

## COORDINATED DSO POSITION 22nd FLORENCE ELECTRICITY FORUM

### 1.2 Network Codes for Grid Connection & Integration of Renewables

- Network integration of renewables requires a system approach
- Most of the renewable generation will be connected to distribution networks
  - Many solutions for network integration, including RES system responsibilities and demand side flexibility will need to be further developed at distribution level
- Development of the system is fast: requirements for generators should be general enough to ensure validity by the time of implementation
- Standardization is a parallel and efficient path towards harmonization of grid connection rules
  - Results of Smart Grids demonstration projects and M490 are key
  - Different national/regional starting points should be considered
- Network codes should define common binding minimum requirements needed for Internal Electricity Market, SoS and renewables integration
- Initiatives at EU level need to be coordinated!

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### 5.2 & 5.3 Network Codes

#### General Comments:

- Focus on requirements necessary for IEM completion
- Transparency is key:
  - The network codes should be made publicly available by ENTSO-E when handed over to ACER and stakeholders should be consulted
- Coherent approach within ENTSO-E is necessary
  - System operation needs should justify grid connection requirements
- Roles and responsibilities should be allocated in a balanced and optimal way – do not just shift the burden from TSOs to DSOs and network users - Market solution is key
- 1 Framework Guideline should result in only 1 NC (cf. gas NC)

#### Cost Benefit analysis:

- Relevant Cost Benefit Analysis on requirements deviating from existing practice should be conducted as required by ACER Framework Guidelines (art. 2.1)
- Who will conduct the missing CBA(s) should be clarified  
ENTSO-E? ACER?

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### 5.2 & 5.3 Network Codes – Specific Remarks

#### Requirements for Generators - Problems with Implementation:

- Many of the proposed requirements are new and untested
- Lack of clarity on applicability – legal issues may arise
- CE marking insufficient for testing of system performances when European standards are missing!
- Authorized certifiers = laboratories (ISO 17025) and accredited certif. bodies

#### Demand Connection:

- Standardization as a key process for defining DSR capabilities of appliances
- European-wide CBA on reserves needs to be performed & to include total costs
- Well-functioning markets must be in place for DSR to deliver. There is a risk that several requirements might “lock out” market solutions.

#### Operational Security:

- DSO as system operator should be a facilitator of operational information on generation embedded in their grids towards TSO
- Rules for coordination among TSOs should be part of the network code