



10th UIC World
Security Congress
Lisbon 2014



Critical Infrastructure Protection

from an IM point of view



INTERNATIONAL UNION
OF RAILWAYS



COMBOIOS DE PORTUGAL

European Rail
Infrastructure
Managers



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Agenda

- Legal background
- Highlights of the directive
- Can we consider Railways as Critical Infrastructure
- Identifying Critical Railway Infrastructure
- Mitigating the risk
 - By reducing the Impact
 - By reducing the probability
- Training & testing
- Back to the drawing board
- Questions





Legal background

2004 – intention

- June 2004 the European Council asked to prepare an overall strategy to protect critical infrastructure.
- December 2004 the Council endorsed the intention of the Commission to propose a European Programme for Critical Infrastructure Protection (EPCIP) and agreed to set up a Critical Infrastructure Warning Information Network (CIWIN)

2005 – green paper

- In November 2005, the Commission adopted a Green Paper on a European Programme for Critical Infrastructure Protection (EPCIP) which provided policy options on how the Commission could establish EPCIP and CIWIN.
- COM(2005) 576 final

2006 – first proposal

- In December the European Commission issued the proposal directive which obliged all member states to adopt the components of the EPCIP into their national statutes. It sets out the principles, processes and instruments proposed to implement EPCIP.
- COM(2006) 786 final





Legal background (cont'd)

2008 – Council Directive 2008/114/EC published

- In December the European Council issued the Directive on the identification and designation of European critical infrastructures and the assessment of the need to improve their protection. It established a procedure for identifying and designating European Critical Infrastructures (ECI) and a common approach for assessing the need to improve their protection.
- The Directive focuses on the energy and transport sectors.
- COUNCIL DIRECTIVE 2008/114/EC

2008 to 2011 – translation into national law

- Member states translate the Council Directive 2008/114/EC into their national law.

2012 – Review

- The European Commission issued a review of the European Programme for Critical Infrastructure Protection (EPCIP) and presented the main preliminary findings of the review in a staff working document.
- SWD(2012) 190 final





Legal background (cont'd)

2013 – update

- In August the European Commission issued a new Commission staff working document on the new approach to the European Programme for Critical Infrastructure Protection making European Critical Infrastructure more secure.
- SWD(2013) 318 final

> 2013 ...





Highlights of the directive

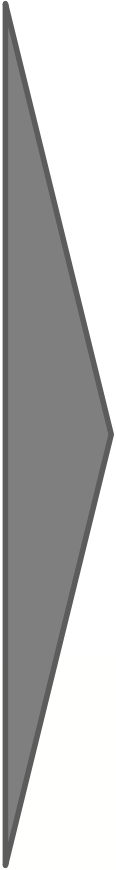
- COUNCIL DIRECTIVE 2008/114/EC sets out the goal to:
 - Identify and designate National and European level critical infra
 - Take appropriate measures to improve their protection
- For this purpose the directive describes:
 - Common definitions
 - Common cross-cutting criteria
 - Requirements to improve protection
- However, it's up to the member state and its sectorial government, often the sector itself, to decide how to:
 - Define the framework
 - Specify the sector related criteria & thresholds
 - ...





Can we consider Railways as Critical Infra?

- National, European?
- Freight, Passenger, both?
- What kind of impact can we expect:
 - casualties
 - economic effects
 - public effects
- Are there alternatives available:
 - road
 - water
 - air



The need for a
thorough
Business
Impact
Assessment





Identifying Critical Railway Infrastructure

- **Business Impact Assessment**

- What's the impact on rail traffic if the operation of a rail asset is disrupted?
- Are there (intermodal) alternatives available? Road, water, air,...

- **Tools**

- Assessment methodology of the national security service
- ISO22301 – Business Impact Analysis
- JDR - EUR 25286 EN – 2012 - Risk assessment methodologies for Critical Infrastructure Protection – state of the art

- **Result**

- Extended list of rail assets prioritised according to their expected impact on rail traffic





Identifying Critical Railway Infrastructure

- **When is a rail asset considered to be critical infrastructure?**
 - Determined by the threshold for:
 - casualties
 - economic effects
 - public effects
- **Where can we find information on these thresholds?**
 - Assessment methodology of the national security service
 - Council of the European Union – proposal of intersectoral criteria and thresholds
 - **Result**
 - Limited list of national critical infrastructure
 - And European? → if a national critical infrastructure also effects another member state





Mitigating the risk

- **What can we do about it?**

- Reduce amount of critical infrastructures
- Improve protection against the identified threats

- **How can we do it?**

- Reduce amount of critical infrastructures by providing alternatives:
 - Ensure system redundancy
 - Ensure sufficient capacity on other modes of transport (road, water, air)
- Improve protection against the identified threats by
 - Assessing threats, vulnerability and risks
 - Putting technical and organisational measures into place to mitigate the risk





Training & Testing

- **Purpose**

Once technical and organisational measures have been put in place, procedures need to be tested and people trained.

- **Tools**

- Tabletop exercises
- Medium exercises (war games,...)
- Extended exercises (live tests,...)

- **Result**

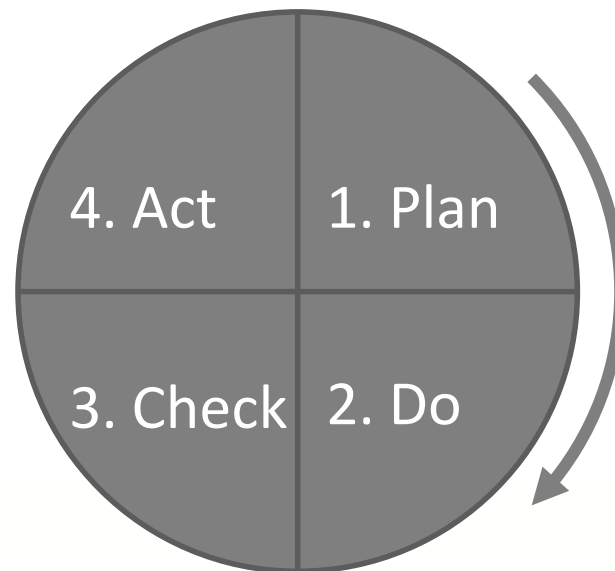
- Knowledge gap identified/closed
- Collaboration gap identified/closed
- Corrective action plan for procedures and documents





Back to the drawing board

The need of continuous adaptation and improvement due to a every changing world





Questions

