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Council of European Energy Regulators

The future role of DSOs

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The future role of DSOs

1. **ACER – CEER Bridge 2025: the process and key Conclusions on the role of DSOs**

2. The evolving role of DSOs in the EU: common features and structural differences challenges

3. Main issues for CEER work: towards a CEER position paper and next steps

1. The “Bridge to 2025” process

Pre-consultation: Nov.-Dec. 2013

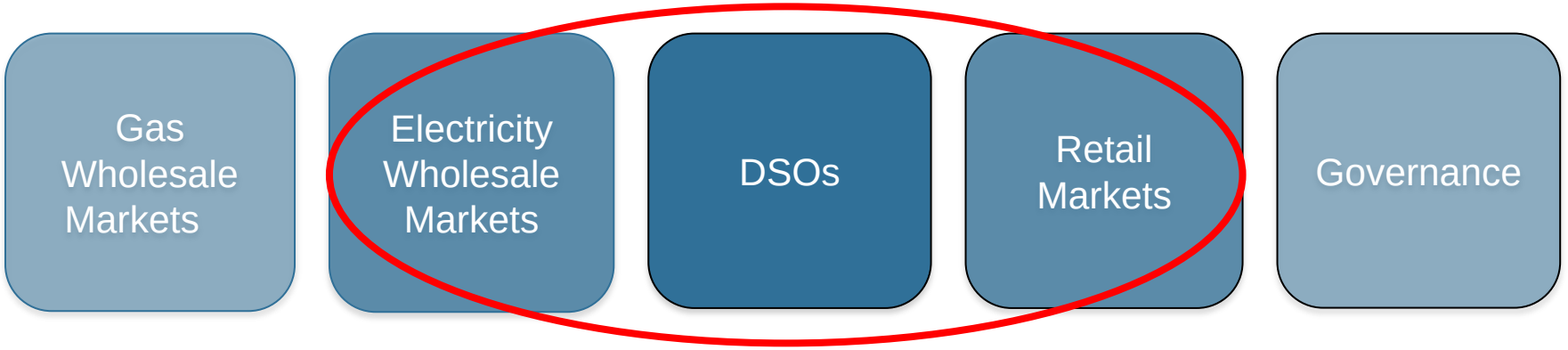
Consultation “Green Paper”: Apr.-Jun. 2013

Conclusions (and Evaluation of Responses)
presented on Sept. 27th 2014
ACER recommendation 05/2014

1. The “Bridge to 2025” pillars

“Energy Regulation: A bridge to 2025”

Encompasses a broad range of issues



Focus of this presentation

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1. Main "Bridge to 2025" conclusions: EU regulators vision

- By 2025, moving to **low-carbon** society with **smart responsive energy supply** and increased non-programmable RES
- Greater need for **flexible response** (from both small generation and demand side)
- Real changes in how **consumers engage with the market** - consumers must be protected
- Changes in technology (smart grids, smart meters) may enable and **empower smaller consumers**
- Uncertainty over the **future gas market** but **new applications for gas for flexible power generating stations**, to respond to greater levels of RES
- Competition must be ensured: **transparency and non-discrimination**
- **Strengthen interactions** with our geographical neighbours.

1. Main “Bridge to 2025” conclusions on DSO role

Key issues of “Bridge to 2025” on DSO: guiding principle for EU regulators

- DSOs must be **neutral market facilitators**
- DSOs will need to manage their networks **actively**; also through smart grid solutions and innovative investments.
- Ensure that the **market for new service** providers is not foreclosed by incumbents (notably **monopoly DSOs**)
- Coordination between **DSOs and TSOs** for network operational matters.
- **Flexibility** and the **new role of DSO**: still to be well understood

- ***Increasing coordination between CEER and ACER is needed on flexibility issues and TSO-DSO coordination***

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2. The evolving role of DSOs: main steps

- **Traditional/core role**:
  - *Grid development, operation and maintenance*
  - *Connections*
  - *Metering (in most EU Member States)*
- **Role related to retail liberalization** ("Supply-centric" model)
  - *Non discriminatory relationship with suppliers*
  - *Switching process*
  - *No longer commercial activities towards final customers*
- **New role related to distributed generation/ feed in connection for gas (*local gas injection- biomethane*)**
  - *Change in network management (reverse flow, congestions)*
  - *Local dispatching / ancillary services*
  - *Safety and quality of gas for feed in gas connections*
- **New role in new services EVs/NGVs**

2 Trends and Technological Innovation

On one side, there are common issues for DSOs across Europe

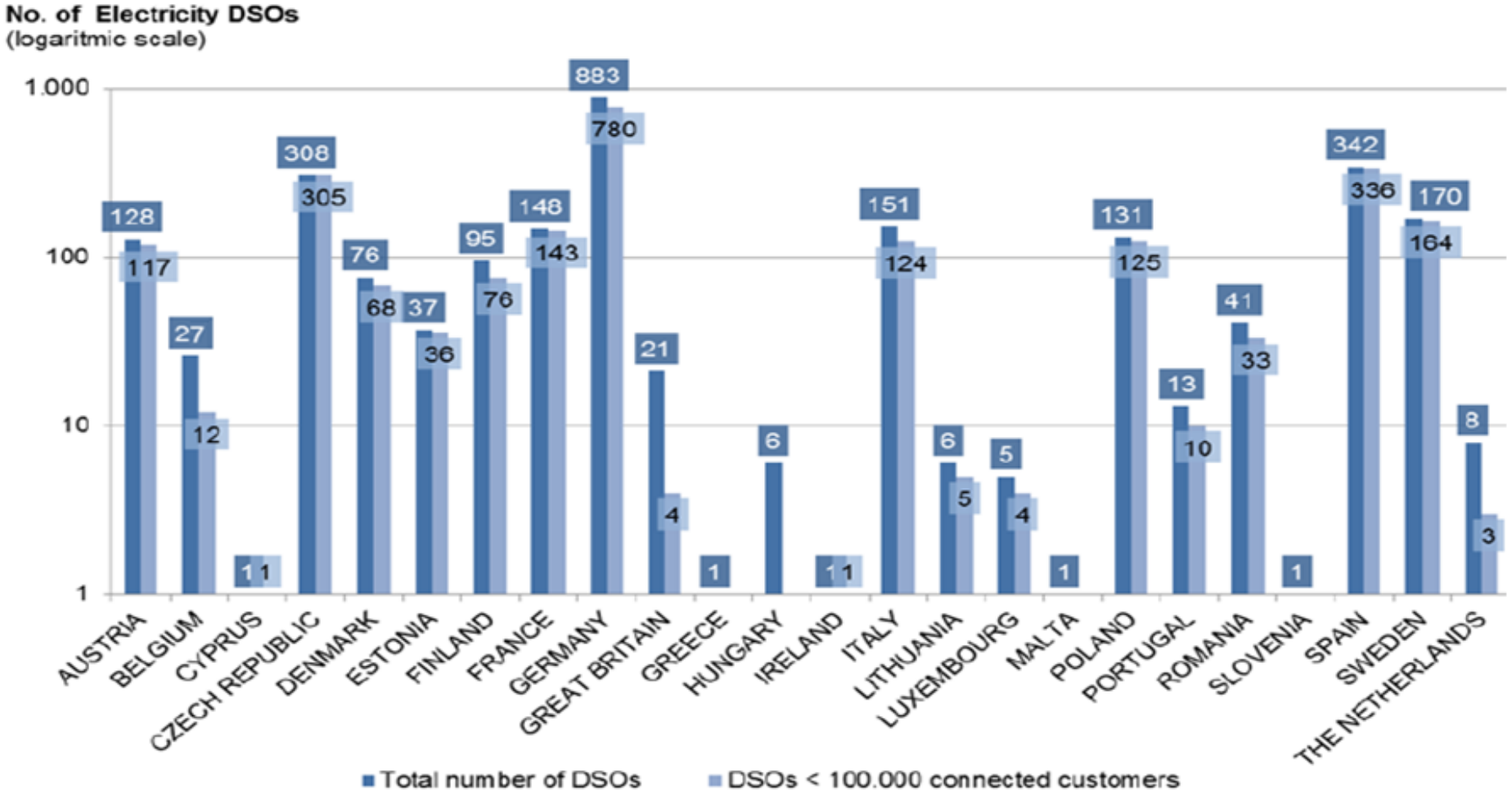
- To meet new demand and generation patterns, DSOs will be required to implement **more active and intelligent network design**, **operation and monitoring**
- To allow for well functioning customer-centric retail markets, **commercial data management will increase** in weight as well as in relevance and the **role of DSOs in this respect will have to be clarified**
- The TSO-DSO interface must be designed to ensure **efficient information exchange for security of supply**, coordinated congestion management and integrated planning. In some cases also DSO-DSO
- DSOs shall remain neutral facilitator for competitive market. It has to be investigated which **services could be better provided within competitive markets** and which additional regulatory safeguards (or boundaries) are required to ensure that competitive market can develop.

2. European DSOs: still a very differentiated landscape

On the other side, there are significant differences between DSOs across Europe

- **Activity profile** can vary quite significantly, especially for metering operations and data management responsibilities (i.e. D, GB)
- Important differences in the degree to which different DSOs have been **unbundled across Europe**; separation between distribution and supply mandatory only for DSOs >100,000 customers
- differences are observable in both structure and specific metrics such as:
  - **size** (number of customers) and number of DSOs per country;
  - **voltage levels** (electricity) and **pressure level** (gas) operated
  - direct or indirect **connection to the transmission grid** (or off-grid for small islands and remote valleys)
  - **network automation and smart metering deployment**
  - level of RES and distributed generation penetration.

2. Electricity DSOs in 24 EU Member States: size variations



Source: Status Review on the Transposition of Unbundling Requirements for DSOs and Closed Distribution System Operators. Ref.:C12-UR-47-03

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3. Main issues for CEER work on DSO (1/2)

- **Existing regulatory requirements**: Continue to **monitor** the activities of vertically-integrated DSOs and assess the **adequacy of the current rules on business separation** against the evolving role of DSOs

- **New services to consumers**: Define core DSOs functions to facilitate the development of **potentially competitive services**

- **Unbundling issues:** Develop a "**toolbox approach**" for the regulation of DSOs, that is flexible, adaptable to nationally conditions and includes a set of consistent options to ensure an adequate level of business separation

3. Main issues for CEER work on DSO (2/2)

- **Investments in innovation and efficient network management:** Develop guidelines for good practice for incentive schemes to encourage efficient innovation by DSOs in such areas as smart grids

- **Network tariff structures**: Identify and share good practices regarding with the aim of:
  - enhancing efficient network development and operation
  - not impeding efficient price signals at the wholesale and retail levels.
  - responding to the needs of simplicity and adequate levels of protection for end-consumers

- **TSO-DSO coordination**: Develop recommendations for clarifying the distinct roles and responsibilities of TSOs and DSOs in order to strengthen cooperation and technical data exchange between them

3. CEER Position paper on the future role of DSOs

- Consult on the **future role of DSOs by end of 2014: CEER position paper by mid 2015.**

Main issues:

1. **Core and new activities of DSOs** and the need for regulatory oversight (competitive potential in enw markets)
2. **TSO and DSO relationship and responsibilities** (real-time operations, balancing, forecasting, network planning and development, emergency and restoration)
3. **Economic signals encouraging DSOs and customers** (price control related incentives, DSR, structure of DSO tariff, ToU tariffs via supplier/aggregator, contractual arrangements)

3. Regulatory next steps concerning the future role of DSOs

- Consider whether the current ***de minimis*** **threshold applying to small DSO networks** (100,000 consumers) could be revised in a more adaptive manner, considering national specificities.
- Define **TSO and DSO cooperation framework** with clear roles and responsibilities
- Assess innovative regulatory mechanisms to **promote necessary investments** with significant social benefits but possibly higher risks.
- Consider **output-based incentive mechanisms** to encourage efficient operations and investments by DSOs in order to have smarter networks (more IT-based control, less copper).

Thank you for your attention!

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