

Auditing the Resilience of Critical Information Infrastructure in Europe

EUROSAI WGAFADC meeting May 21, 2025

State of play in Europe regarding CII the scope







Manufacture, production and distribution of chemicals

Manufacturing

Research

Postal and courier services

Waste management Production, processing and distribution of food

Digital providers







State of play in Europe regarding CII key cyber risks



Ransomware

• for instance, Lockbit

Supply chain attacks

• for instance, Solarwinds

Russia's war of aggression

• for instance, wipers, subsea cables

Industrial and state espionage

• for instance, NXP, ASML

Foreign interference

• for instance, EU elections

ICT supply chain risks

• for instance, 5G

Emerging threats (IoT, AI)

• for instance, deepfake social engineering



State of play in Europe regarding CII NIS2 is reshaping the picture

WHAT YOU NEED TO KNOW

Coordinated

Cyber crisis

policy

vulnerability disclosure

management framework



level of cybersecurity across the Union on the basis of three pillars:

Cybersecurity risk

Incident reporting

management bodies

Responsibility of

management measures

Its aim is to ensure a high common

The NIS2 directive is a flagship EU-wide legislation on cybersecurity.

NIS2 requires each Member State to transpose its provisions into national law by 17 October 2024 **NATIONAL CAPABILITIES** COOPERATION AT UNION LEVEL Cybersecurity strategy National Competent Authority (NCA) Cybersecurity Incident **OBLIGATIONS FOR** •NIS Cooperation Group Response Team (CSIRT) **ENTITIES** • CSIRTs Network

•EU-CyCLONe

the Union on

cybersecurity

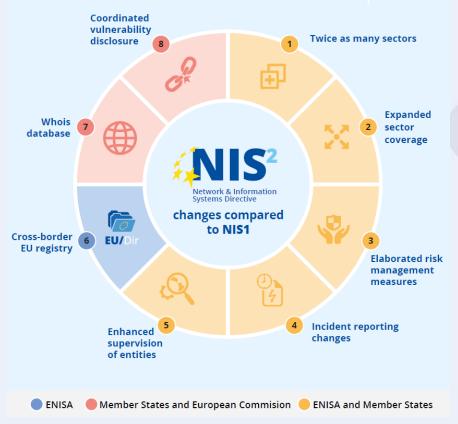
•EU vulnerability database

• EU registry for entities

• Report on the state of

FROM NIS1 TO NIS2: WHAT'S NEW





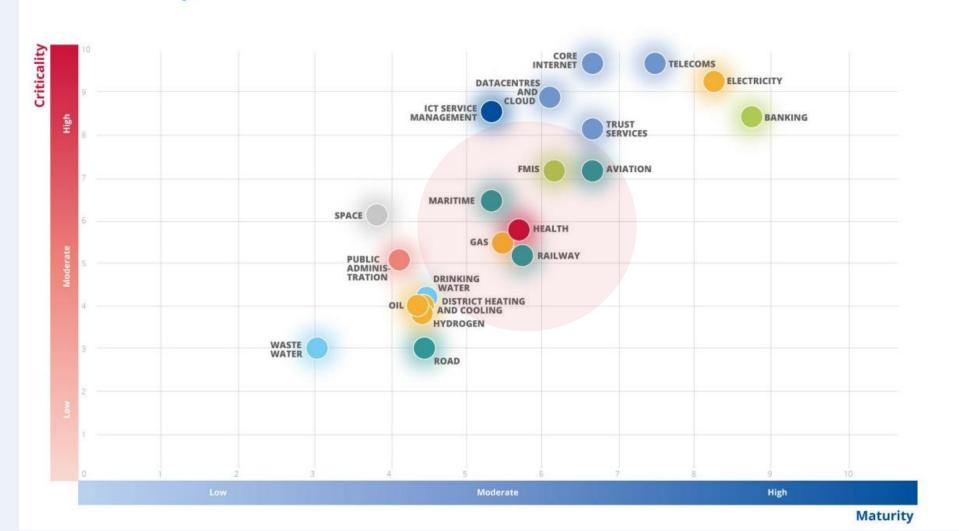




State of play in Europe regarding CII criticality vs maturity

EUROSAI IT Working Group

ENISA NIS360 Quadrant





Auditing CII in Europe some overall remarks



- » Different mandate of SAI-s (for example, in Germany BSI, Federal Office for Information Security, is performing CII audits and also provides assistance to CII operators).
- » Focussing on single area like business continuity management in CII providers in Slovenia – on long-term basis, develops internal SAI capacity and raises awareness in the society (instead of targeting wide range of topics).
- » SAI's maturity assessment based on strong framework might be a valuable tool for long-term audit, providing a unified approach and creating basis for follow-up work.
- >> While it's natural to focus on large CII operators, it's equally important to look at government entities developing and managing CII (for example, interoperability issues and wider coordination in the government).

Auditing CII in Europe main findings



- » Incomplete identification and assessment of IS risks, missing or insufficient mapping of measures to identified risks, no systematic implementation (Slovenia* and Germany).
- Insufficient competence, training and awareness raising, inadequate document control, conflict of interest and low level of reliability checks (Finland, Germany).
- » No systematic business impact analysis, limited focus on alert and report chains (Slovenia* and Germany).
- » No Business Continuity Management System (Slovenia*).
- » No centralized asset inventory, missing linkage between assets and risk management (Germany).

Auditing CII in Europe critical success factors



- » Only holistic approach can have lasting impact across all organizational levels (Germany).
- » Well-thought-out organizational policies, clear definition of roles and reliable, wellinformed employees (Germany, Switzerland).
- » Implementing and incorporating updates and life-cycle of system into maintenance contracts (Switzerland).
- » Establishing proper access control system (Switzerland).
- » Practicing response plans and emergency organizations (Switzerland).
- » Binding and cross-sectional guidelines (Switzerland).
- >> Ensure communication and information flow in the event of an accident (Switzerland).
- » Monitoring and controlling resilience measures (Switzerland).
- » Maturity level of information security and business continuity is lowest in health and transport&traffic sectors (Germany, ENISA).

Thank you for your attention!



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