EC conducted in 2018 found that, due to the increasingly interconnected and cross-border nature of operations using critical infrastructure, protective measures relating to individual assets alone are insufficient to prevent all disruptions from taking place. Therefore, it is necessary to shift the approach towards ensuring that risks are better accounted for, that the role and duties of critical entities as providers of services essential to the functioning of the internal market are better defined and coherent, and that Union rules are adopted</p>			
<p>(1) OJ C 286, 15.7.2021, p. 170.</p> <p>(2) OJ C 40, 24.10.2021, p. 94.</p> <p>(3) Position of the European Parliament of 22 November 2022 (not yet published in the Official Journal) and Council Decision of 8 December 2022.</p> <p>(4) Council Directive 2008/114/EC of 8 December 2008 on the identification and designation of European critical infrastructures and the assessment of the need to improve their protection (OJ L 345, 23.12.2008, p. 75).</p>			

JRC role in the way forward

- Support to the implementation of the CER Directive:
 - common **risk assessment reporting template**
 - non-binding **guideline to identify CEs**
 - non-binding **guideline to define Significant Disruptive effects**
 - non-binding **guideline to specify** the technical, security and organizational **resilience measures of CEs**
- Provide scientific advice to the CER Group (CERG)



- Creation of an expert pool: **European Network for Critical Entities Resilience (ENCER)**

European Network for Critical Entities Resilience (ENCER)

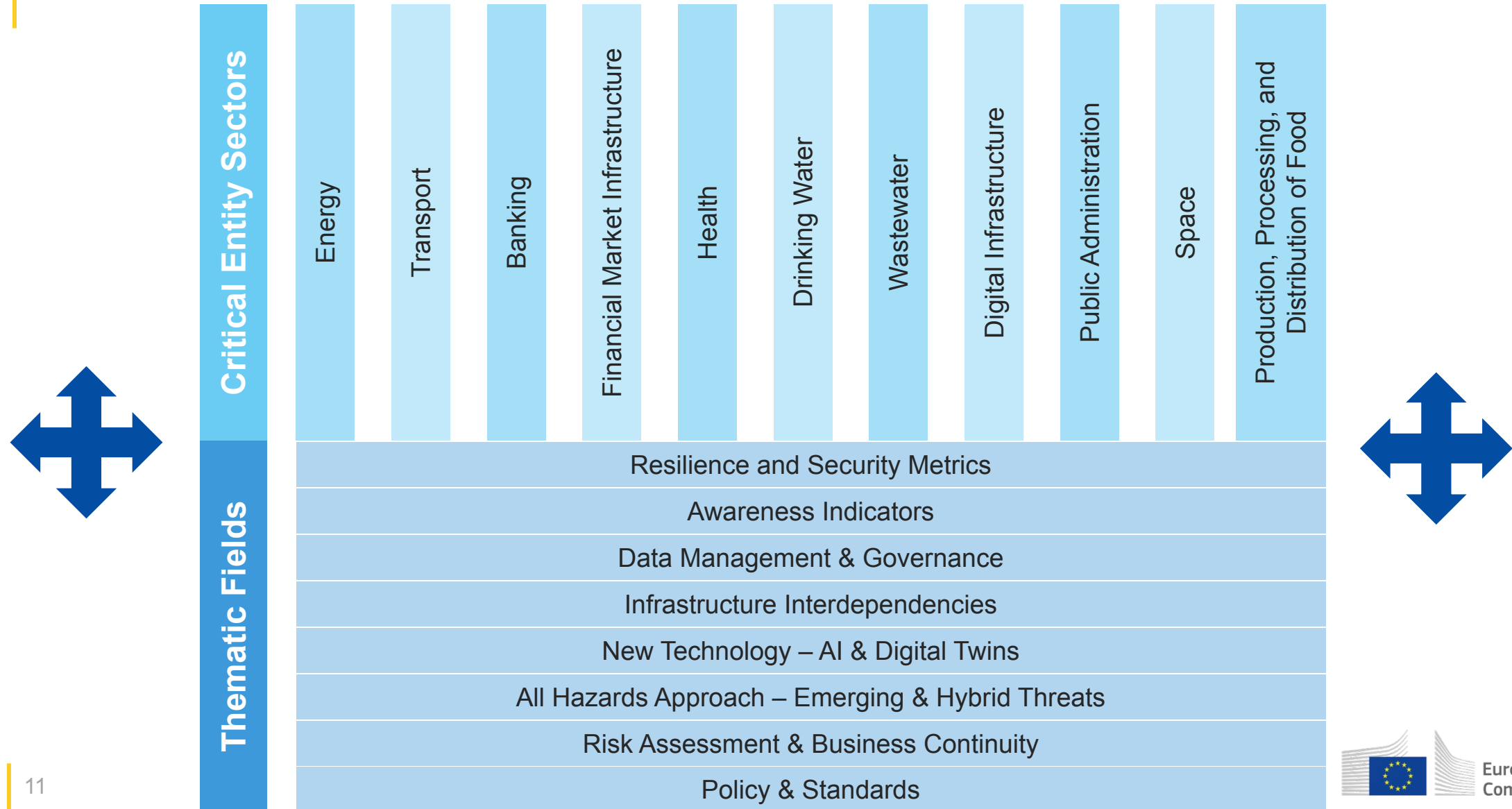
Goal:

- Support the **implementation of CER Directive**:
 - Identify resilience and security best practices
 - Inform the development of the common reporting template and non-binding guidelines
- **Improve security and resilience** of critical entities in Europe

Approach:

- Establish a **network of experts**, [reshaping ERNCIP and its scope](#)
- Representing all **CER stakeholders**
- Develop **cooperation** with CEs and MSs (collaborative environment)
- Organize **working groups**
- Organize **workshops, trainings, and webinars**
- **Consult experts** on ad-hoc basis

ENCER conceptual framework (draft)



Thank you



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