ECDSO-E and Security of Supply

ECDSO-E meeting, Vienna, 17 April 2018

❖ Security of Supply

- Treaty – Title III – Article 29: **SoS Statements**

- Treaty – Title IV – Article 46: **Procedural act on mutual assistance**

❖ PA 2008/02/MC-ENC

- Establishment of SoS Coordination Group (11 December 2008),

- Electricity SG (2001)

  - EC, Parties (representatives) – EnC-CPs, Title III Countries (voluntary)

  - TSO, local industry – upon invitation (becoming common practice)

  - Industry associations (ENTSO-E, EFET, EURELECTRIC) – upon invitation

  - Meetings – once a year (December), ad hoc / urgency meetings (possibility)

  - Agenda – winter preparedness (review), legal developments (TYNDP, generation adequacy, NC / GL, clean energy package, RES, licensing), security coordination centres, data transparency (ETUG), specific topics and events (market restriction cases, countries in focus)

ECDSO-E activities in SoS (proposal)

❖ **TSO-2-DSO**

- Coordination between network layers

  o Structural aspects (definition, integration, compatibility, TPA, network capacity, development planning, network security)

  o Operational aspects (dispatching, balancing, demand management)

  o data transparency, monitoring, data transfer (channels), smart grid functions

- RES integration

  o RES connection (DSO), dispatching (central), balance responsibility – aggregators, concentrators, prosumers, mandatory buyout, access to market

  o Network services, cross-border trade aspects (congestions, redispatching), end-user supply aspects (curtailment), demand management

  o RES deployment - support mechanisms, VAT, public procurements, licensing

ECDSO-E activities in SoS (proposal)

❖ Cybersecurity

- Cyber attacks on electricity networks (successful)

  o **Ukraine, December 2015** – three Oblenergo (DSO) systems compromised: **Prykarpattya** – switched off 30 SS (230.000 citizens) for a period of 6 hours; **Chernivtsi** and **Kiyv** to lower extent - imposed vast damage on systems and data

  o **Ukraine, December 2016** – 330 kV Transmission SS **Kiyv North** SCADA system compromised causing blackout for 1/5 of Kiyv demand for one hour – advanced, automated malware, swappable, adaptable and universal, simultaneous threat to multiple systems

- NIS Directive - (EU) 2016/1148

  o ECS prepared draft adaptation and a Recommendation for application - for the latest PHLG

  o PHLG Conclusion acknowledged the necessity to increase cybersecurity, risk management and reporting capacity – to take steps / discussions for adaptation and prepare a proposal with the appropriate timing

  o PHLG – eliminate regulatory gaps, develop cooperation in cybersecurity

Risk assessment in energy digitalization

- Proliferation of poorly secured Information and Communication Technology (ICT)

- Blurring lines between state and non-state actors

- Evolving cybercrime business models and groups

- Dependence on foreign security technologies

- Persisting critical infrastructure vulnerabilities

- Cascading effects (automation, standardization)

- Real time and time-critical requirements (RES)

- Cross-border impact

NIS Directive (essentials)

- Build sufficient capabilities at national level

- Identification of operators of essential services and digital service providers to whom security and incident notifications requirements are imposed

- Build structures for cross-border cooperation and exchange of information

- Three cumulative conditions for identification of Operators of Essential Services (OES)

- Security and Notification Requirements imposed on OES

- Monitoring and enforcement powers

NIS Directive (messages)
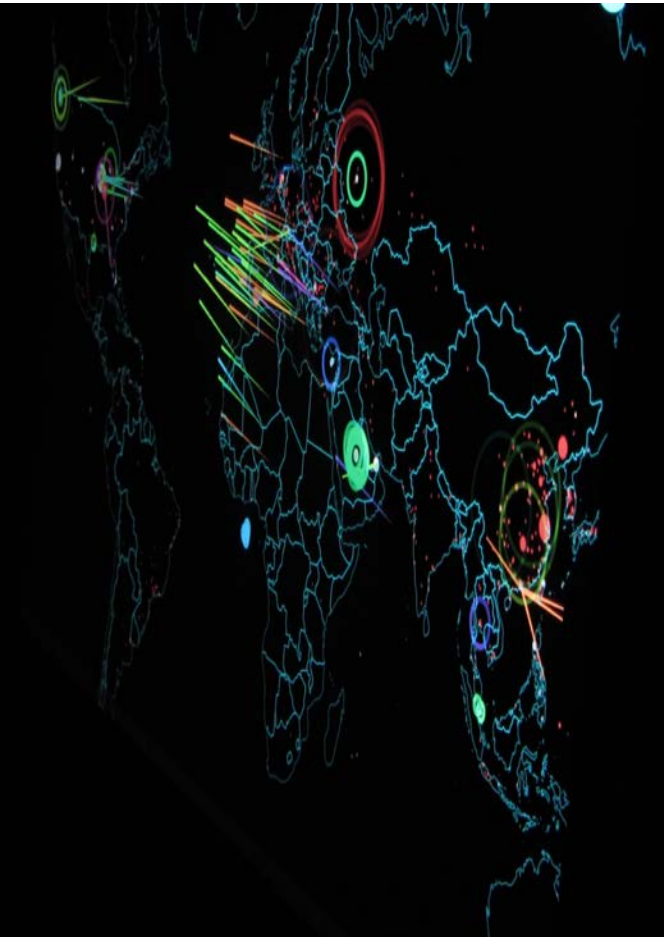
- Create a Cooperation Group between CPs and MSs

- Security of Supply Coordination Group

- Put in place a common certification framework across the single market

- Eliminate regulatory gaps across the single market

- Join efforts on research and education programmes

- Develop a common crisis management and rapid emergence response, *inter alia* through Title III or Title IV measures

- Further challenges specific to the energy sector

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