Network Code on Operational Planning & Scheduling

DSO Associations views on the final version of 27 February 2013

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Positive points

- Recovery of efficient costs maintained for DSOs
- TSO - DSO coordination on outages for relevant elements located in Distribution Networks (art. 29)

But the key concerns raised in our letter to ENTSO-E (dated 01/03/12) prevail

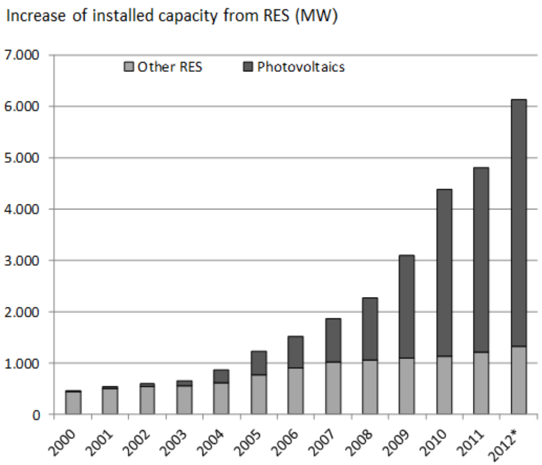
In our opinion, ACER Framework Guidelines are not respected with respect to defining ‘a harmonized standard for timing and content of information” (p.16) and information exchange related to the grid model (p.19):

1. **DSO access to TSO Grid Model for the DSO Observability Area (part of transmission grid that influences distribution grid), including outages information**

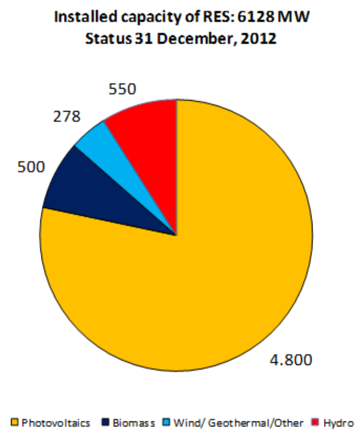
2. **Schedules of distribution network users not communicated by Scheduling Agent to DSO**

Most RES to achieve 20% target by 2020 will be connected to DSO networks

Example #1: E.ON Bayern



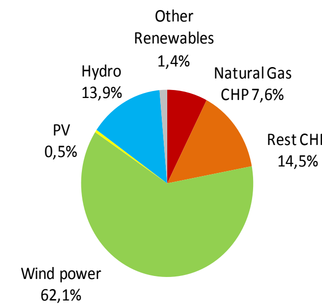
Peak load at E.ON Bayern grid: ~ 6.000 MW



Number of PV installations: ~ 225.000

Example #2: Galicia, Spain

	Installed Capacity (MW)	Percentage (%)
CHP (Natural Gas)	166,9	7,6
Rest CHP	319,4	14,5
Wind Power	1.369,5	62,1
Photovoltaic (PV)	10,3	0,5
Hydro	306,1	13,9
Other Renewables	31,4	1,4
TOTAL Generation	2.203,6	100



	Max. Hourly Average capacity (MW)
Galicia Demand	1.842

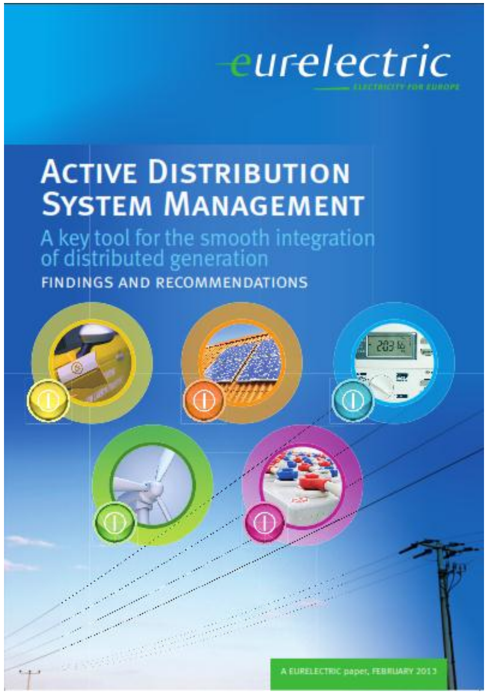
Already today, distributed generation output often exceeds demand at distribution level, and sometimes is even several times higher. In addition, voltage problems are becoming more frequent.

The negative impacts of by-passing the DSOs as SYSTEM OPERATORS

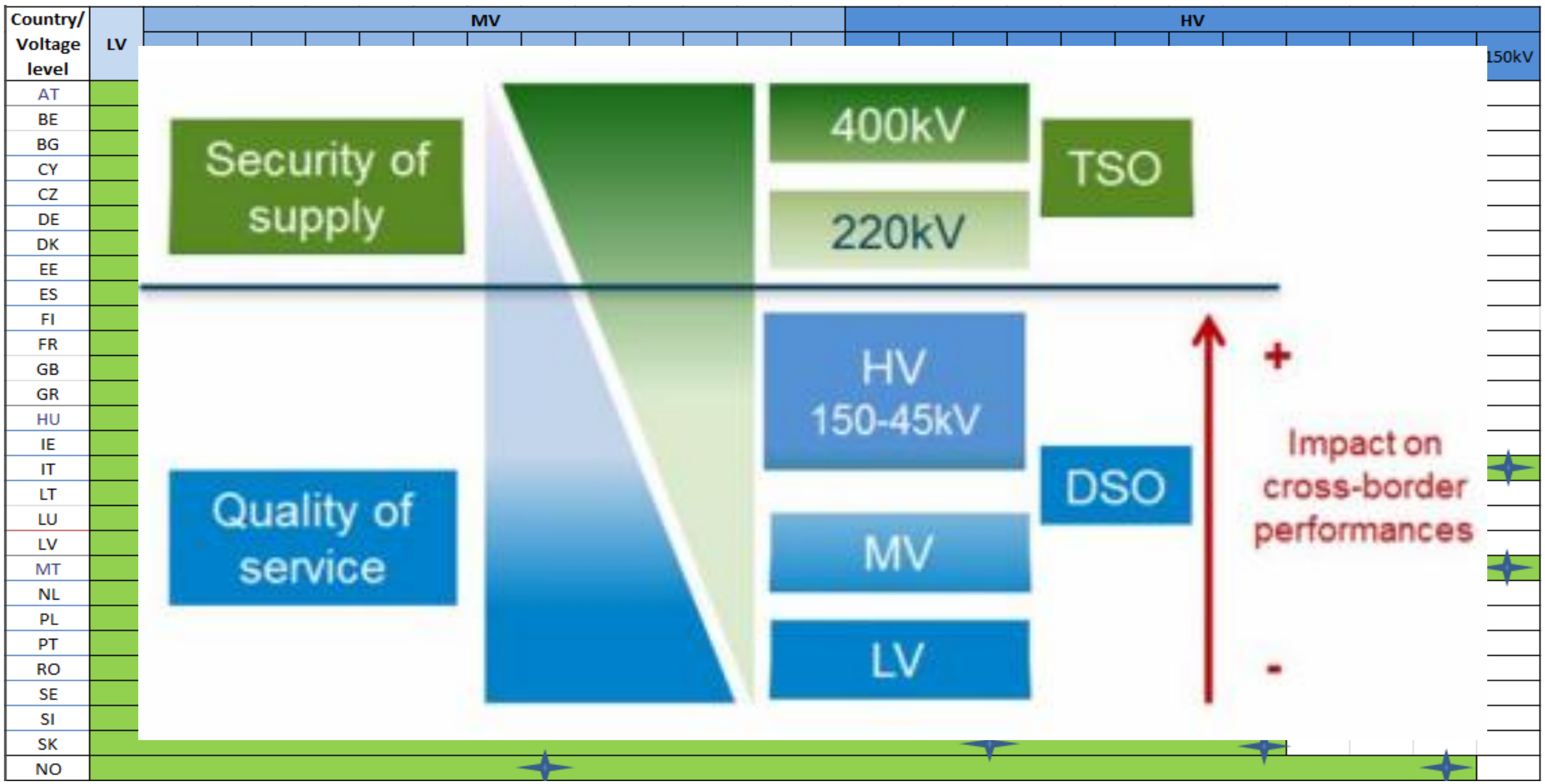
DSOs primary mission = operating their networks at high levels of realibility and quality of service

'Significant DSOs' need relevant operational tools to contribute to the overall system security & efficient RES integration:

- **Information exchange (→ reciprocity) BUT DSOs 'Observability Area' and information exchange missing**
- **Ancillary services**



One-size-fits-all approach towards DSOs is inefficient



Source: EURELECTRIC

Note that European DSOs differ widely with respect to the voltage levels they operate and the degree of penetration of distributed generation

1. DSO access to information on transmission network

- On one hand, the code recognizes that transmission network projects *(outages?)* have an impact on the DSO network (Article 22.5)

- On the other hand, DSO is not allowed to have access neither to the grid model nor to the information on outages on elements connected to the Transmission Network that affect DSO network

- This part of the Transmission Network that affect the operation of distribution grid **= DSO Observability Area**

➢ **This concept should be included both in the OPS & the OS codes**

➢ **This information and the information about outages in DSO Observability will not be available to the DSOs within 'the Transparency Platform'**

2. Schedules of distribution network users & ancillary services

- Significant DSO needs scheduling information from Scheduling Agents to be able to predict possible network constraints in advance
  - What is the difference between ‘forecasted scheduled Active Power’ (as mentioned in art. 25.2 of the OS code) and scheduling information?

- Significant DSO should be able to monitor Ancillary Services

Additional Issues (I)

1. **Similarly as for OPS, NRA approval seems to be limited to an inappropriately small subset of the code**

- TSOs are allowed to come with requirements with no checks by the NRA impose them on DSOs and generators in breach of the law and exposed to substantial costs? (i.e. RCSIs)

2. **Lack of clarity on definitions**

- Critical Network Elements (Art. 27.3.c) - definitions & thresholds missing!
- The concept of Responsibility Area is misused! Very dangerous in a legal text.
- Which definition from previous codes should be used if there are contradictions?
  - For example, the definitions of the Connection Point, Operational Security and Remedial Action differ in the DCC and OS codes
- The concept Close to Real Time is used in NC OS but without a definition, which is given here. If the concept is the same in OS, should be defined there.
- <u>What is exactly the testing status? Is a new test to add up to tests in RfG, DCC and OS?</u>

Additional Issues (II)

3. Do not include small units as Significant Grid Users (Art. 1)

- The inclusion of SGU as Aggregators of Demand, Providers of Active Power Reserve and Redispatching Aggregator makes every single user (including type A generators or even households!) subject to the requirements of the NC.
  - This comment also applies for Operational Security

4. General Provisions on availability plans (art. 32)

- The Availability Plans shall contain a separate Availability Status for each Relevant Asset with at least an hourly granularity (Art. 32.1)
  - <u>Unjustified new requirement</u>
  - <u>DSOs recommend to keep the original proposal (daily granularity)</u>

5. The TSO has the right of preventing some outages in Distribution networks users and elements (Art. 46)

- Who will bear the legal responsibility that could derive from that?

Conclusions & Recommendations

- The OPS code should fully consider Significant DSOs as System Operators and not as System Users
- The ACER Framework Guidelines should be respected as far as the information exchange between TSO and DSO is concerned
- Significant DSO Observability Area should be included in the code