

**RECOMMENDATION OF THE AGENCY FOR THE COOPERATION OF ENERGY
REGULATORS No 02/2015**

of 23 June 2015

ON THE NETWORK CODE ON EMERGENCY AND RESTORATION

THE AGENCY FOR THE COOPERATION OF ENERGY REGULATORS,

HAVING REGARD to Regulation (EC) No 713/2009 of the European Parliament and of the Council of 13 July 2009 establishing an Agency for the Cooperation of Energy Regulators¹, and, in particular, Articles 6(4) and 17(3) thereof,

HAVING REGARD to Regulation (EC) No 714/2009 of the European Parliament and of the Council of 13 July 2009 on conditions for access to the network for cross-border exchanges in electricity and repealing Regulation (EC) No 1228/2003², and, in particular, Article 6(9) thereof,

HAVING REGARD to the favourable opinion of the Board of Regulators of 10 June 2015, issued pursuant to Article 15(1) of Regulation (EC) No 713/2009,

WHEREAS:

- (1) The Framework Guidelines on Electricity System Operation, FG-2011-E-003 (the 'Framework Guidelines')³, were adopted by the Agency on 2 December 2011.
- (2) By letter of 1 April 2014, the Commission invited ENTSO-E to start drafting the network code on emergency and restoration and to submit it to the Agency, pursuant to Article 6(6) of Regulation (EC) No 714/2009, by 1 April 2015.
- (3) In drafting this network code, ENTSO-E endeavoured to involve stakeholders in a transparent process by organising stakeholder workshops, technical expert group meetings for Distribution System Operators and public consultations, documented on ENTSO-E's website. The Agency recognises the close working of ENTSO-E with stakeholders and the Agency to facilitate improvements to the draft network code whilst under development.
- (4) On 31 March 2015, ENTSO-E submitted to the Agency, pursuant to Article 6(6) of Regulation (EC) No 714/2009, the Network Code on Emergency and Restoration (the 'Network Code'), accompanied by the Supporting Document for the Network Code on Emergency and Restoration (the 'Supporting Document'). The Supporting Document

¹ OJ L 211, 14.8.2009, p. 1.

² OJ L 211, 14.8.2009, p. 15.

³

http://www.acer.europa.eu/Official_documents/Acts_of_the_Agency/Framework_Guidelines/FG%20on%20Electricity%20System%20Operation/FG-2011-E-003_02122011_Electricity%20System%20Operation.pdf

and its appendices, in particular the ‘Current practices in Europe on Emergency and Restoration’, the study ‘Technical background for the LFDD requirements’ and the ‘Response to the public consultations’, were taken into account for the assessment of the Network Code in this Recommendation.

- (5) The Network Code is closely connected to the rules that are being developed in other network code areas pursuant to Article 8(6) of Regulation (EC) No 714/2009. It is essential that this Network Code is consistent and coherent with those other rules. In particular, it must be consistent with the Network Code on Operational Security (the ‘NC OS’), the Network Code on Operational Planning and Scheduling (the ‘NC OPS’), the Network Code on Load-Frequency Control and Reserves (the ‘NC LFC’), the Guideline on Capacity Allocation and Congestion Management ‘GL CACM’, the Network Code on Electricity Balancing (the ‘NC EB’), the Network Code on Requirements for Grid Connection Applicable to all Generators (the ‘NC RfG’), the Network Code on Demand Connection (the ‘NC DC’) and the Network Code on HVDC Connections (the ‘NC HVDC’).
- (6) On 1 April 2015, the Agency issued a call for comments to be submitted by 29 April 2015, to collect stakeholders’ views on the Network Code and its Supporting Document,

HEREBY RECOMMENDS:

The adoption of the Network Code by the European Commission.

The Agency considers that there are several areas where the Network Code could be improved. While these areas do not affect the compliance of the Network Code with the Framework Guidelines, a revision of the following points should be considered by the European Commission when adopting the Network Code:

- Regarding the level of harmonisation of the market interaction provisions, the Agency understands that the rules and conditions for suspension and restoration of market activities may not currently exist in some Member States, and that the Network Code provides a significant added value in prescribing the development of those rules and conditions by all TSOs and in laying down some common minimum requirements. However, the Agency notes that the Network Code entrusts this development to each TSO and that the level of ambition in harmonisation of these rules within regions or Synchronous Area is not on par with the ambitions of the design of the System Defence Plan in Article 9(1) and of the Restoration Plan in Article 21(1). This lack of harmonisation may have a detrimental effect on the functioning of some segments of the Internal Energy Market, such as security of supply and generation adequacy. In light of the ongoing European Commission’s work aimed at reinforcing the legislative framework for the security of supply for electricity and at developing a more effective, flexible market design which should go together with enhanced regional cooperation, the Agency believes that the market interaction provisions, in particular the rules and conditions for suspension and restoration of market activities, may benefit from a closer examination and amendments to reflect the ambition of the EU to create an Energy Union.

- The Network Code provides for a consultation with neighbouring TSOs and the other TSOs within the same Synchronous Area in the design phase of the TSO's System Defence Plan and Restoration Plan, as set out in Article 9(1) and Article 21(1), respectively. Additionally, Article 6(5) requires each TSO to check the consistency of its measures with measures from plans of other TSOs within its Synchronous Area when designing its Restoration Plan. The Agency believes that such consultations and consistency checks would be conducted more efficiently at the regional and inter-regional levels by regional security coordination bodies.

Moreover, taking into account the conclusions from the Florence Forum in November 2014 and the Commission's plans for the Energy Union, the Agency recommends to investigate and identify other areas within the scope of the Network Code where a closer regional coordination via regional security coordination bodies would be efficient, effective and adding value to the rules.

- Articles 13(6) and 14(3) suggest disconnection of Energy Storage acting as load before activation of the automatic Low Frequency Demand Disconnection by the TSO. The Agency believes that, as currently drafted, these provisions unintentionally prevent the use of these flexible devices for the benefit of the interconnected systems. For example, such benefits could be delivered by rapid switching between load and generation modes or damping of system oscillations. The Agency suggests the Network Code to be improved so as not to hamper the emerging energy storage technologies from entering ancillary services markets.

Moreover, apart from pump-storage power generating modules, energy storage as such is not covered in the grid connection network codes (NC RfG, NC DC and NC HVDC) and the Commission might want to take a holistic approach when tackling this growing area that could undoubtedly help considerably in the transition to a low-carbon society by providing necessary flexibility to cope with the variable input from renewable energy sources.

- The Agency expects certain provisions of the Network Code, unless reasonably justified due to the specificities of the Network Code, to be brought in line with the equivalent provisions in other technical network codes (NC OS, NC OPS and NC LFC) . These include, but are not limited to, the provisions on multiple TSOs (Article 1(5)), regulatory aspects (Article 3), regulatory approval (Article 4), recovery of costs (Article 5), consultation (Article 6), confidentiality obligations (Article 7), implementation monitoring (Article 50) and stakeholder involvement (Article 51).
- Regarding national scrutiny, the Agency raised concerns in its Opinions No 10/2013 on the NC OS and No 12/2013 on the NC OPS on the need to ensure the non-exhaustiveness of the national scrutiny's scope (Article 4(1) to 4(3) of the NC OS and Article 4(1) to 4(4) of the NC OPS). Article 4(2) of the Network Code lists the terms and conditions or actions to be submitted by TSOs to the regulatory approval of National Regulatory Authorities (NRAs) or other competent authorities of the Member States, while Article 4(4) provides that the notifications pursuant to Article 4(3) are "*without prejudice to the possible competence under national law of a regulatory authority or other competent authorities of the Member State concerned to approve parts or the entire System Defence*

Plan or Restoration Plan”. The Agency considers that it is not clear from Article 4(4) that the list of items to be submitted to regulatory approval pursuant to Article 4(2) is not exhaustive. The Agency recommends that Article 4(4) be amended so as to clarify that not only Article 4(3), but also Article 4(2) are without prejudice to the possible competence under national law of a regulatory authority or other competent authority of the Member State concerned to approve other terms and conditions or actions required to be developed pursuant to this Network Code.

Widening the scope of Article 4(4) from “*parts or the entire System Defence Plan or Restoration Plan*” to “other terms and conditions or actions required to be developed pursuant to this network code” would also be consistent with recital (6).

Some material errors are to be corrected in recital (6) of the Network Code:

- The references to “*terms and conditions or actions necessary to ensure operational security or their methodologies*” should be changed for a more accurate reference to “terms and conditions or actions required to be developed pursuant to this Network Code”;
 - The third sentence of recital (6) only mentions NRAs and not other competent authorities of the Member States, which is not consistent with the rest of the Network Code.
- The Supporting Document explains that the over-Frequency control scheme is currently not covered by practices in Europe, and as such providing accurate and harmonised requirements in the Network Code is not feasible at the time of its drafting. The Supporting Document also suggests that TSOs of each Synchronous Area shall perform a study and implement the scheme according to the results of this study. The Agency also understands that activities in this direction are already taking place at the level of ENTSO-E. However, the wording of Article 15, that deals with the automatic over-Frequency control scheme of the System Defence Plans, does not entirely reflect these plans as it merely requires the definition of TSOs parameters by each TSO in consultation with other TSOs of its Synchronous Area. The Agency suggests that ENTSO-E’s plans regarding the over-Frequency control scheme of the System Defence Plans are elaborated further in the Supporting Document and that they are reflected in the operative part of the Network Code as well.
- Articles 13(4) and 18(3) tackle disconnection of Defence Service Providers and Significant Grid Users as well as conditions governing their reconnection. The Agency believes that the notion of “disconnection” could be misunderstood as an interruption of the energy supply through circuit breakers. Such meaning of “disconnection” is clearly not the intention as the aggregation of demand side response implies that only dedicated electrical appliances and not entire demand facilities are affected.
- The Agency understands that proper critical tools and facilities, including communication systems and their backup power supply of TSOs, DSOs, Significant Grid Users and Restoration Service Providers, have to be available in any system state. The Agency also understands that these features are to some extent already in place today but not

harmonised to the degree that the Network Code now prescribes. It is in this regard that the Agency calls for a more exhaustive elaboration of the state-of-play and some insight into how the relevant provisions of the Network Code will be implemented, in particular in the area of the installation and maintenance of data and voice communication systems, including on the detailed assessment on which system elements are affected by the requirement of backup power supply that needs to be carried out as mentioned in the Supporting Document on page 48. We suggest that these explanations, notwithstanding potential improvements to the Network Code, become part of the Supporting Document.

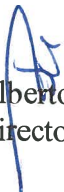
- Article 39(1) requires that DSOs, SGUs, TSOs, and Restoration Service Providers shall have at least one redundant voice communication system to exchange the necessary information for the Restoration Plan. The Agency considers that this clause potentially lacks clarity around what is required from the relevant parties and would suggest that the Article be made clearer.

This Recommendation is addressed to the European Commission.

The Agency's Opinion No 04/2015 of 23 June 2015, the Network Code and the Supporting Document received from ENTSO-E are attached to this Recommendation for information purposes.

Done at Ljubljana on 23 June 2015.

For the Agency:


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Director