

# Optimal Regulation of the Distribution System Operator to 2025 and beyond

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# About this study

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Full report and webinar published at CERRE website:

[Optimal regulation for European DSOs to 2025 and beyond – CERRE](#)



The report aims to:

- **Suggest how regulation of the distribution system operator (DSO) can be improved in the period to 2025 and beyond**
- Investigate directions in which current regulation might be developed leading to an **improvement in social welfare**

# About this study

## We set out to investigate **three questions**:

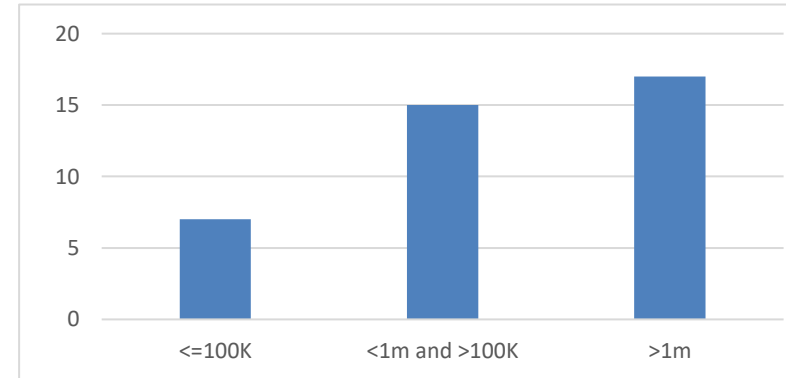
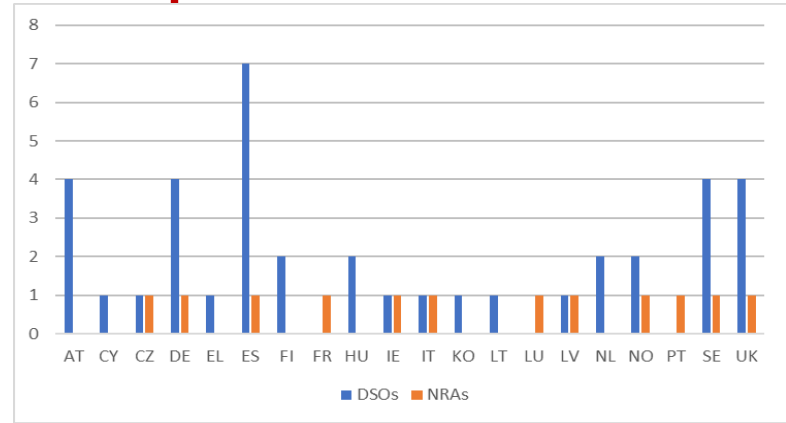
- How can and should the system operation (**SO**) **function of the DSO** be defined and regulated?
- What can regulators and EU policymakers learn from TSO regulation that can be translated down to the DSO?
- How can national regulators and EU institutions **support the capacity of the DSO** to operate and coordinate the system?

## Methodology:

- **2 parallel surveys** to national regulatory agencies (NRAs) and DSOs
- **A set of case studies** (from the survey) of DSOs-covering different roles
- Development of **5 scenarios** where the role of the DSO might be thought to be important

# Survey participants and respondents

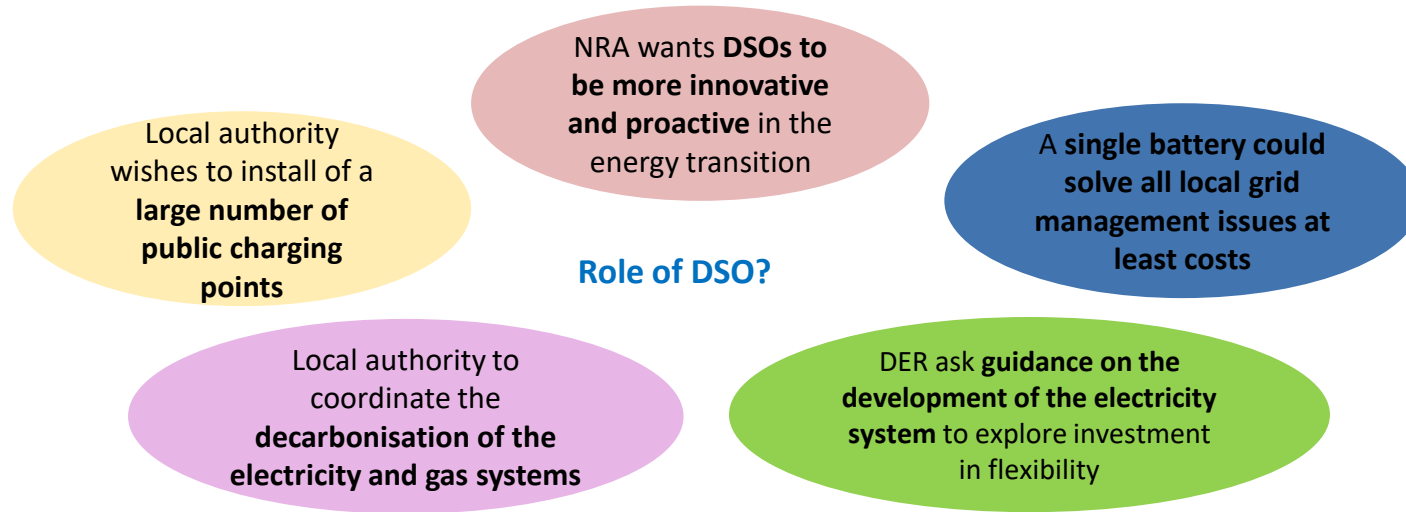
- 51 responses, 20 countries.
- Respondents from 12 NRAs and 37 DSOs.
- 9 countries with responses from both NRA and DSOs.
- 39 responses from DSOs, 17 countries represented.
- 125m customers served by the DSOs, 225m protected by NRAs
- 40% of DSOs with 1 million or more customers.
- Participation of 2 energy network associations



## Towards a more Active DSO

- The move towards a more active role for the DSO remains a work in progress for both DSOs and their NRAs, with non fully aligned views.
- DSOs interested in sufficient returns, while NRAs protecting consumers from unnecessary expenditure.
- Little evidence of the expanded role for DSOs and its quantification (in congestion management), many of DSOs with no competitive procurement.
- Much research activity is focussed on trials.
- DSOs identify tariff structure and regulatory barriers among the most significant to a more active DSO.
- NRAs are most concerned about a lack of potential providers of flexibility and a lack of information on the state of the network.
- New EU DSO Entity can learn from the ENTSO-E but with potential tension between a unified voice for DSOs and policies that reflect the DSOs diversity.

# Future of DSOs projects and scenarios



Key scenarios that discuss the existing European legislation in facilitating a more active role for the DSO

Discussion supported by literature and issues raised in the surveys

Identification of areas of future developments...

# Conclusions

- It **will take time for the Electricity Regulation EU (2019/943) and Directive (2019/944) to have a significant impact on European DSOs** (especially as it was drafted in 2016 and pre-dates Net Zero).
- Our survey suggests **there is work for NRAs and DSOs to do in clarifying** the best way forward for the DSO.
- There is **little evidence that the active DSO has progressed very far** in measurable terms, apart from in the UK.
- There should be a **major role for the EU DSO Entity in evaluating, collating and spreading useful information and experiences** from projects related to the ‘future of the DSO’.
- Areas of **future developments** (from scenarios) **need to be addressed**.



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