

Network code for cybersecurity aspects of cross-border electricity flows (NCCS)

NISDUC Conference, 26 April 2023

Michaela Kollau DG ENERGY, Unit B4: Energy security and safety

Cybersecurity in energy: context

- The electricity sector in the Union is undergoing a profound transformation, characterised by more decentralised markets with more players, a higher proportion of energy from renewable sources, and more digitalised and interconnected systems
- The **digitalisation of the energy system** can deliver a strong contribution to energy security and climate goals, by making our energy system more efficient, more flexible and more resilient.
- But it **also brings along new challenges** related to the cybersecurity of our European energy infrastructure and the reliance of its electricity grid.
- Cybersecurity is, now more than ever, a key horizontal requirement for a secure and robust energy system.

NCCS: Scope and objectives

- Applies to a subsector of the Energy sector, Electricity. Within electricity subsector, the scope of applicability is limited to entities with impact on cross-border electricity flows. The risk assessment will identify which entities are most relevant and what security measures they need to apply.
- Complementing and building upon NIS2 to include sector-specific cybersecurity. requirements
- It provides more precise instructions and procedures, designed by electricity stakeholders together with cybersecurity experts, for the electricity sector.
- The NCCS specifies measures in a coordinated way with industry contribution and the outcome is ready to be used by different Competent Authorities.



Why a NCCS?

• Specific characteristics of the energy sector

- Cybersecurity legislation
 Electricity legislation

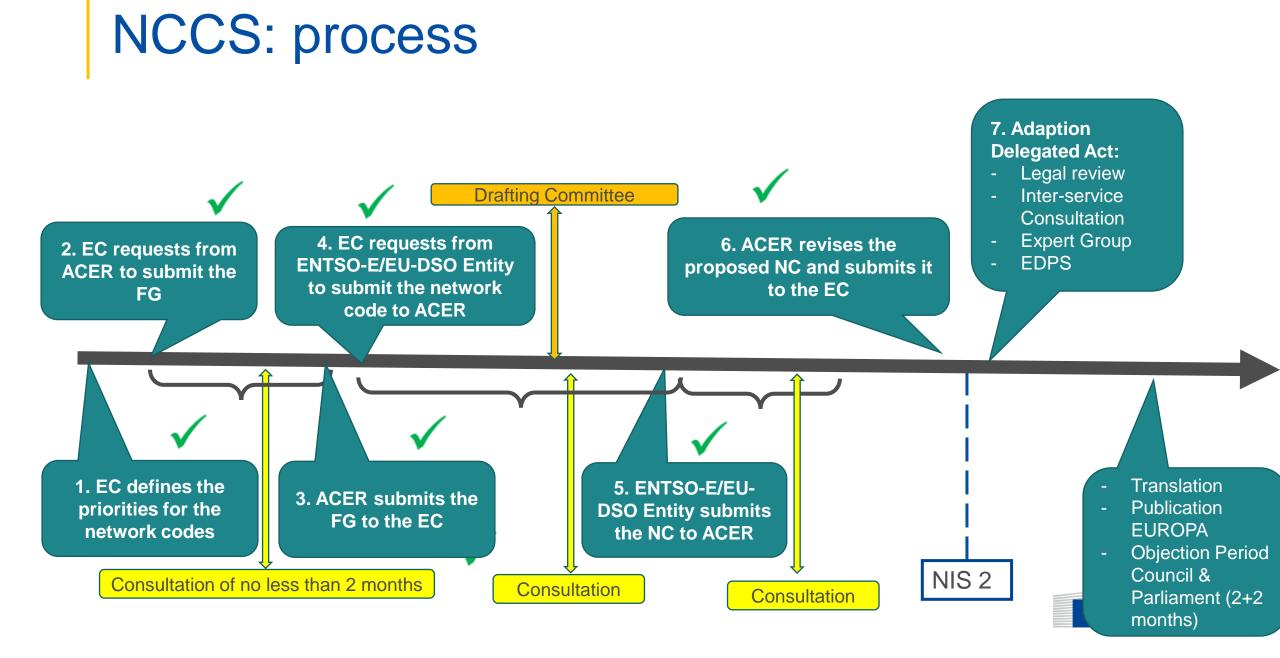
• Specific Solution



Network Code on cybersecurity: legal basis

- Electricity Regulation (EU) 2019/943, Article 59 (2) empowers the Commission to adopt a delegated acts supplementing this Regulation in accordance with Article 68 concerning the establishment of network codes in respective areas.
- For cybersecurity the Article 59 (2) (e) foresees sector-specific rules for cyber security aspects of cross-border electricity flows, on common minimum requirements, planning, monitoring, reporting and crisis management.





NCCS: State of play

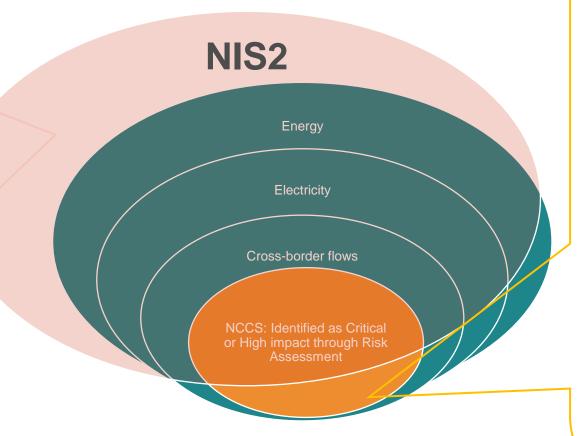
- ACER has reviewed the proposed network submitted by ENTSO-E and EU DSO Entity to ensure it complies with the relevant Framework Guidelines and contributes to market integration, nondiscrimination, effective competition and the efficient functioning of the market.
- Commission (DG ENER) has received it and has started the **adoption process**. Currently the legal team from DG ENER and the Legal Service of the Commission are reviewing the text.
- **Bilateral discussions** with MS authorities and associations (DG ENER)
- Presented in WS energy NIS Cooperation Group on 17.3.22, 21.09.2022 and Council Horizontal Working Party on Cyber on 8.12.2021, 22.3.2022, other energy fora in 2023



NCCS: Scope of applicability



- Electricity undertakings referred to in point (57) of Article 2 of Directive (EU) 2019/944 carry out the function of 'supply'
- Distribution system operators
- Transmission system
 operators
- Producers
- Nominated electricity market operators
- Electricity market participants providing aggregation, demand response or energy storage services
- smart charging operators (new)



Additionally to current NIS2 proposal, the NCCS covers the following entities (*):

- Organised market place
- NEMOs (nominated el. Market operators.)
- ENTSO for Electricity, EU DSO entity
- European Union Agency for the Cooperation of Energy Regulators (ACER)
- National regulatory authorities (NRAs)
- NCCS National Competent Authority
- National competent authorities for risk preparedness (RP-NCA)
- RCCs
- Critical service providers
- Managed security service provider (MSSP)
- National competent authorities on the security of network and information systems (CS-NCA)
- Computer security incident response teams (CSIRTs)
- The European Union Agency for Cybersecurity or (ENISA)
- Any entity or third party to whom responsibilities have been delegated or assigned (*) insofar as as their activities concern cybersecurity aspects of cross-border electricity flows



The NCCS will contribute to the security of supply in cross-border flows of electricity by...

- Providing for a continuous and comprehensive approach to carry out all steps from the risk assessment to the risk treatment and continuous improvement.
- Providing **clear roles and instructions** to carry out such steps by different stakeholders and authorities, electricity and cyber, including their interactions (what, when, how).
- Contributing to a higher common level of cybersecurity across the Union, providing guidance on how to **identify and implement specific controls**
- Enhancing **information sharing** (timely and fast) between electricity undertakings and cybersecurity bodies in EU on cyber vulnerabilities and incidents.
- Defining and **coordinating the electricity and cybersecurity procedures** when handling electricity incidents and crises with a cyber component;
- Defining procedures for an **exercise framework** to enhance preparedness of all operators to deal with electricity incidents with cybersecurity components;
- Providing a set of rules for the protection of information exchange among the different stakeholders in electricity and cyber domains;



• Providing for a framework for monitoring, benchmarking and reporting

Thank you



© European Union 2020

Unless otherwise noted the reuse of this presentation is authorised under the <u>CC BY 4.0</u> license. For any use or reproduction of elements that are not owned by the EU, permission may need to be sought directly from the respective right holders.



Slide xx: element concerned, source: e.g. Fotolia.com; Slide xx: element concerned, source: e.g. iStock.com