Perspectives of the Agency for the Cooperation of Energy Regulators

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Perspectives of the Agency

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Key historical milestones

- **UCPTE 1951**
- **UCTE, ETSO 1999**
- **ENTSO-E 2009**
Drivers (1)

- UCTE-wide event, 4 November 2006
  - 15 million households were cut-off, €0.5bn losses
  - ERGEG*
    - non-compliance has introduced problems not only for the non-complying TSOs but also across Europe
    - enforcing compliance is difficult as UCTE membership is voluntary
  - Commission**
    - Common binding network security standards
    - Efforts should be made to have a gradual evolution towards regional system operators

* ERGEG Final Report – Lessons to be learned from the large disturbance... [6.2.2007]
Drivers (2)

- Foreseen strong decarbonisation of energy sector
  - By 2030, renewable generation will deliver almost 50% of all electricity produced
  - Distributed and variable generation

- Ongoing market integration
  - Increased cross-border trade
  - Increasing pressure to allocate more cross-border capacities

- Growing number of interconnectors and PSTs

Call for rethinking of the currently envisaged electricity system operation design beyond 2025
Network Codes development

- Network Code on Operational Security 2nd edition (24 September 2013)
  - Article 16.10: **A TSO can entrust** a Regional Security Coordination Initiative with some of the tasks ...

- System Operation Guideline
  - Recital (6): ... **mandatory participation of TSOs** in regional security coordinators ('RSCs'). The common requirements for the establishment of RSCs and for their tasks set out in this Regulation constitute **a first step towards further regional coordination and integration of system operation** ...
Voluntary coordination (1)

On 10 December 2015, European TSOs and ENTSO-E signed a Multilateral Agreement on Participation in RSCs.

RSCs to develop in a harmonised, interoperable and standardised way under ENTSO-E’s coordination, tools, standards, and methodologies

5 core functions*:
CC, OSA, CGM, AF, OP

*https://www.entsoe.eu/major-projects/RSC/Pages/default.aspx
Voluntary coordination (2)

- **Coreso**
  - 24/7 operations, D-2 CC, D-1 studies, intraday studies, CWE FB, **close to real-time analyses based on snapshots** (2009)...

- **TSC**
  - 24/7 operations, DACF, IDCF, DOPT/WOPT, hourly snapshots for ex-post analyses
ACER/CEER: Annual Report on the Results of Monitoring the Internal Electricity Markets in 2016 (1)

A large room for improvement in the level of TSO coordination

Regional performance based on fulfilment of capacity calculations requirements – 2016 (% - scoring)

Source: ACER calculations based on NRAs and ENTSO-E (2017).
Note: Evaluation is based on frequency, coordination, use of CGM and required parameters, and hourly resolution of the applied CC methodology.
ACER/CEER: Annual Report on the Results of Monitoring the Internal Electricity Markets in 2016 (2)

Lack of trust:
One third of the national adequacy assessments, in taking a decision on whether to implement or not a CM, ignore the contribution of interconnectors to adequacy.

In most of the other countries, national adequacy assessments tend to underestimate this contribution.
ACER/CEER: Annual Report on the Results of Monitoring the Internal Electricity Markets in 2016 (3)

Recommendations to increase the level of TSOs’ coordination

NRAs and TSOs should ensure the effective and rapid implementation of all legal provisions related to TSO coordination (e.g. RSCs or potentially for ROCs in the future)
Clean Energy for All Europeans (1)

- Commission’s proposal is empowering RSCs with
  - additional coordination functions and
  - decision making powers*

thereby rendering them as Regional Operational Centres (ROCs)

The Agency supports the Commission’s proposal on ROCs

*TSOs may choose not to carry out a decision by ROC should safety of the system will be negatively affected
Clean Energy for All Europeans (2)

- Joint ACER/CEER response on EMD (07 October 2015)

  » The decentralised concept of TSO coordination has not yet proven to be adequate to meet the challenge

  » System operation is the enabler of the electricity market and political borders in system operation, which do not reflect the topology of the system, do not contribute to full market integration
Clean Energy for All Europeans (3)

- Joint ACER/CEER response on EMD (07 October 2015)

  > Proper regionalisation of some system operation functions will thus be necessary to maximise the efficiency and security of the integrated electricity market.

  > The new energy market design could evaluate whether, how and which system operation functions would benefit from regional integration, implying the shift from national to regional responsibility.
Clean Energy for All Europeans (4)

- Regional decision-making procedures

**TSOs**
- Proposal by TSOs of the methodologies, terms and conditions

**NRAs**
- ACER revision and approval of the methodologies, terms and conditions

**TSOs**
- ROCs and TSOs to apply the methodologies, terms and conditions

Is anything missing?

» Compliance enforcement on regional/EU-wide entities
  - Agency to issue binding decisions to require entities operating at regional or EU-wide level to comply with the objectives and the provisions in the Electricity Directive and Regulation and the Network Codes and Guidelines
  - NRAs to impose fines and penalties to ensure enforcement of Agency’s decisions
Question to be asked

- When are TSOs going to put themselves in the forefront of the digitalisation of the networks (blockchain)?
Thank you for your attention!

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Thank you for your attention.

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