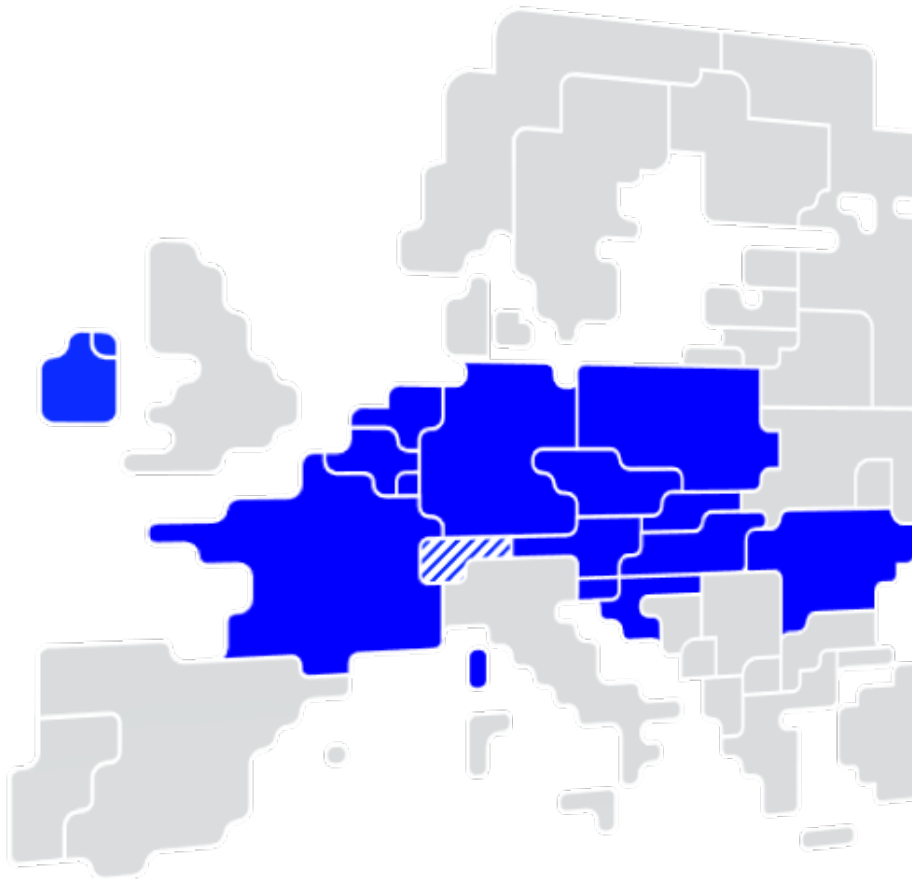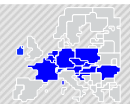# Explanatory document to the first amendment of the Long-term Capacity Calculation Methodology of the Core Capacity Calculation Region

in accordance with Article 10 of Commission Regulation (EU)
2016/1719 of 26 September 2016
establishing a guideline on forward capacity allocation

Version, date and status

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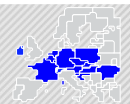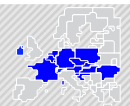|	
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	☐ Market Parties
	☐

1. DOCUMENT HISTORY AND STATUS

Date	Summary of Changes	Version	By
18/09	Version for public consultation	0.1	

Content

2. INTRODUCTION

Article 10 of Commission Regulation (EU) 2016/1719 establishing a guideline on Forward Capacity Allocation ('FCA Regulation') requires TSOs to submit a proposal for a common capacity calculation methodology for the long-term timeframe ('Core LT CCM').

During the implementation of the Core LT CCM as well as the Decision No 05/2023 of the European Union Agency for the Cooperation of Energy Regulators of 22 March 2023 on the TSOs' proposal for amendments to the requirements for the Single Allocation Platform ('SAP') and the SAP cost sharing methodology ('SAP Methodology'), implementation challenges and discussions arose between NRAs, ACER and TSOs arose, which affected the implementation timeline of the aforementioned methodologies significantly.

As requested by regulators and ACER, Core TSOs have integrated the ATC benchmark to this amendment, along with changes enabling SEM integration to the long-term capacity calculation process.

In this explanatory document, Core TSOs explain the background of the changes included in the proposal for amendment of the Core LT CCM. A track-change version of the Core LT CCM reflecting the proposed changes is shared for informative purposes with this document.

3. ATC BENCHMARK

3.1. General aspects

ATC Benchmark enables the reshaping of the flow-based domain to accommodate historical benchmark values.

3.2. Explanation of Changes

3.2.1 Article 2

Article 2 lists the abbreviations applicable within the Core LT CCM. In this amendment, Core TSOs suggest including definitions for Already Allocated Capacity (AAC), available transmission capacity (ATC), MinATC and MaxATC. This amendment is needed to define abbreviations used in the ATC Benchmark process.

3.2.2 Article 10a

Core TSOs suggest adding an article 10a to LTCCM *Title 2 : Capacity Calculation inputs*. Titled "Benchmark input for RAM adjustment", this article defines the process for generating the ATC benchmark input for Core long-term capacity calculation. For yearly capacity calculation, TSOs will provide benchmark values derived from offered capacities for historic yearly auctions, except for borders using PTRs, , DE-AT, FR-SEM and Polish borders; all values will be adjusted for splitting. For monthly capacity calculation, the process will be the same except the benchmark values will be aggregated per CGM season by averaging the values for the concerned months, and not adjusted for splitting.

Hence, this new Article 10a incorporates two concepts: the definition of ATC benchmark for the yearly and monthly capacity calculation and the integration of the LT-benchmark in the calculation methodology.

Core TSOs introduce the ATC benchmark and its application to the LT CC process based on regulatory guidance received from Core NRAs and ACER after initial LTCC simulations. Core NRAs and ACER proposed the ATC benchmark as an effective measure to ensure sufficient capacities are offered for LT FB allocation. The benchmark values for both yearly and monthly are a given and the values that are going to be used for the go-live are mentioned in the annex. Average seasonal monthly values for autumn and winter 2 seasons are not yet available prior to submission of the LTCCM 1st RfA to the public consultation. Values will be added to Annex 1 once available in November 2025.

Core TSOs will input the ATC benchmark values into the central tooling for the LT CC process. The central tooling will apply the ATC benchmark after the pre-solving of the final merged LT-domain. The RAM of each pre-solved CNEC of the final LT domain will be adjusted based on the calculated induced flow for MinATC and MaxATC benchmark. The final FB domain will be an input for LT FB allocation process; the allocation process is outside of the scope of this LTCCM 1st RfA. Therefore, the final allocated capacity per bidding zone border direction will be the outcome of Long-term Flow-based allocation, meaning final allocated values may deviate from benchmark.
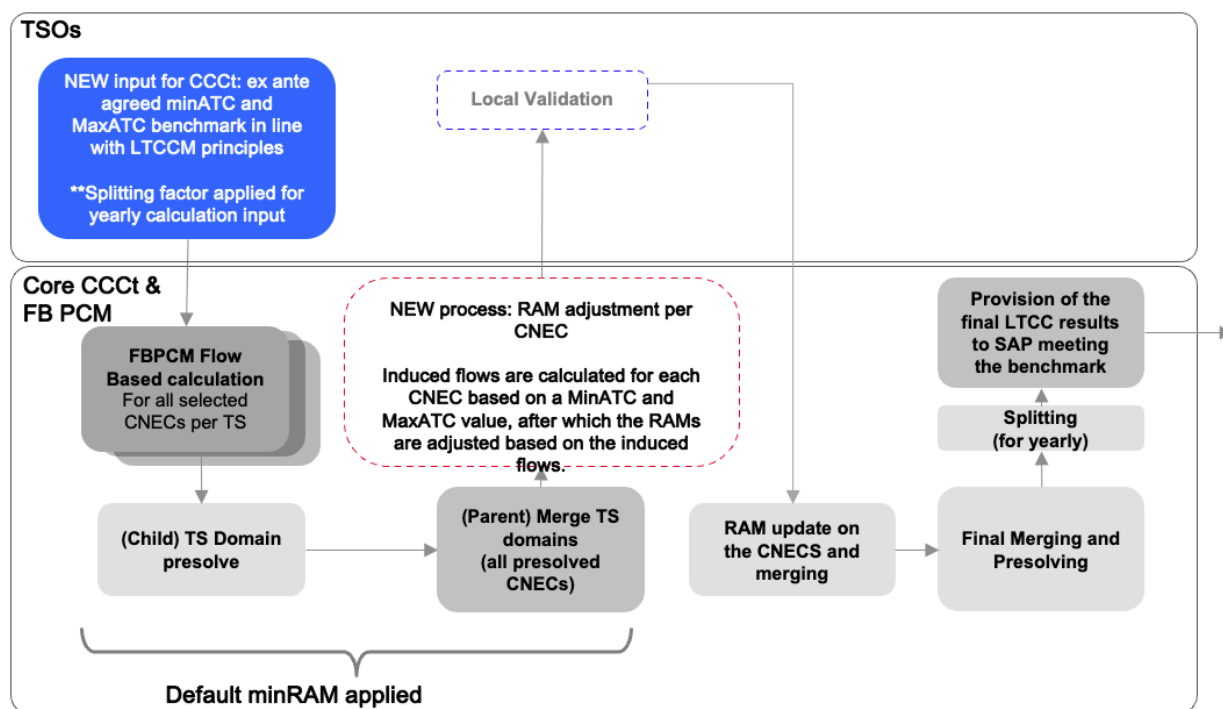
The application of splitting rules defined in LTSRM will be anticipated by increasing the yearly benchmark values on all borders. If the final RAM on CNECs is not within the range, the ATC benchmark will overrule the minRAM.

The application of MaxATC benchmark limits the domain via a cap on resulting RAM on CNECs. MaxATC benchmark is necessary in the context of the proposed removal of LTA inclusion in the DACCM RfA. The MaxATC benchmark application shall ensure that the LT FB domain remains proportionate to the DA FB domain. The proposed removal of LTA inclusion decouples operational security from the LT CC process.

3.2.3   Article 12
Article 12 sets out the requirements for the capacity calculation inputs and outputs. In this amendment, Core TSOs suggest adding an input named "Benchmark ATC values", listed under (h). This input is needed for the new RAM adjustment process step of the capacity calculation.

3.2.4   Article 14
Article 14 sets out the requirements for the remaining available margin computation process. In this amendment, Core TSOs suggest adding a process step in a dedicated paragraph 7, describing the RAM adjustment process. This amendment is needed to describe how RAM will be adjusted based on the ATC benchmark values.

3.2.5   Article 20
Article 20 sets out the requirements for the publication of data. In this amendment, Core TSOs suggest including a new letter (k) to paragraph 1, to add ATC benchmark value to publication requirements.

3.2.6   Article 22
Article 22 sets out the timeline for the implementation of the Core LT CCM. In this amendment, Core TSOs suggest amending Article 22 3.c), in order to match go live date for the flow-based yearly auctions with ATC benchmark improvements.
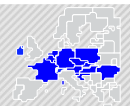
3.2.7   Annex 1

Annex 1 describes the 2025 ATC benchmark values as inputs to the LT CC process. These values shall be applied for capacity calculation for the 2027 yearly and monthly auctions, and may be annually revised by Core TSOs and approved by Core TSO steering committee.

4.   SEM INCLUSION

4.1.   General aspects

These amendment proposals aim at enabling the integration of the SEM - France bidding zone border into the Core CCR once Celtic interconnector commissioning is finalized and the technical conditions allow commercial operations in the long-term timeframe to begin.

4.2.   Explanation of changes

4.2.1   Article 2

Article 2 lists the abbreviations applicable within the Core LT CCM. In this amendment, Core TSOs suggest including the definition of Single Electricity Market (SEM), referring to the bidding zone consisting of both Ireland and Northern Ireland as a single all-island electricity market.

4.2.2   Article 10a

As stated in section 3.2.2 of this Explanatory Note, Core TSOs suggest adding an article 10a to LTCCM *Title 2 : Capacity Calculation inputs*. Titled "Benchmark input for RAM adjustment", this article defines the process for generating the ATC benchmark input for Core long-term capacity calculation. For yearly capacity calculation, the FR-SEM border values will be based on regulatory guidance, as there will be no historic NTC yearly auctions. For monthly capacity calculation, the process will be the same except the benchmark values will be aggregated per CGM season by averaging the values for the concerned months.

4.2.3   Article 12

Article 12 sets out the requirements for the capacity calculation inputs and outputs. In this amendment, Core TSOs suggest including a provision allowing a TSO to delegate its obligation of providing the inputs to another Core TSO. This amendment is needed to accommodate the process foreseen between SONI and Eigrid for SEM input provision.

4.2.4   Article 13

Article 13 sets out the requirements for the power transfer distribution factors computation process. In this amendment, Core TSOs suggest clarifying that the slack node shall be the same *for each* synchronous area. This amendment is needed to account for the inclusion of a second synchronous area in Core CCR, namely the synchronous area island of Ireland, and therefore a second slack node in the PTDF computation.

4.2.5   Article 14

Article 14 sets out the requirements for the remaining available margin computation process. Paragraph 5 describes the Fmax definition process. In this amendment, Core TSOs suggest including a provision allowing a Core TSO to delegate its obligation of providing the minimum percentage of Fmax for RAM for its own CNECs to another Core TSO. This amendment is needed to accommodate the process foreseen between SONI and Eigrid for SEM input provision.

4.2.6   Article 20

Article 20 sets out the requirements for the publication of data. In this amendment, Core TSOs suggest editing paragraph 1. (i) iii. to reference to account for the inclusion of a second synchronous area in the Core CCR, namely the synchronous area island of Ireland.

4.2.7   Article 22

Article 22 sets out the timeline for the implementation of the Core LT CCM. In this amendment, Core TSOs suggest adding a sixth paragraph to clarify that the implementation of this LTCCM to the SEM-FR bidding zone border requires Celtic interconnector commissioning to be finalized, and technical conditions allowing commercial operations in the long-term timeframe to be met.

5.   OTHER CHANGES

5.1.   Article 11

Article 11 sets out the requirements for HVDC interconnectors integration at Core Bidding Zone Borders. In this amendment, Core TSOs suggest removing the following sentence: "in case of a planned outage of the HVDC interconnector, the MPTC shall be set to zero". This amendment is needed to take into account lessons learnt from simulations, which showed setting the MPTC to zero led to 0 MW values on the corresponding Bidding Zone Border. Similarly to the current set-up, reduction periods are foreseen be used instead. The *With* paragraph has also been corrected by deleting the duplicated $PTDF_{VH\_2,l}$ definition.

5.2.   Article 15

Article 15 describes how Non-Core CCR bidding zone borders should be considered in the capacity calculation. Paragraph 3 sets a deadline for Core TSOs to provide a proposal for the improvements of treatment of non-Core exchanges in the LT CCM within 12 months after AHC implementation in Core DA CCM. Given that AHC implementation in Core DA CCM is scheduled early 2026, whereas Core LTCCM Go Live is scheduled in November 2026, there would be no data on long-term capacity calculation to conduct the study. This is why Core TSOs are suggesting to shift the deadline to 12 months after the LTCC Go Live instead of 12 months after the AHC in DA CCM Go Live.

5.3.   Article 16

Article 16 describes the fallback procedure of Core LTCCM. In this amendment, Core TSOs suggest changing the monthly capacity calculation fallback data mentioned in 4.b), from "FB parameters calculated for the corresponding time horizon at the preceding yearly auction" to "the FB parameters calculated for the preceding monthly auction". This amendment is needed to take into account experience and simulations showing that using the preceding monthly auction leads to more up-to-date and accurate results. Indeed, using FB parameters calculated for the corresponding time horizon at the preceding yearly auction as suggested in the approved version of the methodology means using outdated CGMs from the previous year and risking inaccurate results.

5.4.   Article 20

Article 20 describes the publication requirements in accordance with Article 3(f) of the FCA Regulation. In this amendment, Core TSOs suggest changing the publication requirement set out in 1.e) from "zone-to-zone PTDF" to "zone-to-slack PTDF". This amendment is needed to ensure consistency with day-ahead process and improve transparency. Indeed, zone-to-zone PTDFs can be computed from zone-to-slack PTDFs, but the opposite is not
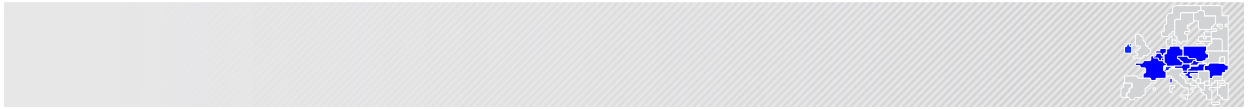
possible. As such, publishing zone-to-slack PTDFs provides stakeholders with a better quality of information on the capacity calculation process.