

**DECISION No 03/2024
OF THE EUROPEAN UNION AGENCY
FOR THE COOPERATION OF ENERGY REGULATORS**

of 14 March 2024

**on the second and third amendment of the intraday capacity calculation
methodology of the Core capacity calculation region**

THE EUROPEAN UNION AGENCY FOR THE COOPERATION OF ENERGY
REGULATORS,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to 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,¹ and, in particular, Article 5(3) and Article 6(10) thereof,

Having regard to Commission Regulation (EU) 2015/1222 of 24 July 2015 establishing a guideline on capacity allocation and congestion management,² and, in particular, Article 9(5), (7)(a), (11) and (13) and Article 20(2) thereof,

Having regard to the outcome of the consultation with the concerned regulatory authorities and transmission system operators,

Having regard to the outcome of the consultation with ACER's Electricity Working Group,

Having regard to the favourable opinion of the Board of Regulators of 7 March 2024, delivered pursuant to Article 22(5)(a) of Regulation (EU) 2019/942,

Whereas:

¹ OJ L 158, 14.6.2019, p. 22.

² OJ L 197, 25.7.2015, p. 24.

1 INTRODUCTION

- (1) Commission Regulation (EU) 2015/1222 of 24 July 2015 establishing a guideline on capacity allocation and congestion management (the ‘CACM Regulation’) laid down a range of requirements for cross-zonal capacity allocation and congestion management in the day-ahead and intraday markets in electricity. These requirements also include the development of the capacity calculation methodology (‘CCM’) in each of the capacity calculation regions (‘CCR’) in accordance with Article 20 et seq. of the CACM Regulation.
- (2) On 21 February 2019, ACER issued its Decision No 02/2019³ approving the proposals of the transmission system operators (‘TSOs’) of the Core region for a regional design of the day-ahead and intraday common capacity calculation methodologies according to Article 20(2) of the CACM Regulation. That Decision included annexes setting out the day-ahead capacity calculation methodology (‘DA CCM’ in Annex I) and the intraday capacity calculation methodology (‘ID CCM’ in Annex II).
- (3) According to Article 9(13) of the CACM Regulation, the TSOs responsible for developing a proposal for terms and conditions or methodologies may propose amendments to the competent regulatory authorities, which are to be approved in accordance with the procedure set out in said Article 9. Where the regulatory authorities have not been able to reach an agreement on such amendment proposal within six months, or upon their joint request, ACER is to decide on the proposal in accordance with Article 9(11) of the CACM Regulation as well as Article 5(3) and the second subparagraph of Article 6(10) of Regulation (EU) 2019/942.
- (4) On 19 April 2022, ACER issued its Decision No 06/2022⁴ on the on the first amendment of the Core ID CCM, following from the Core regulatory authorities’ request that ACER adopts a decision on the amendment given that the Core regulatory authorities could not reach an agreement.
- (5) The present Decision follows from the Core regulatory authorities’ request that ACER adopts a decision on the Core TSOs’ proposal for the second and third amendment of the ID CCM (collectively referred to as the ‘**Proposal**’⁵) given that the regulatory authorities could not reach an agreement to approve it. Annex I and Annex II to this Decision set out the Proposal as amended and approved by ACER (henceforth referred to as the ‘**Core ID CCM Amendment**’).⁶ For information, Annex III provides an informal consolidated version of the amended Core ID CCM.

³ [ACER Decision No 02/2019](#).

⁴ [ACER Decision No 06/2022](#).

⁵ Core TSOs’ proposals for the second and the third amendment of the Core ID CCM are referred to in this Decision as ‘the Proposal’. The Proposal includes the official versions of the second and third amendment proposals as submitted to the Core regulatory authorities and referred to ACER. For information, the referral also included consolidated versions of the Core ID CCM with the proposed amendments integrated in track changes.

⁶ Annex Ia and Annex IIa provide the Core ID CCM Amendment in track changes.

2 PROCEDURE

2.1 Proceedings before the Core regulatory authorities

- (6) The Core TSOs submitted the second and the third amendment proposal concerning the Core ID CCM to the Core regulatory by 24 October 2022 and by 15 March 2023 respectively, pursuant to Article 9(6) of the CACM Regulation. Each amendment proposal was publicly consulted by the Core TSOs before their submission for regulatory approval: the second amendment between 4 March and 4 April 2022 and the third amendment between 30 November and 30 December 2022.
- (7) Article 9(10) of the CACM Regulation requires the Core regulatory authorities to consult and closely cooperate and coordinate with each other to reach an agreement and decide on the proposal within six months following its receipt by the last Core regulatory authority.
- (8) The two amendment proposals submitted by the Core TSOs concerned:
- (a) as the second amendment, the alignment of the Core ID CCM with Core Regional Operational Security Coordination ('ROSC') methodology pursuant to Article 76 of Commission Regulation (EU) 2017/1485 establishing a guideline on electricity transmission system operation ('the SO Regulation'), and more specifically with the coordinated regional operational security analyses ('CROSA') foreseen to be implemented in the last quarter of 2025. Aligning Core ID CCM and CROSA process aims to improve the robustness of the intraday capacities calculated on the basis of the CROSA outputs; and
 - (b) as the third amendment, the application of the validation approach based on Available Transfer Capacity ('ATC').
- (9) During the proceedings before the Core regulatory authorities, the Belgian regulatory authority ('CREG'), expressed its concerns regarding both amendment proposals, and suggested revisions which, however, were not accepted by all Core regulatory authorities. The initial views and disagreements between the Core regulatory authorities are listed in the table in section 6.1.
- (10) The Core regulatory authorities did not issue a shadow opinion on these amendment proposals.

2.2 Proceedings before ACER

- (11) By letter of 3 April 2023,⁷ the Chair of the Core Energy Regulators' Regional Forum (CERRF)⁸, acting on behalf of the Core regulatory authorities, referred the Proposal to

⁷ Received by ACER on 4 April 2023.

⁸ CERRF is a platform of the Core regulatory authorities to consult and cooperate for reaching a unanimous agreement on the proposals by the NEMOs or the TSOs of the Core region.

ACER for a decision pursuant to Article 9(11) of the CACM Regulation. According to this letter, the Core regulatory authorities jointly concluded that they were not able to find a common agreement on the key aspects of the Proposal. As such, they were not in a position to approve the Proposal, or request further amendments, in time for the expected go-live of the first Core intraday capacity calculation in July 2023.

- (12) In their letter, all Core regulatory authorities asked ACER to consider the urgency of a timely decision and expressed readiness to assist and fully support ACER in its decision process.
- (13) On 4 July 2023, ACER launched a public consultation on the Proposal, inviting all interested parties to submit their comments by 31 July 2023. A summary of stakeholders' responses is provided in section 5, and a more detailed evaluation is in Annex IV to this Decision.
- (14) Between April 2023 and February 2024, ACER engaged in extensive discussions with the Core TSOs and the Core regulatory authorities, through working meetings, oral hearings and exchanges of documents.
- (15) In particular, the following key steps have been taken:

5 May 2023	Kick-off meeting (teleconference) with the Core TSOs and the Core regulatory authorities ⁹ ;
26 May 2023	Working meeting (teleconference) with the Core TSOs and the Core regulatory authorities;
6 June 2023	Information on the decision-making procedure provided to the CACM Task Force;
21 June 2023	Working meeting (teleconference) with the Core TSOs and the Core regulatory authorities;
23 June 2023	Information on the decision provided to the AEWG;
9 August 2023	Working meeting (teleconference) with the Core TSOs and the Core regulatory authorities
16 August 2023	Start of the first hearing phase ACER's preliminary position: Draft Core ID CCM Amendment, including ACER's reasoning for amendments, provided to the Core TSOs and the Core regulatory authorities
24 August 2023	Oral hearing with CREG

⁹ The representatives of the European Commission and ENTSO-E were involved in the meetings. Also, with consent of Core TSOs and Core regulatory authorities, the meetings involved the Italian regulatory authority ARERA.

25 August 2023	Oral hearing with 50Hertz, Amprion, TenneT GER and TransnetBW (hereinafter collectively referred to as ‘German TSOs’)
25 August 2023	Oral hearing with the Polish TSO (‘PSE’)
25 August 2023	Oral hearing with the Hungarian TSO (‘MAVIR’), and the Hungarian regulatory authority (‘MEKH’)
28 August 2023	Oral hearing with the Core TSOs
28 August 2023	Oral hearing with the Belgian TSO (‘ELIA’)
29 August 2023	Orientation discussion at the AEWG
4 September 2023	Extension of the hearing phase ACER’s revised preliminary position: Draft Core ID CCM Amendment, including ACER’s reasoning for amendments, provided to the Core TSOs and the Core regulatory authorities
7 September 2023	Oral hearing with the Core TSOs and the Core regulatory authorities
15 September 2023	Oral hearing with the German TSOs
20 September 2023	Orientation discussion at the BoR
22 September 2023	Closure of the first hearing phase
6 October 2023	First AEWG consultation and advice
10 November 2023	Workshop/Working meeting (teleconference) on the legal interpretation of Article 16(8) of the Electricity Regulation
20 November 2023	Orientation discussion at the AEWG
1 December 2023	Start of the second hearing phase ACER’s revised preliminary position: Draft Core ID CCM Amendment, including ACER’s reasoning for amendments, provided to the Core TSOs and the Core regulatory authorities
8 December 2023	Oral hearing with the Core TSOs and Core regulatory authorities
13 December 2023	Orientation discussion at the BoR
15 December 2023	Oral hearing with the German TSOs
15 December 2023	Oral hearing with CREG and the regulatory authorities of the Netherlands (‘ACM’) and Luxembourg (‘ILR’)
18 December 2023	Closure of the second hearing phase
10 January 2024	Orientation discussion at the AEWG
15 January 2024	Working meeting with the Core TSOs and the Core regulatory authorities. Other regulatory authorities were also invited.

23 January 2024	Start of the third hearing phase ACER's revised preliminary position: Draft Core ID CCM Amendment, including ACER's reasoning for amendments, provided to the Core TSOs and the Core regulatory authorities;
24 January 2024	Orientation discussion at the BoR
2 February 2024	Oral hearing with PSE
2 February 2024	Oral hearing with the German TSOs and the TSOs of Austria ('APG') and the Netherlands ('TenneT TSO')
2 February 2024	Oral hearing with the Core TSOs and the Core regulatory authorities. Other regulatory authorities were also invited.
2 February 2024	Closure of the third hearing phase
15 February 2024	Second AEWG consultation and advice
7 March 2024	BoR's opinion

3 ACER'S COMPETENCE TO DECIDE ON THE PROPOSAL

- (16) Pursuant to point (b) of the first subparagraph of Article 5(3) of Regulation (EU) 2019/942, all regulatory authorities of the region concerned shall unanimously agree on proposals for terms and condition or methodologies for the implementation of those network codes or guidelines that were adopted before 4 July 2019 and require the approval of all the regulatory authorities of the region concerned; as provided in the second subparagraph of Article 5(3) of Regulation (EU) 2019/942, those regulatory authorities may refer the proposals to ACER for approval pursuant to point (b) of the second subparagraph of Article 6(10) of Regulation (EU) 2019/942, and they shall do so pursuant to point (a) of the second subparagraph of Article 6(10) of that Regulation where they did not reach a unanimous agreement.
- (17) Pursuant to Article 9(5) and (7)(a) of the CACM Regulation, which has been adopted as a guideline before 4 July 2019, the proposal for a common capacity calculation methodology pursuant to Article 20(2) of the same Regulation shall be subject to approval by all regulatory authorities of the concerned region.
- (18) Pursuant to Article 9(11) of the CACM Regulation, where the regulatory authorities have not been able to reach agreement within six months, or upon their joint request, or upon ACER's request according to the third subparagraph of Article 5(3) of Regulation (EU) 2019/942, ACER 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.
- (19) Pursuant to Article 9(13) of the CACM Regulation, where the TSOs propose amendments of terms and conditions or methodologies to the regulatory authorities, those proposals shall be approved in accordance with the procedure set out in Article 9 of the CACM Regulation.

- (20) Pursuant to Article 9(5) of the CACM Regulation, ACER, before approving the terms and conditions or methodologies, shall revise the submitted proposals where necessary, after consulting the respective TSOs, in order to ensure that they are in line with the purpose of the CACM Regulation and contribute to market integration, non-discrimination, effective competition and the proper functioning of the market.
- (21) On 4 April 2023, the Core regulatory authorities informed ACER that they were not able to reach an agreement on the Proposal, and jointly requested ACER to take a decision on the Proposal.
- (22) Therefore, ACER is competent to decide on the Proposal based on Article 9(5), (7)(a), (11) and (13) of the CACM Regulation, and Article 5(3) and point (b) of the second subparagraph of Article 6(10) of Regulation (EU) 2019/942.

4 SUMMARY OF THE PROPOSAL

- (23) The Proposal referred to ACER includes the following documents:
 - (a) Documents related to the second amendment, dated 9 August 2022:
 - (i) Second amendment of the Intraday 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 ('second amendment proposal');
 - (ii) Explanatory document to the second amendment of the Intraday Capacity Calculation Methodology of the Core Capacity Calculation Region in accordance with article 20ff. of the Commission Regulation (EU) 2015/1222 of 24th July 2015 establishing a guideline on capacity allocation and congestion management ('explanatory document on the second amendment proposal');
 - (iii) Public Consultation Report to the second amendment of the Intraday Capacity Calculation Methodology of the Core Capacity Calculation Region in accordance with article 20ff. of the Commission Regulation (EU) 2015/1222 of 24th July 2015 establishing a guideline on capacity allocation and congestion management" ('PC report on the second amendment proposal');
 - (b) Documents related to the third amendment, dated 19 January 2023:
 - (i) Third amendment of the Intraday 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 ('third amendment proposal');

- (ii) Explanatory Document to Annex 6 (3rd ID CCM amendment) of the Intraday Capacity Calculation Methodology of the Core Capacity Calculation Region in accordance with article 20ff. of the Commission Regulation (EU) 2015/1222 of 24th July 2015 establishing a guideline on capacity allocation and congestion management (‘explanatory document on the third amendment proposal’);
- (iii) Public Consultation Report to the third amendment of the Intraday Capacity Calculation Methodology of the Core Capacity Calculation Region in accordance with article 20ff. of the Commission Regulation (EU) 2015/1222 of 24th July 2015 establishing a guideline on capacity allocation and congestion management (‘PC report on the third amendment proposal’).

(24) The Proposal consists of the following amendments to the Core ID CCM. For clarity and completeness, the sections of the Core ID CCM where no amendments were proposed by the TSOs are also listed below. Amendments concerning the third amendment proposal are underlined.

Whereas	Recitals 1 to 22	<p>‘Whereas’ section explains how the methodology considers the general principles and objectives of the CACM Regulation and Regulation (EU) 2019/943 (‘Electricity Regulation’) and where required, provides additional reasoning supporting the articles of the methodology.</p> <p><i>No amendments were proposed by the Core TSOs.</i></p>
Title 1	Articles 1 to 3	<p>General provisions covering the subject matter and the scope of the methodology, definitions and the application of the methodology;</p> <p><i>The Core TSOs amended the definitions, primarily in relation to the removal of non-costly remedial action optimisation (‘nRAO’)</i></p>
Title 2	Article 4	<p>General description of the capacity calculation methodology with intraday capacity calculation process;</p> <p><i>The Core TSOs amended Article 4 by:</i></p> <ul style="list-style-type: none"> – adding paragraph 8 related to the delivery of common grid models – removing step 4 in paragraph 9 (nRAO) – adding paragraph 11 on the TSOs’ right to reduce the capacities submitted to the intraday allocation process – adding paragraph 12 on the TSOs’ right to delay the capacity calculation in the case of late delivery of input data from the ROSC process
Title 3	Articles 5 to 10	<p>Capacity calculation inputs include methodologies for the calculation of the following inputs: selection of critical network elements with contingencies (‘CNECs’), operational</p>

security limits, calculation of the final adjustment value, allocation constraints, reliability margin, generation shift keys and remedial actions in capacity calculation;

The Core TSOs amended Article 5 by:

- removing the reference to monitored network elements to contingency ('MNEC')
- adding an exception to include the cross-border relevant network elements with contingency ('XNEC') to the list of CNECs

The Core TSOs amended Article 8 by:

- adding the provision that flow reliability margin ('FRM') at the intraday level should be equal "or lower" than the FRM used in previous flow-based initiatives, or equal "or lower" than 10% for the newly included CNECs

The Core TSOs amended Article 10 by:

- adding the provision of alignment the intraday capacity calculation with the most recent outcome of CROSA process
- removing the reference to the nRAO process

Title 4 Article 11

Update of intraday cross-zonal capacities includes a description of the update of intraday cross-zonal capacities remaining after the Single Day Ahead Coupling (SDAC)

The Core TSOs adapted the nomenclature in the equations of Article 11

Title 5 Articles 12 to 20

Description of the intraday capacity calculation process, provides a step-by-step mathematical description of the capacity calculation, followed by further details, including the rules on adjustment of power flows on CNECs, the consideration of non-Core CCR borders, the calculation of the final flow-based domain, capacity validation methodology and the intraday capacity calculation fallback procedure;

The Core TSOs amended Articles 12-20 as follows:

- improved the equation for calculating maximal zone-to-zone PTDF in Article 12(5)
- added a reference to the constraint of the HVDC interconnectors in Article 13(1)
- added a provision on consideration the additional elements of the CNEC list in Article 15(3) and Article 16(2) to (4)
- deleted provisions concerning nRAO
- extended the equations in Article 18(1) to cope with the calculation of the Remaining Available Margin ('RAM') for additionally added elements

- added the PTDF calculation principle for additionally added elements in Article 19(3)
- extended Article 19(7) to cover the influence of already allocated capacities from earlier intraday allocation phases
- deleted the paragraph (10)(e) from Article 19 referring to the previous origin of common grid models used for the capacity calculation
- added reference to the local validation process in Article 20

Title 5 Article 21

Calculation of ATCs for SIDC fallback procedure includes a description of the calculation of available transfer capacities (ATC) for single intraday coupling (SIDC) fallback procedure; *The Core TSOs amended Article 21 by:*

- introducing the ATC limitation from the ATC-based validation pursuant to the 3rd amendment, paragraph 3(d)
- including the ATC limitation in the conversion procedure, in paragraph 5(c)v) (the 3rd amendment)
- introducing the PTDF relevance threshold for the conversion of flow-based parameters into ATC values, in paragraph 4
- adjusted the conversion procedure, in particular for the negative capacities, in paragraph 5(c)

Title 6 Articles 22 to 25

Updates and data provision includes the requirements concerning the necessary updates, publication of data, monitoring and reporting to the regulatory authorities *The Core TSOs amended Articles 22 to 25 as follows:*

- adjusted the relations to CROSA process in Article 22(4)
- removed the reporting obligation for omitted values in Article 23(2)
- converted the obligation to report on the flows resulting from intraday net positions, to quarterly report, in Article 23(2)(f)
- added the reporting obligation in to Core regulatory authorities on a monthly basis in Article 23(7)
- removed paragraph 25(4)(c) related to the monitoring of nRAO efficiency
- added the obligation to report on the flows resulting from intraday net positions, in Article 25(5)(d)

Title 7	Article 26	Implementation sets out a timeline for implementing Core ID CCM; <i>No amendments were proposed by the Core TSOs.</i>
Title 8	Article 27	Final provisions , i.e. language; <i>No amendments were proposed by the Core TSOs.</i>
Annex 1		Annex 1 includes the justification of usage and methodology for calculation of external constraints. <i>No amendments were proposed by the Core TSOs.</i>
Annex 2		Annex 2 includes the requirements for calculation of intraday cross-zonal capacities before full implementation of intraday capacity calculation; <i>No amendments were proposed by the Core TSOs.</i>
Annex 3		Annex 3 includes the requirements on update of intraday cross-zonal capacities remaining after the SDAC in the transition period. <i>No amendments were proposed by the Core TSOs.</i>
Annex 4		Annex 4 includes the requirements on Calculation of ATCs for SIDC fallback procedure in the transition period. <i>No amendments were proposed by the Core TSOs.</i>
Annex 5		Annex 5 includes other transitional arrangements. <i>No amendments were proposed by the Core TSOs.</i>
Annex 6		<u><i>Annex 6 was added by Core TSOs in the scope of the 3rd amendment and sets out provisions on ATC-based validation</i></u>

5 STAKEHOLDERS' RESPONSES TO ACER'S PUBLIC CONSULTATION

- (25) Responses to ACER's public consultation are summarised in Annex IV to this Decision. A short summary of stakeholders' views is provided below:
- (a) Most stakeholders were in favour of the proposed alignment of the ROSC and IDCC processes, stating that it would allow to enhance operational coordination, and thus ensure reliable operation of the interconnected power system. One stakeholder raised concerns about the low availability of cross-zonal capacities during the interim period until the implementation of the ROSC process, and suggested the usage of day-ahead leftovers, rather than calculated cross-zonal capacities, until such implementation.
 - (b) No arguments were made against the recalculation of IDCC once the completed CROSA results are available, with a large majority of responders stating that such recalculation would provide added value specially during the interim period. After the implementation of ROSC, no additional capacity is foreseen to be freed up, as the optimisation of remedial actions will lead to a loading of 100% in the most congested elements.
 - (c) Mixed views were received concerning the conversion of the overloaded XNECs from the ROSC process into CNECs. While most responders agree with ACER's view that allowing for the XNEC into CNEC conversion, without defining a sensitivity threshold, may result in undue discrimination of cross-zonal trade, a few stakeholders retain that this provision is necessary to ensure that remedial actions coordinated within ROSC are not counteracted by additional capacity.
 - (d) Regarding ACER's question on the minimum capacity values and flow-based domain extension, most of the TSO respondents opposed to the application of any 'virtual' capacities in the intraday timeframe. On the other hand, the majority of market participants responding to the consultation were in favour of some of the proposed solutions for enlarging the flow-based domain.
 - (e) All but one respondent were in favour of the ATC-based validation proposal made by the Core TSOs, with most of them specifying that this would be acceptable either as a temporary solution, until the go-live of flow-based allocation in the intraday timeframe, or as a fallback, in case the primary flow-based validation cannot be performed. The respondent opposing this possibility calls for a strictly proportional and justified use of validation, linking with the practice of the excessive use of the validation adjustment in the day-ahead capacity calculation.

6 ENGAGEMENT WITH THE PARTIES AND SUMMARY OF VIEWS

6.1 Initial views of the Core regulatory authorities

- (26) The Core regulatory authorities provided their initial views regarding the proposed two amendments to the Core ID CCM at the related Core Implementation Group (Core IG)¹⁰ explanatory session of 13 March 2023.
- (27) The Core regulatory authorities prepared a survey of the TSOs’ proposals provided in the two amendments, CREG’s counterproposals and raised ‘red flags’, and the position of other regulatory authorities. ACER’s summary of CREG’s and other regulatory authorities’ views is provided in the table:

Aspect of the ID CCM	Summary of CREG’s comments	Summary of views from other regulatory authorities
Removal of adjustment of minimum RAM (AMR) from the day-ahead leftovers:	AMR removal is the source of many problems of non-compliance. AMR, if used in day-ahead, must be kept for the intraday timeframe as well.	ACM and the regulatory authorities of Austria (‘E-Control’), France (‘CRE’) and Germany (‘BNetzA’) disagreed with CREG on guaranteeing AMR at the intraday level.
Negative RAM and negative ATC values:	TSOs are expected to guarantee firmness of the day-ahead market clearing result.	ACM, BNetzA, CRE and E-Control disagreed with CREG and accepted the concept of defining negative ATC values.
Removal of nRAO due to timing issues or inconsistencies with a ROSC methodology:	The concept of optimising cross-border capacities in intraday capacity calculation should be maintained. The impact of nRAO could be translated into a default capacity freed up around the day-ahead market corner.	ACM, BNetzA, CRE and E-Control were against considering default lump capacity. CRE was opened to reintroduce nRAO.
Turning XNECs into CNECs in intraday level:	The set of CNECs should be the same in DA and in ID.	ACM, BNetzA, CRE and E-Control were in favour of providing the TSOs with a possibility of converting XNECs to CNECs.
Cases where Individual Validation	IVA shall be restricted to cases of contingencies or forced	ACM, BNetzA, CRE and E-Control disagreed with CREG.

¹⁰ The Core Implementation Group oversees the implementation processes in Core CCR and consists of representatives from the Core regulatory authorities and Core TSOs.

Adjustment (IVA) may be applied:	outages affecting the system security on CNECs, having monitoring requirements maintained;	
Imposing ATC-based validation (third amendment proposal)	Imposing ATC limits prior to or after the ATC-extraction process, is not in line with a flow-based capacity calculation methodology, which ensures transparency on the limiting CNECs and the capacity provided. Flow-based approach therefore allows to monitor the 70% target and to monitor non-discrimination between internal and cross-zonal trade.	Most of the Core regulatory authorities were open to accept the third amendment proposal, with some modifications.

(28) At the Core IG meeting on 13 March 2023, the Core TSOs highlighted the need to implement both amendments according to the scheduled timeline (June 2023). ACER informed the Core IG that shortening the six-month decision-making timeframe would not be feasible, considering the complex and contentious nature of the proposed amendments (multiple ‘red flags’ and disagreements between the Core regulatory authorities on fundamental issues such as the scope of the CNEC list or ensuring minimum capacities at intraday level).

6.2 Engagement with the Core TSOs and regulatory authorities

6.2.1 Working meetings

(29) The working meetings (listed in section 2.2) served to discuss the Proposal with the Core TSOs and the Core regulatory authorities, clarify issues, collect additional information, explore different solutions and find common ground between diverging positions of the parties, where possible. Beyond discussing the Proposal, further related amendments were considered, such as the revision of the deadline to provide the methodology for advanced hybrid coupling (‘AHC’) on intraday level, additional capacity calculation phases in relation to the issue of occurrence of negative capacities, and proposals for increasing intraday capacities in relation to the issue of occurrence of negative capacities and isolation of certain TSOs with currently estimated intraday ATC values. The parties also discussed a feasible implementation timeframe and sequence which would take into account the required development of processes and tools and, at the same time, would not compromise the planned go-live of the Core ID capacity calculation.

6.2.2 ACER's preliminary position of 16 August 2023

- (30) ACER's preliminary position, shared with the parties on 16 August 2023 for the first hearing phase, included the following amendments proposed by ACER:¹¹
- (a) to allow the TSOs for a negative Individual Validation Adjustment ('IVA') value in the capacity validation phase, as one of the possible solutions to implement the minimum capacity requirement of 70% specified in Article 16(8) of the Electricity Regulation;
 - (b) not to accept the Core TSOs' proposal to allow for exceptional inclusion of cross-border relevant network elements with contingency ('XNECs') in the list of critical network elements with contingency ('CNECs'), because such an exception is de facto provided in the validation procedure for XNECs with the zone-to-zone PTDF equal or above 5%, under conditions specified in Article 19. ACER considered that the 5% threshold is in line with Article 29(3)(b) of the CACM Regulation, which requires that network elements with low sensitivity are ignored in the capacity calculation process. For the same reason, ACER also proposed to limit the application of the IVA value only for congestions on the CNECs, without the possibility to mirror potential congestions on non-CNECs through IVA on CNECs;
 - (c) to apply a fixed flow reliability margin ('FRM') value of 5% at the intraday level, as long as fixed FRM value of 10% would be applied on the day-ahead level;
 - (d) to introduce intraday capacity calculation rounds, including an additional recalculation of intraday capacities allocated at 4:00 ('IDCC c'), and the related implementation schedule of capacity calculation rounds ('IDCC a') to ('IDCC d') in accordance with the Core TSOs' estimation of a plausible implementation timeline.
- (31) Summary of the Core TSOs' and the Core regulatory authorities' views on ACER's preliminary position of 16 August 2023, submitted to ACER in writing and/or orally, during the first hearing phase:
- (a) All Core TSOs and the majority of Core regulatory authorities¹² disagreed with implementing the minimum capacity requirement in the intraday timeframe, in particular through IVA, for the following reasons:
 - (i) it pre-empts the discussions on the issue of 'virtual' capacities and minimum RAM in the intraday timeframe which are to take place in the context of the

¹¹ This section reports only the proposals which, following the input from the parties concerned, were subsequently revised by ACER in the revised preliminary position of 4 September 2023. A comprehensive list of all the proposals consulted with the parties during the hearing phase, including revised and non-revised proposals, is provided in section 6.2.

¹² Except CREG and ILR.

- expected amendments to the CACM Regulation ('CACM 2.0'), foreseen in 2024;
- (ii) it would result in intraday capacities which cannot be reconciled with the operational security, as the necessary short-term application of remedial actions might not be available nor applicable;
 - (iii) if implemented as proposed by ACER, i.e. through IVA, it would jeopardise the full capacity calculation process and be a clear step back in terms of TSO coordination and transparency in the Core region;
 - (iv) if implemented as proposed by ACER, i.e. through IVA, it would endanger network security, as there is no possibility for a TSO to validate the entire flow-based domain if another TSO is allowed to extend it through IVA in an uncoordinated manner;
 - (v) it neither considers the extensive exchanges between the TSOs, the regulatory authorities and ACER nor the clear position of a vast majority of Core regulatory authorities regarding 'virtual' capacities and minimum RAM in intraday, as expressed during the decision procedure in the past months.
- (b) ILR, while not questioning the application of the 70% requirement to the intraday timeframe as such, expressed reservations about implementing the requirement before the expected amendment of the CACM Regulation. If the 70% requirement was to be implemented at this stage, it should be implemented via a minimum RAM in the capacity calculation process (as at the DA) and not through the IVA value as proposed by ACER.
- (c) Regarding the consideration of non-CNECs in the intraday capacity calculation:
- (i) Core TSOs and the majority of Core regulatory authorities¹³ disagreed with ACER's proposal to keep the PTDF threshold of 5% as one of the preconditions for the conversion of XNECs to CNECs. According to the parties, all network elements considered in the ROSC process should be able to be considered in the capacity calculation, if necessary. Ignoring some network elements from the ROSC process could lead to situations where actions to relieve congestions in ROSC would be counteracted by subsequent intraday trade;
 - (ii) The German TSOs also disagreed with limiting the application of the IVA value solely due to congestions on CNECs;

¹³ Except CREG, ILR, CRE and the regulatory authority of the Czech Republic ('ERU').

(iii) ELIA proposed to apply the PTDF threshold of 3% for the XNEC to CNEC conversion as well as the IVA application on CNECs due to congestions on non-CNECs. For the application of IVA, ELIA proposed the floor of RAM on a CNEC to be set to 20% of maximum flow (Fmax).

(d) Regarding the FRM:

(i) The German TSOs and ELIA proposed to remove the FRM calculation methodology from the Proposal, permanently replacing it with a fixed FRM value. In their view, the calculation process is too resource demanding, and the results might only lead to higher FRM values than the actual ones;

(ii) PSE proposed to specify that the fixed FRM value of 5% at intraday will be applied only if all Core TSOs agree to apply fixed FRM value of 10% at day-ahead level; otherwise, the only limitation for the FRM on intraday level should be that it is lower or equal than the FRM on day-ahead level.

(e) Regarding the intraday capacity calculation rounds and their implementation timeline:

(i) All Core TSOs and most Core regulatory authorities, except CREG and ILR, raised concerns about the feasibility of proposed implementation timeline. The Core TSOs were of the view that the previously agreed timeline did not consider any changes of the process, such as those required to implement the 70% capacity requirement;

(ii) PSE proposed to consider the fifth calculation phase, in the afternoon of day D as a possible future development.

6.2.3 ACER's revised preliminary position of 4 September 2023

(32) On 4 September 2023, having considered the views of the Core TSOs and the Core regulatory authorities on the preliminary position of 16 August 2023, ACER shared with the parties its revised preliminary position, and extended the hearing phase until 15 September 2023. Following the concerns of the parties¹⁴ that this timeframe might be too short, ACER further extended the hearing phase until 22 September 2023.

(33) ACER's revised preliminary position included the following main changes:

(a) Regarding the implementation of the 70% requirement in the intraday timeframe:

(i) to remove the possibility for the TSO to increase capacity through IVA (i.e. the negative IVA value) as the operational security concerns expressed by

¹⁴ Comments of the Core TSOs and the Core regulatory authorities during the joint oral hearing of 7 September 2023.

the Core TSOs and the Core regulatory authorities were warranted, in ACER's view; and

(ii) instead, to introduce the adjustment for minimum RAM value ('AMR') in the capacity calculation phase, to nevertheless ensure that the Core ID CCM provides means to implement the 70% requirement in the intraday timeframe, in order to cater for the principle of non-discrimination between internal and cross-zonal flows. To address concerns with respect to the immediate implementation of the minimum RAM, ACER proposed that the adjustment for minimum RAM is subject to a transitory period until 1 January 2026 to provide the TSOs with additional time to develop the related functionalities.

(b) Regarding the consideration of XNECs in the intraday capacity calculation, ACER proposed a compromise solution of the PTDF threshold of 3%, while requiring the TSOs to take all other precautionary measures to prevent any additional flows on such XNEC, including stopping any additional trade within a given bidding zone in a given MTU, or at least any trade within a concerned bidding zone causing flows in the burdening direction of such XNEC;

(c) Regarding the FRM, ACER did not follow the German TSOs' and ELIA's proposal to remove the FRM calculation. ACER accepted the PSE's proposal to specify the conditions of applying the fixed FRM percentage, as explained in section 7.2.2.3.

(34) The views of the Core TSOs and the Core regulatory authorities on ACER's revised preliminary position of 4 September 2023, submitted to ACER in writing and/or orally, during the extension of the first hearing phase, are summarised below:

(a) The Core TSOs and BNetzA still pointed at doubts whether Article 16(8) of the Electricity Regulation has to be interpreted in a manner according to which the TSOs must meet the 70% requirement also fully in the intraday timeframe (but considering capacity allocated in day-ahead). ACER addresses some of these considerations in section 7.2.2.7.1.

(b) A majority¹⁵ of the Core regulatory authorities still had questions concerning the content and the implementation of ACER's revised preliminary position, and reiterated their previous concerns about implementing the minimum RAM;

(c) ACM supported the consideration of 70% requirement at the intraday level, pointing out that introducing this requirement in the ID CCM requires fundamental discussions amongst ACER, the regulatory authorities and the TSOs on the details of the necessary changes in the capacity calculation process and their timing, and on how to deal with the increasing operational risks. In ACM's view, the methodology should leave enough room to incorporate the outcomes of these

¹⁵ Except CREG (Belgium), ILR (Luxembourg) and ACM (The Netherlands).

discussions. In addition, ACM disagreed with removing the possibility to apply IVAs on CNECs for the congestions on non-CNECs, while at the same time introducing minimum RAM.

- (d) MEKH provided a compromise proposal which included the minimum RAM in intraday, provided that:
- (i) it would not generate a need to revise existing action plans or adopting new derogations (systematically and *en masse*);
 - (ii) it would be implemented after a transition period linked to the implementation of the intraday flow-based allocation and the expiry of action plans, optimally by end of 2025;
 - (iii) it would be aligned with CACM 2.0. once adopted, and still before the expiry of the transition period, otherwise the transition period should be extended to allow for such alignment; and
 - (iv) the option to set aside a portion of capacity for shorter timeframe markets (intraday, balancing) should be investigated and actively promoted to prevent the drying up of those cross-border markets.
- (e) The German TSOs provided the following views on the XNEC to CNEC conversion:
- (i) It may not be feasible to take all precautionary measures to stop internal trade, from both legal and technical perspective. The proposed requirement has to be evaluated first in terms of tooling possibility and would be highly challenging;
 - (ii) The TSOs aim to prevent that the effect of the activated cross-border redispatch or countertrading on operational security is diminished by additional cross-zonal trade in accordance with Article 31(3a) of the Core ROSC methodology.¹⁶ It is not the aim of the TSOs to convert to CNECs all the XNECs which have been relieved by remedial actions applied during the ROSC process. At this stage of the ROSC implementation, a lack of reliable data renders it impossible for the TSOs to make a specific proposal in that regard. Therefore, the German TSOs proposed to conduct an analysis of the data which will be available in the future, and which can inform an appropriate proposal;
 - (iii) According to the German TSOs, the conversion should ensure that capacity is limited only by those elements which have been relieved by the cross-

¹⁶ [Annex I](#) to ACER Decision No 33/2020 on the Core ROSC methodology.

border remedial actions by the CROSA. This would also ensure that the effect of activated XRAs on operational security is not diminished by additional cross-zonal trade (cf. Article 31(3) of the Core ROSC methodology). Further, the German TSOs noted that such conversions would be subject to reporting obligations as set out in Article 19(10) of Core ID CCM;

- (iv) If the Core ID CCM does not allow the TSOs to protect cross-border redispatch and countertrading measures in a coordinated and transparent manner during the IDCC process, the TSOs will be forced to use measures according to Article 31(3b) of the Core ROSC methodology to ensure network security;
 - (v) The German TSOs proposed a twelve-month implementation period after the ROSC implementation, with no PTDF threshold in place, in order to have time to analyse the need for exceptional inclusion of the XNECs in the CNEC list as well as the need for, and the size of, a potential threshold which could be applied, and propose a potential amendment in this respect;
 - (vi) Regarding the minimum RAM calculation, the German TSOs proposed to remove the portion of the day-ahead Core net position resulting from cross-zonal redispatching, in order not to counteract these measures.
- (f) CREG reacted to ACER's revised preliminary position by:
- (i) supporting the implementation of the 70% requirement in intraday through the adjustment for minimum RAM, as a measurable indicator for non-discriminatory access to capacity for cross-zonal trade. CREG indicated that there was no reason to differentiate between the day-ahead and intraday timeframes. CREG also pointed out that the Core TSOs' concerns about operational security could be tackled by different solutions, namely network investments, bidding zone reviews, redispatch if needed, transitory period or derogations.
 - (ii) reiterating its concerns on the removal of nRAO with no other measures to ensure that margins are freed up around the day-ahead market clearing point. CREG asked ACER to foresee a minimum RAM of X% around the market clearing point to ensure the ATC-extraction can deliver acceptable results to the market;
 - (iii) asking ACER to remove all references to negative RAM and negative ATC as a basis for ID CCM, in view of its concerns regarding the possibility to translate a non-completed ROSC process into zero RAM and – *a fortiori* – negative RAM and negative ATC; and
 - (iv) opposing the proposal to include network elements with PTDF less than 5% as additional CNECs in the intraday capacity calculation.

6.3 First AEWG consultation and advice of 4 October 2023

- (35) During the AEWG consultation period, including the AEWG meeting of 4 October, the regulatory authorities displayed different views on the proposed implementation of the minimum RAM in the intraday timeframe. In particular, the following comments were provided:
- (a) Minimum RAM in intraday may have unclear impacts on operational security (ACM, E-Control and the regulatory authorities of Romania ('ANRE'), Czech Republic ('ERU'), Croatia ('HERA') and Slovakia ('URSO')). In relation to this, ILR stated that it can support ACER's proposed solution (with the transitory period until January 2026) which gives time and opportunities to the TSOs to adjust and react to potential operational security concerns they may have with the minimum RAM. According to ACM, this longer transitory period might not be enough to ensure operational security. ACM reiterated its concern that the ID CCM should appropriately consider these risks, and that the Core TSOs should propose how to apply the derogation criteria for the intraday timeframe, to guarantee this to be an effective and operable measure to ensure operational security.
 - (b) Minimum RAM in intraday may have unclear financial consequences due to potentially substantial redispatch costs (ANRE, E-Control, URSO, HERA, ERU).
 - (c) Minimum RAM in intraday has not been properly processed or technically assessed in terms of feasibility or necessary framework conditions (E-Control, URSO, ERU).
 - (d) The requirements for intraday capacities should be equally applicable across all CCRs (E-Control, ANRE, HERA, ERU, URSO)
 - (e) The 70% requirement should be discussed in the context of CACM 2.0 (BNetzA, E-Control, HERA, URSO, ERU) or the Electricity Regulation (HERA).
 - (f) The task to analyse and deliver a proper feasibility study for the 70% requirement in the intraday timeframe should be mandated to the TSOs (E-Control, URSO, ERU, HERA). HERA stated that only network investments and a new bidding zone configuration can substantially increase cross-zonal capacities. For ANRE, it is unclear whether a bidding zone review and small bidding zones is sufficient for meeting the 70% requirement in the intraday timeframe, without an appropriate study conducted by ENTSO-E.
 - (g) Minimum RAM in intraday does not provide for a possibility to distribute the 70% between the day-ahead and intraday timeframes, nor consider Article 17(2) of the Regulation as a solution (BNetzA, E-Control, ANRE, URSO, ERU). Related to this, URSO stated that the TSOs should propose a structure for a reasonable, technically verified/proven and efficient allocation of capacity across different timeframes, to be considered and approved by the regulatory authorities.
 - (h) ANRE stated that the minimum RAM in intraday would trigger a 'massive amount' of derogations due to delays in the implementation of network investments and other Core methodologies. HERA stated that derogations (subject to conditions specified in Article 16(9) of the Electricity Regulation) or action plans (which

expire by the end of 2025) are not appropriate solutions for compliance with the 70% requirement in intraday.

- (i) CRE stated the urgent need for an amended Core ID CCM regarding several adapted provisions, which should not be postponed because of the dispute on one specific provision, namely the 70% requirement.
- (j) CREG reiterated its strong support for the implementation of the 70% requirement to the intraday timeframe but noted that the possibility to grant derogations may lead to a deterioration of the intraday capacities if no strict compliance with CACM is ensured.
- (k) MEKH presented its proposal for the minimum RAM in intraday under specific conditions (see above, recital(34)(d)) and proposed a longer transition period linked to the CACM 2.0 developments. MEKH's proposal received mixed support from the other regulatory authorities. In particular, CRE, BNetzA and E-Control raised 'red flags'. HERA saw benefit in MEKH's proposal and stated that additional guarantees can be implemented in the Core ID CCM to secure that CACM 2.0 would trigger the subsequent amendment of the methodology.
- (l) ILR stated that it can support the solution proposed by ACER (with delayed implementation) which gives time and opportunities to the TSOs to adjust and react to potential operational security concerns they may have with the minimum RAM.
- (m) BNetzA provided additional input concerning the applicable legal framework.

(36) Regarding other aspects of the methodology, the following views were provided:

- (a) BNetzA was concerned about not having the possibility to apply IVAs on CNECs to mirror the congestions on non-CNECs, because this would allow, or even oblige, the TSOs to risk operational security on non-CNECs and in general. This, in BNetzA's view, is not compatible with the CACM Regulation and the SO Regulation, and detrimental to the procedure determined for the TSOs using the established iDAVinCy tool.
- (b) ACM also reiterated its concern about the removal of the possibility to apply IVAs on CNECs to solve congestions on non-CNECs in combination with the introduction of virtual capacities. ACM suggested to exclude non-CNECs-related reasons for the IVA application only if there are still sufficient costly and non-costly remedial actions available to ensure operational security.
- (c) CREG reiterated its concerns about removing nRAO without providing measures to ensure that margins are freed up around the DA market clearing point, to ensure that the extracted ATC-capacities have significant values.
- (d) CREG reiterated its opposition to translating a non-completed ROSC process into zero RAM and – *a fortiori* – negative RAM and negative NTC, noting that even with the additional calculation, ACER's proposal would not mitigate all the risks.

- (e) CREG maintained its opposition to the option of converting XNECs with PTDF <5% into CNECs since, in CREG's view, it would not be consistent with Article 29(3)(b) of the CACM Regulation. According to CREG, the proposed compromise solution, which considers the Core TSOs' concerns, would be burdensome to implement and monitor. In addition, the difference in scope of the capacity calculation and validation processes in DA and ID may introduce inconsistencies and would worsen the results of the parallel runs.
- (f) ILR noted that setting day-ahead FRM values on the Core CNECs to 10% (and to 5% for intraday) is a step back because in many cases day-ahead FRMs are lower than 10% (ILR referred to a recent study by CREG). ILR proposed to set the FRM value for intraday as being equal or lower to the minimum between 5% of Fmax and the day ahead FRM, so that all CNECs would have an intraday FRM equal or lower to 5%.
- (37) Generally, the AEWG stressed the importance of increasing capacities for cross-border trade especially in the short-term timeframe for the integration of intermittent generation from renewable sources in the European electricity system while maintaining the operational security of the system.
- (38) Considering the discussion at the AEWG meeting and the comments received, the AEWG did not reach an agreement on ACER's draft decision in relation to the 70% requirement for several key reasons, including differences in the interpretation of the applicable legal framework, severe concerns on the consequences of the minimum RAM (including derogations) and the need for proper analyses by the TSOs.
- (39) AEWG invited ACER to further look for a compromise solution which could be broadly accepted and potentially avoid a large number of derogations being submitted when the ID CCM is implemented. AEWG noted that the consequences of the minimum RAM in intraday should be investigated anyway, to clarify the conditions, potential risks and benefits. The AEWG concluded that it could endorse many agreed elements but identified significant remaining concerns by several regulatory authorities regarding ACER's draft decision.

6.4 Engagement with the Core TSOs and regulatory authorities following AEWG's advice of 4 October

- (40) In light of the AEWG advice, and in order to achieve a compromise, ACER decided to postpone the submission of the draft Decision for the BoR's favourable opinion, and further engaged with the regulatory authorities and the Core TSOs to discuss different positions and proposals for the way forward, and to work out a solution which could be broadly supported and consistent with the legal framework.

- (41) A workshop was organised on 10 November 2023 to identify possible compromise lines. Eight of the Core regulatory authorities¹⁷ highlighted the already existing five months delay of the IDCC go-live and presented a joint proposal for a way forward, which was to immediately apply ACER's amendments to the Core ID CCM without the 70% minimum RAM requirement and, in parallel, request the TSOs to, in the course of six to eight months, assess and introduce short-term measures towards higher intraday capacities and point out directions for further, long-term developments. Eight regulatory authorities argued that a minimum RAM in intraday is too complex and too important subject to be dealt with in a regional methodology, and that it should be rather handled on a European level and on level of CACM 2.0. The discussion focused on the scope and elements of the proposed assessment by the TSOs, and also the possibility of starting with a test phase before amending the methodology in that respect.

6.4.1 ACER's revised preliminary position of 1 December 2023

- (42) Following the workshop of 10 November, and further discussions, on 1 December 2023, ACER shared its third revised preliminary position with the Core TSOs and the regulatory authorities, and opened the second hearing phase. While maintaining in the methodology the 70% minimum RAM, to be implemented by 1 January 2026, ACER proposed to request each Core TSO to analyse potential measures for reaching the 70% threshold in the intraday timeframe. Each TSO was required to consider in their respective assessments at least remedial actions, targeted investments, refinements to capacity calculation principles and data and alternative bidding zone configurations. The Core TSOs were requested to submit their assessments to their respective regulatory authorities and ACER, so that ACER can assist the regulatory authorities in evaluating potential derogation requests for the intraday timeframe, stemming out from these analyses. The preliminary position also envisaged a revision of the methodology, if required following the outcomes of the CACM 2.0 process.
- (43) Regarding the exceptional conversion of XNECs to CNECs, ACER provided a compromise proposal based on the proposal of the German TSOs. The compromise allowed for a temporary one-year conversion of XNECs to CNECs, regardless of their PTDF, but under other conditions, including that the TSOs would analyse and propose appropriate specifications for this conversion, if it was considered necessary to keep it for longer than one year.
- (44) Regarding other aspects of the methodology, ACER proposed to amend the following articles¹⁸:
- (a) Article 8, by taking into account the ILR proposal on the calculation of flow reliability margin;

¹⁷ ANRE, BNetzA, CRE, E-Control, ERU, HERA, URSO and the regulatory authority of Slovenia ('AGEN').

¹⁸ Numbering of articles refers to the preliminary position of 1 December 2023.

- (b) Article 17, by taking into account the proposal provided by the German TSOs on the consideration of net positions in the minimum RAM calculation;
- (45) The views of the Core TSOs and the Core regulatory authorities on ACER's revised preliminary position of 1 December 2023, submitted to ACER during the second hearing phase in writing and/or orally, are summarised below:
- (a) The Core TSOs reiterated their concerns that the implementation of the 70% requirement in intraday through 'virtual' margins is not feasible. They pointed to the limited availability of remedial actions and insufficient time for the activation of remedial actions and for capacity validation in the intraday timeframe. According to the Core TSOs, systemic measures such as network investments and bidding zone reconfigurations are not available soon enough to mitigate this problem. The TSOs proposed therefore to remove the proposed 70% minimum RAM from the Core ID CCM;
 - (b) The Core TSOs were also against the proposed requirement to carry out individual TSO assessments as the basis for ACER's recommendations on potential derogation requests. The Core TSOs considered the individual assessments approach as ineffective, irrelevant, and inappropriate, and proposed to replace it with a coordinated assessment to identify measures to improve intraday capacities and then formalise them through amendments to ID CCM or other relevant methodologies. The TSOs also proposed to adopt a monitoring approach on the level of capacity in ID allowing for better understanding of the underlying issues behind the obtained level of intraday capacities, for which the details are to be further aligned and harmonised on pan-EU level;
 - (c) Eight of the Core regulatory authorities¹⁹ were against ACER's proposed approach for several reasons. In particular, in their view, the proposed approach would not solve the issue of 'virtual' capacities in the coordinated capacity calculation, leading to operational security risks signalled by the TSOs. The eight regulatory authorities further considered that ACER's proposal would conflict and unnecessarily complicate the process for derogations under the Electricity Regulation. The regulatory authorities reiterated their proposal to remove the minimum RAM from the methodology and require the TSOs to carry out a coordinated assessment, as presented at the workshop of 10 November.
 - (d) Core TSOs also requested the inclusion of the recalculation of capacities IDCC(e), in the afternoon of day D, for update of the capacities 19-24h;
 - (e) Regarding the conversion of XNECs, Core TSOs welcomed the proposed stepwise approach allowing the TSOs to first gain experience, following the implementation of ROSC, prior to proposing a PTDF threshold for XNECs which could be exceptionally added to the final FB domain;

¹⁹ AGEN, ANRE, BNetzA, CRE, E-Control, ERU, HERA and URSO.

- (f) At the oral hearing of 15 December 2023, the German TSOs raised their concerns on the proposed restriction of the IVA application to operational security reasons on considered CNECs, without allowing the possibility to mirror congestions from non-CNECs to CNECs by applying IVA on CNECs. According to the German TSOs, ACER's proposal was not in line with Article 26 of the CACM Regulation, which does not restrict operational security reasons to CNECs only;
- (g) At the oral hearing of 18 December 2024, ACM, CREG, ILR and MEKH supported ACER's preliminary position regarding the implementation of the 70% requirement.

6.4.2 ACER's revised preliminary position of 23 January 2024

- (46) Further discussions with the regulatory authorities and the Core TSOs, with the facilitation of the European Commission, ultimately resulted in a compromise solution on the implementation of the 70% requirement in intraday, presented as ACER's fourth revised preliminary position, shared with the Core TSOs and the regulatory authorities on 23 January 2024. ACER considered that the resulting delay in adopting the amended methodology would not jeopardise the implementation of Core IDCC and intraday auctions, expected to go live in June 2024.
- (47) This compromise solution was based on the idea that the immediate implementation of the non-discrimination principle as expressed in the 70% requirement in the intraday timeframe would lead to serious problems considering the current state of progress under Articles 14-16 of the Electricity Regulation. ACER recognised that not only a transition time is required but also a further review of the methodology must be envisaged, to appropriately assess all the underlying implementation problems and potential ways to overcome them. To inform this future revision, the compromise solution still included the TSOs' analyses (as proposed in the previous preliminary position) but further expanded their scope to require, next to individual assessments, a common assessment by all TSOs to explore all the coordinated measures for increasing ID capacities and possible ways to respect the 70% requirement in the future. The solution also integrated the Core TSOs' proposal to monitor the level of intraday capacities, specifying the related data to be provided to ACER for this purpose.²⁰
- (48) ACER also included the capacity calculation phase IDCC(e) in the methodology, based on the Core TSOs proposal, as explained in section 7.2.2.2.
- (49) The views of the Core TSOs and the Core regulatory authorities on ACER's revised preliminary position of 23 January 2024, submitted to ACER during the third hearing phase in writing and/or orally, are summarised below.
- (50) At the oral hearing of 2 February 2024, PSE provided the following views:

²⁰ This section only provides a summary of the preliminary position of 4 September 2023. All aspects of the compromise solution are further discussed in detail in section 7.2.2.7.1.

- (a) Article 1(2) would benefit further clarification;
 - (b) IDCC(a), providing leftover capacities, should also include the possibility of validation;
 - (c) Updates of the internal CNEC list should be simplified and accompanied by more frequent updates of this list to reflect network development;
 - (d) Non-CNECs should be considered in the IVA-based validation as a last resort solution;
 - (e) The XNEC to CNEC conversion should be able to consider all network elements overloaded after the first daily CROSA run, not only XNECs overloaded after the latest CROSA.
- (51) At the oral hearing of 2 February 2024 and in their written input of the same date, APG, TenneT TSO and the German TSOs provided the following views:
- (a) Non-CNECs should be considered in the IVA-based validation as a last resort solution;
 - (b) The exceptional XNEC to CNEC conversion should be able to consider network elements overloaded before the CROSA run, and not only those loaded 100% or more after the CROSA run. Also, the related provision does not belong to the validation process and should be placed earlier in the intraday capacity calculation process.
- (52) At the oral hearing of 2 February 2024 and in their written input of the same date, the Core TSOs provided the following views:
- (a) The current wording of Article 11(2) of the Core ID CCM concerning leftover capacities should be amended because it may imply immediate implementation of the 70% requirement and therefore appears inconsistent with the proposed compromise solution for the intraday timeframe.
 - (b) The exceptional XNEC to CNEC conversion should be able to consider the elements which were overloaded before the CROSA run, not only those loaded 100% or more after the CROSA run. Also, the reference should be the first daily CROSA run (not only the latest CROSA).
 - (c) Before the expected go-live date of the Core ROSC process, there would be no possibility for the TSOs to include the relevant XNECs with the PTDF lower than 5% in the final capacity computation. The Core TSOs therefore proposed to allow for exceptional conversion of the XNECs from the current Core ICS process prior to Core ROSC go-live, also without a PTDF threshold.

- (d) The new data items requested under Article 24(3) would require an implementation period. According to the current IT planning, such data could be provided on the JAO website by the end of 2024.
 - (e) At the oral hearing, the Core TSOs stated that they would be able to complete the analyses on how to increase intraday capacities by April 2025.²¹ The Core TSOs stressed that any study on capacity improvements should focus on the TSOs' harmonised assessment. Including individual assessments in the scope of the TSOs' analyses would, in their view, unnecessarily shift the TSOs' resources to analyse measures which cannot be coordinated with the other TSOs.
 - (f) The Core TSOs also stated that studying bidding zone reconfigurations may not be appropriate in the context of the Core ID CCM, as this exercise has a dedicated process under the Electricity Regulation, and such overlaps with the ongoing bidding zone review and potential duplication of work are not efficient and should be avoided.
 - (g) Implementing IDCC(c) only six months after IDCC(b) would not be possible in practice since the Core TSO must update the current central and local tools, perform tests with new configurations and publish the results during an external parallel run of at least six months. The Core TSOs therefore requested ACER to extend the deadline to implement IDCC(c) to spring 2025.
- (53) In its written input of 2 February 2024, E-Control provided the following views:
- (a) E-Control strongly supported the proposal to remove the minimum RAM from the Core ID CCM while maintaining a constructive process towards higher intraday capacities. E-Control pointed to CACM 2.0 as an appropriate process to address this aspect because, in their view, the topic should not be pre-empted by individual methodologies. In this context, E-Control expressed concerns about references to "threshold of 70%" in Article 25(1) and the "minimum capacity requirement" in Article 25(3)(b).
 - (b) E-Control suggested requesting the Core TSOs, in the context of Article 28(2)(d), to jointly explore other measures which would maximise the infrastructure utilisation and enable higher intraday capacities in the short-term as well as to examine the current and estimate upcoming market needs, in order to identify the most urgent projects and define further development steps, in line with the objective specified in Article 3(g) of the CACM Regulation.

²¹ The Core TSOs stated that the deadline of September 2025 in their written input was inserted by mistake.

- (c) The aim, scope and processing of individual analyses of Core TSOs were not clear to E-Control, as well as their evaluation and gathering of results into one coordinated regional methodology.
- (d) E-Control was not clear which concrete amendments to the ID CCM could result from assessing network investment or bidding zone reconfiguration and proposed to delete the related provision on the expected Core ID CCM amendment (Article 26(8)).

6.5 Second AEWG consultation and advice of 15 February 2024

- (54) On 15 February 2024, the AEWG broadly endorsed ACER's draft decision on the Proposal, subject to potential 'red flags' from DUR and URE raised at the AEWG meeting of 13 February. DUR's position was that the proposed compromise solution does not properly reflect the legal requirement of reaching the minimum 70% target. URE raised concerns regarding the references to the minimum capacity in the draft decision documents and the proposed timelines which, in URE's view, are too ambitious.
- (55) Regarding potential impacts of the Core compromise solution on other capacity calculation regions, it was concluded that the approach agreed for Core would be relevant for all regions.
- (56) Five regulatory authorities submitted their views both orally at the AEWG meeting and in writing during the commenting phase:
 - (a) MEKH, ACM, CREG and ILR reiterated their joint position presented at the BoR's meeting of 24 January 2024. The four regulatory authorities highlighted the importance of meeting renewable energy sources' needs for intraday capacities by 2026 and ensuring firm cross-border capacities in all timeframes for electricity market integration. The regulatory authorities supported the compromise solution on the 70% threshold in intraday, noting that a clear target is needed, with a requirement on the TSOs to investigate how to make its implementation feasible for all. In their view, options targeting 70% would not compromise operational security as the TSOs can reduce capacities when grid security is at stake, and that these short-term safeguards should be complemented with structural solutions.
 - (b) E-Control suggested edits to the draft Decision documents, regarding the amended wording of Article 25 of the Core ID CCM as well as several recitals of the draft Decision summarising ACER's decision process, public consultation and engagement with the parties. E-Control noted that the proposed TSOs' analyses focus on long-term measures, whereas additional intraday capacities are already urgently needed. E-Control thus suggested, in line with the proposal of the eight Core regulatory authorities, to request the Core TSOs to jointly explore other measures which would maximise the infrastructure utilisation and enable higher intraday capacities in the short term.

7 ASSESSMENT OF THE PROPOSAL

7.1 Legal framework

- (57) Article 9(7)(a) and (13) of the CACM Regulation provides that TSOs' proposals of amendments to the common CCM in accordance with Article 20(2) of the CACM Regulation are to be submitted by all TSOs of the concerned CCR to all regulatory authorities of that CCR for their approval; such proposals are to be submitted to consultation in accordance with the procedure set out in Article 12 of the CACM Regulation.
- (58) Article 20 of the CACM Regulation sets general requirements regarding the development of a proposal for a common coordinated CCM and its implementation.
- (59) Article 21 of the CACM Regulation specifies various requirements for the content of the proposal for a CCM, referring to further specifications in Articles 22, 23, 24 and 25 of the same Regulation. It also includes a provision for the inclusion of a fallback procedure for the case where the initial capacity calculation does not lead to any results.
- (60) Article 22 of the CACM Regulation sets out requirements related to the reliability margin methodology to be necessarily included in the CCM.
- (61) Article 23 of the CACM Regulation lays down requirements related to operational security limits, contingencies and allocation constraints.
- (62) Article 24 of the CACM Regulation stipulates requirements related to the generation shift keys methodology.
- (63) Article 25 of the CACM Regulation specifies requirements related to the methodology for remedial actions in capacity calculation.
- (64) Article 26 of the CACM Regulation sets requirements related to the methodology for the validation of cross-zonal capacity.
- (65) Article 27 of the CACM Regulation defines general requirements related to the capacity calculation process.
- (66) Article 28 of the CACM Regulation provides for requirements related to the creation of a common grid model. However, these are not directly relevant for the capacity calculation methodology.
- (67) Article 29 of the CACM Regulation sets requirements related to the regional calculation of cross-zonal capacity.
- (68) Article 30 of the CACM Regulation sets requirements related to the validation and delivery of cross-zonal capacity.
- (69) As a general requirement, Article 9(9) of the CACM Regulation provides for that the proposal for terms and conditions or methodologies include a proposed timescale for their

implementation and a description of their expected impact on the objectives of the same Regulation.

- (70) Article 16 of the Electricity Regulation sets out the general principles of capacity allocation and congestion management.
- (71) Article 17(1) of the Electricity Regulation sets out principles for the allocation of capacities between different timeframes.
- (72) Article 34 and 35 of the Treaty Functioning of the European Union (TFEU) prohibit unjustified import or export restrictions for goods.

7.2 Assessment of the legal requirements

7.2.1 Assessment of the procedural requirements

7.2.1.1 Development and submission of the Proposal

- (73) The Proposal fulfils the procedural requirements of Articles 9(7)(a), 9(13) and 9(11) of the CACM Regulation as all Core TSOs submitted the Proposal to all Core regulatory authorities, which then referred it to ACER.
- (74) The Proposal fulfils the requirement of consultation according to the second subparagraph of Article 9(13) and Article 12 of the CACM Regulation as the Core TSOs publicly consulted the second amendment of the Core ID CCM from 4 March 2022 to 4 April 2022, and the third amendment of the Core ID CCM from 30 November 2022 to 30 December 2022.

7.2.1.2 Required elements of the Proposal

- (75) The Proposal provides a description of the expected impact of the TSOs' proposed amendments on the objectives of the CACM Regulation, in the respective "Whereas" sections included in the second and the third amendment proposals, as well as a proposed timescale for the implementation of these amendments, in the explanatory document to the second amendment. Therefore, the Proposal complies with Article 9(9) of the CACM Regulation in this respect.

7.2.2 Amendments to the Proposal²²

7.2.2.1 *Amendments to the general provisions*

- (76) ACER has added paragraph 2 in Article 1 of the Proposal to clarify that the methodology does not affect the Core TSOs' actions pursuant to the SO Regulation, and further clarified it in accordance with PSE's comments (see recital (50)). This amendment relates to the Core TSOs' amendment specifying the so-called 'right to reduce' in Article 11 of the Proposal. ACER considers that the TSOs' actions in accordance with the SO Regulation are performed outside the capacity calculation process and are therefore outside the scope of the Core ID CCM.
- (77) Article 2 of the Proposal provides amendments to Definitions. ACER has amended this Article as follows:
- (a) definitions are linked to the Core ROSC methodology;
 - (b) definitions referring to the nRAO process are removed; and
 - (c) definitions related to the mathematical formulation of the capacity calculation are added or adapted.

7.2.2.2 *Intraday capacity calculation process (Article 4)*

- (78) During the working meetings, there was a wide consensus among the Core TSOs and the Core regulatory authorities that introducing an additional intraday capacity calculation round in the early morning of day D, after CROSA completed at 2:00, would decrease occurrence of low or negative capacities, resulting partially from the fact that the evening capacity calculation (by 22h of day D-1) would be based on an incomplete D-1 CROSA results. Further on, the Core TSOs proposed to include the recalculation of the intraday capacities in the afternoon of day D. Based on this, ACER has included the following intraday capacity calculation rounds in Article 4 of the Proposal:
- (a) IDCC(a): updating of cross-zonal capacities remaining after the SDAC for all ID CC MTUs between 00:00 and 24:00 of day D and providing them as intraday cross-zonal capacities to the relevant NEMOs no later than 15 minutes before the intraday cross-zonal gate opening time, at 15:00 market time of day D-1;
 - (b) IDCC(b): calculation of intraday cross-zonal capacities for all ID CC MTUs between 00:00 and 24:00 of day D. The cross-zonal capacities resulting from this calculation shall be published and submitted to the NEMOs no later than 15 minutes before the target start of allocation at 22:00 market time of day D-1; and

²² Unless stated otherwise, numbering of the articles and paragraphs in this section corresponds to the final renumbered articles and paragraphs of the Core ID CCM.

- (c) IDCC(c): re-calculation of intraday cross-zonal capacities for all ID CC MTUs between 06:00 and 24:00 of day D. The cross-zonal capacities resulting from this calculation shall be published and submitted to the NEMOs no later than 15 minutes before the target start of allocation at 04:00 market time of day D;
- (d) IDCC(d): re-calculation of intraday cross-zonal capacities for all ID CC MTUs between 12:00 and 24:00 of day D. The cross-zonal capacities resulting from this re-calculation shall be published and submitted to NEMOs no later than 15 minutes before the target start of allocation at 10:00 market time of day D; and
- (e) IDCC(e): re-calculation of intraday cross-zonal capacities for all ID CC MTUs between 18:00 and 24:00 of day D. The cross-zonal capacities resulting from this re-calculation shall be published and submitted to NEMOs no later than 15 minutes before the target start of allocation at 16:00 market time of day D.

ACER has defined that the capacities are to be calculated for 6 hours (18:00-24:00), instead for 5 hours (19:00-24:00), as proposed by the Core TSOs, in order to maintain the 6-hours update windows for all IDCC phases. Accordingly, the capacities would be delivered by 16:00 (instead by 17:00).

- (79) In line with PSE proposal (see recital (50)), ACER has specified in paragraph 3(4) that the capacity validation may also be applied for the leftovers.
- (80) ACER has also added point (b) in Article 4(5) to specify an additional input of Core net positions from previous SIDC rounds, required for the calculation of the adjustment of minimum RAM.
- (81) ACER has deleted paragraph 11 proposed by the TSOs, specifying the TSOs' 'right to reduce' after the delivery of the capacities for the allocation. The deletion of paragraph 11 is explained in recital (76).
- (82) ACER has amended paragraph 12, proposed by the TSOs and specifying their right to delay the delivery of intraday capacities in case the ROSC ICS/CROSA process cannot be finalised within the foreseen timeframe and more time is necessary to manage grid security. The (renumbered) paragraph 9 in the ID CCM Amendment still allows the Core TSOs to delay the delivery of intraday capacities in case of delay of the ROSC/CROSA outputs, however, as long as the delay in delivery of capacities does not affect the allocation process. ACER has also specified that the fallback procedure provided in Article 20 would apply if the target start of allocation becomes affected by such a delay.

7.2.2.3 Capacity calculation inputs (Title 3 - Articles 5-10 and Annex 1)

- (83) In line with the PSE's proposal to accommodate more frequent updates of the internal CNEC list, ACER specified in Article 5(6) that its frequency of update is 'at least' every two years.
- (84) The TSOs proposed to delete Article 5(4) referring to the list of monitored network elements with contingencies (MNECs). Since such a list becomes irrelevant after the

removal of the non-costly remedial action optimization process, ACER has agreed to delete Article 5(4).

- (85) The TSOs proposed no further amendments to Title 3. However, ACER has amended two additional provisions under Title 3 in order to align them with amendments introduced in Title 5. These latter amendments are discussed in detail in section 6.2.2.5 and required that:
- (a) Article 5(7) is amended to allow for inclusion of exceptionally added CNECs to the list of internal CNECs, in accordance with Article 16, paragraphs (2)-(4);
 - (b) Article 5(10), requiring the TSOs to assess the possibility of including an adjustment for minimum RAM, is deleted as obsolete.
- (86) ACER has updated Article 7 on allocation constraints and corresponding Annex 1 of the Core ID CCM, in accordance with the fact that ELIA and TenneT Netherlands stopped the usage of allocation constraints.
- (87) Regarding Article 8 on the FRM values, ACER:
- (a) has not accepted the proposal of the German TSOs and ELIA to remove the FRM calculation methodology. ACER sees the FRM values as an important input to the capacity calculation process, which needs to be supported by the calculation. Hence the fixed FRM application is a transitional solution. Finally, the FRM calculation methodology is a clear requirement pursuant to Article 22 of the CACM Regulation;
 - (b) has accepted the PSE's proposal to specify that the fixed FRM value of 5% at the intraday level is applied only if all Core TSOs agree to apply a fixed FRM value of 10% at the day-ahead level.
 - (c) has accepted ILR's proposed refinement of the fixed FRM value approach provided in the AEWG consultation (see recital(36)(f)) and specified that during the period of application of the day-ahead FRM values equal or lower than 10%, the intraday FRM value shall be the minimum between the day-ahead FRM value and the 5% value.

7.2.2.4 Update of intraday cross-zonal capacities (Article 11)

- (88) ACER has amended paragraph 4 in accordance with the conclusions of the Core IG meeting held on 21.06.2023. At that meeting, the Core regulatory authorities, the Core TSOs and ACER agreed that, due to the current expected timing of the implementation of the first intraday auction ('IDA1') in the first quarter of 2024, it is not necessary to prolong the derogation for providing the leftovers of day-ahead capacities at 15:00 of D-1. Accordingly, paragraph 4 has been amended to limit the possibility to provide the non-zero ID capacities in period 15-22h of D-1 until the implementation of IDA1.
- (89) As proposed by the Core TSOs during the third hearing phase, and in consistency with the compromise solution for the intraday timeframe (see recital (120)), ACER has deleted the relevant wording implying the need for immediate implementation of the 70% requirement, for the leftovers, in Article 11(2).

7.2.2.5 Description of the intraday capacity calculation process (Articles 12-20)

7.2.2.5.1 Consideration of non-CNECs

- (90) ACER has carefully considered the Core TSOs' proposal to allow for an exceptional inclusion of XNECs from CROSA in the final list of CNECs, regardless of their PTDF threshold.
- (91) In principle, if there was a security issue on a XNEC with low sensitivity to cross-zonal transactions (and hence with a maximum zone-to-zone PTDF below 5%), this would be primarily due to internal transactions causing internal flows on that XNEC. Therefore, reducing cross-zonal transactions (which cause allocated flows) in order to slightly decrease the loading of an XNEC with low sensitivity to cross-zonal exchanges would be disproportionate and discriminatory towards cross-zonal exchanges, which is not allowed under the legislative framework. First of all, Article 16 of the Electricity Regulation requires the TSOs to maximise cross-zonal capacities and ensure that at least a minimum amount of cross-zonal capacity is offered for capacity allocation. Article 21(1)(b)(ii) of the CACM Regulation requires that the capacity calculation approach include rules for avoiding undue discrimination between internal and cross-zonal exchanges. Article 29(3)(b) of the CACM Regulation explicitly provides that elements with low sensitivity to cross-zonal exchanges should be ignored in the capacity calculation.
- (92) At the working meeting of 21 June 2023, ACER asked the Core TSOs to provide concrete examples with network models, including the flow decomposition per those XNECs with a maximum zone-to-zone PTDF below 5%. The Core TSOs were not able to provide such examples, stating that they cannot be easily delivered without ROSC in place. Without such examples, ACER fails to see that the proposed conversion of XNECs with low PTDF is necessary for an efficient removal of congestions. Rather, ACER expects that the flow decomposition would show that such XNECs are largely congested by flows resulting from internal transactions.
- (93) ACER considers that the conversion is not the only way to relieve congestion on such network elements. Instead of including it in the list of CNECs, the TSOs should step out of the coordinated part of ROSC and use the ROSC's Fast Activation Process ('FAP'). Such approach is expected to perform well even before the ROSC (and FAP) implementation, since a similar approach has already been efficiently applied in the Core region.
- (94) During the hearings, the German TSOs maintained their position on the necessity of the XNEC-CNEC conversion, pointing out that otherwise, each cross-border relevant remedial action applied in the ROSC for an XNEC which is not a CNEC, is inefficient. This is because the IDCC outcome again allows for a likely (due to market direction) overload of the XNEC. As this must be solved again afterwards with remedial actions, the resulting overall process is less efficient and a threat to system security as the lead times and remedial actions' potential for solving the overloads after IDCC are reduced.
- (95) It is unclear to ACER how the TSOs can have redispatch potential and possibility to manage uncertainties caused by the internal trade (and which would have much higher influence on the internal XNECs in question) and, at the same time, lack sufficient redispatch potential

to manage uncertainties caused by events/schedules beyond the bidding zone (with rather small influence on the internal XNECs in question).

- (96) The current Core ID CCM²³ already provides for a possibility to exceptionally add internal XNECs to the CNEC list, with a maximum zone-to-zone PTDF equal to or above 5%. In its revised preliminary position of 4 September 2023, ACER proposed to allow for a conversion in the validation phase, under the conditions that the converted XNECs have to respect a maximum zone-to-zone PTDF of 3% and that the connecting TSO has to stop all subsequent internal trades, or at least all trades in the burdening direction. ACER's aim was to take into account the concerns of the TSOs, while still ensuring that potential undue discrimination between internal and cross-zonal exchanges would not occur, as required by Article 21(1)(b)(ii) of the CACM Regulation.
- (97) In response to ACER's revised preliminary position of 4 September 2023, the German TSOs expressed concerns that ACER's proposal may not be feasible, and that they need time to assess it. The German TSOs also asked ACER to consider permitting the XNEC to CNEC conversion on a temporary basis. They claimed that it would give the TSOs an opportunity to appropriately examine its effects and establish whether it is necessary to keep it in order to preserve the effect of activated XRAs on operational security. The TSOs asked for a temporary permission to convert XNECs to CNECs which would give them practical experience to carry out the relevant study.
- (98) Notwithstanding the considerations in recitals (90)-(96), ACER sees merit in providing the TSOs with a limited period of time to gain experience and study the effects of the conversion. ACER has amended Article 16 to allow for an exceptional and temporary conversion of XNECs, provided that all available costly and non-costly remedial actions cannot resolve their congestion, and their RAM is the highest RAM which ensures operational security, with the floor of zero. ACER has confirmed the existing or specified further conditions for the conversion which address the concerns of the Core TSOs while, at the same time, restrict its scope to the absolute minimum that is necessary.
- (99) In particular, ACER has allowed for a temporary conversion of XNECs to CNECs in the first twelve months after the ROSC application without a maximum zone-to-zone PTDF threshold, but under conditions specified in Article 16, paragraphs (3)-(4). This will provide the Core TSOs with sufficient time to study the needs and effects of this conversion and an opportunity to propose the related specifications, if required.
- (100) In this context, the TSOs also asked for allowing the conversion of XNECs overloaded before any of the previous CROSAs. ACER has not accepted the proposal and specified that only XNECs overloaded before the latest CROSA can be converted. If an XNEC overloaded before any preceding CROSA ceased to be overloaded before the latest CROSA (due to ordered remedial actions and intermediate changes in the generation and load

²³ Core ID CCM as amended and approved by ACER Decision No 06/2022 of 19 April 2022.

pattern), converting it again to a CNEC would not be necessary, especially considering the exceptional nature of this conversion measure.

- (101) During the third hearing phase, the Core TSOs asked ACER to extend the exceptional conversion to cover the period before the implementation of ROSC (see recital (52)). ACER notes that such an extension of the study period without the PTDF threshold is not necessary, as the Core TSOs may use existing practices for managing potential issues at non-CNECs. After the ROSC implementation, the transition period without the PTDF threshold may be needed to cope with new complexity of the ROSC and IDCC alignment and to gain experience.
- (102) Several Core TSOs and regulatory authorities were concerned about ACER's proposal to restrict the application of IVA to solve congestions on CNECs only. For them, the possibility of using IVA on CNECs to mirror potential congestions on non-CNECs was needed for ensuring operational security. ACER has carefully considered these views and decided to permit using IVA for this purpose only as a last resort. Therefore, Article 18(2) requires the TSOs to consider all the measures specified in Article 22 of the SO Regulation before resorting to IVA for mirroring non-CNEC congestions. Also, the TSOs should ensure that potentially not applied measures are made available (e.g. countertrading). Under the conditions specified in Article 18(2), ACER expects that IVA would be used very rarely for this purpose.
- (103) ACER did not find appropriate to allow for using IVA for non-CNECs' congestions as a standard validation measure, for the following important reasons:
- (a) considering the compromise approach for the XNEC-CNEC conversion, mirroring of potential congestions through IVA is not needed and considerably less transparent than the temporary conversion to CNECs;
 - (b) allowing the consideration of non-CNECs in capacity calculation and validation can only be accepted as a last resort measure since the capacity calculation in the flow-based approach considers critical network elements only.²⁴
- (104) ACER has found it necessary to specify additional reporting obligations in Article 18(10) to appropriately monitor the exceptional conversion of non-CNECs into CNECs (Article 16, paragraphs (2)-(4)) and the instances of applying IVA for mirroring congestion on non-CNECs (Article 18(2)).

²⁴ See e.g. references in Article 26(1), 26(3), 29(3)(b) and 30(1) of the CACM Regulation.

7.2.2.5.2 Calculation of flow-based parameters

- (105) ACER has extended the scope of Article 17 on the calculation of flow-based parameters before validation to include the process of calculation of unscheduled allocated flows (Fuaf). This process does not apply directly to the calculation of RAM values, but serves the purpose of performing TSOs' analyses of offered intraday capacities required by Article 25 (see recital (122)).

7.2.2.5.3 Other amendments to the description of the intraday capacity calculation process

- (106) ACER has shortened the period for the Core TSOs to submit the proposal for amendment to the Core ID CCM to include advanced hybrid coupling ('AHC'). The period of 18 months in Article 14(4) has been shortened to 12 months to align the timing of the AHC application at the intraday level with the expected AHC development at the day-ahead level. As discussed during the working meetings, the shortened period concerns only the development of the proposal for the AHC inclusion, and not its actual implementation.
- (107) ACER accepted the TSOs' proposal to remove the provision²⁵ on the application of nRAO. According to the Core TSOs, it would not be feasible to perform nRAO (which requires approx. 2.5 hours) within the available timeframe of approx. 1 hour. Moreover, the additional calculation run, IDCC(c), reduces the need for nRAO since it ensures that the results of the completed CROSA can be taken into account in the capacity calculation for most MTUs. ACER considers that the additional calculation run also addresses CREG's concerns about occurrence of zero or negative capacities (see section 6.2.3).

7.2.2.6 Updates and data provision (Articles 21-24)

- (108) The Core TSOs suggested to monitor the level of intraday capacities to better understand the issues with providing higher capacities.²⁶ ACER's monitoring activity has so far indeed focused on the part of the physical capacity offered for trade in the day-ahead timeframe, where the coordinated capacity calculation methodologies are already implemented.²⁷ With the implementation of the Core ID CCM, ACER intends to start monitoring intraday capacities in the Core region as it would bring important insights on the underlying issues. To enable such monitoring, it is necessary that the Core TSOs provide data on the flow components at different critical network elements. This will enable ACER to assess the actual levels of intraday capacities in the Core and to identify potential implementation problems. To this end, ACER has added a new paragraph (3) in Article 24 of the methodology, specifying the related data provision requirements. Based on the discussions with the Core TSOs (see recital (52)), ACER specified that the provision of these additional data would commence in January 2025 (reporting data for December 2024).

²⁵ In the TSOs' proposal numbered as Article 17.

²⁶ Core TSOs' joint response of 18 December 2023 to ACER's revised preliminary position of 1 December.

²⁷ See ACER's 2023 MACZT Report.

- (109) ACER has amended Article 22(2)(xi) to require that the TSOs publish the calculated set of PTDFs in case an internal element is exceptionally added to the list of CNECs during the validation. This will enable the monitoring of the minimum PTDF threshold as per Article 16.
- (110) Based on the discussion at the Core IG meeting of 21 June 2023, ACER has amended paragraphs 2(d) and 2(f) of Article 22 and paragraph 6(d) of Article 24 to require the TSOs to publish the shadow prices and flows induced by net positions obtained at intraday auctions, both after the occurrence of the auction and within a quarterly report developed by the coordinated capacity calculator. This obligation will apply once SIDC is able to directly apply flow-based parameters.
- (111) Finally, ACER has inserted minor edits in Articles 21, 22 and 24, mainly to ensure the consistency of these provisions with the removal of the nRAO process.

7.2.2.7 Implementation (Articles 25-26 and Annex 2)

7.2.2.7.1 Addressing implementation problems related to Article 16(8) of the Electricity Regulation while safeguarding the principle of non-discrimination

- (112) Article 16 of the Electricity Regulation provides a framework for capacity allocation and congestion management based on the fundamental principles of equal treatment and non-discrimination between internal and cross-zonal exchanges. The principle that imported electricity should not be treated differently from domestic electricity, e.g. when deciding about access to the grid, follows directly from the fundamental freedoms in the EU Treaty, as well as from various provisions in EU electricity legislation implementing this principle.²⁸ The principle of non-discrimination translates into the principle of maximisation of cross-border capacities set out in Article 16(4) of the Electricity Regulation. Articles 14-17 of the Electricity Regulation provide for more detailed rules how to apply the non-discrimination rule in practice. One element of this framework is Article 16(8) of the Electricity Regulation, which aims to ensure that all market participants have equal access to the transmission network to exchange electricity, regardless of whether they are entering into internal or cross-zonal trades. Article 16(8) explicitly provides that the TSOs are not allowed to limit cross-zonal capacity to solve internal congestion or manage flows resulting from internal trade. This, again, reflects the principle of non-discrimination between internal and cross-zonal electricity exchanges.
- (113) However, certain capacity limitations on critical network elements are unavoidable and technically justified, which has been recognised in the Clean Energy Package. To facilitate the implementation of the non-discrimination principle, to cater for possible security of

²⁸ See e.g. Articles 3(h), Art 14-17 or 34(2) and recitals 20, 21, 27 and 31 of the Electricity Regulation, as well as Articles 3(1), 40(1)(f) or 59(h) of Directive (EU) 2019/944 on common rules for internal market for electricity. Discrimination between domestic and non-domestic flows can also constitute an abuse of a dominant position under Article 102 TFEU, see e.g. antitrust cases *Swedish Interconnectors* – COMP Case No 39351, or *Tennet* – COMP Case No 40461.

supply considerations, and to avoid an individual calculation of the percentage of necessary limitations, Article 16(8) of the Electricity Regulation allows the TSOs to reduce capacities allocated at critical network elements²⁹ by a ‘lumpsum’ of up to 30% (e.g. to cater for reliability margins, loop flows and internal flows). To allow for a gradual transition to more open electricity borders, the Member States and the European Parliament also agreed in the Clean Energy Package that a transition time may be necessary for some Member States to take the necessary measures to implement the 70% requirement, such as network investments, more efficient redispatch, or changes to the current configuration of bidding zones. TSOs may therefore temporarily reduce CNEC capacity even by more than 30% in case they have received a derogation under Article 16(9) of the Electricity Regulation. Articles 14 and 15 of the Electricity Regulation provide for a coordinated process which aims at reducing the root causes for structural congestion and allowing all TSOs to reach the minimum 70% threshold by 2026.³⁰

- (114) As the non-discrimination rule applies, in principle, to all electricity trade within the EU, with no distinction between market timeframes, it is difficult to conceive a long-term regulatory solution for intraday trading which would give unlimited access to the grid to domestic electricity, while permanently putting significant restrictions on network access for non-domestic electricity.³¹ When it comes to the principle of non-discrimination, Article 16(8) of the Electricity Regulation does not distinguish between the two timeframes covered by the CACM Regulation. It therefore appears to be in line with the principles of free flows of electricity in the internal market and non-discrimination of cross-border flows that the TSOs should, in any long-term solution, apply the maximisation principles of the Electricity Regulation not only to either the day-ahead or intraday timeframe, but to both timeframes.³²
- (115) Insofar as some Core regulatory authorities and the TSOs refer to Article 17(2) of the Electricity Regulation as a possible solution, this Decision leaves enough space to implement the main idea of this provision, namely to involve the TSOs in the development of workable solutions, such as the Core TSOs’ analyses in new Article 25 of the Core ID CCM (see recital (122)).

²⁹ Critical network elements are considered in the flow-based approach.

³⁰ See e.g. the report on structural congestion in Article 14(2), the action plans to remove the structural congestion by 2026 in Article 15 and the bidding zone review process in Article 14(7) and (8) and 15(5) of the Electricity Regulation.

³¹ ACER notes in this context that also a solution whereby the TSOs could “distribute” the allowed limitation between intraday and day-ahead framework (e.g. be allowed to make 70% of capacities available in day-ahead, and no or very limited capacities in the intraday timeframe) on a lasting basis cannot be considered as the target model envisaged by the Electricity Regulation after the transition time. Such solution would effectively and on a lasting basis limit the access by non-domestic grid users by more than 30%, while domestic users within the bidding zone would have access to 100% of the capacities. This appears difficult to reconcile with the EU principle of non-discrimination.

³² The application to both timeframes also appears to follow from Article 21(1)(b)(ii) and Article 29(7)(d) of the CACM Regulation. Article 21(1)(b)(ii) of the CACM Regulation refers to point 1.7 of Annex I to Regulation (EC) 714/2009, which is now replaced by Article 16(8) of the Electricity Regulation.

- (116) While recognising the challenges of an implementation on short notice, ACER also notes that a timely implementation of the non-discrimination principle to day-ahead and intraday trading would also help supporting the Union's decarbonisation objectives. Providing capacity for cross-border trading opportunities plays an important role in incentivising energy investments. Producers of renewable energy, which is intermittent by nature, must be able to trade closer to real time to balance their positions. As this requires liquid intraday markets, sufficient capacity should be made available to cross-zonal trade not only in day-ahead, but also in intraday.³³
- (117) In any event, ACER notes that the current compromise in this Decision addresses the concerns of those TSOs and regulatory authorities who argued against an immediate implementation of the non-discrimination principle to the intraday timeframe, and provides for further opportunities to analyse and discuss possible implementation problems and different solutions until January 2026.³⁴
- (118) In fact, to address the concerns voiced during the proceedings, it is appropriate to introduce a transition period and a further revision of the Core ID CCM before proceeding to further implementation steps of the 70% requirement in the intraday timeframe. ACER fully recognises the challenges of its practical implementation. Progress towards removing capacity limitations has been slow overall, and the minimum 70% requirement can often not yet be reached even in the day-ahead timeframe. Important coordinated procedures are ongoing under Article 14 to 16 of the Electricity Regulation and the CACM Regulation to define efficient solutions to address structural congestion and find an optimal bidding zone configuration.
- (119) The extensive discussions between ACER, the regulatory authorities and the Core TSOs in the context of this decision procedure demonstrated that in this point of time the practical implementation of the 70% requirement in the intraday timeframe is significantly more challenging than in the day-ahead timeframe. In particular, solutions which have been devised for the day-ahead capacity calculation, such as the adjustment for minimum RAM, appear not readily applicable to the intraday timeframe right now, as they give rise to major concerns regarding security of efficiency risks. Exploring other solutions seems necessary, at least until more structural solutions developed in the processes under Article 14 to 16 of the Electricity Regulation are implemented.
- (120) In view of these discussions and significant concerns coming from the TSOs as well as several regulatory authorities, ACER considers that it is appropriate for this Core ID CCM amendment not to provide at this stage any specific mechanism for reflecting the 70%

³³ The support for an application of the non-discrimination principle to all timeframes, once the necessary coordination processes under Articles 14-16 of the Electricity Regulation are finalised, and the importance of this principle for a well-functioning intraday market and integrating renewables is also highlighted in the European Commission's letter to Core TSOs. See letter of Commissioner Kadri Simson to the Core TSOs, 22 January 2024, Brussels, ref. ARES(2023)s2019763.

³⁴ In practical terms, meeting the 70% requirement in the intraday timeframe would, in ACER's view, already include capacity allocated in day-ahead, leaving only the top-up to be added in intraday.

requirement in capacity calculation, such as minimum RAM. Instead, following the compromise approach devised in the course of these decision proceedings, ACER considers it acceptable in the current state of the electricity market that the Core TSOs do not immediately implement the 70% requirement, and do not seek annual derogations for this purpose. ACER notes that TSOs remain nevertheless bound by the general obligation to maximise interconnector capacities in Article 16(4) of the Electricity Regulation. In this context, the TSO should put their best efforts to increase the current level of intraday capacities and actively explore ways to reach the 70% threshold in the future, considering the evolving market circumstances.

- (121) By the end of 2025, the coordinated process under Articles 14 to 16 of the Electricity Regulation and Articles 31 to 34 of the CACM Regulation will have identified measures to facilitate the increase of cross-zonal capacity. It can be expected that progress with network extensions, organisation of redispatch measures and bidding zone reconfigurations will facilitate the implementation of the 70% requirement beyond the day-ahead timeframe. At that point in time, a review of the current Core ID CCM therefore should verify to what extent possible justifications for exceptionally higher limitations on critical network elements still remain. For that purpose, ACER has added a new paragraph (8) in Article 26 of the methodology, requiring the Core TSOs to submit the related amendment proposals by 1 October 2025. ACER considers that the TSOs' analyses and the resulting Core ID CCM amendment proposal should include solutions on how to increase intraday capacities and on how to eventually reach the 70% threshold on all CNECs, in all rounds of the intraday capacity calculation.
- (122) In the meantime, further studies to explore all possible means to increase capacities in the intraday timeframe appear necessary, to inform the planned review of the Core ID CCM. To this aim, ACER has inserted a new Article 25 into the methodology, requesting the Core TSOs to carry out further analyses and submit them to ACER and the Core regulatory authorities by 1 April 2025. The proposed timeline aims to ensure that the TSOs' analyses can feed into their proposal for amending the methodology. The analyses would comprise a common assessment by all Core TSOs of both short- and long-term systemic measures as well as individual assessments of measures which can be taken by each Core TSO, including remedial actions, targeted investments, refinements to capacity calculation principles and data, or alternative bidding zone configurations, which would enable TSO to offer higher intraday cross-zonal capacities and over time, reach the minimum capacity threshold on all critical network elements.
- (123) The Core TSOs (see recital (52)) and E-Control (see recital (53)) commented on the suitability of individual TSO assessments.
- (124) Since the Core TSOs may have different issues and solutions regarding the level of ID capacities on their CNECs, ACER considers that each Core TSO should individually assess possible ways to increase capacities and implement the 70% requirement on their CNECs, without being limited by approaches or problems faced by other Core TSOs. On the other hand, a more consistent approach in developing individual assessments is welcomed. To that end, ACER aims to support the individual assessments by providing, in coordination with the Core regulatory authorities, informal guidance for performing these assessments.

In addition, some activities within the individual assessment may be organised jointly by the Core TSOs, such as the preparation of inputs (analysed timestamps, common grid models, CNEC lists, GSK data), as well as single calculation on the effects of bidding zone changes on all CNECs, per each analysed timestamp.

- (125) The Core TSOs also commented on the appropriateness of studying the bidding zone reconfigurations in the context of the Core ID CCM (see recital (52)).
- (126) Bidding zone reconfiguration is one of potential structural measures to decrease loop flows and increase capacities for the cross-zonal market, and thus reach the 70% threshold. As such, it should be one of the elements considered in the Core TSOs' analyses. ACER does not see this exercise as a duplication of the ongoing bidding zone review. The latter aims to study a wide range of benefits and drawbacks of potential changes in particular bidding zone configurations, while the TSOs' analyses under Article 25 should only apply the effects of predefined alternative bidding zone configurations³⁵ to the size of loop and internal flows per Core CNECs. To optimise the workload, the Core TSOs are free to re-use the information on flow components per CNECs from the bidding zone review analyses, if the selection of analysed timestamps at both processes (bidding zone review and TSOs' analyses in Core ID CCM) is suitable.
- (127) E-Control questioned the link between the assessment of network investments or bidding zone reconfiguration, with the expected amendment of the Core ID CCM (see recital (53)).
- (128) ACER recognises that not each specific category of measures to be analysed by the TSOs under Article 25 would readily translate into concrete proposals for amending the Core ID CCM. However, the joint consideration of all possible measures in the TSOs' analyses will inform the Core TSOs, regulatory authorities and ACER on the actual state and prospects for further increasing intraday capacities and overtime, implementing the 70% requirement also in the intraday timeframe. Gaining this understanding is essential for assessing and proposing any further implementation steps.

7.2.2.7.2 Other amendments related to implementation

- (129) ACER has amended Article 26 of the Proposal to define the implementation timeline of intraday capacity calculation rounds in line with the proposals by the Core TSOs.
- (130) Regarding the third amendment proposal, ACER has allowed a two-year period in which the Core TSOs may apply the ATC-based validation in parallel to the IVA-based validation. Assuming that the first phase of IDCC(a) is implemented by June 2024, the option to apply the ATC-based validation would expire by June 2026. ACER expects that by then, the SIDC will be able to accommodate the flow-based parameters. Even if this is not the case,

³⁵ The potential configurations as defined in the [Annex I of ACER Decision 11/2022](#)

ATC-based validation should not be possible after the two-year period, as explained in section 7.2.2.8.

- (131) For the avoidance of doubt, and considering the views of the Core TSOs and some Core regulatory authorities, ACER has added a new paragraph (9) in Article 26, clarifying that the Core ID CCM may also need to be revised following the CACM 2.0 process.
- (132) ACER has updated the table in Annex 2 with phases of calculated and allocated capacities in light of the implementation of intraday auctions ('IDA') and Core intraday capacity calculation (IDCC(b)). This includes the amendments to link the possibility of applying zero intraday capacities before 22h of day D-1 with the implementation of the first IDA. Also, although it is unlikely that IDAs would be implemented before IDCC(b), the table has been amended to cover such possibility, by specifying that the leftovers from previous ID continuous trading process would be used in such case.

7.2.2.8 ATC-based validation process (Annex 6)

- (133) ACER has accepted the third amendment proposal of the Core TSOs by adding Annex 6 to the methodology. Annex 6, further adapted during the proceedings, provides now a possibility of a second validation of cross-zonal capacities defined in the flow-based domain, after it has been converted to an ATC domain.
- (134) ACER considers that the validation process in a flow-based capacity calculation process must be performed on a CNEC level in order to maintain the information on the location of the congestion and to allow for capacity reduction only to the extent necessary to guarantee operational security. Therefore, the validation process described in Article 19 of the methodology is and should remain the only enduring solution for the intraday flow-based capacity calculation.
- (135) However, in order to address the Core TSOs' concerns about the constrained timings of the CNEC-based validation, which are significantly reduced compared to the day-ahead process, and the resulting security issues, ACER has allowed for a temporary ATC-based validation, under the conditions set out in Annex 6. The ATC-based validation is still permitted for a maximum of two years following the implementation of IDCC(a). ACER expects that two years is sufficient for all the TSOs to develop their local tools to perform a full-fledged CNEC-based validation, which is more suitable for the flow-based capacity calculation process, and more accurate than the ATC-based validation. ACER notes that in any case, the ATC-based validation becomes obsolete as soon as SIDC is updated to accommodate flow-based parameters.

7.3 Editorial amendments

- (136) ACER has introduced a number of editorial amendments which were required to improve consistency and structure of the Proposal, while preserving the intended meaning of the content.

8 CONCLUSION

- (137) For all the above reasons, ACER considers the Proposal in line with the requirements of the CACM Regulation, provided that the amendments described in this Decision are integrated in the Proposal, as presented in Annex I and Annex II to this Decision. The amendments, which have been consulted with the Core TSOs and the Core regulatory authorities, are necessary to ensure that the Proposal is in line with the purpose of the CACM Regulation and contributes to market integration, non-discrimination, effective competition and the proper functioning of the market.
- (138) Therefore, ACER approves the Proposal subject to the necessary amendments set out in Annex I and Annex II. For reasons of clarity, Annex III to this Decision provides a complete, consolidated version of the Core ID CCM,

HAS ADOPTED THIS DECISION:

Article 1

The intraday capacity calculation methodology of the Core capacity calculation region, developed pursuant to Article 20 of Regulation (EU) 2015/1222, is amended and approved as set out in Annex I and Annex II to this Decision.

Article 2

This Decision is addressed to:

1. 50Hertz - 50Hertz Transmission GmbH
2. Amprion - Amprion GmbH
3. APG - Austrian Power Grid AG
4. ČEPS - ČEPS a.s.
5. CREOS Luxembourg - CREOS Luxembourg S.A.
6. ELES - ELES, d.o.o.
7. Elia - Elia Transmission Belgium S.A.
8. HOPS d.d. - Croatian Transmission System Operator Plc
9. MAVIR ZRt. - MAVIR Magyar Villamosenergia-ipari Átviteli Rendszerirányító Zártkörűen Működő Részvénytársaság ZRt.
10. PSE - Polskie Sieci Elektroenergetyczne S.A.
11. RTE - Réseau de Transport d'Electricité S.A.
12. SEPS - Slovenská elektrizačná prenosová sústava, a.s.
13. TenneT GER - TenneT TSO GmbH
14. TenneT TSO - TenneT TSO B.V.
15. Transelectrica - Compania Nationala de Transport al Energiei Electrice S.A.
16. TransnetBW - TransnetBW GmbH

Done at Ljubljana, on 14 March 2024.

- SIGNED -

*For the Agency
The Director*

C. ZINGLERSEN

Annexes:

- Annex I The second amendment of the Core Intraday Capacity Calculation Methodology, as revised and approved by ACER.
- Annex Ia The second amendment of the Core Intraday Capacity Calculation Methodology, with ACER's amendments to the Core TSOs' proposal shown in track changes – **for information**.
- Annex II The third amendment of the Core Intraday Capacity Calculation Methodology, as revised and approved by ACER.
- Annex IIa The third amendment of the Core Intraday Capacity Calculation Methodology, with ACER's amendments to the Core TSOs' proposal shown in track changes – **for information**.
- Annex III Consolidated version of the Core Intraday Capacity Calculation Methodology – **for information**.
- Annex IIIa Consolidated version of the Core Intraday Capacity Calculation Methodology with amendments shown in track changes towards Annex II³⁶ to ACER Decision 06/2022 – **for information**.
- Annex IV Evaluation of responses to ACER's public consultation on the proposal for the second and third amendment of the intraday capacity calculation methodology of the Core capacity calculation region – **for information**.

In accordance with Article 28 of Regulation (EU) 2019/942, the addressees may appeal against this Decision by filing an appeal, together with the statement of grounds, in writing at the Board of Appeal of ACER within two months of the day of notification of this Decision.

³⁶ [Annex II](#) to ACER Decision 06/2022.

In accordance with Article 29 of Regulation (EU) 2019/942, the addressees may bring an action for the annulment before the Court of Justice only after the exhaustion of the appeal procedure referred to in Article 28 of that Regulation.