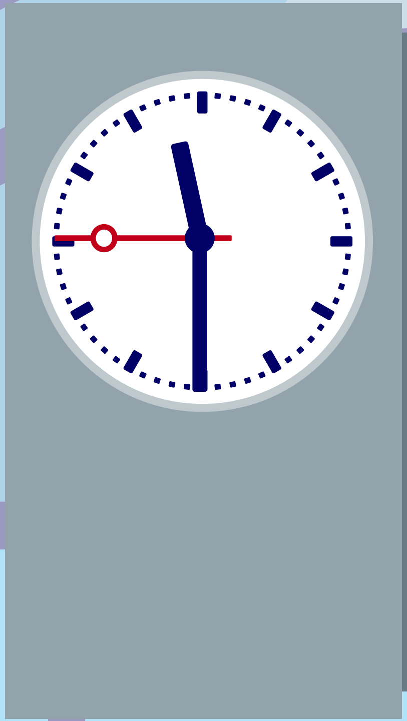


Pearls and Perils of Sectoral Cooperation

Joseph Mager

NS Cybersecurity

November 2023

Personal Pearls and Perils

brunch
USUAL SUSPECTS
HSV
Roberts Point Viewing Platform
605m
WIJ ZIJN ROTTERDAM
Do not go past this point.
Bluffs and steep drop offs surround this area.
You cannot access the glacier from here.
MEIN HERZ SCHLÄGT NUMA HIER
Return the way you came - stay on track.

rnhem Centraal
Reisinformatie
Reisinformatie
NS

Digitalisation

Increase in Legislation

Threat Landscape

Sectoral Cooperation

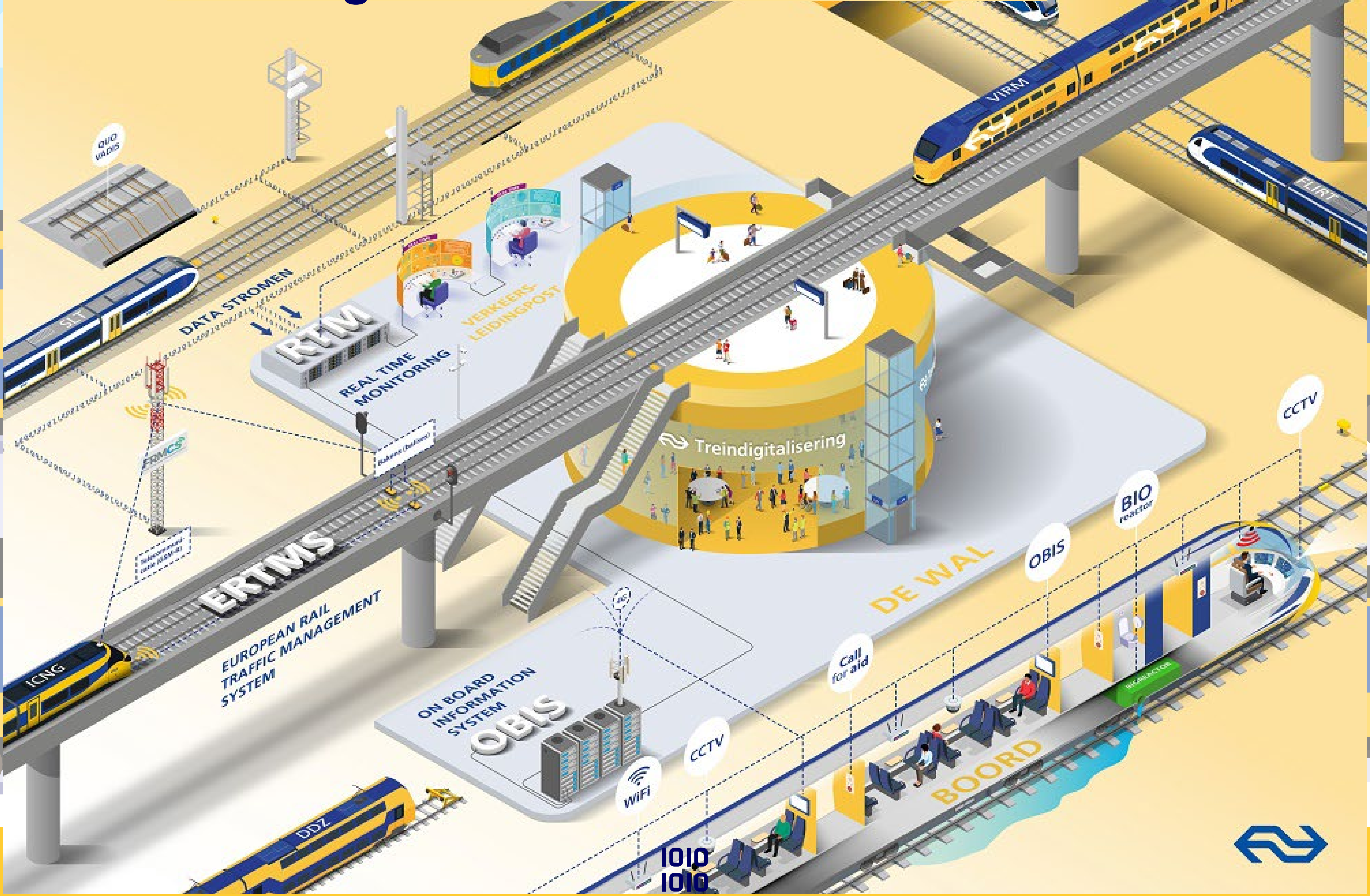
Pearls

Perils

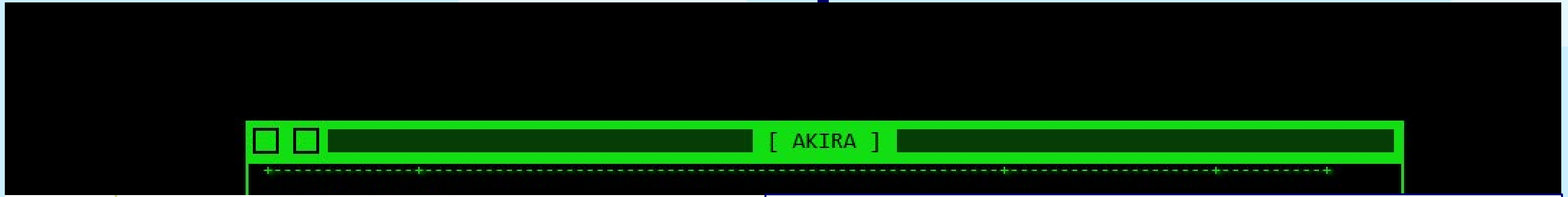
Lessons Learned

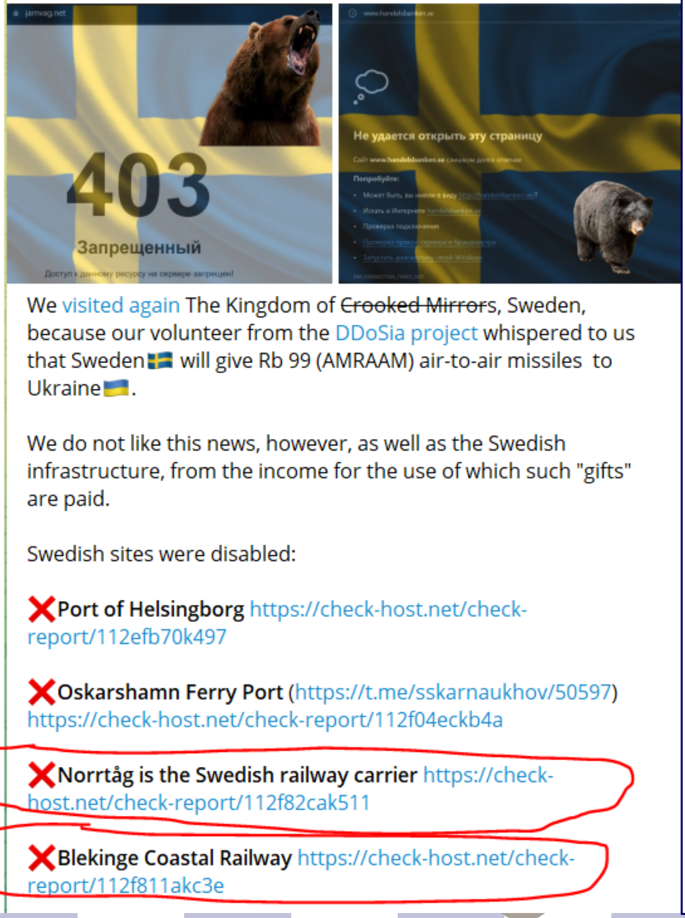
06
59

Digitalization in our sector



Threat landschape for Rail





We visited again The Kingdom of ~~Crooked Mirrors~~, Sweden, because our volunteer from the DDoSia project whispered to us that Sweden🇸🇪 will give Rb 99 (AMRAAM) air-to-air missiles to Ukraine🇺🇦.

We do not like this news, however, as well as the Swedish infrastructure, from the income for the use of which such "gifts" are paid.

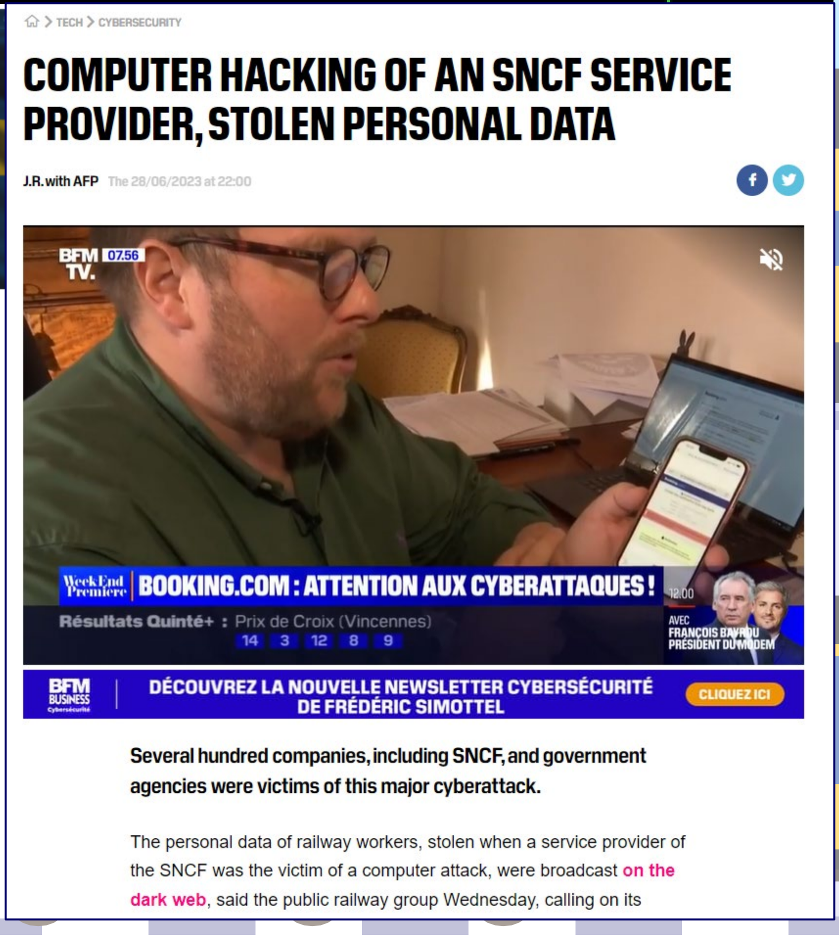
Swedish sites were disabled:

❌**Port of Helsingborg** https://check-host.net/check-report/112efb70k497

❌**Oskarshamn Ferry Port** (https://t.me/sskarnaukhov/50597) https://check-host.net/check-report/112f04eckb4a

❌**Norrtåg is the Swedish railway carrier** https://check-host.net/check-report/112f82cak511

❌**Blekinge Coastal Railway** https://check-host.net/check-report/112f811akc3e


BOOKING.COM : ATTENTION AUX CYBERATTAQUES !
Résultats Quinté+ : Prix de Croix (Vincennes) 14 3 12 8 9

TECH > CYBERSECURITY

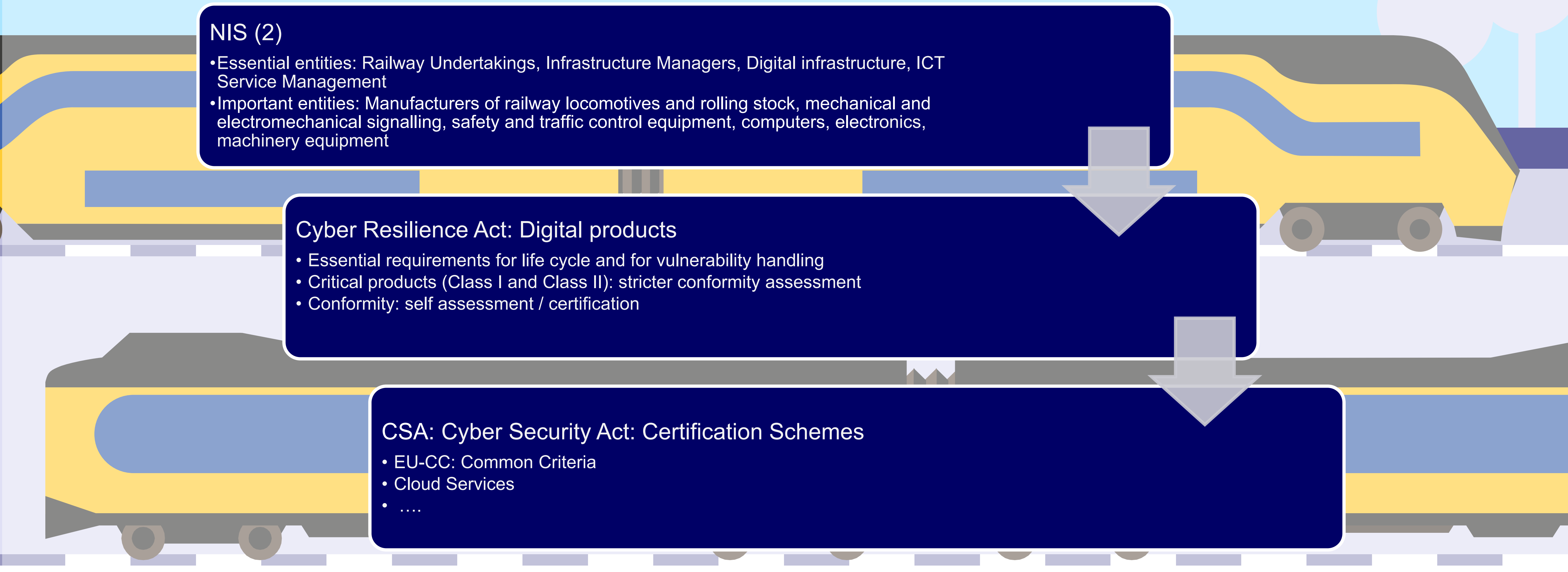
COMPUTER HACKING OF AN SNCF SERVICE PROVIDER, STOLEN PERSONAL DATA

J.R. with AFP The 28/06/2023 at 22:00

Several hundred companies, including SNCF, and government agencies were victims of this major cyberattack.

The personal data of railway workers, stolen when a service provider of the SNCF was the victim of a computer attack, were broadcast on the dark web, said the public railway group Wednesday, calling on its

Legislation



NIS (2)

- Essential entities: Railway Undertakings, Infrastructure Managers, Digital infrastructure, ICT Service Management
- Important entities: Manufacturers of railway locomotives and rolling stock, mechanical and electromechanical signalling, safety and traffic control equipment, computers, electronics, machinery equipment

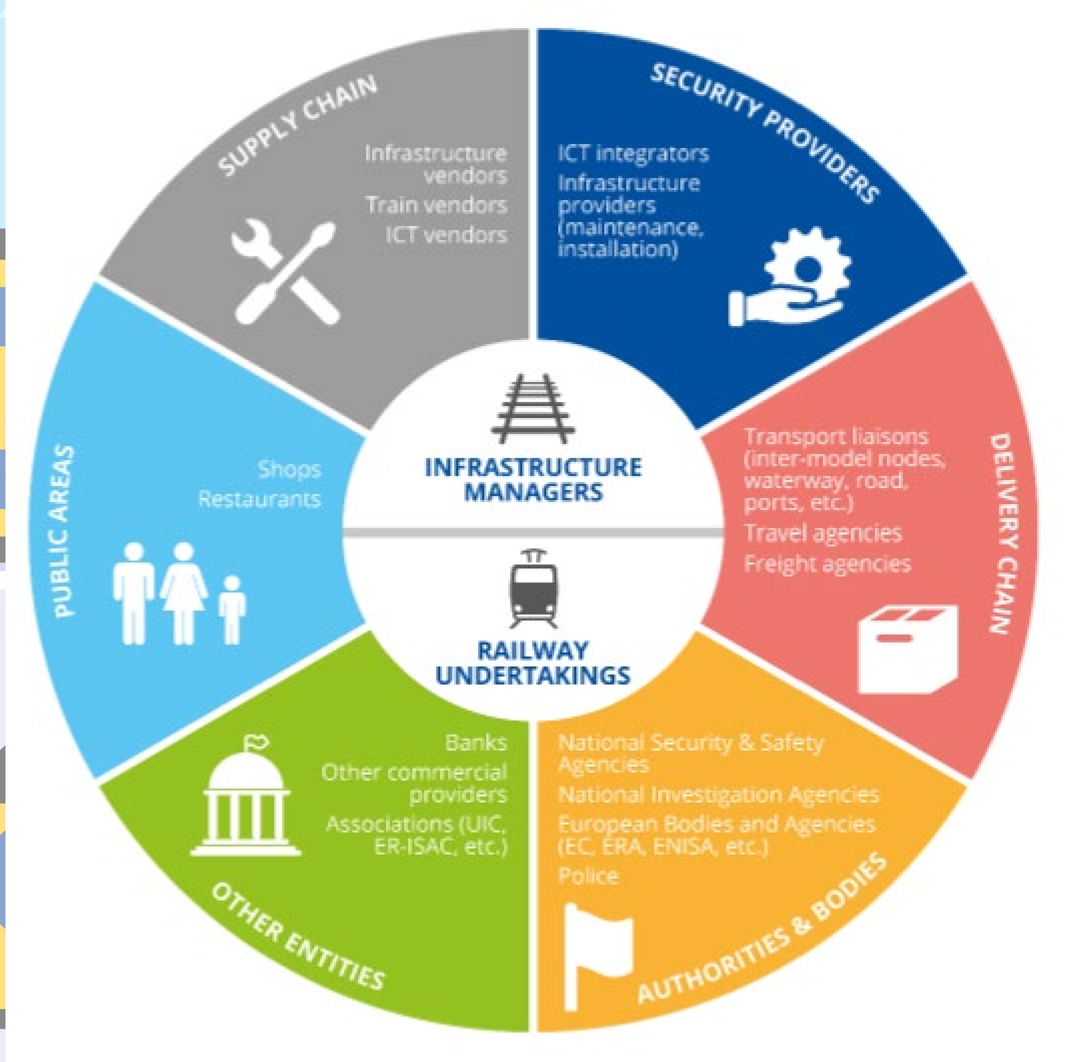
Cyber Resilience Act: Digital products

- Essential requirements for life cycle and for vulnerability handling
- Critical products (Class I and Class II): stricter conformity assessment
- Conformity: self assessment / certification

CSA: Cyber Security Act: Certification Schemes

- EU-CC: Common Criteria
- Cloud Services
- ….

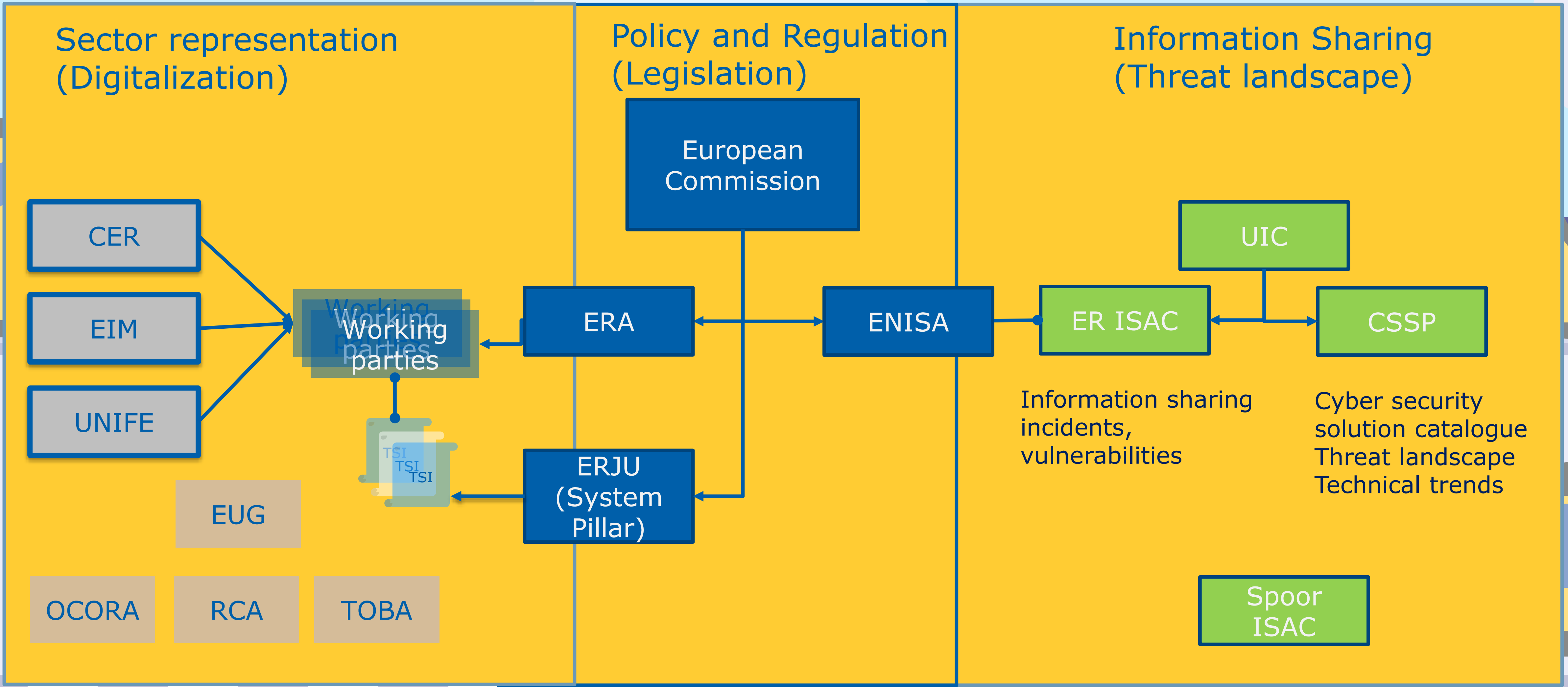
Overview of Sectoral Ecosystem


SUPPLY CHAIN
Infrastructure vendors
Train vendors
ICT vendors
SECURITY PROVIDERS
ICT integrators
Infrastructure providers (maintenance, installation)
DELIVERY CHAIN
Transport liaisons (inter-model nodes, waterway, road, ports, etc.)
Travel agencies
Freight agencies
AUTHORITIES & BODIES
National Security & Safety Agencies
National Investigation Agencies
European Bodies and Agencies (EC, ERA, ENISA, etc.)
Police
OTHER ENTITIES
Banks
Other commercial providers
Associations (UIC, ER-ISAC, etc.)
PUBLIC AREAS
Shops
Restaurants
INFRASTRUCTURE MANAGERS
RAILWAY UNDERTAKINGS

- Railway Undertakings
- Infrastructure Managers
- Manufacturers of rolling stock
- Manufacturers of railway equipment
- ICT service providers
- Manufacturers of ICS/ OT equipment
- Manufacturers of ICT equipment

Source: Enisa report on railway cybersecurity

Initiatives for Cooperation



Sector representation (Digitalization)

CER

EIM

UNIFE

Working parties

TSI

EUG

OCORA

RCA

TOBA

Policy and Regulation (Legislation)

European Commission

ERA

ERJU (System Pillar)

ENISA

Information Sharing (Threat landscape)

UIC

ER ISAC

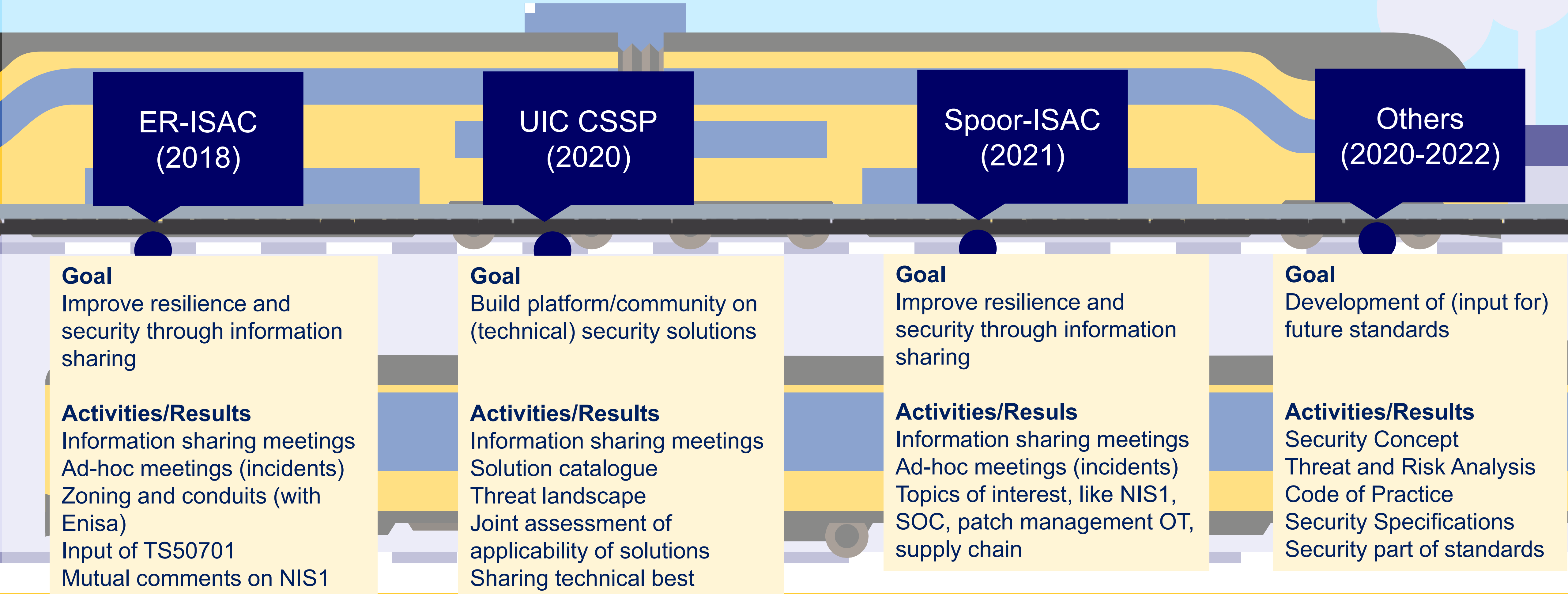
CSSP

Information sharing incidents, vulnerabilities

Cyber security solution catalogue
Threat landscape
Technical trends

Spoor ISAC

Pearls of Sectoral Cooperation



ER-ISAC (2018)

Goal
Improve resilience and security through information sharing

Activities/Results
Information sharing meetings
Ad-hoc meetings (incidents)
Zoning and conduits (with Enisa)
Input of TS50701
Mutual comments on NIS1

UIC CSSP (2020)

Goal
Build platform/community on (technical) security solutions

Activities/Results
Information sharing meetings
Solution catalogue
Threat landscape
Joint assessment of applicability of solutions
Sharing technical best practice (f.i. IAM, patching)

Spoor-ISAC (2021)

Goal
Improve resilience and security through information sharing

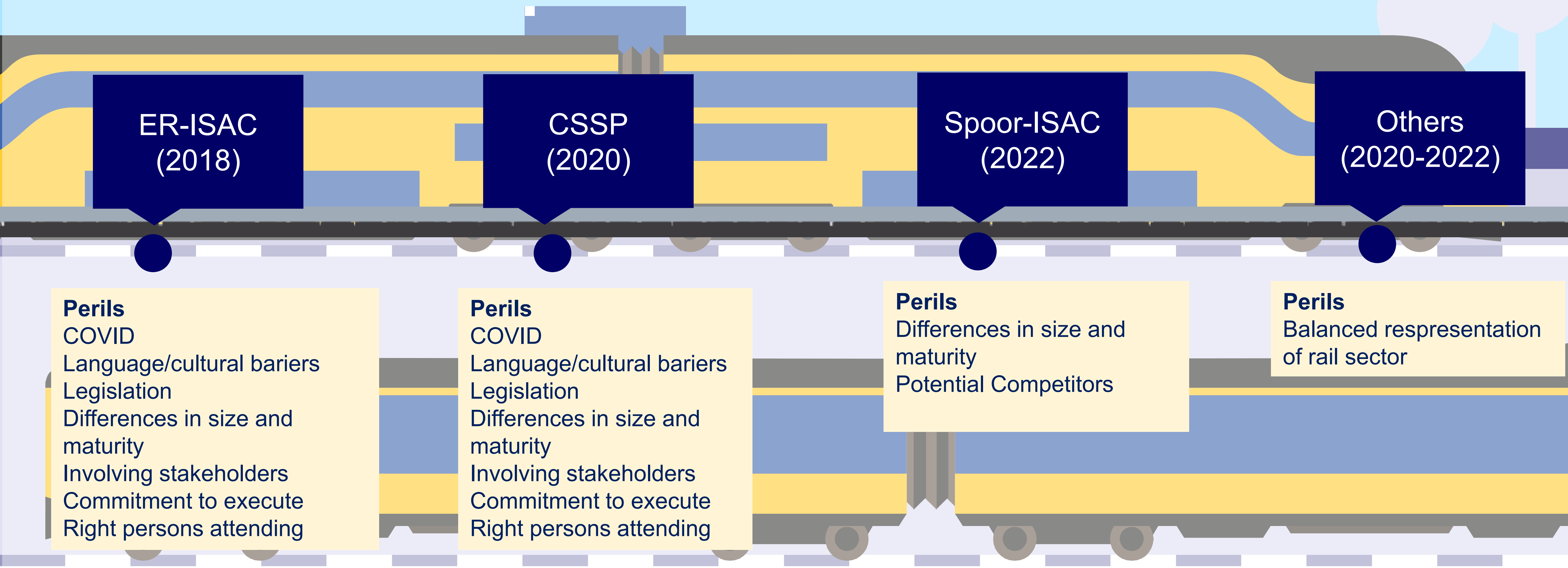
Activities/Resuls
Information sharing meetings
Ad-hoc meetings (incidents)
Topics of interest, like NIS1, SOC, patch management OT, supply chain

Others (2020-2022)

Goal
Development of (input for) future standards

Activities/Results
Security Concept
Threat and Risk Analysis
Code of Practice
Security Specifications
Security part of standards

Perils of Sectoral Cooperation



ER-ISAC (2018)

CSSP (2020)

Spoor-ISAC (2022)

Others (2020-2022)

Perils
COVID
Language/cultural bariers
Legislation
Differences in size and maturity
Involving stakeholders
Commitment to execute
Right persons attending

Perils
COVID
Language/cultural bariers
Legislation
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Right persons attending

Perils
Differences in size and maturity
Potential Competitors

Perils
Balanced respresentation of rail sector

Turning Perils into Pearls

ER-ISAC

Maturity assessment

- 13 domains
- 1.5 on a scale of 1 to 5

Stakeholder interviews

Meet project

- Focus on improving 6 of the 13 domains
- Cooperation with other ISACs

Reboot information flow

Succes factors from a study on cooperation

Trust

Open and transparant communication

Leadership

Shared goals

Evaluation

Expertise

Knowledge transfer

Turning Perils into Pearls

CISO Forum (Est. 2023)

- Strategic direction
- Common voice
- Commitment and empowerment
- Network of CISOs

Lessons Learned

- Cooperation needs trust and builds trust
- International cooperation differs from national
- Involvement and commitment of senior executives
- Building communities takes time and perserverance

Time for Discussion

What is your experience:

- Is cooperation needed?
- What are the pearls you have discovered?
- Which perils did you have to circumvent?
- How can we learn from each other?

Check out:

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