Explanatory document to the first amendment of the Day-Ahead Capacity Calculation Methodology of the Central Europe Capacity Calculation Region

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

March 2026

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1. Introduction

The Commission Regulation (EU) 2015/1222 establishing a guideline on Capacity Calculation and Congestion Management ('CACM') requires the development and implementation of a common Day-Ahead Capacity Calculation Methodology ('DA CCM') per Capacity Calculation Region ('CCR').

In this explanatory document CE TSOs and iTCP explain the background to the changes included in the proposal for amendment of the CE DA CCM. A track-change version of the CE DA CCM reflecting the proposed changes is shared for informative purpose.

Should it become necessary, within the scope of the testing, validation and operational functioning activities of the CE DA capacity calculation process, to introduce improvements aimed at enhancing the effectiveness, accuracy or efficiency of the process itself and of the methodology, the CE TSOs, where appropriate, will implement such improvements. These evaluations and potential improvements may be carried out both during the parallel run phase and subsequently within the operational phase, in order to ensure the continuous enhancement of the capacity calculation process and the reliability of its results, in compliance with the regulatory framework.

2. Article 25: IDCC(a) process

The amendments to Article 25 are intended to address any incompatibilities with SIDC, Core ID CCM, and Italy North ID CCM, as referenced in Article 25(20) of the first version of CE DA CCM.

The proposal aims to ensure alignment with the intraday market topology, which must remain consistent across all Intraday Auctions. In addition, the proposal incorporates changes introduced to the Core ID CCM through its 5th and 6th amendments and the inclusion of iTCP.

The main amendments and the corresponding justification are listed below:

- iTCP is included in all paragraphs to ensure coordination in capacity calculation and consistency with DA capacity calculation
- Paragraph 5 allows iTCP and its neighbouring TSOs to adjust cross-zonal capacity for the transitional period where the iTCP is not included in subsequent CE ID capacity calculations. Further details are described in Annex 5 of the CE DA CCM.
    - iTCP and neighbouring CE TSOs shall have the right to adapt the ID ATC after CE IDCC(a) in order to support ID trading on CE-iTCP borders. This is deemed necessary to cope with situations of low-ATC values after CE IDCC(a), resulting from the ATC extraction performed on the CE DA FB domain shifted to MCP. This issue is solved in the following IDCC(b) – (e) processes, when updated ID FB domains are created. However, as the iTCP is not participating in these following processes when CE DACC goes live, ID ATC on the CE-iTCP-borders would remain on the CE

IDCC(a)-values during the whole Intraday-timeframe. In case of low ATCs from CE IDCC(a), market participants don't have the possibility to adapt their positions in Intraday, which could increase the need for balancing energy. In order to avoid this security risk, iTCP and neighboring CE TSOs shall have the right to adapt the ID ATC-values after CE IDCC(a).

  - If iTCP would not participate in the recalculation of ID ATCs, there would also need to be the possibility to adjust the ID ATCs to mitigate potential risks to operational security due to uncoordinated capacities. As preparation for the future CE IDCC process, and in order to maintain coordination as much as possible, the iTCP was therefore included in the ID ATC recalculation, with the possibility to adjust the ID ATCs.

- Paragraph 11 is amended to allow for the application of allocation constraints also on iTCP bidding zone borders. Due to the fact that iTCP bidding zone borders are not part of SIDC, the allocation constraints need to be applied during the capacity calculation process similar to Art. 7(3).
- Paragraph 13 is amended to reflect the most recent information available regarding iTCP bidding zone borders in the capacity calculation. Consequently, a shift to iTCP DA nominations is included in Article 25(12).
- To ensure a consistent market topology across all Intraday Auctions Article 25 is designed to provide capacity for both CCRs Core and Italy North, while also accommodating future developments in SIDC, including Flow-Based IDA Allocation. It needs to be highlighted that that this approach is necessary due to the fact that CE CCR has first been defined for the day-ahead timeframe only in *ACER Decision No 04/2024 on the amendment to the determination of capacity calculation regions (CCRs)*; therefore, this provision represents the transition to the Core and Italy North CCRs for the intraday timeframe. The necessity of this transitional arrangement will cease with the implementation of CE IDCC.
  - Paragraph 18 is adapted to distinguish between bidding-zone borders in CE CCR including iTCP bidding zone border where flow-based allocation in IDA is enabled and those which remain ATC-based.
  - For the bidding zone borders where flow-based allocation is enabled namely the Core CCR Paragraph 23 details the approach to consider calculated ATCs for non-flow-based bidding zone borders and the reduction of dimensions. By doing so, it is ensured that the capacity provided to the Intraday market is coordinated (see Figure 1).

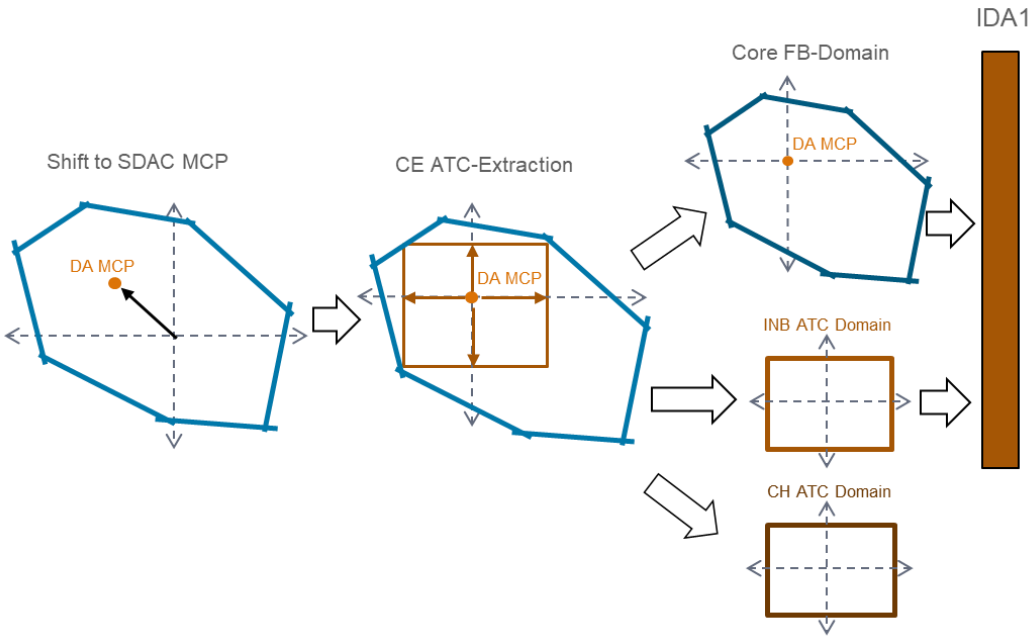

Figure 1: CE IDCC(a) approach with Core and Italy North ID market topology

- Paragraph 19 allows for IVA and ATC validation, due to the fact that flow-based parameters and ATCs will be a result of this process. This is needed to give every TSO of both CCRs the opportunity to validate the calculated capacity
- Paragraph 21f. is added to detail the handling of a bidding zone border consisting of AC and DC interconnectors. In this case the share of the respective border shall be split between an AC and a HVDC part during the ATC Extraction. In the end these parts will be summed up to get a final ATC for this bidding zone border

3. Removal of LTA inclusion

In order to make maintaining operational security, which is a crucial condition of DA CC, independent from the amount of long-term allocated capacities (LTA), the proposal includes provisions for the removal of LTA inclusion. While these are mostly aligned with the fourth amendment of the Core DA CCM, some changes compared to the Core DA CCM are included to reflect the specifics of the CE DA CCM:

- The stipulations for the new RAM floor level reflect the fact that in the CE DA CCM, there is an additional NTC extraction step for the iTCP borders after the validation and before the LTN shift. To ensure a fair treatment of CE and iTCP borders, the RAM floor is applied twice:
    - After validation (Article 20): The first application of the RAM floor, which is newly introduced for CE, is foreseen directly after validation, in Article 20(26)f. Without this step, i.e. if the RAM floor was only considered during final computation as in the Core DA CCM, the NTCs for the iTCP would not benefit from the RAM floor. The numerical level of the RAM floor and the rules for deviating from the default level are adopted from the Core DA CCM and introduced in this first application step.

    - In the final computation (Article 21): Still, also the final RAM for CE must respect a RAM floor, to make sure that the flows due to LTN do not lead to low RAM. However, a literal adoption from the final computation of the Core DA CCM, i.e. increasing the RAM for CE to 20%, would negate the impact of iTCP NTCs, and hence induce an operational security risk. To avoid this, the RAM floor is set to 20% of Fmax or the RAM after deducting the impact of iTCP NTCs, whichever is lower. Thus, the final RAM amounts at least to 20% of Fmax minus the impact of the iTCP NTCs.
    - Any deviation from the default RAM floor level that is introduced after Individual Validation, i.e. pursuant to Article 20(26a), will be carried over to the final computation.
- The concepts for the application of capacity calculation fallback (Default Flow-based Parameters, DFPs) and SDAC fallback (Shadow Auction ATCs) respect the extended range of allocation constraints used in CE, cf. Article 22(7) for DFPs and Article 24(3)(c), 24(5)(c) and 24(7) for Shadow Auction ATCs, respectively.
- The condition for the removal of LTA inclusion in Article 30(6) is linked to Core and Italy North CCRs because the Long Term capacity calculation is not covered by the CE CCR. However, the Italy North LTCCM is already in operation.

4. Harmonised GLSK Methodology

The proposed amendments to Article 9 are to align it with the fourth amendment of the Core DA CCM. An additional paragraph is introduced to exempt CE TSOs and iTCP from the requirements stemming from the Core GSK study until the CE GSK study has been conducted. If no new insights are gained from the CE GSK study, these exemptions will be fully reversed.

5. Allocation constraints in SDAC fallback

The modifications are intended to clarify the application of the Italian allocation constraints within the SDAC fallback procedure. They clarify the use of the relevant allocation constraints and refine the iterative method applied for the ATC calculation, ensuring full alignment with the provisions on allocation constraints set forth in Annex I – Italy.

6. Ramping constraints

The purpose of this amendment is to provide a more comprehensive description of the methodology applied by Terna for determining the value of the ramping constraints. The ramping constraint is defined as the maximum value of variation of exchange (import/export) from/to a set of interconnectors from one MTU to the next from the Northern Italian interconnectors. In the first version of the CE DA CCM, Terna had already indicated that an update of the methodological approach for calculating ramping constraints would be submitted within 18 months from the initial submission of the methodology. The relevant updates are presented in Annex 1 of the CE DA CCM.

7. Inclusion of Celtic interconnector and SEM-FR Bidding Zone Border

Pursuant to ACER's Decision No. 04/2024, the Celtic interconnector will create a new bidding zone border assigned to the CE CCR once it becomes operational. Subsequently, the bidding zone border between the Single Electricity Market in Ireland and Northern Ireland ('SEM') and France ('FR'), attributed to EirGrid, System Operator for Northern Ireland (SONI), and Réseau de Transport d'Electricité (RTE), will be included in the flow-based capacity calculation of the CE CCR.

As part of this explanatory document CE TSOs aim at explaining the following proposed changes to the CE DA CCM resulting from the inclusion of the SEM - FR bidding zone border in the CE CCR. While these are mostly aligned with the fourth amendment of the Core DA CCM, some changes compared to the Core DA CCM are included to reflect the specifics of the CE DA CCM:

- The CE DA CCM First Amendment proposes the amendment of Article 25 (10) to include EirGrid and SONI to the list of TSOs permitted to use allocation constraints alongside PSE and Terna. This amendment also proposes to include a new sub-paragraph, numbered 25(10)(e), which expressly permits the use of ramping constraints on HVDC interconnectors between synchronous areas as an additional type of allocation constraint, aimed at limiting the maximum flow change from one MTU to the next.
- Article 30(5), the operationalization of the SEM-FR bidding zone border is contingent upon the completion and commissioning of the Celtic HVDC interconnector, as well as the fulfilment of the necessary technical conditions required to enable the commencement of commercial operations. The CE DA CCM First Amendment proposes introduction of a new paragraph, numbered '5', into Article 30, which explicitly links the operation of the SEM - FR bidding zone border within the CE CCR capacity calculation process to the completion of the Celtic HVDC interconnector project.

8. SEM Allocation Constraints SEM

Considering the joint discussions with CE TSOs, EirGrid and SONI intend to use allocation constraints. The general provisions for applying allocation constraints are provided in Article 7 of the CE DA CCM, while Annex I contains the list of CE TSOs approved to use allocation constraints, along with detailed technical and legal reasoning or the need to apply such constraints. While this is mostly aligned with the fourth amendment of the Core DA CCM, some changes compared to the Core DA CCM are included to reflect the specifics of the CE DA CCM:

- The CE DA CCM First Amendment proposes the introduction of a new sub-paragraph and paragraph, numbered 7(2)(e) and 7(4)(d), into Article 7, which expressly permits the use of ramping constraints on HVDC interconnectors between synchronous areas as an additional type of allocation constraint, aimed at limiting the maximum flow change from one MTU to the next. This approach preserves the overall structure of the article on allocation constraints and exempts

the introduced ramping constraints on HVDC interconnector from the transitional and reporting obligations outlined in Article 7(4).

9. Integration of new inner-German HVDC lines

The German Transmission System Operators (TSOs) are developing high-voltage direct current (HVDC) lines within Germany in the upcoming years, which will serve as a corrective measure for the NRAO and Coordinated Validation. The first line's commission is planned end of 2026. The following Article was extended (as also proposed for the Core DA CCM 4th amendment):

- In Article 10(7) for internal HVDC lines, an expansion of this bullet was added to reflect that the initial setpoint change of HVDCs can be used as a remedial action.

10. Operational security limits

The proposed amendment to Article 6, which is accompanied by a minor adaptation of Whereas (19), adopts the respective change from the 4th amendment of the Core DA CCM.

11. Consideration of 110 kV elements as CNECs after capacity validation

The purpose of this amendment is to align the CE DA CCM with Core DA CCM and Core ID CCM. Article 4 (8) details the steps of capacity calculation. Article 16 refers to the CNEC selection. However, 110 kV elements shall be added during the capacity validation referred to in Article 20. Moving the reference to 110 kV elements from Article 15 (2) to Article 20 (23) makes it possible to add 110 kV network elements as CNECs during the capacity validation to the final CNEC list if the listed conditions are fulfilled - i.e. maxz2zPTDF higher than 5%. It might be more important to Hungary as 110kV network elements are partially meshed with the transmission network, their maxz2zPTDF can be higher than 5%. The intention is to consider the 110 kV elements in the capacity validation.