

**APPROVAL BY
CAPACITY CALCULATION REGION
HANSA REGULATORY AUTHORITIES**

OF

**THE CCR HANSA COMMON COORDINATED
CAPACITY CALCULATION METHODOLOGY
IN ACCORDANCE WITH ARTICLE 20(2) OF
COMMISSION REGULATION (EU) 2015/1222 OF 24 JULY
2015**

**establishing a guideline on capacity allocation and
congestion management**

22 August 2025

I. Introduction and legal context

This document elaborates an agreement of all relevant Capacity Calculation Region (“CCR”) Hansa Regulatory Authorities, reached on 22 August 2025, on the Hansa TSOs’ amendment proposal for the CCR Hansa Common Coordinated Capacity Calculation Methodology, hereafter referred to as “DA&ID CCM”, being the abbreviation of “Day-ahead and Intraday Capacity Calculation Methodology”.

The TSOs of the CCR Hansa (“Hansa TSOs”) are therefore the German TSOs TenneT TSO GmbH, 50Hertz Transmission GmbH and Baltic Cable AB, the Dutch TSO TenneT TSO NL B.V., the Danish TSO Energinet, the Swedish TSO Svenska kraftnät, and the Polish TSO Polskie Sieci Elektroenergetyczne S.A (“PSE”), as well as the Norwegian TSO Statnett SF.

The Hansa TSOs submitted their proposal, dated 17 July 2024, with the last Hansa NRA receiving it on 21 August 2024. Pursuant to Article 9(10) of the CACM Regulation, the relevant NRAs have six months from receipt to make a decision. Article 9(12) of the CACM Regulation provides for NRAs to request of amendments of a proposal for terms, conditions, and methodologies. On 10th February 2025, the Hansa NRAs reached an agreement to request an amendment (RfA) to the Hansa TSOs’ proposal. The RfA was sent to the Hansa TSOs on 20 February 2025.

According to Article 9(12) the Hansa TSOs shall submit an amended proposal for approval within two months following the requirement from the regulatory authorities. The Hansa TSOs submitted the amended proposal, dated 22 April 2025, with the last Hansa NRA receiving it on 25 June 2025. Pursuant to Article 9(12) of the CACM Regulation, the relevant NRAs have two months from receipt to make a decision. On 25 August 2025, the Hansa NRAs reached an agreement to approve the amended proposal of the DA&ID CCM for CCR Hansa.

This agreement of the Hansa NRAs shall provide evidence that a decision on the amendment proposal for the DA&ID CCM for CCR Hansa does not need to be adopted by ACER pursuant to Article 9(11) of the CACM Regulation. Thus, this agreement is intended to constitute the basis on which, the Hansa NRAs will each of them subsequently adopt national decisions pursuant to Article 9(7)(a) of the CACM Regulation to approve the Hansa TSOs’ amendment proposal for DA&ID CCM for CCR Hansa.

The legal provisions that lie at the basis of the Hansa TSOs' amendment proposal for the DA&ID CCM for CCR Hansa, and this agreement by the Hansa NRAs on approval of the amendment proposal, can notably be found in Articles 3, 12, 20, 21, and 23, of the CACM Regulation, and in Article 9 of the CACM Regulation as amended by Commission Implementing Regulation (EU) 2021/280 of 22 February 2021 and in Article 5(6) of the ACER Regulation (EU) 2019/942.

II. Hansa TSOs' amendment proposal for DA&ID CCM and revisions by Hansa NRAs

The Hansa TSOs' amendment proposal for the DA&ID CCM for CCR Hansa

The amendment proposal continues basic and principal characteristics of the present DA&ID CCM for CCR Hansa. Notably, the DA&ID CCM covers the capacity calculation methodologies for the day-ahead ("DA") and intraday ("ID") timeframes, and is based on a Coordinated Net Transmission Capacity ("CNTC") approach with a strong link to the adjacent CCRs, i.e. CCR Nordic and CCR Core.

Recital (18) introduces the Master Controller for Interconnector Operation (MIO), which has been acknowledged by the European Commission as a separate system operator. The MIO is responsible for calculating the available capacity on the hybrid interconnector KF CGS. In their amended proposal, the Hansa TSOs take into account the duration of the derogation for KF CGS by adding a provision stating that, upon the expiration of the derogation, the Hansa TSOs shall submit an amendment to the DA&ID CCM.

Following the Request for Amendment (RfA), the Hansa TSOs revised Article 2(1)(a), specifying that the coordinated capacity calculator is responsible for performing the calculation based on inputs provided by the Hansa TSOs.

With the establishment of the MIO, a new provision has been added to Article 3, outlining its role in providing the Net Transfer Capacity (NTC) to the dedicated Coordinated Capacity Calculator (CCC), taking forecasted wind production into account. Additionally, Article 3 now includes a provision to consider already allocated capacity (AAC) in the capacity calculation. These changes are also reflected in the amended calculation rules for KF CGS in Article 4.

The Hansa NRAs proposed adding a requirement in Article 4(1) to provide a justification for the use of explicit loss factors. The rationale behind the added requirement was that CACM Article 22(3)(b) provides the legal basis for the introduction of implicit loss factors as an allocation constraint in the capacity allocation, while no similar provision in Articles 21 to 26 provides a clear legal basis for the introduction of explicit loss factors in the capacity calculation. However, TSOs

may include other topics or items in the CCM, if considered to be in accordance with the general provisions on capacity calculation and contributing to meet overall objectives of the Electricity Regulation (EU) 943/2019 and the CACM Regulation. Hence, Hansa TSOs may include explicit loss factors in the CCM, provided it can be seen as contributing to the fulfillment of the objectives of the regulations, like the objectives listed in Article 3 of the CACM Regulation. The Hansa NRAs assessed it to be in line with CACM objectives and not unreasonable to include a sentence in the CCM obliging the TSOs to justify the use of explicit loss handling on interconnectors to ensure that it is conducted in an economically optimal manner.

The added requirement was sent out for consultation to the Hansa TSOs, and they responded with arguments for removing the requirement. The Hansa TSOs explained in their response that the use of implicit loss factors can give a redistribution of flows in the AC network due to avoiding a DC flow with losses, and this in turn will lead to losses in the AC network that are not visible to the market coupling algorithm. The Hansa TSOs argued that this is the reason why the use of implicit loss factors should be justified, while the use of explicit loss factors is the default way of compensating losses incurred by the DC flow. The Hansa TSOs proposed that the requirement was removed based on this reasoning.

The Hansa NRAs assessed the response from the Hansa TSOs and found the explanation to be reasonable. The Hansa NRAs therefore concluded that the added requirement should be removed from the CCM.

At the same time, the Hansa NRAs observed that the topic of loss handling is not sufficiently handled by the current regulatory framework. The Hansa NRAs therefore also concluded that this topic should be discussed at a later stage. For instance, by requesting the Hansa TSOs to provide their view on a dedicated methodology for explicit and implicit loss handling. A dedicated methodology would increase transparency for the choice of loss handling and loss factors. Since the Hansa NRAs observe that there are not any dedicated provisions giving guidelines for loss handling in the current CACM Regulation, it was concluded that this topic could be beneficial to discuss in the update of this regulation.

In Article 4(1) the Hansa NRAs rechecked the description of the mathematical formula of the $NTC_{i,DC}$ -calculation as Article 4(1) addresses calculations for DC lines and not AC lines.

Due to a special grid connection situation at the DE/LU-SE4 border, operational security limits of the local DSO network on the German side significantly impact the (operational) characteristics of the interconnector. To conduct an appropriate capacity assessment, these security limits shall be

respected in the cross-border capacity calculation until the dedicated grid reinforcement project in the surrounding area is completed.

In Article 8(2) Hansa NRAs made changes to the procedure to be followed by the Hansa TSOs if they still deem the allocation constraint described in Article 8(1)(a) needed after its two-year interim period following the implementation of the methodology. The Hansa NRAs adjusted the wording so it states that if all CCR Hansa TSOs, not any, should want to continue to use the allocation constraint before they need to deliver a proposal for amendments of the methodology to the Hansa NRAs. While considering feedback received from the Hansa TSOs during the consultation of the methodology, the Hansa NRAs adjusted the article further. The wording now states that a proposal for amendment shall be delivered to the Hansa NRAs if at least one, not all, of the Hansa TSOs wants to use the allocation constraint and that that all Hansa TSOs agree. In addition, and as stated in the approved capacity calculation methodology for the balancing timeframe (BT CCM) for CCR Hansa, the Hansa NRAs added that the CCR Hansa TSOs shall, in explanatory document of the amended proposal, describe the allocation constraint's impact on economic surplus and distributional effects along with possible alternative options to the allocation constraint. Further, the Hansa NRAs linked the amendment process to Article 21(1), i.e. the implementation article of the methodology.

The Hansa NRAs added Article 8(3) containing reporting requirements for CCR Hansa TSO(s) applying the allocation constraint described in Article 8(1)(a) during the interim period. The Hansa TSO(s) shall daily calculate the value of external constraints for each DA/ID CC MTU, make quarterly reports to the Hansa NRAs and implement alternative solutions to the allocation constraint if and when possible. The reporting requirements correspond to the requirements stipulated in the Intraday capacity calculation methodology of the Core capacity calculation region (ACER decision 03/2024) where the same allocation constraint is applied.

In Article 8(4) Hansa NRAs understand, based on reply of 8 June 2025 from the CCR Hansa TSOs, that the maximum flow change in the BT CCM incorporates limits to the exchange of FRR from balancing power plants, whereas this is not the case for the maximum flow change in the DA/ID CCM. The CCR Hansa TSOs describe the maximum flow change in the DA/ID CCM as a ramping restriction that is applied during the MTU and limited to a specific volume of MW per minute, whereas the maximum flow change in the BT CCM applies both within and between MTUs and can be considered as a less stringent restriction that depends on the FRR balancing energy needs and the available capacity for the given MTU. The CCR Hansa TSOs conclude that the ramping restriction in the DA/ID timeframe and the maximum flow change in the BT timeframe are two distinct products. The Hansa NRAs have refined Article 8(4) to make clear that ramping

restrictions, as per Article 8(1)(b) and Article 137 of the SO Regulation, are used to maintain system security and manage frequency as well as to ensure that HVDC interconnections between market time units (MTUs) stay within technical limits as per Article 25 of the SO Regulation. The Hansa NRAs have specified that ramping restrictions set the maximum flow change (in MW per MTU) for the CCR Hansa interconnectors.

In article 8(9), the Hansa NRAs refined the provisions for new allocation constraints. The CCR Hansa TSOs intending to apply allocation constraints under Article 8(1) on Hansa bidding zone borders must notify and consult market participants for at least one month, and inform all CCR Hansa TSOs and NRAs at least two months prior. Detailed justifications demonstrating compliance with Article 23(3) of the CACM Regulation are required. Allocation constraints under Article 8(1)(a), (b), (d), (e) and (f) must show why they cannot be transformed efficiently into maximum flows (pursuant to Article 23(3)(a) of the CACM Regulation) whereas allocation constraints under Article 8(1)(c) must provide an analysis evidencing welfare gains, i.e. the avoided cost is greater than the loss in economic surplus (pursuant to Article 23(3)(b) of the CACM Regulation). The analysis and market feedback must be submitted to Hansa NRAs before implementation.

The Hansa TSOs are required by the Hansa NRAs in Article 8(10) to annually review allocation constraints pursuant to Article 27(4)(a) of the CACM Regulation and notify Hansa NRAs of changes. In addition, to ensure compliance with CACM Article 23(3), the Hansa TSOs have to conduct an impact analysis every three years after the implementation of this methodology in accordance with Article 21. The impact analysis shall at least assess the economic surplus and distributional effects and alternative solutions to ensure that the application of the allocation constraints are the most efficient from a European perspective. The results of the impact analysis shall be submitted to the Hansa NRAs. The Hansa NRAs decided to keep the provision, well aware of the viewpoints by the Hansa TSOs that the assessment would put inadequate additional burden on the Hansa TSOs. The Hansa NRAs believe, however, that the arguments in favour for the analysis outweigh the arguments against the analysis.

Hansa TSOs amended Article 8(11) to specify that before implementing allocation constraints under Article 8(1)(d), (e) and (f), they must submit a written proposal with justification to the market coupling governance bodies. TSOs and NEMOs will jointly assess the feasibility, design, and impact of the constraint, including testing market outcomes. Additionally, Hansa NRAs requested that TSOs share the assessment outcome.

The Hansa NRAs observed that the Hansa TSOs amended Article 20 to require the data to be published on a quarterly basis in accordance with Article 16(10). Moreover, the Hansa TSOs amended Article 20 to include publication of all reductions done during validation and, initially computed capacity by the CCC and the final validated capacity in MW provided by TSOs. Hansa NRAs rephrased the article to require daily publication of the data in addition to the quarterly reporting according to Article 16(10). The Hansa NRAs further added a requirement to publish the justification for validation reductions along with the magnitude of the reduction in MW. The requirement to make the data publicly available on a daily basis is intended to increase transparency in accordance with Article 3(f) of the CACM Regulation.

The proposed amendments to Article 20 were sent out for consultation to the Hansa TSOs. The Hansa TSOs gave a remark stating that the proposed wording had some inconsistencies since information on plans to apply or change allocation constraints, as well as the quarterly reporting according to Article 16(10) cannot be published on a daily basis. The Hansa NRAs agreed to this observation and changed the wording of Article 20(2) such that there are only data for the reductions made during validation and the justification for those reductions, along with the initially computed capacity and the final validated capacity, which is requested to be published on a daily basis. The wording was adapted such that information on plans to apply or change allocation constraints should rather be published as soon as available. The wording was also adapted to make it clear that all data, information and reporting that are requested to be published on a publicly available platform.

With reference to the implementation (Article 21), the Hansa CCCs shall calculate cross-zonal capacities by matching of TTCs/NTCs and AACs, provided by TSOs, and taking into account the validation by the responsible TSOs. The TSOs have informed the Hansa NRAs that the CCC's calculation will be delayed. Due to this the deadline for all Hansa bidding zone borders, except DE/LU-DK2 and DE/LU-SE4, has been changed from the original Q4 2025 to Q2 2026 in Article 21(1)(a). DE/LU-DK2 and DE/LU-SE4 will follow 12 months later. Answering the consultation, the Hansa TSOs informed the Hansa NRAs that the date for the implementation may be March 2026, but confirmation by responsible bodies is still pending.

Annex 1, explaining the justification and methodology used for calculating the combined import export allocation constraint applied by PSE, of the initial methodology proposal made by the Hansa TSOs did not consider the balancing market reform introduced in Poland in June 2024. Therefore, in the RfA, the Hansa NRAs requested the Hansa TSOs to update the justifications in Annex 1 in relation to the reform. The Hansa NRAs also requested the TSOs to amend the methodology to align the time limitation and reporting requirements of the allocation constraint with the CCR CORE

intraday CCM. The Hansa TSOs amended the justifications in Annex 1 in relation to the balancing reform but did not add the reporting requirements requested. Therefore, the Hansa NRAs added the reporting requirements in Article 8(3) of the methodology as explained further above. Moreover, since the legal references in Annex 1 did not refer to specific articles of the EB and SO regulations, the Hansa NRAs specified the articles.

The Hansa NRAs also agreed on some minor wording and clarification issues along with editorial corrections throughout the methodology.

With a view to consolidate the above single considerations and processes, the Hansa NRAs have closely cooperated and coordinated with each other in order to reach agreement on the Hansa TSOs' amendment proposal for the DA&ID CCM for CCR Hansa.

Regarding the amendments of the DA&ID CCM and the amended explanatory document, Hansa NRAs considered the amended DA&ID CCM for CCR Hansa did not meet the requirements of both the CACM Regulation and the Hansa NRAs' RfA of 20 February 2025. Therefore, the Hansa NRAs revised the amended DA&ID CCM in order to be subject for approval. The revision of the Hansa NRAs was subject of a consultation of the Hansa TSOs from 16 July to 15 August 2025. The Hansa TSOs answered the consultation. The Hansa NRAs duly took into account the expressed views by the Hansa TSOs.

III. Conclusion

The Hansa NRAs have assessed, consulted, coordinated, and closely cooperated with each other, to reach an agreement that the NRA-revised Hansa TSOs' amendment proposal for the DA&ID CCM for CCR Hansa meets the requirements of CACM Regulation, and as such, is to be subject for approval by the Hansa NRAs.

The Hansa TSOs' amendment proposal for the DA&ID CCM was received by the last Hansa NRA on 25 June 2025.

On the basis of the actual common agreement among the Hansa NRAs, a decision on approval of the Hansa TSOs' amendment proposal for the DA&ID CCM is required by each of the Hansa NRAs by 25 August 2025 as at the latest, pursuant to the 2-months deadline, following from Article 9(12), 2nd subparagraph, ref. to Article 9(10), 1st subparagraph of the CACM Regulation.

Following national decisions on approval, adopted by each of the Hansa NRAs, each of the Hansa TSOs is then required to publish the amended DA&ID CCM for CCR Hansa pursuant to Article 9(14) of the CACM Regulation.