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OPINION OF THE AGENCY FOR THE COOPERATION OF ENERGY REGULATORS No 10/2013

of 28 May 2013

ON THE NETWORK CODE ON OPERATIONAL SECURITY

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 Regulators (hereinafter referred to as the "Agency")¹, 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(7) thereof;

HAVING REGARD to the favourable opinion of the Board of Regulators of 14 May 2013, 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) Following the adoption of these Framework Guidelines, the Commission invited ENTSO-E, by letter of 24 February 2012, to start the drafting of the operational security network code and to submit it to the Agency pursuant to Article 6(6) of Regulation (EC) No 714/2009, by 1 March 2013.
- (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.

3

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



¹ OJ L 211, 14.8.2009, p. 1.

² OJ L 211, 14.8.2009, p. 15.



- (4) On 28 February 2013, ENTSO-E submitted to the Agency, pursuant to Article 6(6) of Regulation (EC) No 714/2009, the Network Code on Operational Security (the 'Network Code'), accompanied by the Supporting Document for the Network Code on Operational Security (the 'supporting document'). The supporting document was taken into account for the assessment of the Network Code in this opinion. The Agency however regrets that, at the time of adoption of this opinion, the evolution in the drafting of the Network Code was not reflected on ENTSO-E's website, with the previous versions of the Network Code prior to its submission to the Agency, including the version that was subject to public consultation, no longer being available on ENTSO-E's website.
- (5) The Agency acknowledges the importance of the Network Code for the security of supply, as well as for the completion and well-functioning of the internal market in electricity and cross-border trade, including the delivery of benefits to customers and the facilitation of the European Union's targets for the penetration of renewable energy sources.
- (6) The Agency understands that Chapter 4 of the Network Code aims at covering the principles related to staff-training and certification, without prejudice to any decision that could be taken in the future for the development of a separate network code on this topic in line with the Framework Guidelines chapter on staff-training and certification. Therefore, the Network Code provisions related to staff-training and certification have not been assessed against the dedicated chapter of the Framework Guidelines,

HAS ADOPTED THIS OPINION:

The Network Code submitted by ENTSO-E to the Agency on 28 February 2013 is broadly in line with the Framework Guidelines and the objectives stated therein.

The Agency commends ENTSO-E's effort to align the Network Code to the Framework Guidelines and acknowledges that the requirements introduced by the Network Code shall facilitate achieving the targets of the European Union on renewable energy sources, as well as market integration, while ensuring security of supply, as well as non-discrimination, effective competition and the efficient functioning of the market.

However, in a few specific areas, such as the compatibility and coherence with the other network codes developed pursuant to Articles 6 and 8(6) of Regulation (EC) No 714/2009 (particularly in the area of network connection rules), the national scrutiny, performance indicators and information exchange, the Network Code does not comply with the Framework Guidelines.

Considering the importance of the timely adoption of the Network Code for the security of supply, as well as the completion and well-functioning of the internal market in electricity and cross-border trade, including the delivery of benefits to customers and the facilitation of



the European Union's targets for the penetration of renewable energy sources, the Agency focuses its concerns in this opinion on major issues. Improvements in these areas are required before the Agency can be satisfied that the Network Code is in line with the Framework Guidelines and can recommend its adoption to the European Commission. The Agency believes that the issues identified in what follows can be addressed within a reasonable period, and preferably in advance of the submission of the network code on Load-Frequency Control and Reserves to be developed pursuant to Articles 6 and 8(6) of Regulation (EC) No 714/2009, through targeted amendments to the Network Code, by improving the drafting of the Network Code provisions or, where relevant, amending the supporting document. To this end, the Agency is fully committed to support ENTSO-E in the process of addressing these issues.

1. Coherence and compatibility with other network codes developed pursuant to Articles 6 and 8(6) of Regulation (EC) No 714/2009

The Network Code is interrelated with network codes that are being developed in other areas pursuant to Articles 6 and 8(6) of Regulation (EC) No 714/2009.

The Framework Guidelines (section 1.3) state that "[i]n drafting the relevant network code(s) ENTSO-E shall ensure that they are appropriately coherent and compatible".

In particular, it is essential that the Network Code is coherent and compatible with the network codes developed by ENTSO-E in the area of grid connection⁴: the Network Code should ensure the efficient and optimal use by Transmission System Operators ('TSOs') of the capabilities required from Power Generating Modules, Demand Facilities, Distribution Networks, Distribution Network Connections and Aggregators in the network codes developed pursuant to the Framework Guidelines on Electricity Grid Connections, namely the Network Code for Requirements for Grid Connection Applicable to all Generators ('NC RfG') and the Network Code on Demand Connection ('NC DC').

In the opinion of the Agency, several provisions of the Network Code lack coherence and compatibility with the provisions in the NC RfG and the NC DC, thus leading to the risk of inconsistent interpretation of how the NC RfG's and NC DC's requirements should be applied pursuant to this Network Code.

The relevant provisions are the following:

a) Articles 10(3), 10(4) and 10(5) of the Network Code could be seen as potentially extending the scope of application of the capabilities required from Power Generating Modules by the NC RfG. They provide for the application of the voltage ranges of Article 11 of the NC RfG to the grid users identified as significant pursuant to the

In development pursuant to Article 8(6)(b) of Regulation (EC) No 714/2009 and the Framework Guidelines on Electricity Grid Connections (as adopted by the Agency on 20 July 2011, FG-2011–E-001, the 'Framework Guidelines on Electricity Grid Connections', http://www.acer.europa.eu/Official_documents/Acts_of_the_Agency/Framework_Guidelines/FG%20On%20Electricity%20Grid%20Connections/110720%20FGC%202011E001%20FG%20Elec%20GrConn%20FINAL.pdf).





Network Code, namely Types B, C and D Power Generating Modules of the NC RfG. However, in the NC RfG, this Article 11 only applies to Type D Power Generating Modules. The Agency expects that the Network Code should not be construed as extending capabilities to Types B and C Power Generating Modules which are only required from Type D Power Generating Modules under the NC RfG, but that TSOs shall only use capabilities mentioned in this Network Code to the extent of their scope pursuant to the NC RfG.

- b) The Network Code lacks clarity regarding its application to Power Generating Modules qualified as Type A under the NC RfG. While Article 1(3) of the Network Code does not identify such Power Generating Modules as Significant Grid Users for the application of the Network Code, the supporting document suggests the application of the Network Code requirements to Type A Power Generating Modules. This is notably the case for Articles 8(6), 8(14), 9(2) to (7), 12(4) and 14(8) of the Network Code according to the supporting document (pp. 169, 171, 177, 178, 180, 208 and 226). The Agency expects that the Network Code is not intended to apply to Type A Power Generating Modules.
- c) Some provisions in the Network Code give the impression that existing Significant Grid Users could be affected without respecting the procedure set for such grid users by Article 33 of the NC RfG (which requires a cost-benefit analysis and a decision from national regulatory authorities). This is notably the case for Article 9(4) of the Network Code. This article requires Significant Grid Users "which are PGMs which are not subject to or derogated from the requirements" of the NC RfG to provide information about their frequency withstand capabilities in comparison to the NC RfG requirements, with the possibility for TSOs to request a modification to those capabilities in case of need for Operational Security. The Agency understands from Article 4(2)(a) of the Network Code and its supporting document (p. 86) that any requests for modifications is subject to national regulatory approval. The conduct of a cost-benefit analysis, in line with Article 33 of the NC RfG, is however not provided. Article 9(4) of the Network Code accordingly lacks legal certainty in its current drafting and could entail a risk of short-circuiting the NC RfG provisions. Article 10(3) of the Network Code raises the same concerns. The Agency expects that the application of Article 9(4) and 10(3) of the Network Code to existing Significant Grid Users should be in line with the NC RfG and the NC DC, i.e. that the procedure under Article 33 of the NC RfG and Article 36 of the NC DC, including a cost-benefit analysis and a decision from the competent national regulatory authority, is followed also with regard to existing Significant Grid Users.

The Agency believes that those concerns could be addressed by improvements in the wording of the Network Code. Improvements to the supporting document could also be considered.

2. National scrutiny

The Framework Guidelines (section 1.1) require that the Network Code "will be applied by electricity system operators and significant grid users, taking into account possible public service obligations and without prejudice to the regulatory regime for cross-border issues





pursuant to Article 38 of Directive 2009/72/EC (henceforth referred to as the "Electricity Directive") and to the responsibilities and powers of regulatory authorities established according to Article 37(6) of the Electricity Directive".

National scrutiny over the requirements of the Network Code to be implemented at the national level is addressed in the Network Code through general statements in Recitals 8 to 10 indicating that the Network Code "should respect the competences of national authorities raising out of Regulation (EC) No 714/2009 and Directive 72/2009/EC" (Recital (8)), as well as through Article 4 listing the methodologies and conditions establishing the framework for the adoption by TSOs of terms and conditions necessary for Operational Security to be approved by national regulatory authorities or other relevant national authorities.

The Agency considers that this approach raises several major concerns, which are listed below and should be addressed.

The Network Code should be without prejudice to the competences of national regulatory authorities under the 3rd Package.

Regarding the recitals of the Network Code, the Agency is of the opinion that:

- The drafting proposed in Recitals (8) to (10) of the Network Code does not make clear that the competences of national regulatory authorities or other relevant national authorities pursuant to the 3rd Package are relevant and effective also for the Network Code and for the acts taken under the Network Code. It should be clarified that the provisions of the Network Code are to be read in line with the provisions of the 3rd Package and that, accordingly, the establishment by TSOs pursuant to the Network Code of terms and conditions or actions necessary to ensure Operational Security or their methodologies shall be without prejudice to the competences granted by the 3rd Package to national regulatory authorities and other relevant national authorities;
- The supporting document lists several provisions of the Network Code which should be subject to decisions by national regulatory authorities or other relevant national authorities "if explicitly mentioned in national law" (p. 121 of the supporting document, with references to Articles 16(5), 19(1), 19(2), 21(3), 24(2), 25(1), 25(2), 26(1), 26(2), 27(1), 27(2), 29(1) 29(2) and 32(10) of the Network Code). Except for the provisions outlined below for which the Agency believes an explicit approval from national regulatory authorities or other relevant national authorities is required under Article 4 of the Network Code, the Network Code should explicitly mention in its recitals those provisions listed in the supporting document as examples of requirements for which national scrutiny would particularly apply;
- The Network Code provides for the establishment by TSOs of remedial actions. Remedial actions are addressed in the network code on Capacity Allocation and Congestion Management ('NC CACM'), with the provision of an explicit approval by national regulatory authorities. It should be clarified that this Network Code is without prejudice and builds upon the national scrutiny for remedial actions ensured in the NC CACM;



- Article 31(8) of the Network Code allows TSOs and DSOs to request compliance tests and simulations at any time and without any national scrutiny. Similar provisions are provided in the NC RfG and NC DC (respectively Articles 35(2) and 38(2)), but with an explicit reference to the article dealing in those network codes with the issue of national scrutiny (respectively Articles 4(3) and 9(3)). An equal level of national scrutiny should be ensured in the Network Code.

Regarding the list of methodologies and conditions establishing the framework for the adoption by TSOs of terms and conditions necessary for Operational Security to be approved by national regulatory authorities or other relevant national authorities under Article 4 of the Network Code, national scrutiny is missing for several methodologies and conditions:

- The list in Article 4(2) of the Network Code should be completed by the list of high-priority Significant Grid Users referred to in Article 32(10) of the Network Code and the scope of the data exchange with Significant Grid Users referred to in Article 16(4) of the Network Code so as to ensure regulatory approval and consistency with Article 9(5)(d)(2) of the NC RfG and Article 18(1)(c) of the NC DC, as well as to ensure that the application of Articles 20 and 26 of the Network Code does not endanger the proportionality principle.

Additionally, the Agency believes that the possible exemptions foreseen in Article 26(2) of the Network Code from Significant Grid Users' obligation to provide data directly to the TSOs should be subject to the applicable national regulatory framework. Article 26(2) of the Network Code should therefore be included in the list in Article 4(2) of the Network Code;

The list in Article 4(3) of the Network Code related to the elaboration of methodologies and conditions established by TSOs of Synchronous Area and respective regulatory approval should be completed by the methodology used within the Synchronous Area to determine the required upward and downward Active Power reserve to be developed pursuant to Article 9(10) of the Network Code, by the methodology and criteria for coordination and harmonisation of the key principles for the establishment of Contingency Lists across the Synchronous Areas to be developed pursuant to Article 13(5)(f) of the Network Code, and by the key organisational requirements, roles and responsibilities in relation to the data exchange to be developed pursuant to Article 16(5) of the Network Code. Furthermore, the reference to Article 5(4) of the Network Code should be deleted in line with the concern raised below on this provision.

The Agency furthermore believes that the lists in Article 4 of the Network Code should not be construed as exhaustive. In accordance with the principle of subsidiarity, any Member State should be entitled, in line with its rules of national law implementing the provisions of the 3rd Package related to the competences of national regulatory authorities and/or other relevant national authorities, to subject to regulatory approval any items to be developed pursuant to the Network Code, irrespective of its inclusion or not in Article 4 of the Network Code. The Agency accordingly suggests clarifying in Article 4(1) of the Network Code that the lists contained in Article 4(2) and (3) are not exhaustive.



3. Performance indicators

Performance indicators are provided by Article 32(2) and Article 32(3) of the Network Code. The Agency acknowledges that those articles are broadly in line with the provisions of the Framework Guidelines related to performance indicators, subject to the following concern.

The Framework Guidelines (section 2) require that the Network Code shall "foresee the publication of a yearly report by ENTSO-E on the evolution of system operation performance. This report shall provide a detailed assessment of the performance per country, including the selected performance criteria and their evolution over time".

The Network Code does not clarify, as required by the Framework Guidelines, that the report shall provide a detailed assessment of the performance per country as well as the evolution of the selected performance criteria over time. Even though the supporting document provides an explanation of why the performance indictors can be applied only per synchronous area, this justification may not be considered as valid for all indicators.

The Agency understands that the relevant data shall be collected at the individual TSO level and recognises the strong benefits from higher granularity of the proposed performance indicators. This would allow to ascertain the cross-border nature of the monitored phenomena and to appropriately inform the potential change of any given network code. The Agency accordingly suggests considering in the Network Code the reporting of the performance indicators per Member State.

The Agency notes that the current version of the ENTSO-E Incident Classification Scale of 23 March 2012 developed pursuant to Article 8(3)(a) of Regulation (EC) No 714/2009 is not consistent with the wording of Articles 32(2) and 32(3) of the Network Code.

4. Information exchange

The Framework Guidelines (section 2) require that the Network Code shall "define the timing and content of data exchange between TSOs, among TSOs and DSOs, between TSOs/DSOs and significant grid users and among adjacent DSOs".

Data exchange is governed by Articles 16 to 29 of the Network Code. In the opinion of the Agency, these articles raise two concerns:

- The provisions of the Network Code related to the supply of information by Distribution System Operators ('DSOs') to TSOs (Chapter 3 of the Network Code) are considered by the Agency as comprehensive, but potentially onerous.

The same cannot however be said for the supply of information by TSOs to DSOs. This flow of information exchange is merely addressed in Article 6(2) of the Network Code in the context of confidentiality obligations in case of exchange of information. The Network Code therefore implicitly leaves the question of information exchange from TSOs to DSOs to subsidiarity.



The Agency understands that, in some specific cases, if a DSO fails meeting its obligations for maintaining the local system security, due to lack of information from the neighbouring systems (transmission or distribution), this could in turn affect the cross-border system performance. As drafted, the Network Code may entail a risk of misapplying the principle of proportionality with regard to the exchange of information between TSOs and DSOs.

An appropriate level of reciprocity in the exchange of information should be ensured. The Agency suggests therefore that a new provision in Article 16 of the Network Code is included which addresses DSOs' needs for information, as well as for the cooperation between TSOs and DSOs at a high level. The provision should envisage an agreement between the involved parties and subject to case-by-case consideration in order to respect various regional specificities across the European Union;

- With regard to the scope of the data exchange with Significant Grid Users set out in Chapter 3 of the Network Code, the Agency understands the forward looking nature of the provisions therein; however, clear criteria are missing to ensure that the determination of the scope of the data exchange is made in the respect of the principles of transparency, proportionality and non-discrimination. The wording of Article 16(4) of the Network Code should accordingly be adapted to provide at least high level criteria, such as the efficiency and the effectiveness, to be respected by TSOs when applying this provision. Furthermore, the use of the word "adjust" does not appear appropriate, as the scope should be first determined before being subject to adjustments. The Agency accordingly suggests replacing the word "adjust" by "determine".

5. Scope

The Framework Guidelines (section 1.1) require that the Network Code "shall ensure provision of an efficient functioning of the <u>interconnected</u> transmission systems to support all market activities" (emphasis added).

As drafted, the Network Code raises concerns with regard to the application of the Network Code to non-interconnected systems. The Network Code merely addresses this issue in its Recital (7) according to which: "This Network Code has been drafted in accordance with Article 8(7) of Regulation (EC) 714/2009 according to which the network codes shall be developed for cross-border network issues and market integration issues (...). For Transmission System Operators of small Responsibility Areas like Åland Islands, or standalone Transmission Systems like Canary Islands or Malta, it is not feasible to meet obligations of this Network Code".

This recital lacks clarity and could accordingly lead to the risk of interpreting the Network Code as applying to small-isolated systems not connected to any country, such as, for instance, the Canary Islands (Spain), Madeira (Portugal) and Guadalupe (France). For islands without interconnections, there are neither cross-border network issues nor market integration issues (and no cross-border trade either). Accordingly, on the basis of Article 8(7) of Regulation (EC) No 714/2009, it seems to the Agency that the non-application of the





Network Code to islands without interconnections should be explicitly stated in the operative part of the Network Code.

6. Drafting quality

The drafting of several provisions of the Network Code could, in the opinion of the Agency, be improved so as to ensure the effective and efficient implementation of the Network Code.

Provisions that could in particular affect legal certainty and undermine the targets of the 3rd Package include the following:

- The definitions introduced in this Network Code are not always consistent with those provided in other network codes. For a same term, the co-existence of two (or more) definitions may lead to lack of legal certainty. Therefore, the Agency expects that the definitions shall be harmonised across all network codes as well as published on the ENTSO-E website;
- The drafting of Articles 1(6) and 1(7) of the Network Code lacks clarity, and therefore may cause legal uncertainty with regard to new applications;
- In Article 2 of the Network Code, the definition of "Significant Grid User" lacks clarity and, due to the absence of a reference to the types of Significant Grid Users explicitly identified under Article 1(3) of the Network Code, may lead to the risk of inconsistent interpretation. The Agency therefore suggests adding a reference to Article 1(3) of the Network Code in the definition of Significant Grid User;
- The scope of application of the Network Code is based and dependent on the notion of "Transmission System". It is however not clear whether this notion should be understood according to the definition of "Transmission System" in the NC CACM or to the definition of "Transmission Network" in the NC DC. Furthermore, the Network Code lacks clear criteria as to how the Transmission System/Network should be determined at the Member State level;
- Some definitions in the Network Code appear to be missing in Article 2 of the Network Code. This is notably the case for the definition of "European Awareness System" (Article 18(1)), "Static VAR Compensator" (Article 18(2)(g)) and "HVDC Interconnector" (Article 22(4));
- The last sentence of Article 3(3) of the Network Code does not seem necessary as it merely reflects the obligation of TSOs pursuant to Article 12 of Directive 2009/72/EC. In addition, this last sentence appears to aim at giving national legislation precedence over the European legislation (see the use of the words "in compliance" and "according to"). This sentence should therefore be deleted;
- Article 4 of the Network Code establishes the competences of national regulatory authorities and other relevant national authorities for regulatory approvals. However, it does not consider that Member States might find it appropriate to foresee, in line



with the 3rd Package, regulatory involvement other than through approval, notably by fixing the methodologies and conditions. Further, it does not consider that national regulatory authorities, to attend their duties effectively, need to be informed whenever TSOs can implement the Network Code without the approval of national regulatory authorities. Those aspects should also be taken into account by the Network Code;

- In Article 4(3) of the Network Code, the wording does not clearly reflect the need for TSOs to jointly establish the mentioned methodologies and conditions and to accordingly submit a joint proposal to the concerned national regulatory authorities or other relevant national authorities. This should be clarified. Further, it should be clarified to ensure an efficient procedure that national regulatory authorities and other relevant national authorities, when approving methodologies and conditions established by TSOs of a Synchronous Area, should consult each other and cooperate closely with each other, in line with the recommendations made by the Agency on the NC CACM (Recommendation No 01/2013 of 14 March 2013⁵);
- Article 4(5) of the Network Code appears to be a repetition of Article 8 of Regulation (EC) No 713/2009 and its deletion should therefore be considered;
- Regarding the cost recovery provisions, the fourth paragraph of Article 5 of the Network Code does not seem to bring any added value as it would already be covered by the general principle of cost-recovery formulated in the first paragraph of this article. Article 5(4) furthermore lacks consistency with the provisions in the NC RfG and the NC DC. This paragraph should accordingly be deleted;
- Article 8(17) of the Network Code seems closely linked to Article 5 of Council Directive 2008/114/EC of 8 December 2008 on the identification and designation of European critical infrastructures and the assessment of the need to improve their protection. A compatible drafting should accordingly be ensured in the Network Code, clarifying the confidentiality scope in the frame of implementation monitoring;
- Article 9(7) of the Network Code refers to "manual or automatic re-synchronisation". These terms are not defined or explained and so the general differences and functionalities of the two are not clear. Furthermore it is not clear what their application will be. "Manual re-synchronisation" appears to be more onerous, so there is concern that it is not clear whether its use will be mandated for certain types of generators. There is also concern that if "manual re-synchronisation" is mandatory for all Significant Grid Users, then it is not practicable for the DSO to grant resynchronisation permission to all affected Significant Grid Users during an Emergency State or Blackout State. The Agency understands that it is normal practice in some countries for a threshold to be set, below which "automatic resynchronisation" is permitted, but if this is the intention of ENTSO-E it is not

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 $http://www.acer.europa.eu/Official_documents/Acts_of_the_Agency/Recommendations/ACER\%20Recommendation\%2001-2013.pdf$



reflected in this article. The issue should be clarified and the wording accordingly adapted;

- Article 9(11) of the Network Code lacks clarity as to how the data available at the Connection Point of a Significant Grid User will be transmitted to the respective TSO. This concern is related particularly to numerous Type B Power Generating Modules. It appears there is no clear obligation in the Network Code for the TSOs to collect the concerned data at the Connection Point of a Significant Grid User;
- In Article 9(14) of the Network Code, the use of the words "establish" does not seem to be justified. The Agency would suggest redrafting as "Each TSO shall be entitled to use actions to improve System Frequency quality as defined in [NC LFCR].";
- Article 10(3) of the Network Code limits the application of voltage and time ranges to Power Generating Modules. It seems to the Agency that similar information on voltage withstand capabilities of the Demand Facilities with Connection Point directly to the Transmission System may also be relevant for Operational Security, particularly considering that similar capabilities are required pursuant to the NC DC;
- Article 10(9) of the Network Code seems to misapply the scope of Significant Grid Users identified in Article 1(3)(c) of the Network Code. The current wording seems to suggest that both aggregated Demand Facilities and the Aggregators shall comply with the requirement. This could imply that the households participating in a demand side response scheme or their Aggregators would have to disconnect at specified voltages, probably measured at the Connection Point, in the specified timeframe, defined by the TSO or by the DSO. The Agency believes neither this is possible nor this is the intention of the Network Code. Article 10(9) of the Network Code should be deleted or amended to address only large consumers while ensuring national scrutiny;
- In Article 10(16) of the Network Code, although the requirement applies to a "Demand Facility with Connection Point directly to the Transmission System", reference is made in the last sentence to the NC RfG;
- Article 12(4) of the Network Code, related to Redispatching, seems to be a reiteration of Article 41(2) of the NC CACM;
- The criterion "as far as reasonably practicable" in Articles 13(5)(b) and (9) of the Network Code lacks precision;
- Article 17 of the Network Code provides for structural and forecast data exchange between the TSOs. The Agency questions whether the wording of Article 17(3)(c) allows for an efficient operational planning as the notions of "injections" and "withdrawals" are not defined. The appropriate split of the injections and withdrawals between the substation busbars, in case of their decoupling, needs to be ensured and to allow for the correct load flow calculations;



- Article 26(2) of the Network Code puts upon TSOs an obligation to define requirements "together with" DSOs, while Article 26(1) and other provisions of the Network Code related to the cooperation between TSOs and DSOs refer to a duty of "coordination". Consistency should be ensured;
- Article 27(2) of the Network Code allows TSOs to request from Power Generating Modules connected to the Distribution Network any further data deemed necessary for Operational Security Analysis and validation of models. The Agency believes that the possibility for TSOs to request data directly from grid users connected at the distribution level should be subject to the applicable national regulatory framework. Article 27(2) should therefore be redrafted to clarify that the modalities for the provision of data directly to the TSO by grid users connected at the distribution level should be subject to the applicable national regulatory framework;
- In Article 29(2)(c) of the Network Code, it is not clear whether real-time Active and Reactive Power data should be understood as measurements or estimations. Not all Aggregators can efficiently and effectively provide real-time measured values. The relevant paragraph should therefore be redrafted to clarify that the data to be exchanged could be based on estimations;
- Reference is made in Article 32(2) of the Network Code to the "annual reporting developed pursuant to Article 8(3)(a) of the Regulation (EC) 714/2009". However, the annual reporting shall be developed pursuant to the common incidents classification scale, adopted by ENTSO-E in accordance with Article 8(3)(a) of Regulation (EC) No 714/2009. The wording should accordingly be adapted;
- With regard to Articles 32 (2) and (3) of the Network Code it is to note that a draft of the Network Code dated 14 December 2012, as previously published on ENTSO-E's website, included the possibility of involving national regulatory authorities in the process of analysis and classification of system incidents. Currently, the Network Code does not provide for such involvement of national regulatory authorities. For the purpose of efficiency of that process and of reinforcement of operational security the Agency considers that such possibility of involving national regulatory authorities should be reintroduced into the Network Code;
- Various notions defined and used in this Network Code lack consistency with the definitions introduced in the NC RfG and NC DC, e.g. the notion of "Distribution Networks and Closed Distribution Networks with Connection Point directly to the Transmission System" used in the Network Code lacks consistency with the notion of "Transmission Connected Distribution Network Operators" used in the NC DC;
- Some provisions of the Network Code leave too wide a margin of discretion to TSOs (see for instance Article 8(14) with the use of the words "unless decided otherwise by the TSO" which suggests that the TSOs enjoys unlimited discretion in their decisions).

The Agency is committed to supporting ENTSO-E in the redrafting process.



Done at Ljubljana on 28 May 2013.

For the Agency:

Alberto Pototschnig Director



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