



ERN-CIP EUROPEAN REFERENCE NETWORK FOR CRITICAL INFRASTRUCTURE PROTECTION

A proposed network for experimental security
in support of CIP policy in Europe





- **POLICY BACKGROUND**

**COUNCIL DIRECTIVE 2008/114/EC 8 Dec 08
on the identification and designation of European
critical infrastructures and the assessment of the
need to improve their protection**



“ ‘**Critical infrastructure**’ means an asset, system or part thereof located in Member States which is essential for the maintenance of vital societal functions, health, safety, security, economic or social well-being of people, and the disruption or destruction of which would have a significant impact in a Member State as a result of the failure to maintain those functions”



“ **‘European critical infrastructure’** or **‘ECI’**
means critical infrastructure located in Member
States the disruption or destruction of which
would have a significant impact on
at least two Member States....

This includes effects resulting from cross-sector
dependencies on other types of infrastructure”



WE NEED TO KNOW MORE ABOUT...

- **Vulnerabilities, threat means, attack processes**
- **Potential countermeasures**
- **Benchmarking of systems and products**
- **Validation and verification of models & simulation**
- **Creating standards, best practices, guidelines etc.**



EXISTING SOURCES OF DATA

Real-world data

- From the vendors of the critical systems and the security-related systems
- From the critical infrastructure operators

Data from desktop simulations and simulated environments

- Computer simulations and laboratories

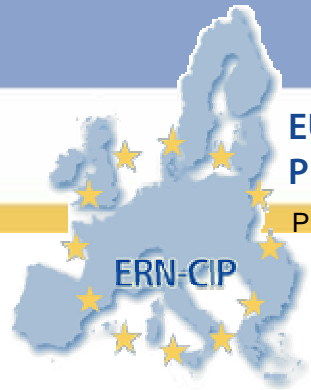
Data from experimental security test platforms and ranges

- Data obtained from realistic environments



PROPOSED SOLUTION TO OBTAIN EXPERIMENTAL DATA

**A EUROPEAN REFERENCE NETWORK FOR CRITICAL
INFRASTRUCTURE PROTECTION ERN-CIP**

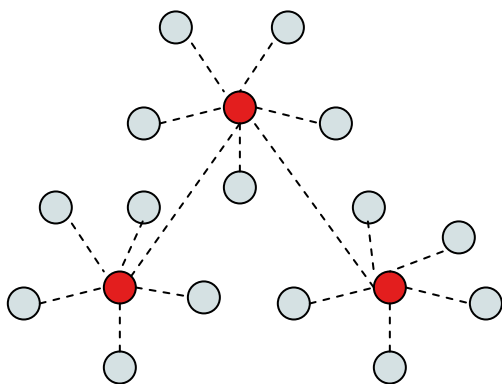


ERN-CIP's FUNCTIONS

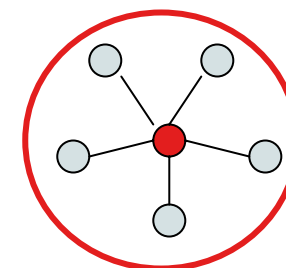
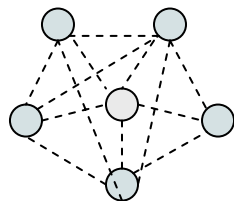
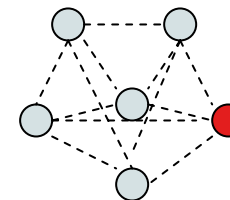
- Obtaining data from **realistic** settings
- Creating labs that can work at **extreme security scenarios**, involving destruction of components
- Setting up Europe-wide security **standards**
- Supporting the development of new **legislation**
- Aid CI Protection in the **future** by contributing to the European Commission RTD Framework Programmes



OPTIONS FOR NETWORK SHAPE



- LOOSE NETWORK?
- FEDERATION?
- CONFEDERATION?
- TRUSTED BROKER?
- E-AGENCY?





ERN-CIP STAKEHOLDERS

Private Sector

Economy of scale

Better products

Create a EU security market

No need to use overseas labs

General Interest

Increased security at the right price



Organisations & Academia

Verification of Modeling & Simulation

New Research & Development Programs

Infrastructure/Service Owners

Sharing best practice

Improved service

Standardisation & Certification

EU & MS Interest

Help remove obstacles to the European security market

Help reduce vulnerabilities

Help decide on proper protection

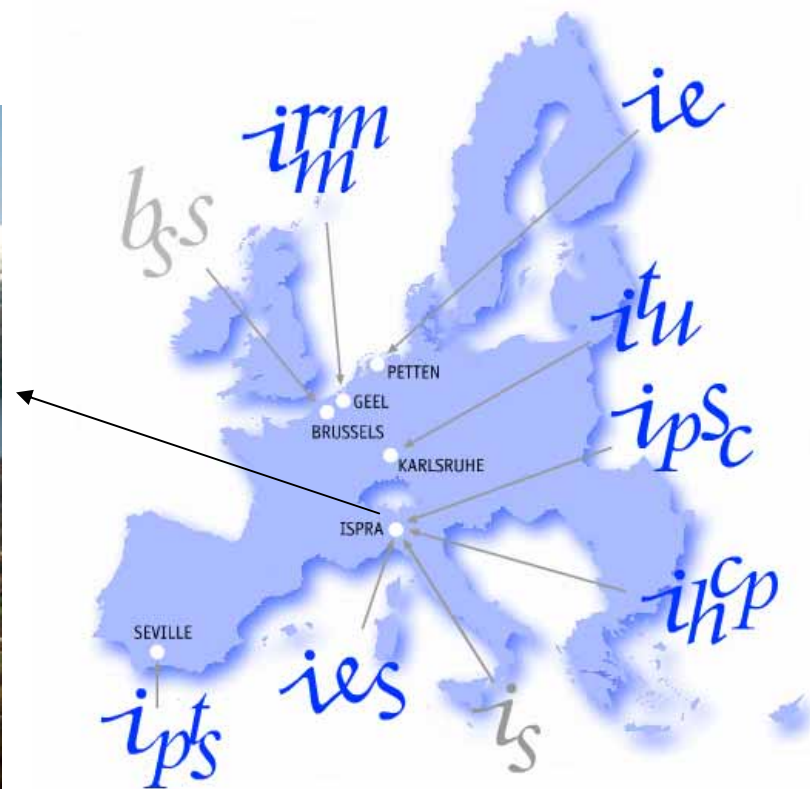
Gap analysis



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Presentation for the FUTURE SECURITY KARLSRUHE 30 SEPT-01OCT 2009





ERN-CIP, IT IS UP TO THE MEMBER STATES AND THE RELEVANT STAKEHOLDERS!

- WHAT ISSUES?
- WHAT FORMAT?
- ACCORDING TO WHAT PRINCIPLES

**WE CHANNEL THE STAKEHOLDERS VOICES
AND WORK TOGETHER TO DEVELOP A PROPOSAL**





WHO ARE WE?

We are a *Task Force* composed of
4 JRC staff
and **3 seconded national experts**

Malin Fylkner

Ferenc Borsos

Naouma Kourti

Adam Lewis

Myriam Janssens

Gustav Soderlind

Muriel Schimmer



Most people contributed to the preparation of the EU CIP Directive



HOW WE WORK

- **VISITS TO ALL THE MEMBER STATES**
 - To collect priorities & requirements
- **INVENTORY OF FACILITIES,**
 - To understand EU's capabilities and competencies
- **DRAFTING OF PROJECT PROPOSAL**
 - Expert group to be formed in order to assist and advice in this process
- **DEDICATED WORKSHOPS**





BY JULY 2010 WE WILL DELIVER DRAFTS FOR

1. A REPORT ON MEMBER STATES NEEDS AND REQUIREMENTS

2. FACILITY INVENTORY

3. EXPERIMENT ORGANISATION

4. STRUCTURE AND PROCEDURES

5. SECURITY REQUIREMENTS

6. PROJECT PROPOSAL (PLAN)

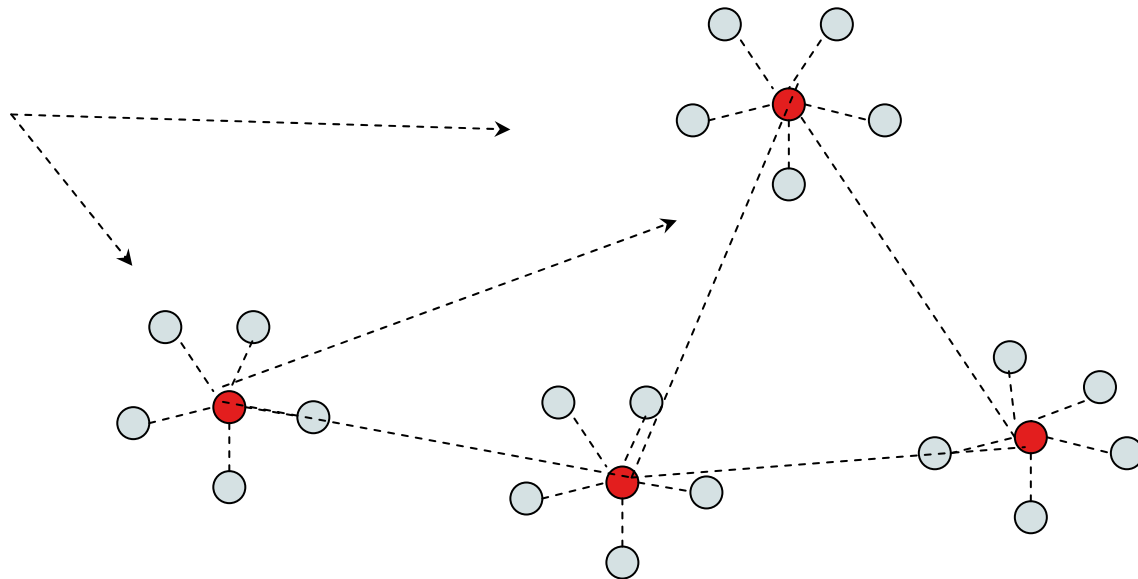




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CONTACT INFORMATION

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