

DECISION OF THE CORE REGULATORY AUTHORITIES

on

**THE SECOND AMENDMENT OF THE DAY-AHEAD
CAPACITY CALCULATION METHODOLOGY OF THE
CORE CAPACITY CALCULATION REGION**

**in accordance with Articles 20ff. of the Commission
Regulation (EU) 2015/1222 of 24th July 2015 establishing
a guideline on capacity allocation and congestion
management**

28 November 2023

1. Introduction and legal context

This document elaborates an agreement of the Core Regulatory Authorities (hereafter: “Core NRAs”), agreed on 28 November 2023 at the Core Energy Regulators’ Regional Forum (hereafter: “CERRF”) on the Core Transmission System Operators (hereafter: “Core TSOs”) proposal for the second amendment of the Day-Ahead Capacity Calculation Methodology of the Core Capacity Calculation Region (hereafter: “Core DA CCM 2nd Amendment Proposal”). The Core DA CCM 2nd Amendment Proposal was submitted in accordance with Articles 20ff. and Article 9(13) of the Commission Regulation (EU) 2015/1222 of 24 July 2015 establishing a guideline on capacity calculation and congestion management as amended by Commission implementing regulation (EU) 2021/280 of 22 February 2021 amending Regulations (EU) 2015/1222, (EU) 2016/1719, (EU) 2017/2195 and (EU) 2017/1485 in order to align them with Regulation (EU) 2019/943 (hereafter: “CACM Regulation”).

This agreement of the Core NRAs shall provide evidence that a decision on the Core DA CCM 2nd Amendment Proposal does not, at this stage, need to be adopted by ACER pursuant to Article 9(11) of the CACM Regulation as amended by Regulation 2021/280. It is intended to constitute the basis on which the Core NRAs will each subsequently issue a national decision to approve the Core DA CCM 2nd Amendment Proposal pursuant to Article 9(10) of the CACM Regulation as amended by Regulation 2021/280.

The legal provisions that lie at the basis of the Core DA CCM 2nd Amendment Proposal and this Core NRAs’ agreement on the methodology, can be found in Articles 3, 9 and 20ff of the CACM Regulation, Article 5 of the Regulation (EU) 2019/942 of the European Parliament and of the Council of 5 June 2019 establishing a European Union Agency for the Cooperation of Energy Regulators (hereafter: “ACER Regulation”). These articles are set out below for reference.

1.1 CACM Regulation

Article 3

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 as amended by Regulation 2021/280

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 Agency or the competent regulatory authorities within the respective deadlines set out in this

Regulation. In exceptional circumstances, notably in cases where a deadline cannot be met due to circumstances external to the sphere of TSOs or NEMOs, the deadlines for terms and conditions or methodologies may be prolonged by the Agency in procedures pursuant to paragraph 6, jointly by all competent regulatory authorities in procedures pursuant to paragraph 7, and by the competent regulatory authority in procedures pursuant to paragraph 8.

(...)

5. Each regulatory authority or where applicable the Agency, as the case may be, 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. Before approving the terms and conditions or methodologies, the Agency or the competent regulatory authorities shall revise the proposals where necessary, after consulting the respective TSOs or NEMOs, in order to ensure that they are in line with the purpose of this Regulation and contribute to market integration, non-discrimination, effective competition and the proper functioning of the market.

6. The proposals for the following terms and conditions or methodologies and any amendments thereof shall be subject to approval by the Agency:

(...)

(e) the proposal for a harmonised capacity calculation methodology in accordance with Article 21(4);

(...)

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 for terms and conditions or methodologies subject to the approval by several regulatory authorities in accordance with paragraph 7 shall be submitted to the Agency within 1 week of their submission to regulatory authorities. Proposals for terms and conditions or methodologies subject to the approval by one regulatory authority in accordance with paragraph 8 may be submitted to the Agency within 1 month of their submission at the discretion of the regulatory authority while they shall be submitted upon the Agency's request for information purposes in accordance with Article 3 paragraph 2 of the Regulation (EU) 2019/942 if the Agency considers the proposal to have a cross-border impact. Upon request by the competent regulatory authorities, the Agency shall issue an opinion within 3 months on the proposals for terms and conditions or methodologies.

10. Where the approval of the terms and conditions or methodologies in accordance with paragraph 7 or the amendment in accordance with paragraph 12 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 to reach an agreement. Where applicable, the competent regulatory authorities shall take into account the opinion of the Agency. Regulatory authorities or, where competent, the Agency shall take decisions concerning the submitted terms and conditions or methodologies in accordance with paragraphs 6, 7 and 8, within 6 months following the receipt of the terms and conditions or methodologies by the Agency or the regulatory authority or, where applicable, by the last regulatory authority concerned. The period shall begin on the day following that on which the proposal was submitted to the Agency in accordance with paragraph 6, to the last regulatory authority concerned in accordance with paragraph 7 or, where applicable, to the regulatory authority in accordance with paragraph 8.

11. Where the regulatory authorities have not been able to reach agreement within the period referred to in paragraph 10, or upon their joint request, or upon the Agency's request according to the third subparagraph of Article 5(3) of Regulation (EU) 2019/942, the Agency shall adopt a decision concerning the submitted proposals for terms and conditions or methodologies within 6 months, in accordance with Article 5(3) and the second subparagraph of Article 6(10) of Regulation (EU) 2019/942.

12. In the event that the Agency, or all competent regulatory authorities jointly, or the competent regulatory authority request an amendment to approve the terms and conditions or methodologies submitted in accordance with paragraphs 6, 7 and 8 respectively, the relevant TSOs or NEMOs shall submit a proposal for amended terms and conditions or methodologies for approval within 2 months following the request from the Agency or the competent regulatory authorities or the competent regulatory authority. The Agency or the competent regulatory authorities or the competent regulatory authority shall decide on the amended terms and conditions or methodologies within 2 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 paragraph 7 within the 2-month deadline, or upon their joint request, or upon the Agency's request according to the third subparagraph of Article 5(3) of Regulation (EU) 2019/942, the Agency shall adopt a decision concerning the amended terms and conditions or methodologies within 6 months, in accordance with Article 5(3) and the second subparagraph of Article 6(10) of Regulation (EU) 2019/942. 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. The Agency, or all competent regulatory authorities jointly, or the competent regulatory authority, where they are responsible for the adoption of terms and conditions or methodologies in accordance with paragraphs 6, 7 and 8, may respectively request proposals for amendments of those terms and conditions or methodologies and determine a deadline for the submission of those proposals. TSOs or NEMOs responsible for developing a proposal for terms and conditions or methodologies may propose amendments to regulatory authorities and the Agency.

The proposals for amendment to the terms and conditions or methodologies shall be submitted to consultation in accordance with the procedure set out in Article 12 and approved in accordance with the procedure set out in this Article.

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 Agency or 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 21

Capacity calculation methodology

1. The proposal for a common capacity calculation methodology for a capacity calculation 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 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 (EC) No 714/2009;
- (iii) rules for taking into 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;
- (v) for the flow-based approach, a mathematical description of the calculation of power transfer distribution factors and of the calculation of available margins on critical network elements;
- (vi) for the coordinated net transmission capacity approach, the rules for calculating cross-zonal capacity, including the rules for efficiently sharing the power flow capabilities of critical network elements among different bidding zone borders;
- (vii) where the power 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 timeframe, 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 capacity 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).

1.2 ACER Regulation

Article 5

Tasks of ACER as regards the development and implementation of network codes and guidelines

(...)

3. Where one of the following legal acts provides for the development of proposals for terms and conditions or methodologies for the implementation of network codes and guidelines which require the approval of all the regulatory authorities of the region concerned, those regulatory authorities shall agree unanimously on the common terms and conditions or methodologies to be approved by each of those regulatory authorities:

(a) a legislative act of the Union adopted under the ordinary legislative procedure;

(b) network codes and guidelines that were adopted before 4 July 2019 and subsequent revisions of those network codes and guidelines; or

(c) network codes and guidelines adopted as implementing acts pursuant to Article 5 of Regulation (EU) No 182/2011.

(...)

6. Before approving the terms and conditions or methodologies referred to in paragraphs 2 and 3, the regulatory authorities, or, where competent, ACER, shall revise them where necessary, after consulting the ENTSO for Electricity, the ENTSO for Gas or the EU DSO entity, in order to ensure that they are in line with the purpose of the network code or guideline and contribute to market integration, non-discrimination, effective competition and the proper functioning of the market. ACER shall take a decision on the approval within the period specified in the relevant network codes and guidelines. That period shall begin on the day following that on which the proposal was referred to ACER.

2. The Core TSOs' proposal

Through the Core DA CCM 2nd Amendment Proposal, the Core TSOs aim to introduce several amendments to the Core DA CCM, established through the Core NRAs national decisions on the first amendment of the Core DA CCM¹. Based on Article 13(3) of the Core Day-ahead capacity calculation methodology as approved by ACER on 21 February 2019 and amended by Core NRAs on 10 May 2021, the Core TSOs shall jointly develop a proposal for the implementation of the Advanced Hybrid Coupling (hereafter "AHC") no later than six months after the implementation of the Core DA CCM and submit it by the same deadline to all Core regulatory authorities as a proposal for amendment of this methodology in accordance with Article 9(13) of the CACM Regulation. With the implementation of the Core DA CCM foreseen for 28 February 2022, the proposal for AHC was then expected to be submitted by 28 August 2022.

¹ ACER decision 02/2019 of 21 February 2019 on the Core CCR TSOs' proposal for the regional design of the day-ahead and intraday common capacity calculation methodologies and relevant Core NRAs' decisions on the first amendment of the Core DA CCM (May-June 2021).

After the Core DA CCM went finally live on 8 June 2022 and alignments between Core NRAs and Core TSOs during IG meetings, the Core NRAs² accepted the request of Core TSOs' of 3 November 2022 to extend the resulting deadline until February 2023 to allow Core TSOs more time to elaborate this proposal for amendment in detail.

All Core TSOs organized, from 25 November 2022 until 25 December 2022, a public consultation of the Core DA CCM 2nd Amendment Proposal in accordance with the requirements in Article 20(2), Article 9(13) and Article 12 of the CACM Regulation. This public consultation has been organized by ENTSO-E on behalf of all Core TSOs, via the online ENTSO-E Consultation Hub. Two stakeholders provided their input to this consultation.

Core NRAs provided the Core TSOs with their opinion on the draft DA CCM Amendment Proposal through a shadow opinion, which was commonly endorsed and submitted for the Core TSOs' consideration on 13 February 2023. Core NRAs considered that applying and amending all related provisions of Core DA CCM instead of applying major AHC-related changes in a single article (Article 13) would be more transparent.

Core NRAs also asked Core TSOs to implement AHC in the Single Day Ahead Coupling (SDAC) by end 2024, preceded by the regular preparatory process with internal and external parallel runs, as prescribed by Article 20(8) of the CACM Regulation.

Nonetheless, Core TSOs decided to submit the Core DA CCM 2nd Amendment Proposal as initially foreseen.

The Core DA CCM 2nd Amendment Proposal was received by the last Core Regulatory Authority on 4 May 2023. It consists of several documents:

- the Core DA CCM Amendment Proposal itself (including 2 articles with proposed amendments);
- a consultation report;
- an explanatory note; and
- a consolidated version, including the amendments under track changes in the original Core DA CCM¹.

The Core DA CCM 2nd Amendment Proposal proposes to introduce the following modifications to the Core DA CCM:

- Article 1 on the implementation of AHC:
 - o Introduction of definitions due to the need to differentiate between the two types of virtual hubs, i.e. the internal virtual hubs introduced for the modelling of HVDC interconnectors on bidding zone borders of the Core CCR on the one hand, and the external virtual hubs introduced for the modelling of AHC borders on the other hand (Article 2 of the 1st amendment of the Core DA CCM);
 - o Introduction of all provisions related to AHC in Article 13 of the 1st amendment of the Core DA CCM, including the implementation timeline foreseen "until 2025".
- Article 2 on the correct handling of HVDC interconnectors (Article 11 and Article 12 of the 1st amendment of the Core DA CCM).

² Regulatory Authorities of Austria, Belgium, Croatia, Czech Republic, France, Germany, Hungary, Luxembourg, Netherlands, Poland, Romania, Slovakia and Slovenia.

3. The Core NRAs' position

3.1 Core NRAs' position

Core NRAs thoroughly assessed the proposal and identified a number of elements to be amended, being:

1. Incorporate all AHC-related changes throughout the document in the specific articles;
2. Explicitly exclude the Italy-North border from the scope of the AHC-implementation given the planned merger;
3. Ensure a future-proof methodology with respect to the representation of HVDC interconnectors in the capacity calculation and allocation phase in case of multiple HVDCs on a same AHC-border;
4. Ensure a specific and more ambitious implementation date;
5. Include the need for an external parallel run.

Core NRAs unanimously decided to amend those changes themselves. The draft version of the Core NRA decision on the Core DA CCM 2nd Amendment Proposal was circulated amongst Core NRAs in September 2023. It was also sent to Core TSOs with the request to provide feedback on the proposed changes. Two informal meetings with Core TSOs took place on 4 October 2023 and 9 October 2023. Firstly, Core TSOs signalled to need more time to review all AHC-related changes in the different articles, definitions and equations which Core NRAs proposed to introduce. Secondly, TSOs signalled that not only the North-Italian border would be considered out of scope, but the French-Spanish border as well.

As the alignment and finalisation of the decision was expected to last longer than expected to meet the legal deadline of the 6-month period as required by the CACM Regulation, Core NRAs requested on 24 October 2023 a 3-month extension period to ACER.

Core NRAs formally consulted Core TSOs from 27 October 2023 to 15 November 2023.

3.2 Core NRAs' amendments

Before approving the Core DA CCM 2nd Amendment Proposal, Core NRAs agree on the introduction of the following amendments:

- In the Whereas section, the inclusion of a paragraph presenting the context and the scope of the introduction of AHC in the Core capacity calculation region.
- In Article 2 - Definitions, the inclusion of new terms and definitions linked to the introduction of AHC, as well as the update of some existing terms and definitions. This includes amongst others the definitions on internal virtual hubs, external virtual hubs and Core net positions.
- Throughout the methodology, and specifically in Articles 4, 5, 7, 8, 9, 11, 12, 16, 17, 18, 19, 21, 22, 23 and 25, amendments to account for the introduction of AHC. This includes amongst others the explicit acknowledgment of commercial exchanges on AHC borders and the treatment of external and internal virtual hubs in the descriptions, definitions and equations.
- In article 28, Timescale for implementation, more specific and ambitious requirements on the timing and conditions for the implementation. In particular, readiness at Core TSO side is expected by

31 March 2025 and implementation by 30 June 2025. The implementation, which is subject to readiness at SDAC level, shall be preceded by an external parallel run of at least three (3) months.

In accordance with Article 5(6) of the ACER Regulation and Article 9(5) of the CACM Regulation Core NRAs have formally consulted respectively ENTSO-E and the Core TSOs, before the final agreement on the proposed amendments. Core TSOs have shared their feedback on 15 November 2023. Their feedback included notably:

- Firstly, a review of the descriptions, definitions and equations related to the introduction of AHC throughout the methodology,
- Secondly, an alternative proposal on the implementation time scale for AHC in article 28.

On the first point, there are content-wise no divergent views between the Core NRAs draft decision and the Core TSOs feedback. Instead, Core TSO comments provide enhanced clarity and precision to the AHC-related articles, definitions and equations. Core NRAs hence decide to incorporate the modifications proposed by Core TSOs.

On the second point, Core TSOs' proposal on the implementation timescale is less specific and less ambitious than the proposal in the Core NRA draft decision. In specific, Core TSOs propose to remove the explicit requirement for an external parallel run of at least 3 months by a general requirement for a preparative phase of at least 1 month. On other elements, the Core TSO proposal is complementary to the one of Core NRAs. Core NRAs hence decide to merge the alternative proposal with the original Core NRA proposal, given the complementarity between both, and to have the explicit requirement of at least one (1) month external parallel run. This relatively short duration of external parallel run is motivated by the acknowledgment of the burden of this parallel run on TSOs' operators, especially in light of the existing local validation processes which need to be incorporated in a representative way.

4. Conclusions

Core NRAs have consulted, closely cooperated and coordinated to jointly agree that they shall revise the Core DA CCM 2nd Amendment Proposal in accordance with the concrete amendments as presented in the document attached to this position paper before approving it. The legal basis for the direct amendments by Core NRAs lies in Article 5(6) of the ACER Regulation and in Article 9(5) of the CACM Regulation. Core NRAs will issue their national decisions to approve the (revised) Core DA CCM 2nd Amendment Proposal on the basis of this agreement.

5. Annex

- **Second amendment of the Day-Ahead Capacity Calculation Methodology of the Core Capacity Calculation Region** In accordance with Articles 20ff of the Commission Regulation (EU) 2015/1222 of 24th July 2015 establishing a guideline on capacity allocation and congestion management