

**APPROVAL BY THE IRELAND-UNITED KINGDOM (IU)  
REGULATORY AUTHORITIES  
OF**

**THE AMENDED IU TSO PROPOSAL FOR THE  
COMMON CAPACITY CALCULATION METHODOLOGY**

**23 July 2018**

## I. Introduction and legal context

This document elaborates an opinion of the IU Regulatory Authorities, agreed on 23 July 2018, on the amended IU TSO Proposal of common capacity calculation methodology (hereinafter referred to as the “IU CCM”) for the day-ahead and intraday market timeframe in accordance with Article 20 of Commission Regulation (EU) 2015/1222 of 24 July 2015 establishing a Guideline on Capacity Allocation and Congestion Management (Regulation 2015/1222).

This agreed opinion of the IU Regulatory Authorities shall provide evidence that a decision on the IU CCM for the day-ahead and intraday market timeframe does not, at this stage, need to be adopted by the Agency for the Cooperation of Energy Regulators (ACER) pursuant to Article 9(11) of the Regulation 2015/1222. It is intended to constitute the basis on which the IU Regulatory Authorities will each subsequently make national decisions pursuant to Article 9(7)(a) and to Article 9(12) of Regulation 2015/1222.

The legal provisions that lie as the basis for the common capacity calculation methodology, and this IU Regulatory Authority agreed opinion on the common capacity calculation methodology, can be found in Article 3, 9, 20 and 21 of Regulation 2015/1222. These Articles are set out below for reference.

Article 3 of Regulation 2015/1222:

Objectives of capacity allocation and congestion management cooperation

*This Regulation aims at:*

- (a) Promoting effective competition in the generation, trading and supply of electricity;*
- (b) Ensuring optimal use of the transmission infrastructure;*
- (c) Ensuring operational security;*
- (d) Optimising the calculation and allocation of cross-zonal capacity;*
- (e) Ensuring fair and non-discriminatory treatment of TSOs, NEMOs, the Agency, regulatory authorities and market participants;*
- (f) Ensuring and enhancing the transparency and reliability of information;*
- (g) Contributing to the efficient long-term operation and development of the electricity transmission system and electricity sector in the Union;*
- (h) Respecting the need for a fair and orderly market and fair and orderly price formation;*
- (i) Creating a level playing field for NEMOs;*
- (j) Providing non-discriminatory access to cross-zonal capacity*

Article 9 of Regulation 2015/1222:

Adoption of terms and conditions or methodologies

- 1. TSOs and NEMOs shall develop the terms and conditions or methodologies required by this Regulation and submit them for approval to the competent regulatory authorities within the respective deadlines set out in this Regulation. Where a proposal for terms and conditions or methodologies pursuant to this Regulation needs to be developed and agreed by more than one TSO or NEMO, the participating TSOs and NEMOs shall closely cooperate. TSOs, with the assistance of ENTSO for Electricity, and all NEMOs shall regularly inform the competent regulatory authorities and the Agency about the progress of developing these terms and conditions or methodologies.*

*[...]*

5. *Each regulatory authority shall approve the terms and conditions or methodologies used to calculate or set out the single day-ahead and intraday coupling developed by TSOs and NEMOs. They shall be responsible for approving the terms and conditions or methodologies referred to in paragraphs 6, 7 and 8.*
6. *The proposals for the following terms and conditions or methodologies shall be subject to approval by all regulatory authorities:*
  - e. *the proposal for a harmonised capacity methodology in accordance with Article 21(4)*
7. *The proposals for the following terms and conditions or methodologies shall be subject to approval by all regulatory authorities:*
  - a. *the common capacity methodology in accordance with Article 20(2);*  
(...)
8. (...)
9. *The proposal for terms and conditions or methodologies shall include a proposed timescale for their implementation and a description of their expected impact on the objectives of this Regulation. Proposals on terms and conditions or methodologies subject to the approval by several or all regulatory authorities shall be submitted to the Agency at the same time that they are submitted to regulatory authorities. Upon request by the competent regulatory authorities, the Agency shall issue an opinion within three months on the proposals for terms and conditions or methodologies.*
10. *Where the approval of the terms and conditions or methodologies requires a decision by more than one regulatory authority, the competent regulatory authorities shall consult and closely cooperate and coordinate with each other in order reach an agreement. Where applicable, the competent regulatory authorities shall take into account the opinion of the Agency. Regulatory authorities shall take decisions concerning the submitted terms and conditions or methodologies in accordance with paragraphs 6, 7 and 8, within six months following the receipt of the terms and conditions or methodologies by the regulatory authority or, where applicable, by the last regulatory authority concerned.*
11. (...)
12. *In the event that one or several regulatory authorities request an amendment to approve the terms and conditions or methodologies submitted in accordance with paragraphs 6, 7 and 8, the relevant TSOs or NEMOs shall submit a proposal for amended terms and conditions or methodologies for approval within two months following the requirement from the regulatory authorities. The competent regulatory authorities shall decide on the amended terms and conditions or methodologies within two months following their submission. Where the competent regulatory authorities have not been able to reach an agreement on terms and conditions or methodologies pursuant to paragraphs (6) and (7) within the two-month deadline, or upon their joint request, the Agency shall adopt a decision concerning the amended terms and conditions or methodologies within six months, in accordance with Article 8(1) of Regulation (EC) No 713/2009. If the relevant TSOs or NEMOs fail to submit a proposal for amended terms and conditions or methodologies, the procedure provided for in paragraph 4 of this Article shall apply.*
13. (...)
14. *TSOs and NEMOs responsible for establishing the terms and conditions or methodologies in accordance with this Regulation shall publish them on the internet after approval by the competent regulatory authorities or, if no such approval is required, after their establishment, except where such information is considered as confidential in accordance with Article 13.*

Article 20 of Regulation 2015/1222:

Introduction of flow-based capacity calculation methodologies

1. *For the day-ahead market time-frame and intraday market time-frame the approach used in the common capacity calculation methodologies shall be a flow-based approach, except where the requirement under paragraph 7 is met.*
2. *No later than 10 months after the approval of the proposal for a capacity calculation region in accordance with Article 15(1), all TSOs in each capacity calculation region shall submit a proposal for a common coordinated capacity calculation methodology within the respective region. The proposal shall be subject to consultation in accordance with Article 12. The proposal for the capacity calculation methodology within regions pursuant to this paragraph in capacity calculation regions based on the 'North-West Europe' ('NWE') and 'Central Eastern Europe' ('CEE') as defined in points (b), and (d) of point 3.2 of Annex I to Regulation (EC) No 714/2009 as well as in regions referred to in paragraph 3 and 4, shall be complemented with a common framework for coordination and compatibility of flow-based methodologies across regions to be developed in accordance with paragraph 5.*

*[...]*

Article 21 of Regulation 2015/1222:

Capacity calculation methodology

1. *The proposal for a common capacity methodology for a capacity region determined in accordance with Article 20(2) shall include at least the following items for each capacity calculation time-frame:*
  - a. *Methodologies for the calculation of the inputs to capacity calculation, which shall include the following parameters:*
    - (i) *a methodology for determining the reliability margin in accordance with Article 22;*
    - (ii) *the capacity methodologies for determining operational security limits, contingencies relevant to capacity calculation and allocation constraints that may be applied in accordance with Article 23;*
    - (iii) *the methodology for determining the generation shift keys in accordance with Article 24;*
    - (iv) *the methodology for determining remedial actions to be considered in capacity calculation in accordance with Article 25.*
  - b. *a detailed description of the capacity calculation approach which shall include the following:*
    - (i) *a mathematical description of the applied capacity calculation approach with different capacity calculation inputs;*
    - (ii) *rules for avoiding undue discrimination between internal and cross-zonal exchanges to ensure compliance with point 1.7 of Annex I to Regulation (EX) No 714/20017*
    - (iii) *rules for taking in to account, where appropriate, previously allocated cross-zonal capacity*
    - (iv) *rules on the adjustment of power flows on critical network elements or of cross-zonal capacity due to remedial actions in accordance with Article 25;*

*[...]*

- (vi) *for the coordinated net transmission capacity approach, the rules for calculating cross-zonal capacity, including the rules for efficiently sharing the power of flow capabilities of critical network elements among different bidding zone borders;*
  - (vii) *where the power of flows on critical network elements are influenced by cross-zonal power exchanges in different capacity calculation regions, the rules for sharing the power flow capabilities of critical network elements among different capacity calculation regions in order to accommodate these flows.*
- c. *a methodology for the validation of cross-zonal capacity in accordance with Article 26*
2. *For the intraday capacity calculation time-frame, the capacity calculation methodology shall also state the frequency at which capacity will be reassessed in accordance with Article 14(4), giving reasons for the chosen frequency.*
  3. *The capacity calculation methodology shall include a fallback procedure for the case where the initial capacity calculation does not lead to any results.*
  4. *All TSOs in each capacity calculation region shall, as far as possible, use harmonised capacity calculation inputs. By 31 December 2020, all regions shall use a harmonised capacity calculation methodology which shall in particular provide for a harmonised capacity calculation methodology for the flow based and for the coordinated net transmission capacity approach. The harmonisation of capacity calculation methodology shall be subject to an efficiency assessment concerning the harmonisation of the flow-based methodologies and the coordinated net transmission methodologies that provide for the same level of operational security. All TSOs shall submit the assessment with a proposal for the transition towards a harmonised capacity calculation methodology to all regulatory authorities within 12 months after at least two capacity calculation regions have implemented common capacity calculation methodology in accordance with Article 20(5).*

## II. The IU TSO proposal

The common capacity calculation methodology for the day-ahead and intraday market timeframe proposal was consulted on by the IU TSOs through ENTSO-E for over one month from 26 July 2017 to 31 August 2017, in line with Article 20 and Article 12 of Regulation 2015/1222.<sup>1</sup>

The amended IU TSOs' proposal for the IU CCM was received by the last Regulatory Authority on 23 May 2018. The proposal includes proposed timescales for its implementation and a description of its expected impact on the objectives of Regulation 2015/1222, in line with Article 9(9) of Regulation 2015/1222.

Regulation 2015/1222 requires the competent Regulatory Authorities to consult and closely cooperate and coordinate with each other in order to reach an agreement and take decisions within two months following receipt of an amended proposal by the last regulatory authority. A decision is therefore required by each Regulatory Authority by 23 July 2018.

The proposal contains the methodologies outlined in Article 21(1)(a) of Regulation 2015/1222. It is inclusive of the inputs for the day-ahead and intraday Capacity Calculations, a description of the capacity calculation approach required by Article 21(1)(b), a methodology for the validation of cross-zonal capacity in line with Article 21(1)(c) and a fallback methodology, required in line with Article 21(3).

<sup>1</sup> The public consultation held 26 July 2017 to 31 August 2017 is available on the ENTSO-e website: <https://consultations.entsoe.eu/markets/capacity-calculation-methodology-iu-ccr/>

The IU CCM is based on the application of a Coordinated Net Transmission Capacity (CNTC) approach for the day-ahead and intraday capacity calculation in the IU Region. A separate proposal for the application of the CNTC approach has been submitted to IU Regulatory Authorities. We have agreed to approve the CNTC methodology and will publish our decision on 23 July 2018.

### **III. IU Regulatory Authority position**

In our original decision, the IU Regulatory Authorities requested several amendments in order to ensure the methodology included the necessary level of detail to be considered satisfactory. We share the opinion that the amended IU CCM contains sufficient detail and clarity. Further, the IU Regulatory Authorities are in agreement that the proposed IU CCM will facilitate the achievement of the objectives specified within Article 3 of Regulation 2015/1222. The IU Regulatory Authorities would like to acknowledge the effort of IU TSOs to amend the IU CCM in line with requests made by IU Regulatory Authorities.

We are pleased that the methodology states that costly remedial actions will be made available to the coordinated capacity calculator. We are also pleased that, it states when determining which costly remedial actions to make available, the relevant TSO shall consider whether these are more economically efficient than the alternative to compensation interconnectors for a reduction of their capacity. This approach satisfies the requirements of the capacity allocation and congestion management guideline and the high level principle 1 of ACER Recommendation No 2/2016<sup>2</sup> which states that congestion should in principle be resolved with remedial actions in the short term.

Consequently, the IU Regulatory Authorities shall adopt national decisions to approve the amended IU CCM proposal, within the two-month deadline as set out in Article 9(12) of the Regulation 2015/1222.

### **IV. Actions**

The IU Regulatory Authorities have assessed, consulted and closely cooperated and coordinated to reach agreement that the amended IU CCM proposal meets the requirements of the Regulation 2015/1222 and as such can be approved by relevant Regulatory Authorities.

The IU Regulatory Authorities must therefore make their decisions, on the basis of this agreement in accordance with the two-month deadline as set out in the Regulation 2015/1222.

Following national decisions by the IU Regulatory Authorities, the IU TSOs will be required to publish the amended IU CCM proposal as approved on the internet in line with Article 9(14) of Regulation 2015/1222, and must meet the implementation deadlines required by Article 28 of the amended IU CCM.

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<sup>2</sup> ACER Recommendation No 2/2016 on the Common Capacity Calculation and Redispatching and Countertrading Methodologies, available at the following address:  
[https://www.acer.europa.eu/Official\\_documents/Acts\\_of\\_the\\_Agency/Recommendations/ACER%20Recommendation%2002-2016.pdf](https://www.acer.europa.eu/Official_documents/Acts_of_the_Agency/Recommendations/ACER%20Recommendation%2002-2016.pdf)