Directive on security of network and information systems (NIS)

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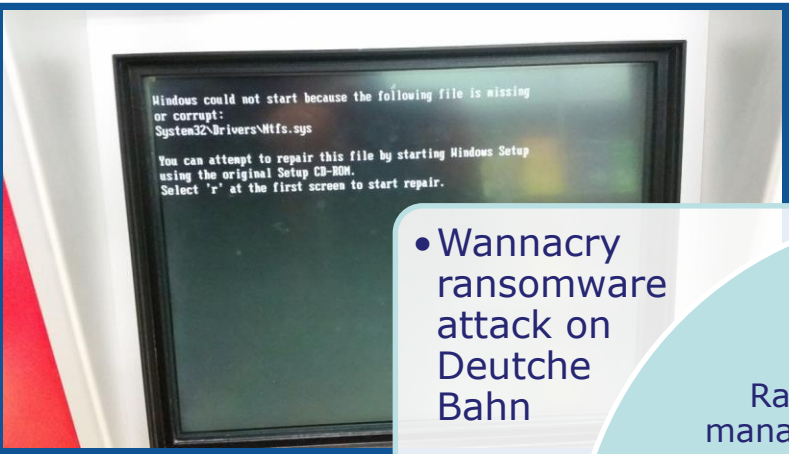
***CyberSecurity4Rail* Conference**
October 4, 2017
Hotel Thon, Brussels

In the News

European Commission



- Wannacry ransomware attack on Deutche Bahn

http://www.telegraph.co.uk/news/2017/05/13

- Safety threats due to hacking

http://www.dailymail.co.uk/sciencetech 25/09/2017

Railway management on networked IT platforms

UK installs digital signalling

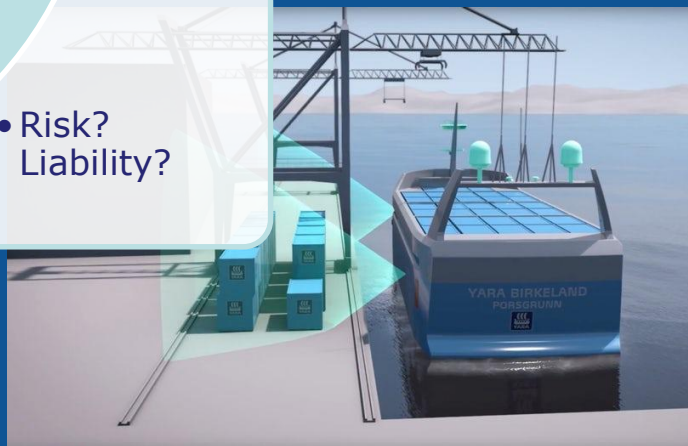
http://www.railway-technology.com 23/03/2017

Rail speeds up ERTMS roll out

Automatic Train Operation in rail freight sector is the future

https://www.railfreight.com/business/2017/09/20/

- Is it cybersecure?



- Risk? Liability?

The *umbrella* strategy

EU Cybersecurity Strategy: An Open, Safe and Secure Cyberspace

Digital Agenda for Europe

1. Cyber resilience
   - NIS Directive (capabilities, cooperation, risk management, incident reporting)
   - Raising awareness

Justice and Home Affairs

2. Reduce cybercrime

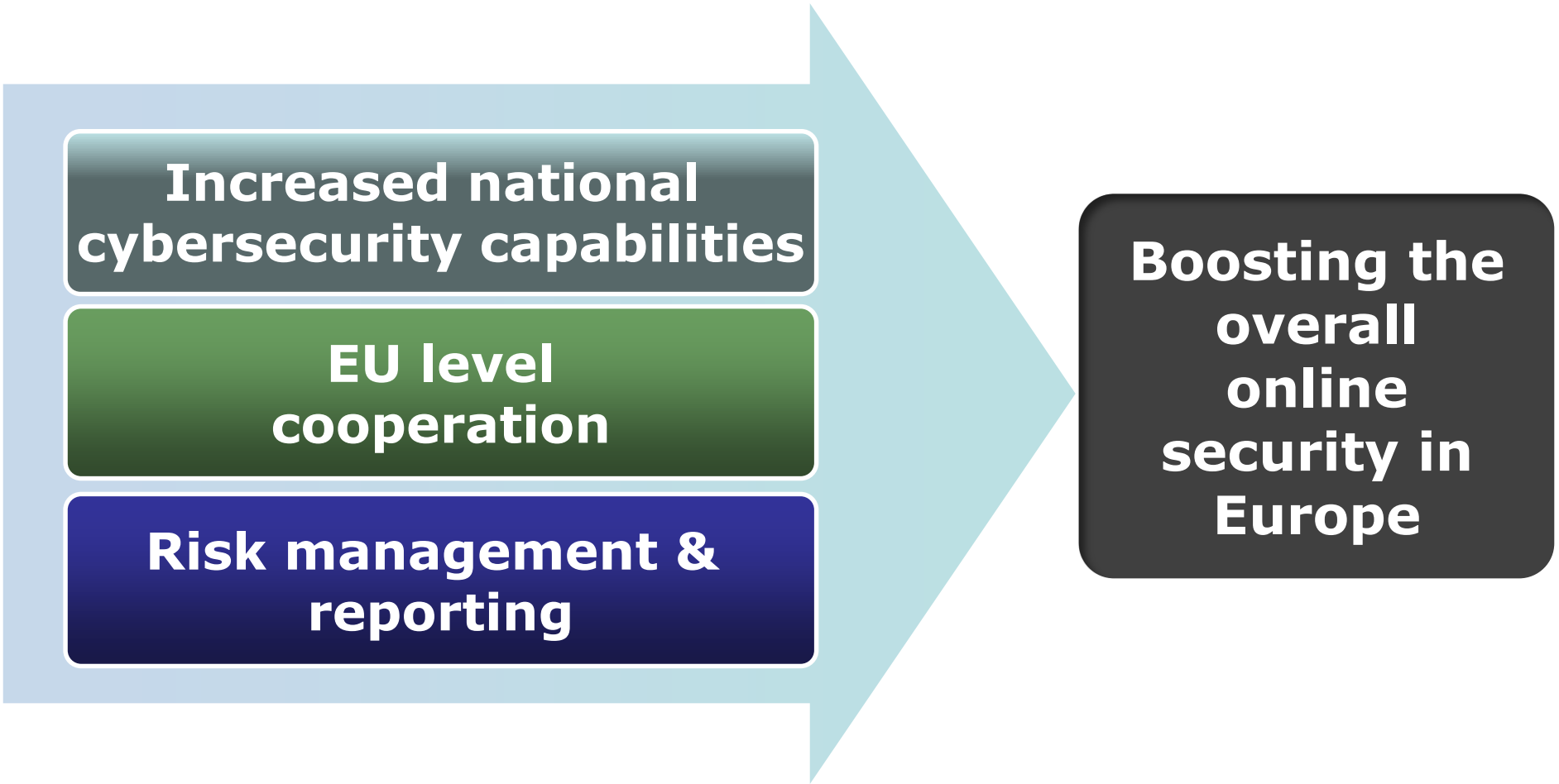
EU Foreign and Security Policy

3. Cyber defence policy and capabilities
5. International cyberspace policy

4. Industrial and technological resources: NIS platform; H2020

- Fundamental rights apply both in physical and digital world
- Cybersecurity depends on and contributes to protecting fundamental rights
- Access for all
- Democratic and efficient multi-stakeholder governance
- Cybersecurity is a shared responsibility

The NIS Directive: objectives



Capabilities

All MS to have in place

- **NIS National strategy**
- **NIS competent national authority**
- **Computer Security Incident Response Team (CSIRT)**

Cooperation

Cooperation Group

what: strategic cooperation
who: MSs; EC (secretariat), ENISA

CSIRT network

what: operational cooperation
who: national CSIRTs; CERT-EU; ENISA (secretariat)

Security and notification requirements

Operators of essential services

- Energy: electricity, gas and oil
- Transport: air, rail, water and road
- Banking: credit institutions
- Financial market infrastructure
- Health: healthcare providers
- Water: drinking water supply and distribution
- Digital infrastructure: internet exchange points, domain name system service providers, top level domain name registers

Security and notification requirements

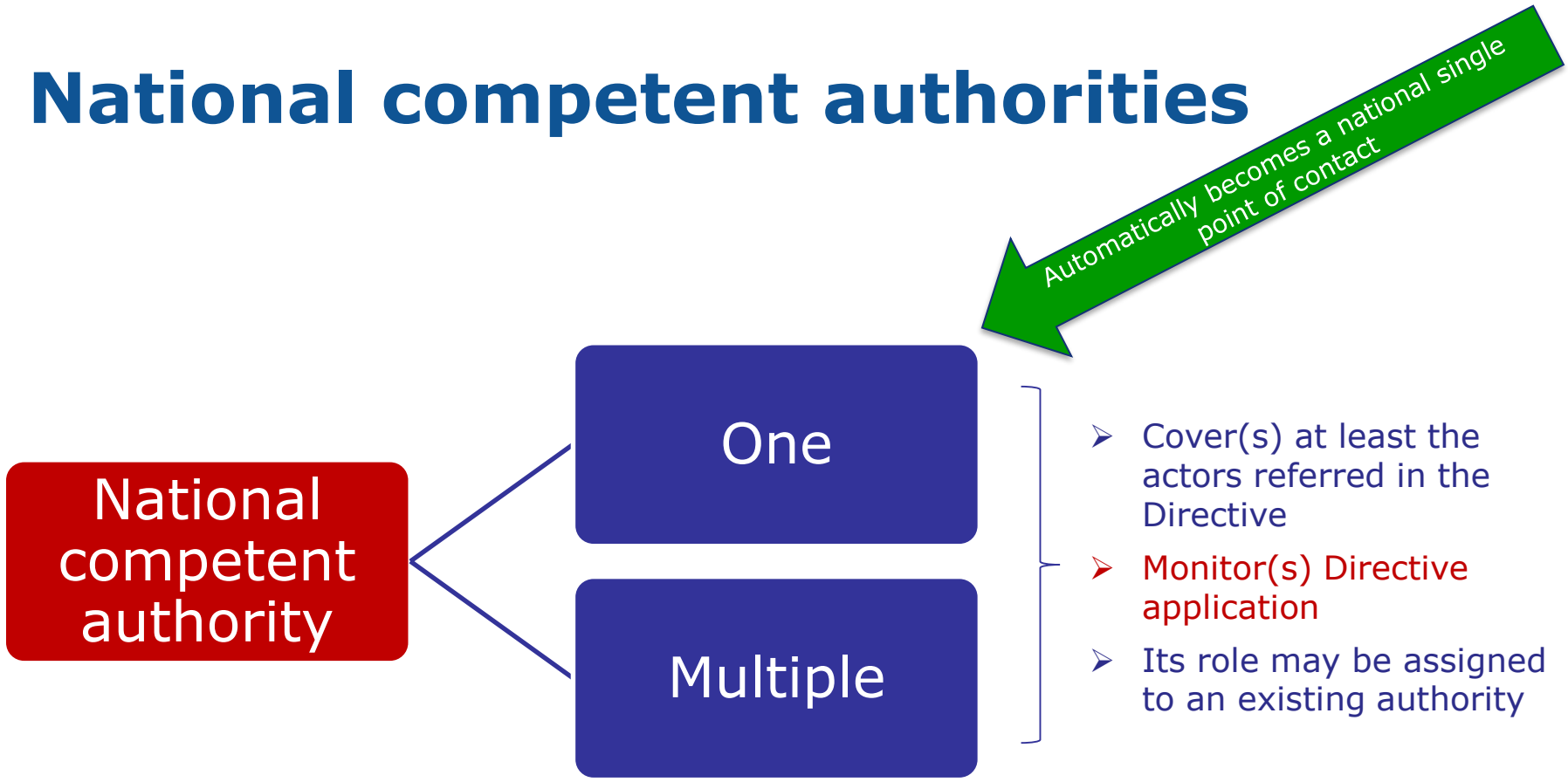
Digital Services Providers (DSPs)

- Online market places
- Cloud computing services
- Search engines

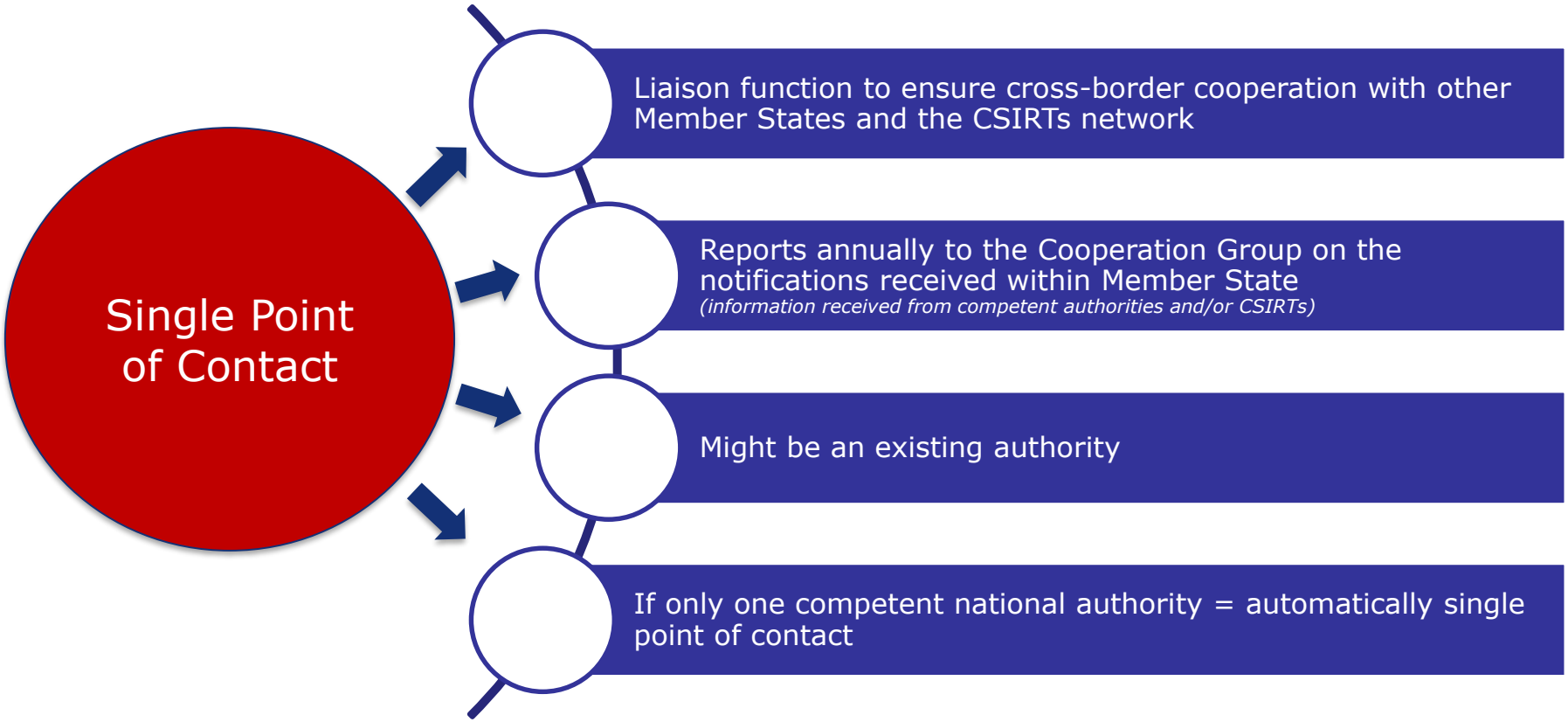
European Commission

Capabilities

National competent authorities



Single Point of contact



Cooperation

Cooperation Group - Overview

Aims

- Foster EU-level **strategic** cooperation
- Build trust & confidence

Composition

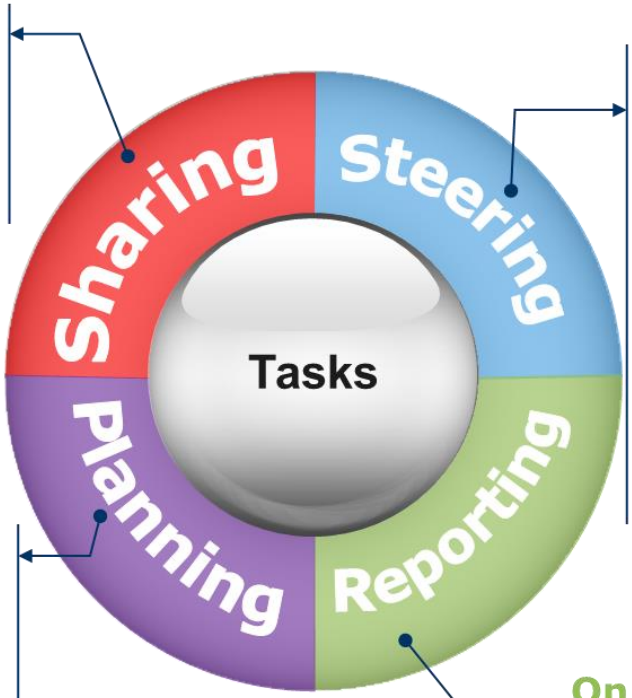
- Member States
- ENISA
- European Commission (secretariat)

Work to start 6 months after entry into force

EC will establish operational rules and procedures via implementing act

Cooperation Group - Tasks

Information &Best practices on
- Risks
- Incidents
- Awareness raising
- Training
- R&D

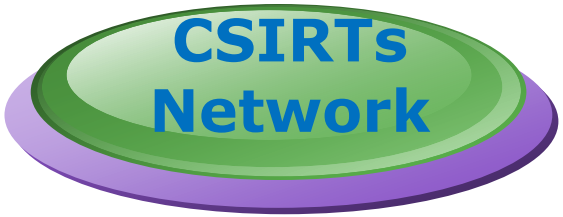


Policy coordination
- guidance for **CSIRTs Network**
- assist MSs in NIS **capacity building**
- support MSs in the **identification of operators of essential services**
- discuss **incident notification practices**
- Discuss **standards**
- Engage with relevant EU institutions
- Evaluate NIS national strategies and CSIRTs (voluntary)

Work of the Group
- Establish a **work programme** by 18 months after entry into force
- Prepare WP every 2 years thereafter

On progress
- Every 1,5 yrs provide a **report** as input to EC's review of the Directive

CSIRTs Network- Overview



Aims

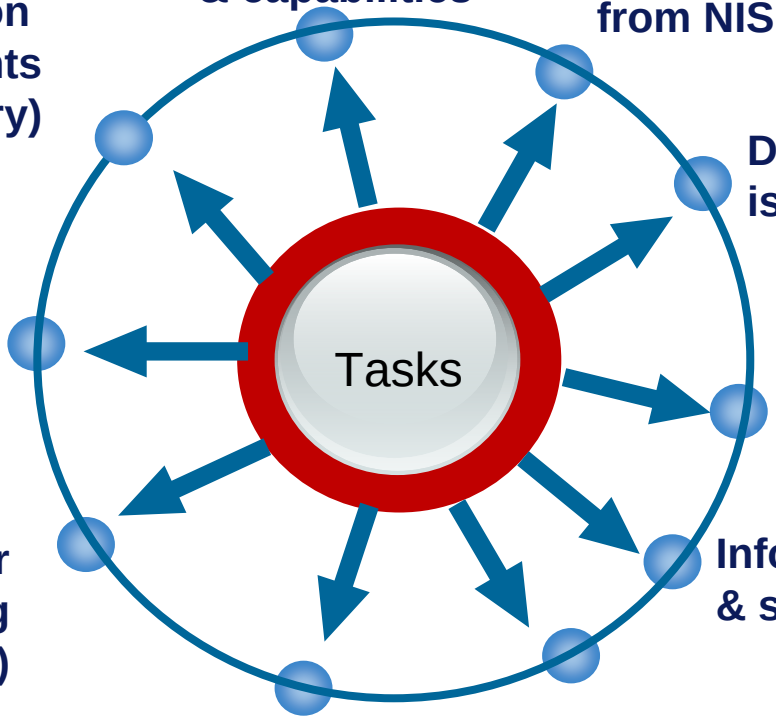
- Foster EU-level **operational** cooperation
- Build trust & confidence

Composition

- National CSIRTs
- CERT-EU
- ENISA (secretariat)
- European Commission (observer)

CSIRTs Network will establish its own **rules of procedures**

CSIRTs Network - Tasks



Exchange info on CSIRTs services, operations & capabilities

Discuss lessons learnt from NIS exercises

Exchange info on individual incidents (on request & voluntary)

Discuss individual CSIRT issues (on request)

Identify coordinated response to incidents (on request & voluntary)

Guidelines on Operational cooperation

Support cross-border incident handling (voluntary)

Inform Cooperation Group & seek guidance

Explore further forms of operational cooperation

Report as input to EC review every 1,5 yrs

Identification of operators of essential services

Each MS will identify the entities subject to security and notification obligations by applying these **criteria:**

1. The entity provides a **service** which is **essential** for the maintance of critical societal/economic activities

2. The provision of that service **depends** on **network and information systems**; and

3. A NIS incident would have **significant disruptive effects** on the provision of the essential service

Lex specialis

Notification requirements

MSs shall ensure notifications without undue delay to the competent authority or to the CSIRT.

Operators of Essential services

"incidents having a significant impact *on the continuity of the essential services they provide.[...]"*

Digital Services providers

"any ***incident having a substantial impact on the provision*** *of a service as referred to in Annex III that they offer within the Union"*

Member States' different provisions

Operators of essential services

MSs are **not prevented** from adopting/maintaining provisions with a view of achieving a **higher security** of networks and information systems.

Digital services providers

Member States are **not allowed** to impose any further security or notification requirements

Implementation and Enforcement

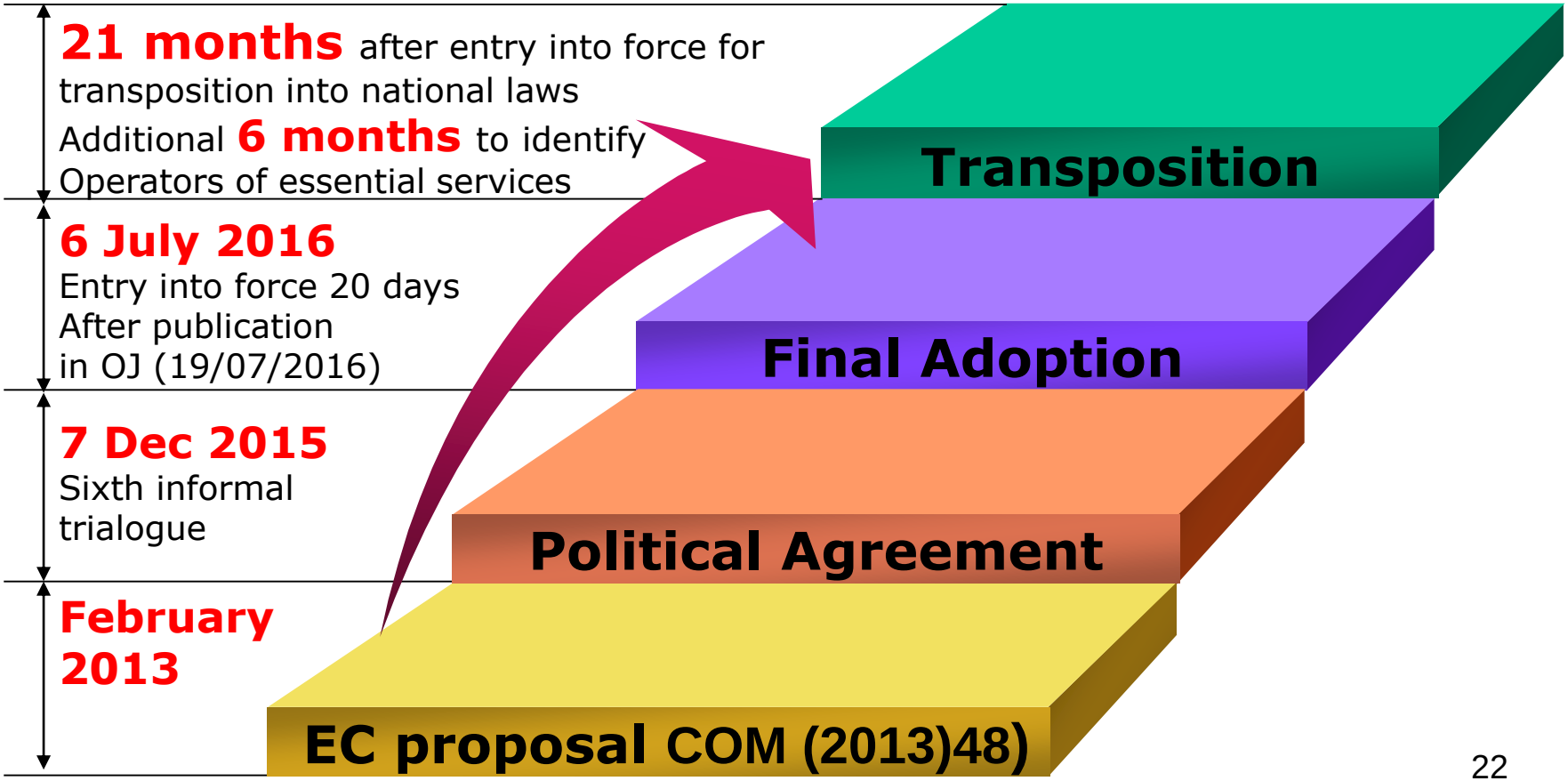
Operators of essential services

Competent national authorities should have the necessary powers/means to **assess the compliance** with the Directive and issue enforcement measures if necessary.

Digital services providers

The competent national authorities are entitled to carry out solely reactive **ex-post supervisory activities** in line with the light-touch regulatory approach applicable to DSPs.

The NIS Directive: from proposal to transposition



Cybersecurity contractual Public-Private Partnership (cPPP)

- Stimulate the **competitiveness and innovation** capacities of the digital security and privacy industry in Europe
- Ensure a sustained **supply of innovative cybersecurity products and services** in Europe

Thank you for your attention!