

# **SO network codes**

## **Minimum Standards**

2nd SO -ESC meeting

Ljubljana, 6th June 2017

# Outline

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## 1. Context of EURELECTRIC's issue

# 1. Minimum Standards – what does the SO GL say?

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- The SO GL envisages «a common set of minimum requirements **for Union-wide system operation, for the cross-border cooperation between the TSOs and for utilising the relevant characteristics of the connected DSOs and SGUs**» [Recital 4]
- To do this « All TSOs should comply with the common minimum requirements on **procedures necessary to prepare real-time operation**, to develop individual and deliver common grid models, to **facilitate the efficient and coordinated use of remedial actions which are necessary for real-time operation in order to maintain the operational security, quality and stability of the interconnected transmission system, and to support the efficient functioning of the European internal electricity market and facilitate the integration of renewable energy sources ('RES')**» [Recital 5]

## 2. Minimum Standards – what does the SO GL say?

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- To help with this «*Rules on operational training and certification are required in order to guarantee that system operator employees and other operational staff are skilled and well trained and that the system operator employees in real-time operation are **certified to operate the transmission system in a secure way during all operational situations**. The rules on training and certification strengthen and formalise existing best practices amongst TSOs and ensure that minimum standards are applied by all TSOs in the Union.*» [Recital 6]
- «*One of the most critical processes in ensuring operational security with a high level of reliability and quality is the load-frequency control ('LFC'). **Effective LFC can be made possible only if there is an obligation for the TSOs and the reserve connecting DSOs to cooperate for the operation of the interconnected transmission systems as one entity and for providers' power generating modules and providers' demand facilities to meet the relevant minimum technical requirements**.*» [Recital 12]

### 3. Minimum Standards – what does the SO GL say?

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- *«In order to ensure the quality of the common system frequency, it is essential that a common set of minimum requirements and principles for Union-wide LFC and reserves are defined as a basis for both the cross-border cooperation between the TSOs and, where relevant, for utilising characteristics of the connected generation, consumption and distribution systems. To that end, **this Regulation addresses the LFC structure and operational rules, the quality criteria and targets, the reserve dimensioning, the reserve exchange, sharing and distribution and the monitoring related to LFC.**» [Recital 14]*

## 4. Minimum Standards – what is reasonable, efficient and proportionate?

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- SO GL Article 9 Recovery of costs
  - 1. *The costs borne by system operators subject to network tariff regulation and stemming from the obligations laid down in this Regulation shall be assessed by the relevant regulatory authorities. Costs assessed as reasonable, efficient and proportionate shall be recovered through network tariffs or other appropriate mechanisms.*
  - 2. *If requested by the relevant regulatory authorities, system operators referred to in paragraph 1 shall, within three months of the request, provide the information necessary to facilitate assessment of the costs incurred.*

## 5. Minimum Standards – simple example

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- Take a simple example where the common set of minimum requirements for a hypothetical item within the SO GL is set at 100
  - The current requirement in Country A is set at 90
  - The current requirement in Country B is set at 100
  - The current requirement in Country C is set at 110
- In this example Country A goes up from 90 to 100 and Country B remains unchanged at 100.
- But what happens with Country C? Does it drop to 100 or remain at 110?
- For Country C to remain at 110 it could be argued
  - (i) it is not “*reasonable, efficient and proportionate*” (as per Article 9, SO GL) as they are doing more than the minimum required (‘gold plating’?); and
  - (ii) it does not achieve all the benefits of harmonization that were set for the Network Codes if we continue to do different things in different parts of the Union

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# Thank you