



**DECISION No 08/2019**  
**OF THE AGENCY FOR THE COOPERATION OF**  
**ENERGY REGULATORS**

**of 19 June 2019**

**ON THE ALL TSOs' PROPOSAL FOR THE METHODOLOGY FOR ASSESSING**  
**THE RELEVANCE OF ASSETS FOR OUTAGE COORDINATION**

THE AGENCY FOR THE COOPERATION OF ENERGY REGULATORS,

Having regard to the Treaty on the Functioning of the European Union,

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<sup>1</sup>, and, in particular, Article 8(1) thereof,

Having regard to Commission Regulation (EU) 2017/1485 of 2 August 2017 establishing a guideline on electricity transmission system operation<sup>2</sup>, and, in particular, Articles 6(3)(c) and 6(8) thereof,

Having regard to the outcome of the consultation with all national regulatory authorities and transmission system operators,

Having regard to the favourable opinion of the Board of Regulators of 12 June 2019, delivered pursuant to Article 15(1) of Regulation (EC) No 713/2009,

Whereas:

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<sup>1</sup> OJ L 211, 14.8.2009, p. 1.

<sup>2</sup> OJ L 220, 25.8.2017, p. 1.

## **1. INTRODUCTION**

- (1) Commission Regulation (EU) 2017/1485 of 2 August 2017 establishing a guideline on electricity transmission system operation (the ‘SO Regulation’) lays down the requirements for outage coordination, including the requirements for the development of a methodology for assessing the relevance of assets for outage coordination (‘RAOCM’) in accordance with Article 84 of the SO Regulation.
- (2) Pursuant to Articles 5(1), 5(2), 6(3)(c) and 84 of the SO Regulation, transmission system operators (‘TSOs’) are required to develop an agreed proposal for RAOCM, at least per synchronous area, and submit it to the regulatory authorities of the concerned region(s) for approval. Then the regulatory authorities should reach an agreement and take a decision on the proposal for RAOCM within six months after the receipt of the proposal by the last regulatory authority. When regulatory authorities fail to reach an agreement within the six-month period after the submission, the Agency shall adopt a decision concerning the TSOs’ proposal in accordance with Article 8(1) of Regulation (EC) No 713/2009.
- (3) To comply with these requirements, all TSOs developed one RAOCM, meant to apply Union-wide, including all synchronous areas within the Union. Accordingly, the same proposal of RAOCM was submitted to all regulatory authorities concerned at Union level.
- (4) The present Decision of the Agency follows from the request of all regulatory authorities that the Agency adopts a decision on the proposal for RAOCM, which all TSOs submitted to all regulatory authorities and which those regulatory authorities agreed to refer for decision to the Agency. Annex I to this Decision sets out the RAOCM as decided by the Agency.

## **2. PROCEDURE**

### **2.1. Proceedings before regulatory authorities**

- (5) Article 84 of the SO Regulation requires TSOs, of at least each synchronous area, to submit a proposal for assessing the relevance of assets for outage coordination, no later than twelve months after the entry into force of the SO Regulation. As the SO Regulation entered into force on 14 September 2017, TSOs were required to submit a proposal for RAOCM by 14 September 2018.
- (6) On 26 February 2018, all TSOs published, for public consultation, the draft ‘all TSOs’ proposal for assessing the relevance of assets for outage coordination in accordance with Article 84 of Commission Regulation (EU) 2017/1485 of 2 August 2017’. The consultation lasted from 26 February 2018 until 6 April 2018.
- (7) On 14 September 2018, all TSOs submitted to all regulatory authorities an ‘all TSOs’ proposal for assessing the relevance of assets for outage coordination in accordance with

Article 84 of Commission Regulation (EU) 2017/1485 of 2 August 2017' (hereafter referred to as the 'Proposal'). The last regulatory authority received the proposal on 1 October 2018.

## **2.2. Proceedings before the Agency**

- (8) In a letter received by the Agency on 21 December 2018, the Chair of the all Energy Regulators' Forum<sup>3</sup>, on behalf of all regulatory authorities, informed the Agency that on 19 December 2018 all regulatory authorities reached a unanimous agreement to request the Agency to adopt a decision on the Proposal pursuant to Article 84 of the SO Regulation.
- (9) In the accompanying non-paper, all regulatory authorities expressed their views on the Proposal. This Non-paper, dated 19 December 2018, does not detect any major shortcomings in the Proposal to prevent an approval by all regulatory authorities. On the other hand, all regulatory authorities highlight that the RAOCM and the methodology for coordinating operational security analysis ('CSAM'), to be developed pursuant to Article 75 of the SO Regulation, share the same influence computation method to establish elements for the observability area, thresholds for external contingencies and the list of assets for outage coordination. The CSAM and RAOCM are therefore interlinked and should be handled consistently. Therefore, when all regulatory authorities unanimously agreed to refer the CSAM to the Agency, they also referred the RAOCM.
- (10) In the referral letter addressed to the Agency, the regulatory authorities called upon the Agency to give utmost consideration to all regulatory authorities' views on the RAOCM provided in their non-paper and on the consistency between the CSAM and RAOCM.
- (11) On 25 January 2019, the Agency launched a public consultation on the Proposal, inviting all market participants to submit their comments by 18 February 2019. The consultation document asked stakeholders to provide views on two topics which were deemed as the most relevant: (i) the implementation timeline and (ii) further comments on the Proposal. The summary and evaluation of the responses received are presented in Annex II to this Decision.
- (12) Moreover, the Agency closely cooperated with all regulatory authorities and all TSOs and further consulted on the amendments to the Proposal during teleconferences, meetings and exchanges of amendments. In particular, the following steps were taken:
  - 7 March 2019: workshop with all regulatory authorities and TSOs;

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<sup>3</sup> The all regulatory authorities' platform to consult and cooperate for reaching a unanimous agreement on NEMO's and TSO's proposals.

- 13 March 2019: teleconference with all regulatory authorities and TSOs;
- 22 March 2019: discussion with all regulatory authorities in the framework of the SOGC Task Force;
- 27 March 2019: teleconference with all regulatory authorities and TSOs;
- 3 April 2019: the Agency circulated an updated draft of the proposed amendments to the RAOCM;
- 10 April 2019: teleconference with all regulatory authorities and TSOs;
- 24 April 2019: meeting with all regulatory authorities and TSOs;
- 7 May 2019: teleconference with all regulatory authorities and TSOs;
- 13 May 2019: teleconference with all regulatory authorities and TSOs;
- 16 May 2019: orientation discussion at the meeting of the Board of Regulators;
- 21 May 2019: discussion with all regulatory authorities at the Electricity Working Group meeting;

### **3. THE AGENCY'S COMPETENCE TO DECIDE ON THE PROPOSAL**

- (13) Pursuant to Article 6(8) of the SO Regulation, where the regulatory authorities have not been able to reach an agreement within six months following the receipt of the terms and conditions or methodologies or upon their joint request, the Agency shall adopt a decision concerning the submitted proposal for terms and conditions or methodologies within six months, in accordance with Article 8(1) of Regulation (EC) No 713/2009.
- (14) As the Proposal aims to apply Union-wide, including all synchronous areas within the Union, and as it was submitted to all regulatory authorities responsible for all synchronous areas within the Union, all those regulatory authorities are to be considered as concerned within the same 'region' according to Article 6(3)(c) of the SO Regulation.
- (15) According to the letter of the Chair of the all Energy Regulators' Forum of 21 December 2018, all those concerned regulatory authorities have agreed to refer the Proposal to the Agency.
- (16) Therefore, under the provision of Article 6(8) of the SO Regulation, the Agency became responsible to adopt a decision concerning the Proposal by the referral of 21 December 2018.

#### **4. SUMMARY OF THE PROPOSAL**

(17) The Proposal consists of the following elements:

- (a) The ‘Whereas’ section and Articles 1 and 2, which include general provisions, the scope of application and the definitions;
- (b) Articles 3, 4 and 5, which contain the influence computation method and relevance of dynamic aspects for influence assessment to determine the relevant assets for outage coordination;
- (c) Article 6, which is dedicated to the implementation timeline;
- (d) Article 7, which includes provisions on language;
- (e) Annex I, which includes the influence thresholds, a description in words of the influence computation method and mathematical descriptions for the computation of power flow influence for network elements and significant grid users, as well as voltage influence computation for network elements.

#### **5. SUMMARY OF THE OBSERVATIONS RECEIVED BY THE AGENCY**

##### **5.1. Initial observations of all regulatory authorities**

- (18) According to the letter of the Chair of the all Energy Regulators Forum of 21 December 2018, all regulatory authorities identified only minor shortcomings of the Proposal.
- (19) All regulatory authorities emphasised, in the Non-paper, that should the influence computation method be changed in the CSAM, these changes need to be consistently mirrored in the RAOCM. This is a requirement stemming from Article 84(3) of the SO Regulation.
- (20) Also, all regulatory authorities identified that the Proposal is unclear with regard to the correct trigger for an update of the list of relevant assets for outage coordination.

##### **5.2. Consultation of all regulatory authorities and TSOs**

- (21) During the close cooperation between the Agency and all regulatory authorities and TSOs as detailed in paragraph (12) above, and beyond the abovementioned issues, the Agency:
  - (a) with respect to the appropriate number of years in between the application of quantitative re-assessment of the relevance of external network elements, power generating modules and demand facilities for outage coordination, further discussed with stakeholders and TSOs the cycle of such application;

- (b) with respect to the application of dynamic studies, further elaborated on this topic with TSOs and regulatory authorities;
- (c) with respect to the unclear trigger for an update of the list of relevant assets for outage coordination, clarified this point with regulatory authorities and no changes were necessary in the Proposal;
- (d) with respect to the influence computation method, further clarified some points.

### **5.3. Public consultation**

- (22) Answers to the public consultation (see paragraph (11) above) shed light on the stakeholders' concerns regarding the above-mentioned issues, in particular regarding the implementation of the quantitative computation, the majority of stakeholders supported a reduction of the period between two successive re-assessments from five to three years, whereas one stakeholder did not think this to be meaningful as evident from Annex II.

## **6. ASSESSMENT OF THE PROPOSAL**

### **6.1. Legal framework**

- (23) Articles 5(1), 5(2) and 6(3)(c) of the SO Regulation require all TSOs to provide, at least per synchronous area, an agreed proposal for RAOCM, in accordance with Article 84(1) of the SO Regulation, to the concerned regulatory authorities for their approval.
- (24) Article 84 of the SO Regulation sets out the requirements regarding the development of a proposal for RAOCM and its implementation. In this context, TSOs of each synchronous area are required to submit a proposal for RAOCM no later than twelve months after entry into force of the SO Regulation. TSOs need to consult the Proposal in accordance with Article 11 of the SO Regulation. Moreover, Article 84(3) of the SO Regulation requires the Proposal to be consistent with the methods developed in accordance with Article 75(1)(a) of the SO Regulation.
- (25) As a general requirement, Article 6(6) of the SO Regulation provides that the proposals for terms and conditions or methodologies include a proposed timescale for their implementation and a description of their impact on the objectives of the same Regulation.

## **6.2. Assessment of the legal requirements**

### **6.2.1. Assessment of the requirements for the development and for the content of the Proposal**

#### *6.2.1.1. Development of the Proposal*

- (26) The Proposal fulfils the requirements of Articles 5(1), 5(2) and 6(3)(c) of the SO Regulation as all TSOs developed and submitted a common proposal of an RAOCM which includes all synchronous areas.
- (27) The Proposal partly fulfils the requirements of Article 84(1) of the SO Regulation, as the Proposal, while it was submitted by most TSOs by 14 September 2018, which is within twelve months after entry into force of the SO Regulation, was submitted by the last TSO on 1 October 2018, which is in breach of the twelve-month submission deadline. The Proposal was subject to consultation as described in Section 2.1 above.

#### *6.2.1.2. Required content of the Proposal*

- (28) The proposal meets the requirements of Article 84(2) of the SO Regulation regarding the content of the RAOCM, as it includes:
- (a) a quantitative methodology to evaluate the changes of electrical values,, such as for example, power flows and voltage;
  - (b) harmonised thresholds on the sensitivity of electrical values in Annex I to the Proposal;
  - (c) a capacity limit for power generating modules and demand facilities to qualify as significant grid users;
  - (d) a qualitative approach;
  - (e) rules for taking into account the systematic relevance of network elements connecting different control areas and critical network elements, in accordance with Commission Regulation (EU) 2015/1222 of 24 July 2015 establishing a guideline on capacity allocation and congestion management (the ‘CACM Regulation’).
- (29) The Proposal fulfils the requirement of Article 84(3) of the SO Regulation as the influence computation method to assess the relevance of assets for outage coordination is consistent with the method to assess elements for the observability area and thresholds to identify contingencies in the proposal on the CSAM. The relevant Articles 3 to 5 in both Proposals are consistent in relation to the computation methods. For consistency reasons with the CSAM, a new definition for ‘connecting TSO’ was added to ease the readability of Articles 3 and 4.

- (30) Yet, the Agency made changes in Articles 4(1) and 4(6) of the Proposal to include the regional security coordinators ('RSC(s)') in the information exchange. In Article 4 of the RAOCM, the information exchange with the RSC(s) is necessary to allow RSC(s) to be compliant with their tasks stemming from Commission Regulation (EU) 2017/2196 of 24 November 2017 establishing a network code on electricity emergency and restoration (hereafter 'ER Regulation'). In particular, the regional coordination in accordance with Article 6(1) of the ER Regulation requires consultation with the RSCs to assess the consistency of measures, within the entire synchronous area, of system defence plans, pursuant to Article 11, and restoration plans, pursuant to Article 23 of the same Regulation. In order for RSCs to understand the dynamic behaviour (frequency and voltage-wise) of the system users, and the interconnected power system in general, they need to be informed of the models, studies and criteria defined by the TSOs to be used for the assessment of influence of the connectivity status and electrical values of the network elements, power generating modules and demand facilities located in transmission-connected distribution system operators ('DSOs')/closed-DSOs ('CDSOs') networks. For example, TSOs' dynamic studies provide for the necessary information on the behaviour of the system (or of its part such as transmission-connected DSOs/CDSOs networks) during stressed situations (emergency and restoration states). In accordance with Article 6(2)(c) of the ER Regulation, regional common mode failures to be assessed by the RSC(s). In complying with this obligation, RSC(s) will need to assess the aforementioned TSOs' dynamic studies and identify potential common mode failures, such as adverse behaviour of a large number of distribution-connected system users during large frequency deviations.
- (31) The Agency also included the RSC(s) in the information exchange in Article 5(2) of the Proposal so as to allow for an efficient exchange of information in accordance with Article 75(1)(d) of the SO Regulation knowing that the threshold values as selected by TSOs will in any way be published by the European Network of Transmission System Operators for Electricity at some point.
- (32) Changes in Article 4 of the Proposal on dynamic aspects for influence assessment were made to align the wording with the respective Articles 38 and 39 of the SO Regulation and to maintain the consistency between the Proposal and the SO Regulation.

#### *6.2.1.3. Proposed timescale for implementation*

- (33) The Proposal fulfils the requirements of Article 6(6) of the SO Regulation with regard to the proposed timescale for implementation of the RAOCM.
- (34) Article 5(5) of the Proposal provides that after the adoption of the RAOCM, all TSOs of an outage coordination region will start using this methodology. Therefore, the RAOCM will be operational in the second semester of 2019 and no testing phase is envisaged.
- (35) Article 5(8) of the Proposal contains a requirement for all TSOs to re-assess the relevance of assets for outage coordination every five years with the quantitative computation

method. Between the mandatory assessments, TSOs of an outage coordination region may use qualitative re-assessment to update the list with relevant assets for outage coordination.

- (36) Yet, the Agency found it necessary to amend Article 5(8) of the Proposal with regard to the cycle for quantitative re-assessment with the computation method. A three-year cycle for re-assessment is more appropriate for the objectives of the SO Regulation on transparency in accordance with its Article 4(2)(b) and non-discrimination in accordance with its Article 4(2)(a). Recitals (3) and (5) of the SO Regulation address the integration of renewable energy sources ('RES') which is relevant as well for the Proposal. In order properly and without discrimination to address the changes in the behaviour of the interconnected transmission system stemming from RES integration, the cycle for quantitative re-assessment has to be adapted accordingly. This will help assess the generation and network situation for outage coordination regularly and synchronise the changes happening due to RES commissioning.
- (37) The Agency has defined the above mentioned cycle for quantitative re-assessment after consultation with all TSOs, regulatory authorities and market participants. The Agency understands that this timescale increases the workload for TSOs, but does not create an unnecessary burden for them. On the other hand, transparency for stakeholders is increased by using the more precise approach in shorter cycles.

#### *6.2.1.4. Description of the expected impact on the objectives of the SO Regulation*

- (38) The recitals in the Proposal provide a description of the expected impact of the RAOCM on the objectives of the SO Regulation. All the relevant objectives set in Article 4 of the SO Regulation are addressed in the recitals, apart from the objective on common load-frequency control process, according to Article 4(1)(c) thereof, and the objective on maintaining frequency quality, according to Article 4(1)(e) thereof. These latter are out of scope of the Proposal.

#### *6.2.2. Assessment of the requirements for consultation, transparency and stakeholder involvement*

##### *6.2.2.1. Consultation and involvement of stakeholders*

- (39) When drafting the Proposal, all TSOs aimed to address the requirements of Article 11 of the SO Regulation regarding the involvement of stakeholders.
- (40) As indicated in paragraph (6) above, all TSOs fulfilled the requirements of Article 11 of the SO Regulation, since stakeholders were consulted on the draft Proposal in accordance with Article 11(1) of the SO Regulation. This involvement took place during a public consultation which ran from 26 February 2018 until 6 April 2018. In addition, all regulatory authorities were regularly informed and consulted, pursuant to Article 11(1) and (2) of the SO Regulation. The justifications regarding the consideration given to the views expressed by stakeholders during the public consultation in the drafting of the

Proposals were provided in a separate document dated 10 July 2018 and submitted to all regulatory authorities.

## 7. CONCLUSION

- (41) For all the above reasons, the Agency considers the Proposal in line with the requirements of the SO Regulation, provided that the amendments described in this Decision are integrated in the Proposal, as presented in Annex I.
- (42) Therefore the Agency approves the Proposal subject to the necessary amendments and to the necessary editorial amendments. To provide clarity, Annex I to this Decision sets out the Proposal as amended and approved by the Agency,

HAS ADOPTED THIS DECISION:

### *Article 1*

The methodology for assessing the relevance of assets for outage coordination in accordance with Article 84 of Regulation (EU) 2017/1485 is adopted as set out in Annex I to this Decision.

### *Article 2*

This Decision is addressed to the following TSOs:

50Hertz Transmission GmbH,  
Amprion GmbH,  
AS Augstsprieguma tīkls,  
Austrian Power Grid AG,  
BritNed Development Limited (NL),  
BritNed Development Limited (UK),  
C.N.T.E.E. Tranelectrica S.A.,  
ČEPS a.s.,  
Creos Luxembourg S.A.,  
EirGrid Interconnector DAC,  
EirGrid plc,  
Eleclink Limited,  
Elektroenergien Systemen Operator EAD,  
Elering AS,  
ELES, d.o.o.,  
Elia System Operator SA,  
Elia System Operator NV/SA,  
Energinet.dk,  
Fingrid Oyj,

HOPS d.o.o. (Hrvatski operator prijenosnog sustava),  
Independent Power Transmission Operator S.A.,  
Kraftnät Åland Ab,  
Litgrid AB,  
MAVIR ZRt,  
Moyle Interconnector Limited,  
National Grid Electricity Interconnector Limited,  
National Grid Electricity Transmission plc,  
National Grid IFA2 Limited,  
Nemo Link Limited,  
Polskie Sieci Elektroenergetyczne,  
Red Eléctrica de España S.A.,  
Rede Eléctrica Nacional, S.A.,  
Réseau de Transport d'Electricité,  
Slovenská elektrizačná prenosová sústava, a.s.,  
Svenska kraftnät,  
System Operator for Northern Ireland Ltd,  
TenneT TSO B.V.,  
TenneT TSO GmbH,  
Terna Rete Elettrica Nazionale S.p.A.,  
TransnetBW GmbH, and  
VUEN - Vorarlberger Übertragungsnetz GmbH.

Done at Ljubljana on 19 June 2019.

**- SIGNED -**

*For the Agency*  
*Director ad interim*  
Alberto POTOTSCHNIG

Annexes:

Annex I – Methodology for assessing the relevance of assets for outage coordination in accordance with Article 84 of the Commission Regulation (EU) 2017/1485 of 2 August 2017 establishing a guideline on electricity transmission system operation

Annex II – Evaluation of responses to the public consultation on the amendments of the proposal for assessing the relevance of assets for outage coordination

*In accordance with Article 19 of Regulation (EC) No 713/2009, the addressees may appeal against this Decision by filing an appeal, together with the statement of grounds, in writing at the Board of Appeal of the Agency within two months of the day of notification of this Decision.*