

DECISION OF THE AGENCY FOR THE COOPERATION OF ENERGY REGULATORS No 06/2016

of 17 November 2016

ON THE ELECTRICITY TRANSMISSION SYSTEM OPERATORS' PROPOSAL FOR THE DETERMINATION OF CAPACITY CALCULATION REGIONS

THE AGENCY FOR THE COOPERATION OF ENERGY REGULATORS,

HAVING REGARD to the Treaty on the Functioning of the European Union,

HAVING REGARD to Regulation (EC) No 713/2009 of the European Parliament and of the Council of 13 July 2009 establishing an Agency for the Cooperation of Energy Regulators¹, and, in particular, Article 8(1) thereof,

HAVING REGARD to Commission Regulation (EU) 2015/1222 of 24 July 2015 establishing a guideline on capacity allocation and congestion management², and, in particular, Article 9(11) thereof,

HAVING REGARD to the outcome of the consultation with the concerned national regulatory authorities and transmission system operators,

HAVING REGARD to the favourable opinion of the Board of Regulators of 8 November 2016, delivered pursuant to Article 15(1) of Regulation (EC) No 713/2009,

WHEREAS:

1. INTRODUCTION

(1) Commission Regulation (EU) 2015/1222 of 24 July 2015 establishing a guideline on capacity allocation and congestion management ('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 also include specific requirements for capacity calculation regions which, according to the definition in Article 2(3) of the CACM Regulation, are the geographic areas in which coordinated capacity calculation is applied. The determination of the capacity calculation regions is the first step towards the

¹ OJ L 211, 14.8.2009, p. 1.

² OJ L 197, 25.7.2015, p. 24.



implementation of the CACM Regulation and, as such, the basis for further implementing acts.

- (2) Under Article 9(1) and (6)(b) and Article 15(1) of the CACM Regulation, transmission systems operators ('TSOs') are required jointly to develop a common proposal regarding the determination of capacity calculation regions and submit it to all regulatory authorities for approval. Then, according to Article 9(10) of the CACM Regulation, the regulatory authorities receiving the proposal on the determination of capacity calculation regions shall reach an agreement and take a decision on that proposal, in principle, within six months after the receipt of the proposal by the last regulatory authority. According to Article 9(11) of the CACM Regulation, if the regulatory authorities fail to reach an agreement within the six-month period, or upon their joint request, the Agency is called upon to adopt a decision concerning the TSOs' proposal.
- (3) The present Decision of the Agency follows from the regulatory authorities' failure to reach an agreement on the proposal concerning the determination of capacity calculation regions which the TSOs submitted to the regulatory authorities for approval. Annex I to this Decision sets out the capacity calculation regions, pursuant to Article 15(1) of the CACM Regulation, as determined by the Agency.

2. **PROCEDURE**

2.1 **Proceedings before Regulatory Authorities**

- (4) On 24 August 2015, the European Network of Transmission System Operators for Electricity ('ENTSO-E') and the TSOs responsible under Article 15(1) of the CACM Regulation published an 'All TSOs' draft proposal for Capacity Calculation Regions' ('draft CCRs Proposal') for public consultation. The consultation lasted from 24 August until 24 September 2015.
- (5) Following the public consultation, the draft CCRs Proposal was updated with respect to the following elements:
 - a) the inclusion, in the Central East Europe (CEE) region, of the bidding zone borders between Croatia and Slovenia, between Croatia and Hungary, and between Romania and Hungary from the beginning and of a bidding zone border between Germany/Luxembourg and Austria 'in line with the implementation calendar agreed upon by the relevant regulatory authorities and TSOs in accordance with the Agency Opinion No 09/2015 and at the latest when implementation of flow-based capacity calculation takes place in the CEE CCR in accordance with the CACM Regulation';
 - b) the commitment from the TSOs in the Central West Europe (CWE) and the CEE regions to cooperate towards a merger of those two CCRs, on the basis of existing solutions for the flow-based day-ahead and intraday capacity calculation methodology.



- (6) On 13 November 2015, ENTSO-E published and submitted 'on behalf of all TSOs' to the Agency an 'All TSOs' proposal for Capacity Calculation Regions (CCRs) in accordance with Article 15(1) of the Commission Regulation (EU) 2015/1222 of 24 July 2015 establishing a Guideline on Capacity Allocation and Congestion Management' dated 29 October 2015³ ('CCRs Proposal'), together with an explanatory document⁴.
- (7) By 17 November 2015, all TSOs required by the CACM Regulation submitted the CCRs Proposal and the explanatory document to their respective regulatory authorities.
- (8) On 3 March 2016, the TSOs of the CWE and CEE regions signed a 'Memorandum of Understanding on the development of a common CWE and CEE CCR's day-ahead flowbased capacity calculation methodology and the merger of the CEE and CWE CCR' ('MoU of 3 March 2016'). The MoU of 3 March 2016 indicates the intention of all TSOs from the CWE and CEE regions to develop a common flow-based capacity calculation methodology for the day-ahead timeframe within the deadline provided for in the CACM Regulation and to implement it by Q1 of 2019 at the latest.
- (9) By letter of 13 May 2016, the Austrian regulatory authority, Energie-Control Austria für die Regulierung der Elektrizitäts- und Erdgaswirtschaft ('E-Control'), requested unilaterally all European TSOs (as listed in the annex to the letter) to amend the CCRs Proposal to the effect that the bidding zone border between Germany/Luxembourg and Austria is removed and that the CEE CCR and CWE CCR are merged into one common CWE-CEE CCR.

2.2 **Proceedings before the Agency**

(10) In a letter of 17 May 2016, the Chair of the Energy Regulators' Forum - i.e. the regulatory authorities' platform to consult and cooperate for reaching a unanimous agreement on a TSOs proposal - informed the Agency that the regulatory authorities, despite their best endeavours, could not reach a unanimous decision on the CCRs Proposal and that, therefore, the Agency should adopt a decision concerning the CCRs Proposal within six months, in accordance with Article 9(11) of the CACM Regulation and Article 8(1) of Regulation (EC) No 713/2009. In the letter, the regulatory authorities' positions were summarised as follows:

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 $https://www.entsoe.eu/Documents/Network\%20codes\%20documents/Implementation/ccr/151103_CCRs\%20Proposal_approved_updated_clean_and_final_for_submission.pdf$

https://www.entsoe.eu/Documents/Network%20codes%20documents/Implementation/ccr/151103_CCRs_explanato ry_document_approved_final_and_clean_for_submission.pdf



- a) All regulatory authorities agreed with the majority of the CCRs Proposal. However, there appeared to be a common agreement that an amendment to the CCRs Proposal is required, in order to merge the CWE and CEE regions to create a CORE region, subject to appropriate governance arrangements. In addition, there appeared to be a common agreement that the CCRs Proposal should be amended to require TSOs to resubmit a revised translation of the original English proposal if there is a translation issue.
- b) Regulatory authorities did not agree on whether the German-Austrian border should be included in the CCRs Proposal.
- (11) By letter of 7 June 2016, the Agency's Director asked the services of the European Commission's Directorate-General for Energy for their view on the decision-making process for the CCRs Proposal, in particular with regard to E-Control's request of 13 May 2016 and potential amendments to the CCRs Proposal which the Agency may consider necessary.
- (12) On 22 June 2016, the Agency launched a public consultation PC_2016_E_02 with regard to the CCRs Proposal, inviting interested stakeholders to submit their comments by 20 July 2016. In that context, the Agency raised five questions, seeking comments on specific issues of the CCRs Proposal, as well as general comments regarding the elements of the CCRs Proposal which were introduced after the public consultation held by ENTSO-E from 24 August to 24 September 2015. A summary and evaluation of the responses received is attached as Annex II to this Decision.
- (13) On 22 June 2016, the Agency also directly informed the TSOs which submitted the CCRs Proposal and the respective regulatory authorities about the opening of public consultation PC_2016_E_02 and invited them to send any comment they may have on the CCRs Proposal, in particular on the questions listed in the consultation document, by 20 July 2016.
- (14) By letter of 4 July 2016, the services of the European Commission's Directorate-General for Energy informed the Agency that, in their view, first, E-Control's unilateral request of 13 May 2016 did not trigger the amendment process under Article 9(12) of the CACM Regulation so that the responsibility to take a decision on the CCRs Proposal passed to the Agency as of 18 May 2016, and, second, the Agency can decide on the CCRs Proposal in full, including by introducing any change that it considers necessary.
- (15) By email of 24 August 2016, the Agency consulted the regulatory authorities about its preliminary findings and conclusions. As regards the issues singled out in the letter of 17 May 2016 (see above para. 10), of those regulatory authorities which responded, all supported the merger of the CWE and CEE CCRs into one CCR⁵ and only E-Control

⁵ Two regulatory authorities however stressed that this merger should not impact the ongoing regional projects both in the CWE and CEE regions.



opposed the inclusion of a bidding zone border between Germany/Luxembourg and Austria; the German regulatory authority, Bundesnetzagentur für Elektrizität, Gas, Telekommunikation, Post und Eisenbahnen, stated the need for congestion management on the German-Austrian border.

- (16) In addition, the Agency also provided the services of European Commission's Directorate-General for Energy with an opportunity to comment on the Agency's preliminary findings. In their reply of 15 September 2016, the Commission's services provided comments with regard to the potential inclusion of a bidding zone border between Germany/Luxembourg and Austria and with regard to a potential merger of CCRs. They expressed concerns over the inclusion of a bidding zone border between Germany and Austria, as in their view decisions on bidding zones should be taken in the framework of the bidding zone review under the CACM Regulation; therefore, the Agency's decision on the CCRs Proposal should at least make clear that any inclusion of a bidding zone border between Germany/Luxembourg and Austria would not pre-empt the outcome of the bidding zone study. However, they supported the merger of the CWE and CEE CCRs as the best way to ensure the consistency of capacity calculations in Central Europe, and moreover proposed also to merge the 'Channel' and 'Hansa' regions with other regions and to set up a roadmap for merging the 'SWE', 'Baltic' and 'SEE' regions with neighbouring regions as soon as possible.
- (17) By email of 15 September 2016, the Agency consulted the regulatory authorities and the TSOs on its preliminary draft decision, which indicated that the CCRs should be defined as proposed in the CCRs Proposal (including the Germany/Luxembourg Austria biding zone border) subject to the only amendment of merging the CWE and CEE CCRs. Of those regulatory authorities who replied, only E-Control disagreed on substance in that it repeated its objection against the inclusion of the Germany/Luxembourg Austria bidding zone border. The TSOs, in a joint response of all TSOs, expressed concerns over a merger of the CWE and CEE CCRs. In its individual response, the Austrian TSO APG supported a merger of the CWE and CEE CCRs, while objecting to the inclusion of the Germany/Luxembourg Austria bidding zone border. A summary and evaluation of the responses received is attached as Annex III to this Decision.

3. THE AGENCY'S COMPETENCE TO DECIDE ON THE CCRs PROPOSAL

3.1 No agreement by the concerned regulatory authorities

(18) Pursuant to Article 9(11) of the CACM Regulation, where the regulatory authorities have not been able to reach an agreement on terms and conditions or methodologies within six months following the receipt of the proposal for such terms and conditions or methodologies by the last regulatory authority concerned, the Agency shall adopt a decision concerning the submitted proposal within six months and in line with Article 8(1) of Regulation (EC) No 713/2009.



- (19) As evidenced by the letter of the Chair of the Energy Regulators' Forum of 17 May 2016, all concerned regulatory authorities received the CCRs Proposal by 17 November 2015 and were not able to reach an agreement on the CCRs Proposal by 17 May 2016, i.e. within six months. In particular, the regulatory authorities could reach an agreement neither on a final decision concerning the CCRs Proposal, nor on a decision to request an amendment of the CCRs Proposal by the TSOs.
- (20) Therefore, under the provisions of Article 9(11) of the CACM Regulation, the Agency has become responsible to adopt a decision concerning the submitted CCRs Proposal as of 18 May 2016.

3.2 E-Control's request for an amendment

- (21) With regard to E-Control's request of 13 May 2016 for an amendment of the CCRs Proposal, some stakeholders considered in their responses to public consultation PC_2016_E_02 that this request was not dealt with in line with the procedure outlined in Article 9(12) of the CACM Regulation and that this procedure ought to be upheld.
- (22) Article 9(12) of the CACM Regulation provides for the possibility of amendment requests by regulatory authorities, which may have an impact on the transfer of the responsibility to take a decision to the Agency:

'In the event that one or several regulatory authorities request an amendment to approve the terms and conditions or methodologies submitted in accordance with paragraphs 6, 7 and 8, the relevant TSOs or NEMOs shall submit a proposal for amended terms and conditions or methodologies for approval within two months following the requirement from the regulatory authorities. The competent regulatory authorities shall decide on the amended terms and conditions or methodologies within two months following their submission. Where the competent regulatory authorities have not been able to reach an agreement on terms and conditions or methodologies pursuant to paragraphs (6) and (7) within the two-month deadline, or upon their joint request, the Agency shall adopt a decision concerning the amended terms and conditions or methodologies within six months [...].

- (23) The first sentence of Article 9(12) of the CACM Regulation refers to 'the event that one or several regulatory authorities request an amendment to approve the terms and conditions or methodologies submitted in accordance with paragraphs 6, 7 and 8'. According to E-Control's request for amendment, this wording suggests that a single regulatory authority can request an amendment of the terms and conditions or methodologies which the TSOs submitted in accordance with Article 9(6), (7) and (8) of the CACM Regulation.
- (24) Article 9(6), (7) and (8) of the CACM Regulation divide the terms and conditions or methodologies which require approval by regulatory authorities into three different layers:(i) those which are subject to the approval by all regulatory authorities in the EU, pursuant

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to Article 9(6); (ii) those which are subject to the approval by all regulatory authorities of the concerned region, pursuant to Article 9(7); and (iii) those which are subject to the individual approval by each regulatory authority or other competent authority of the Member State concerned, pursuant to Article 9(8).

- (25) If a single regulatory authority requested an amendment of the terms and conditions or methodologies which are subject to the approval by all regulatory authorities in the EU or by all regulatory authorities of the concerned region, any resubmitted amended terms and conditions or methodologies would still need the approval by all those regulatory authorities and all those regulatory authorities would have to reach an agreement on this approval pursuant to Article 9(11) of the CACM Regulation. It is obvious that such an agreement would not be reached where the request for an amendment had been made unilaterally by one regulatory authority and not agreed upon by all competent regulatory authorities. The submission of an amended proposal, on which the other competent regulatory authorities did not agree, would be of no use. The TSOs cannot reasonably be expected to submit to their respective regulatory authorities amended terms and conditions or methodologies which are not agreed by those regulatory authorities.
- (26) Therefore, the amendment request procedure under Article 9(12) of the CACM Regulation is meant to address the concerns of all the regulatory authorities responsible for the approval and to enable finally the approval of the amended terms and conditions or methodologies by all those regulatory authorities. Accordingly, the right to request an amendment can be exercised only in coordination and in agreement with all regulatory authorities that are responsible for the approval of the specific terms and conditions or methodologies at issue.
- (27) Therefore, with regard to the context and purpose of an amendment request under Article 9(12) of the CACM Regulation, the latter provision is to be interpreted to the effect that one regulatory authority can request an amendment unilaterally only where it is solely responsible for approving terms and conditions or methodologies pursuant to Article 9(8) of the CACM Regulation.
- (28) Since, for the approval of the CCRs Proposal, all regulatory authorities are competent, an amendment of the CCRs Proposal could be requested, pursuant to Article 9(12) of the CACM Regulation, only by all regulatory authorities jointly, but not by one regulatory authority individually.
- (29) For these reasons, and as also confirmed by the services of the European Commission's Directorate-General for Energy in the letter of 4 July 2016 (see above para. 0), E-Control's request for amendment of 13 May 2016 does not qualify as a valid amendment request pursuant to Article 9(12) of the CACM Regulation which would require TSOs to resubmit an amended CCRs Proposal. Therefore, this request does not prevent the Agency from becoming responsible to decide on the CCRs Proposal due to the regulatory authorities' failure to reach an agreement.





4. SUMMARY OF THE CCRs PROPOSAL

- (30) The CCRs Proposal defines eleven CCRs: 'Nordic', 'Hansa', 'Central-west Europe (CWE)', 'Italy North', 'Greece-Italy (GRIT)', 'Central Eastern Europe (CEE)', 'South-west Europe (SWE)', 'Ireland and United Kingdom (IU)', 'Channel' 'Baltic' and 'South-east Europe (SEE)' (Articles 3 to 8 and 10 to 14).
- (31) The CCRs Proposal defines the bidding zone borders within the CCRs (Articles 3 to 8 and 10 to 14). According to the CCRs Proposal (Article 1(1)), they include:
 - a) all existing bidding zones borders within and between Member States to which the CACM Regulation applies;
 - b) future bidding zone borders due to interconnections operated by legal entities certified as TSOs which are under construction and planned to be commissioned before 2018; and
 - c) the bidding zone border between Germany/Luxembourg and Austria.
- (32) The CCRs Proposal provides a duty on the TSOs of the CWE and CEE CCRs to cooperate closely towards the merger of the two CCRs and to submit, within four months after the submission of the CCRs Proposal, a roadmap on how to merge the two CCRs (Article 9).
- (33) The CCRs Proposal provides that the proposed CCRs shall apply as soon as the regulatory authorities have approved them or the Agency has decided on them (Article 15).
- (34) The CCRs Proposal describes the expected impact of the proposed CCRs on the objectives of the CACM Regulation (Recitals (8) to (16)).
- (35) In addition, the explanatory document to the CCR Proposal explains the legal context, offers justification and further description of the proposed CCRs, assesses the comments received during the public consultation, provides further information on the inclusion of the bidding zone border between Germany/Luxembourg and Austria, as well as on the CWE-CEE cooperation initiative, contains an overview of the future composition of CCRs (Annex 1) and of future bidding zone borders (Annex 2), presents a roadmap for future CCRs integration (Annex 3) and lists the comments to the public consultation on the draft CCRs Proposal (Annex 4).

5. ASSESSMENT OF THE CCRs PROPOSAL

5.1 Legal framework

(36) Article 15 of the CACM Regulation sets out specific requirements for the common proposal regarding the determination of CCRs.

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- (37) According to Article 15(1), the common proposal shall be subject to consultation in accordance with Article 12 of the CACM Regulation.
- (38) According to Article 15(2), the common proposal shall define the bidding zone borders attributed to TSOs who are members of each CCR and shall meet the following requirements:
 - a) the regions specified in point 3.2. of Annex I to Regulation (EC) No 714/2009 of 13 July 2009 on conditions for access to the network for cross-border exchanges in electricity and repealing Regulation (EC) No 1228/2003⁶ shall be taken into consideration;
 - b) each bidding zone border, or two separate bidding zone borders if applicable, through which interconnection between two bidding zones exists, shall be assigned to one CCR; and
 - c) at least those TSOs shall be assigned to all CCRs in which they have bidding zone borders.
- (39) As a general requirement, Article 9(9) of the CACM Regulation demands that every proposal for terms and conditions or methodologies includes a proposed timescale for their implementation and a description of their expected impact on the objectives of the CACM Regulation.
- (40) Further, for coherence reasons and as confirmed by Article 9(9) of the CACM Regulation, the common proposal must be in line with the objectives of the CACM Regulation defined in its Article 3.
- (41) Moreover, the CACM Regulation has been adopted on the basis of Article 18(3)(b) and (5) of Regulation (EC) No 714/2009.
- (42) According to its Recital (33), the CACM Regulation supplements Annex I to Regulation (EC) No 714/2009, in accordance with the principles set out in Article 16 of that Regulation. Accordingly, the common proposal must be consistent also with the requirements of Regulation (EC) No 714/2009, including Article 16 and Annex I thereto.

5.2 **Public consultation**

(43) The draft CCRs Proposal was consulted Union-wide with stakeholders from 24 August to 24 September 2015.



⁶ OJ L 211, 14.8.2009, p. 15.



- (44) The explanatory document to the CCRs Proposal describes the comments received from stakeholders, assesses them and explains why comments have or have not been taken into account. The explanatory document was published together with the CCRs Proposal on 13 November 2015.
- (45) Therefore, the CCRs Proposal has been subject to a public consultation in accordance with Article 12 of the CACM Regulation and complies with Article 15(1) of the CACM Regulation.

5.3 Definition of the bidding zone borders

- (46) The CCRs Proposal includes the bidding zone borders covered by the respective CCRs and attributed to the TSOs.
- (47) All regulatory authorities, all TSOs and the stakeholders who responded to public consultation PC_2016_E_02 agreed with all the bidding zone borders included in the CCRs Proposal, except for the bidding zone border between Germany/Luxembourg and Austria in the CEE CCR.
- (48) With regard to the bidding zone border between Germany/Luxembourg and Austria in the CEE CCR, E-Control, Austrian Power Grid AG and a few stakeholders claimed that this bidding zone border should not be included in the CCRs Proposal. In essence, they argued, firstly, that a (new) bidding zone border between Germany/Luxembourg and Austria cannot be considered under Article 15 of the CACM Regulation, but can only be established after a review process pursuant to Articles 32 to 34 of the CACM Regulation, and, secondly, that such border is not necessary, contrary to the principle that TSOs shall not limit interconnection capacity to solve congestion inside their own control area, and an artificial split of an integrated market, infringing Articles 101 and 102 TFEU, as well as an artificial trade barrier, infringing Articles 34 and 35 TFEU.
- (49) In this context, it is first to note that the CCRs Proposal included new, currently nonexisting bidding zone borders. Besides the envisaged border between Germany/Luxembourg and Austria (hereafter 'the DE-AT border'), the CCRs Proposal included also the new borders between Belgium and Germany/Luxembourg in the CWE CCR and between Hungary and Slovenia in the CEE CCR. All regulatory authorities – including E-Control – agreed with the inclusion of these other new bidding zone borders.
- (50) Secondly, the wording of the CACM Regulation does not restrict the bidding zone borders to be defined in the common proposal for CCRs to such borders which are already existing. Article 15(2) of the CACM Regulation refers to 'define the bidding zone borders attributed to TSOs who are members of each capacity calculation region' and does not refer to 'existing' bidding zone borders or, contrary to Article 32 of the CACM Regulation, to 'existing bidding zone configurations'. The bidding zone review process under Articles 32 to 34 of the CACM Regulation has also not been set as a prerequisite for the inclusion of a

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bidding zone border in the common proposal for CCRs pursuant to Article 15(2) of the CACM Regulation. The step of defining the bidding zone borders is explicitly provided for in Article 15 of the CACM Regulation and, given the deadline set by the CACM Regulation to submit a common proposal for CCRs, including bidding zone borders, this is the only possible legal procedure to 'define' bidding zone borders by three months after the entry into force of the CACM Regulation.

- (51) The CACM Regulation has indeed created a dedicated process for a comprehensive review of the bidding zones in an entire region in Article 32 to 34. However, the bidding zone review process under Articles 32 to 34 of the CACM Regulation is not a prerequisite for the inclusion of a bidding zone border already in the common proposal for CCRs pursuant to Article 15(2). It is also clear that the definition of the bidding zone borders in the context of the determination of CCRs is without prejudice to the outcome of a subsequent bidding zone review and that the present Decision would have to be reviewed in case the final decision taken in the framework of the bidding zone review process resulted in a configuration of bidding zones different from the one emerging from the definition of bidding zone borders in this Decision⁷.
- (52) Thirdly, any proposals for capacity allocation based on the CACM Regulation should be in conformity with the essential requirements laid down in Regulation (EC) No 714/2009, as the CACM Regulation – which implements Regulation (EC) No 714/2009 – can amend only non-essential elements of Regulation (EC) No 714/2009 pursuant to Article 18(5) of that Regulation. One essential element of Regulation (EC) No 714/2009 is the requirement to implement a capacity allocation procedure in case of congestion pursuant to Article 16(1) of Regulation (EC) No 714/2009 and points 1.2., 1.4. and 3.1. of its Annex I. A derogation from this essential duty would go beyond amending a non-essential element of Regulation (EC) No 714/2009. Therefore, the CACM Regulation cannot and did not define whether, at the time of its adoption, the existing capacity allocation practices were compliant with Regulation (EC) No 714/2009; nor can and did the CACM Regulation exempt from the requirement to implement a capacity allocation procedure in case of congestion pursuant to Article 16(1) of Regulation (EC) No 714/2009 and points 1.2., 1.4. and 3.1. of its Annex I. This context confirms that new bidding zone borders may be defined also outside the bidding zone review process under Articles 32 to 34 of the CACM Regulation, to enable the implementation of a capacity allocation procedure that is compliant with Regulation (EC) No 714/2009; and that it is in the interest of a coherent application of the law to include such a new bidding zone border in the definition of bidding zone borders pursuant to Article 15(2) of the CACM Regulation.

⁷ It is to be noted that in the ongoing informal bidding zone review, different scenarios will be considered. While the model-based scenarios are not defined yet, the expert based scenarios, which focus on the splitting of bidding zones in order to address congestion problems in the CEE region, do in fact include the DE-AT border as a bidding zone border.





- (53) Fourthly, it is also in the interest of a coherent application of the law that a new bidding zone border is included in the definition of bidding zone borders pursuant to Article 15(2) of the CACM Regulation, where such inclusion is necessary to meet the objectives of the CACM Regulation as defined in its Article 3.
- (54) In the Agency's view, with which the majority of stakeholders who participated in public consultation PC_2016_E_02 effectively concur, that the implementation of a capacity allocation procedure on the DE-AT border is indeed necessary to comply with Regulation (EC) No 714/2009 and also to meet the objectives of the CACM Regulation as defined in its Article 3, for the reasons laid out in paragraphs 0 to (61) below.
- (55) With regard to the compliance with Regulation (EC) No 714/2009, it is to be noted that this Regulation and its Annex I laying down 'Guidelines on the management and allocation of available transfer capacity of interconnections between national systems' require capacity allocation in case of congestion. Pursuant to Article 16(1) of Regulation (EC) No 714/2009, network congestion problems shall be addressed with non-discriminatory market-based solutions which give efficient economic signals to the market participants and transmission system operators involved. Pursuant to points 1.2. and 1.4. of Annex I to Regulation (EC) No 714/2009, there need be no capacity allocation procedure for access to a cross-border transmission service where there is usually no congestion, while appropriate congestion-management methods and arrangements, defined and agreed upon in advance. shall be implemented immediately by the TSOs if structural congestion appears. Further, pursuant to point 3.1. of Annex I to Regulation (EC) No 714/2009, capacity allocation at an interconnection shall be coordinated and implemented using common allocation procedures by the TSOs involved in cases where commercial exchanges between two countries (TSOs) are expected significantly to affect physical flow conditions in any third country. Regulatory authorities and TSOs shall ensure that no congestion-management procedure with significant effects on physical electric power flows in other networks is devised unilaterally.
- (56) As shown by the evidence presented in Annex IV to this Decision and as also already demonstrated in the Agency's Opinion No 09/2015 of 23 September 2015 (Annex V to this Decision), the cross-border exchanges between Germany/Luxembourg and Austria (hereafter 'the DE-AT cross-border exchanges') significantly affect network elements in other parts of the CWE and CEE regions, which are unambiguously defined as structurally congested (on average, about 59% of the physical flows resulting from the DE-AT cross-border exchanges are not realised through the DE-AT border, but are flowing as loop flows through other borders. See Part 1 of Annex IV to this Decision for further details). The Agency would like to emphasise that the impact of the DE-AT cross-border exchanges on the network elements in other parts of the CWE and CEE regions will not significantly change with the installation of phase-shifting transformers (PSTs)⁸. The use of a PST to

⁸ The PTDF values are calculated assuming a constant phase angle of a PST. Thus, the PST has almost no effect on how the flows resulting from 100 MW of exchange are distributed across the AC network. Nevertheless, some





alter the physical flows over a congested network element should be seen as a remedial action which allows accommodating more electricity exchanges causing a physical flow over such element. In the absence of capacity allocation on the DE-AT border, the PST would facilitate exchanges between Germany and Austria whose welfare gain is unknown. On the other hand, a coordinated capacity allocation on the DE-AT border would enable the PST to facilitate electricity exchanges at regional level, bringing then a higher social welfare. For this reason, the installation of a PST should not be considered as an efficient alternative to a coordinated capacity allocation in the case of structural congestion problems. Further, assuming that all the DE-AT cross-border exchanges actually physically flow on the DE-AT border, Part 2 of Annex IV to this Decision shows that, 53% of the time, the network between Germany and the main part of Austria would not be able physically to accommodate all the requests for DE-AT cross-border exchanges.

- (57) As a consequence, the DE-AT border needs to be considered as usually unable to accommodate all physical flows resulting from international trade requested by market participants, i.e. as usually and structurally congested pursuant to Article 2(2)(c) of Regulation (EC) No 714/2009 and points 1.2. and 1.4. of Annex I to the same Regulation, as well as Article 2(19) of the CACM Regulation. Due to the usual and structural congestion of the DE-AT border, the implementation of a coordinated capacity allocation procedure on the DE-AT border is required by Article 16(1) of Regulation (EC) No 714/2009 and points 1.2., 1.4. and 3.1. of Annex I to the same Regulation. According to the Agency's findings, the implementation of a coordinated capacity allocation on the DE-AT border is the only measure addressing the congestion on that border in compliance with Regulation (EC) No 714/2009; the Agency could not identify any alternative measure which could equally ensure compliance with Regulation (EC) No 714/2009 (see in particular the analysis in Annex IV, pp. 6 and 7, and Annex V, paras. 114-120).
- (58) The Agency deems it important to clarify that the purpose of implementing a coordinated capacity allocation procedure on the DE-AT border is to address usual and structural congestion on that (congested) interconnection in accordance with Regulation (EC) No 714/2009, and not to solve an internal structural congestion elsewhere in the network. In the Agency's views, the existence of internal structural congestions elsewhere in the network in Austria, Germany or any other Member State falls outside the scope of this Decision.
- (59) Therefore, a capacity allocation procedure on the DE-AT border is legally required under Regulation (EC) No 714/2009 to manage the congestion problems caused by the DE-AT cross-border exchanges in a market-based way. In fact, it is the legislator's response to a situation of inadequate interconnection capacity which, by its nature, is an obstacle to free cross-border trade in electricity and to a real competitive European electricity market. Recital (11) of the CACM Regulation makes it particularly clear that the splitting of

limited effect may be observed since a PST slightly increases the impedance of the transmission corridor (line + PST).





bidding zones may also be necessary 'to ensure efficient congestion management and overall market efficiency'. As such, the implementation of a capacity allocation procedure on the DE-AT border is only enabling competitive access to transmission lines and promoting non-discriminatory trade in electricity in the CWE and CEE regions. Therefore, it does not constitute an artificial split of an integrated market infringing Articles 101 or 102 TFEU or an artificial trade barrier infringing Articles 34 or 35 TFEU; on the contrary, it contributes to competition and market integration by creating a level-playing field for market participants on the European wholesale market.

- (60) With regard to the objectives of the CACM Regulation as defined in its Article 3, it has to be pointed out that the non-inclusion of this border in the CCRs Proposal would clearly prevent meeting the objectives of the CACM Regulation, as:
 - the absence of a coordinated capacity allocation method on the DE-AT border implies that the DE-AT cross-border exchanges, while having a significant impact on structural congestions in the CWE and CEE regions, do not have to compete with other cross-border exchanges in the CWE and CEE regions for the limited capacity of these congested network elements. This *de facto* gives DE-AT cross-border exchanges priority access over other cross-border exchanges in the CWE and CEE regions, which constitutes a clear violation of objectives (a) ("promoting effective competition in the generation, trading and supply of electricity"), (b) ("ensuring optimal use of the transmission infrastructure"), (e) ("ensuring fair and non-discriminatory treatment of [...] market participants"), (h) ("respecting the need for a fair and orderly market and fair and orderly price formation") and (j) ("providing non-discriminatory access to cross-zonal capacity") in Article 3 of the CACM Regulation;
 - the fact that a significant and variable volume of cross-border exchanges on the DE-AT border is accepted unconditionally by the Austrian and German TSOs implies that the TSOs on other CWE and CEE borders need to reduce the cross-border capacities on those borders not only for the expected volume of physical flows resulting from the cross-border exchanges on the DE-AT border, but also due to the uncertainty of their level (i.e. actual flows may be larger than the expected ones). This situation implies that TSOs in the regions cannot rely on transparent and reliable information (objective (f) in Article 3 of the CACM Regulation) to optimise the calculation and allocation of cross-zonal capacity in the regions (objective (d)) and ensure operational security (objective (c));
 - finally, the absence of a coordinated capacity allocation method on the DE-AT border and all the distortive effects it creates do not give the right investment signals and therefore do not contribute to the efficient long-term operation and development of the electricity transmission system and of the electricity sector in the Union (objective (g) in Article 3 of the CACM Regulation).



- (61) Further details about the various concerns raised by stakeholders during the consultation process regarding the inclusion of the DE-AT border, as well as how the Agency evaluated them, can be found in Annexes II and III to this Decision.
- (62) Therefore, the CCRs Proposal may and shall include a bidding zone border between Germany/Luxembourg and Austria in defining the bidding zone borders attributed to the TSOs who are members of each CCR in accordance with Article 15(2) of the CACM Regulation.
- 5.4 Consideration of the regions pursuant to point 3.2. of Annex I to Regulation (EC) No 714/2009
- (63) The eleven CCRs proposed in the CCRs Proposal cover all the regions specified in point 3.2. of Annex I to Regulation (EC) No 714/2009.
- (64) Therefore, the CCRs Proposal took those regions into consideration in accordance with Article 15(2)(a) of the CACM Regulation.

5.5 Proposed timescale for the implementation

- (65) Article 15 of the CCRs Proposal provides that the proposed CCRs shall apply as soon as approved by all regulatory authorities or decided upon by the Agency.
- (66) Therefore, the CCRs Proposal complies with the requirement of the implementation timescale in Article 9(9) of the CACM Regulation.

5.6 Expected impact on the objectives of the CACM Regulation.

- (67) Recitals (8) to (16) of the CCRs Proposal describe the expected impact of the proposed CCRs on the objectives listed in Article 3 of the CACM Regulation.
- (68) Therefore, the CCRs Proposal complies with the requirement of the impact description in Article 9(9) of the CACM Regulation.
- (69) As regards the substance of the described impact, the Agency agrees with the description in the CCRs Proposal with the exception of the impact concerning the merger of the CWE and CEE regions (see below paras. 0 to 0).

5.7 Consistency with the requirements for coordinated capacity allocation and congestion management - the merger of the CWE CCR and CEE CCR

(70) Articles 5 and 8 of the CCRs Proposal propose a CCR for CWE and a CCR for CEE. With regard to a merger of those two CCRs, Article 9 of the CCRs Proposal provides for a close cooperation of the TSOs concerned towards such a merger, which shall take place as soon

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as possible, and the submission of a clear roadmap within four months after the submission of the CCRs Proposal. The TSOs of the CWE and CEE regions signed the MoU of 3 March 2016 and indicated the TSOs' intention to develop a common flow-based capacity calculation methodology for the day-ahead timeframe within the deadline provided for in the CACM Regulation and to implement it by Q1 of 2019 at the latest.

- (71) The majority of the stakeholders who responded to public consultation PC_2016_E_02 considered the commitment from the CWE and CEE TSOs to cooperate towards a merger of the CWE and CEE CCRs and the MoU of 3 March 2016 as insufficient to ensure that the CWE and CEE regions will develop and implement a common congestion management procedure.
- (72) The majority of TSOs expressed concerns over a merger of the CWE and CEE CCRs in that the deadlines in the CACM Regulation are too short and hence very challenging in case of a direct merger; a direct merger would also risk to put ongoing regional projects on hold as the prime focus in the merged region would be on developing a common flow-based day-ahead capacity calculation methodology. By contrast, Austrian Power Grid AG supported a merged CWE-CEE CCR, *inter alia*, because the existing two regions consist of a highly meshed transmission grid and therefore this approach will ensure best compliance with the required common congestion management procedures and also because it is important that the CWE and CEE TSOs together continue to develop one common flow-based capacity calculation concept.
- (73) In that context, it is to be noted that point 3.1. of Annex I to Regulation (EC) No 714/2009 requires that '[i]n cases where commercial exchanges between two countries (TSOs) are expected to affect physical flow conditions in any third-country (TSO) significantly, congestion-management methods shall be coordinated between all the TSOs so affected through a common congestion-management procedure.'
- (74) The commercial exchanges within the CWE and CEE regions are significantly interdependent in the sense that exchanges in one region induce significant physical flows over network elements which are considered critical network elements for capacity calculation in the other region. This strong interdependency is particularly obvious for the DE-AT cross-border exchanges as a significant share (58.8% on average) of these exchanges (which represented respectively 28.9% (35.3%)⁹ and 38.3% (42.5%) of all cross-border exchanges observed in the CWE and CEE regions in 2014 (2015)) is being realised through the neighbouring CWE and CEE networks. Therefore, pursuant to point 3.1. of Annex I to Regulation (EC) No 714/2009, this strong interdependency requires a common congestion management procedure for the CWE and the CEE regions.



⁹ Assuming the DE-AT border as part of the CWE region.



- (75) This common congestion management procedure for the CWE and the CEE regions must also achieve the objectives of Article 3 of the CACM Regulation, in particular the objectives of promoting effective competition in the generation, trading and supply of electricity (paragraph (a)), of ensuring optimal use of the transmission infrastructure (paragraph (b)), of ensuring operational security (paragraph (c)), of optimising the calculation and allocation of cross-zonal capacity (paragraph (d)), of ensuring and enhancing the transparency and reliability of information (paragraph (f)), and of providing non-discriminatory access to cross-zonal capacity (paragraph (j)).
- (76) In the Agency's view, a common congestion management procedure for the CWE and the CEE regions can only achieve the above-mentioned objectives of Article 3 of the CACM Regulation if it is applied at the level of a single CCR resulting from the merger of the CWE CCR and the CEE CCR. The absence of a common congestion management procedure at the level of the two regions would inevitably lead to inefficiencies in the calculation and allocation of cross-zonal capacity, in the overall use of transmission infrastructure, as well as in the management of the operational security of the network, and would therefore prevent TSOs from fulfilling the aforementioned objectives.
- (77) Defining separate CWE and CEE CCRs would indeed result in cross-zonal electricity exchanges within one region causing unscheduled allocated flows¹⁰ on another region. These unscheduled allocated flows would, in turn, significantly reduce the amount of cross-zonal capacities on the other region and thus inevitably lead to a significant loss of social welfare¹¹. On the contrary, a merged CWE-CEE CCR would establish a common capacity calculation procedure which would not result in any unscheduled allocated flows in the CWE region created by exchanges in the CEE region and *vice versa*.
- (78) The merger of CWE and CEE CCRs is also important for the coordination of remedial actions (i.e. redispatching), as the latter may have significant effect both in terms of operational security and capacity calculation. This is particularly true when internal exchanges within a given bidding zone area create severe congestion problems in both the CWE and CEE regions¹², which, in the absence of capacity allocation procedures to manage these congestions, can only be managed with remedial actions (i.e. redispatching). It is therefore essential that these remedial actions are fully coordinated and optimised



¹⁰ Unscheduled allocated flows are physical flows created by cross-zonal electricity exchanges on bidding zone borders where capacity calculation is not coordinated with the bidding zone borders where these flows are observed. ¹¹ E.g. in the case where the bidding zone border between Germany/Luxembourg and Austria were to be allocated to the CEE region as per the draft CCRs Proposal, this would result in 220 MW of unscheduled allocated flows on the DE-NL, NL-BE, BE-FR borders and 163 MW on the DE-FR border (this estimation is done by multiplying the average exchanges on the DE-AT border (3189 MW) by the average PTDF values on the DE-NL, NL-BE, BE-FR and DE-FR borders). A maximum exchange observed so far on the DE-AT border (i.e. 7688 MW) would result in 530 MW of unscheduled allocated flows on the DE-NL, NL-BE, BE-FR borders. As shown in the Agency's Market Monitoring Report 2015, the unscheduled flows result in a significant loss of cross-zonal capacities and social welfare.

¹² See paragraph 120 of the Agency's Opinion No 9/2015.



within a common region and involve all TSOs and networks which are potentially affected. The coordination requirement stipulated by point 3.1. of Annex I to Regulation (EC) No 714/2009 should in this case apply not only to exchanges between Member States, but also to exchanges between and within TSO areas¹³.

- (79) While the commitment of all TSOs from the CWE and CEE regions in the MoU of 3 March 2016 to develop a common flow-based capacity calculation methodology for the day-ahead timeframe within the deadline provided for in the CACM Regulation and to implement it by Q1 of 2019 is indeed very welcomed, it is also to be noted that this commitment is not legally binding and, more importantly, does not cover all the aspects of a common congestion management procedure. In particular, it does not cover the methodologies to calculate capacity for the intraday timeframe, to coordinate redispatching and countertrading and to share the costs of remedial actions. Accordingly, this commitment does not guarantee that the CWE and the CEE regions will develop and then implement a common congestion management procedure as required by point 3.1. of Annex I to Regulation (EC) No 714/2009 and in accordance with the objectives in Article 3 of the CACM Regulation.
- (80) Therefore, the CCRs Proposal is not compliant with point 3.1. of Annex I to Regulation (EC) No 714/2009 and the objectives a), b), c), d), f) and j) in Article 3 of the CACM Regulation to the extent that it does not merge the CWE CCR and the CEE CCR into one CCR. The CWE CCR and the CEE CCR as described in Articles 5 and 8 of the CCRs Proposal need to be merged.
- (81) Finally, with regard to the TSOs' concerns about the potential consequences of a direct merger, i.e. the impact on the ongoing regional projects and the risk of not meeting the ambitious deadlines set in the CACM Regulation, the Agency considers that the following aspects mitigate these concerns:
 - Article 9(9) of the CACM Regulation explicitly allows TSOs to propose the appropriate implementation timescale for each methodology;
 - the CACM Regulation does not prohibit the TSOs to propose the implementation of the requirements through a step-by-step approach and sub-regional projects, provided the latter are consistent with the common methodologies developed at regional level;
 - the efforts and progress achieved already in the framework of the ongoing regional projects should actually foster the development of common methodologies at the level of the merged region.

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¹³ I.e., in cases where commercial exchanges within a TSO or between two TSOs are expected to affect physical flow conditions in any third TSO significantly, congestion-management methods shall be coordinated between all the TSOs so affected through a common congestion-management procedure.



5.8 Overall number of CCRs and its evolution over time

- (82) With the exception of the CWE-CEE CCR merger, the Agency broadly agrees with the TSOs that the CCRs Proposal represents a pragmatic approach, which will need progressively to evolve towards a smaller number of CCRs.
- (83) To ensure such an evolution, the Agency considers important that the relevant TSOs regularly review the definition of CCRs in the light of forthcoming developments (in particular regarding infrastructure developments, bidding zone reconfiguration, level of interdependencies between regions and with respect to the conditions set out in Article 15(3) and Article 20(5) of the CACM Regulation) and propose amendments when appropriate with a view to reducing the number of CCRs as defined in this Decision.
- (84) Since the CACM Regulation aims at extending market coupling beyond the EU borders¹⁴, the Agency stresses the importance to prepare the future extension of CCRs to third countries well in advance. The Agency therefore welcomes that the CCRs Proposal provides for a planning for the future extension of the current CCRs, including to third countries¹⁵.

5.9 Conclusion

- (85) For all these reasons, the Agency considers the CCRs Proposal in line with the requirements of the CACM Regulation and Regulation (EC) No 714/2009, provided that the CWE CCR and the CEE CCR are merged. Point 3.1. of Annex I to Regulation (EC) No 714/2009 and the objectives a), b), c), d), f) and j) in Article 3 of the CACM Regulation require that the CWE CCR and the CEE CCR as described in Articles 5 and 8 of the CCRs Proposals be merged into one CCR.
- (86) Therefore the Agency approves the CCRs Proposal subject to the necessary amendments related to:
 - the merger of the CWE CCR and the CEE CCR into one CCR, i.e. the inclusion of a CORE CCR combining the CWE CCR and the CEE CCR, the deletion of the commitments to work towards a merger of the CWE and CEE CCRs and the corresponding renumbering of the subsequent provisions and CCRs, and
 - the Agency's decision taking, i.e. omission of the references to the regulatory authorities' approval.

To provide clarity, Annex I to this Decision sets out the CCR Proposal as approved, including the amendments.

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¹⁴ See e.g. Article 20(4) of the CACM Regulation.

¹⁵ See page 33 et seq. of the "Explanatory document to all TSOs' proposal for Capacity Calculation Regions (CCRs)" of 29.10.2015.



- (87) The definition of bidding zone borders in this Decision is without prejudice to the outcome of the bidding zone review process under Articles 32 to 34 of the CACM Regulation and shall be reviewed if such a process results in a different bidding zone configuration.
- (88) The Agency invites ENTSO-E, in the framework of its biennial report on capacity calculation and allocation pursuant to Article 31 of the CACM Regulation, to develop statistical indicators to evaluate the level of interdependency between the defined CCRs and the expected efficiency gains that further mergers could bring. When doing so, the relevant TSOs are invited to focus, in particular, on the level of interdependency between the CWE-CEE region and the Channel, Italy-North, South-east, Hansa and Nordic regions.

HAS ADOPTED THIS DECISION:

Article 1

The capacity calculation regions pursuant to Article 15 of Regulation (EU) 2015/1222 shall be determined as set out in Annex I of this Decision.

Article 2

The definition of bidding zone borders in Annex I of this Decision is without prejudice to any decision which will be taken in the framework of the bidding zone review process under Articles 32 to 34 of Regulation (EU) 2015/1222. If such decision results in a configuration of bidding zones different from the one emerging from the definition of bidding zone borders in this Decision, this Decision shall be reviewed.

Article 3

This Decision is addressed to 50Hertz Transmission GmbH, Amprion GmbH, Austrian Power Grid AG, AS Augstsprieguma tīkls, BritNed Development Limited, ČEPS, a.s., Creos Luxembourg S.A., Croatian Transmission System Operator Ltd. (HOPS d.o.o.), East-West Interconnector Company, EirGrid plc, Elering AS, ELES d.o.o., Elia System Operator SA, Energinet.dk, Electroenergien Sistemen Operator EAD, Fingrid Oyj, Independent Power Transmission Operator S.A., Litgrid AB, MAVIR Magyar Villamosenergia-ipari Átviteli Rendszerirányító Zártkörűen Működő Részvénytársaság, Moyle Interconnector Limited, National Grid Electricity Transmission plc, National Grid Interconnectors Limited, Polskie Sieci Elektroenergetyczne S.A., Red Eléctrica de España S.A.U., Rede Eléctrica Nacional S.A., Réseau de Transport d'Electricité, Slovenská elektrizačná prenosová sústava a.s., System Operator for Northern Ireland Ltd, Affärsverket Svenska kraftnät, TenneT TSO BV, TenneT TSO GmbH, Terna - Rete Elettrica Nazionale SpA, Compania Nationala de Transport al Energiei Electrice "TRANSELECTRICA" S.A., TransnetBW GmbH, Vorarlberger Übertragungsnetz GmbH.





Done at Ljubljana on 17 November 2016.

For the Agency:

Alberto Pototschnig Director



Annexes:

Annex I - Definition of the Capacity Calculation Regions (CCRs) in accordance with Article 15(1) of the Commission Regulation (EU) 2015/1222 of 24 July 2015 establishing a Guideline on Capacity Allocation and Congestion Management

Annex Ia – Track change version of Annex I compared to the CCRs Proposal (for information only)

Annex II - Evaluation of responses to the public consultation on the CCRs Proposal

Annex III - Evaluation of responses to the NRA and TSO consultation on the preliminary draft Agency Decision on the CCRs Proposal

Annex IV - Technical Justification document for the inclusion of the border between Germany/Luxembourg and Austria in the determination of CCRs

Annex V - Agency's Opinion No 09/2015 of 23 September 2015 on the compliance of national regulatory authorities' decisions approving the methods of allocation of cross-border transmission capacity in the Central-East Region with Regulation (EC) No 714/2009 and the Guidelines on the management and allocation of available transfer capacity of interconnections between National Systems contained in Annex I thereto

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Annex I

Definition of the Capacity Calculation Regions (CCRs) in accordance with Article 15(1) of the Commission Regulation (EU) 2015/1222 of 24 July 2015 establishing a Guideline on Capacity Allocation and Congestion Management (CACM Regulation)

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TITLE 1

General Provisions

Article 1 Subject matter and scope

- 1. The CCRs cover the following:
 - a) all existing bidding zones borders within and between Member States, to which the CACM Regulation applies;
 - b) future bidding zone borders due to interconnections operated by legal entities certified as TSOs which are under construction at the time of the approval of this proposal and planned to be commissioned before 2018; and
 - c) the Germany/Luxembourg Austria bidding zone border (DE/LU AT) in accordance with Article 5 of this document.
- 2. Based on the CACM Regulation, the following terms and conditions or methodologies shall be developed in each CCR and submitted for approval to the competent regulatory authorities:
 - a) the common capacity calculation methodology in accordance with Article 20 of the CACM Regulation;
 - b) the methodology for coordinated redispatching and countertrading in accordance with Article 35(1) of the CACM Regulation;
 - c) the fallback procedures in accordance with Article 44 of the CACM Regulation; and
 - d) the redispatching or countertrading cost sharing methodology in accordance with Article 74(1) of the CACM Regulation.
- 3. Any changes in the bidding zone border configuration in the Member States shall be taken into account for amendment proposals concerning this document in accordance with Article 9(13) of the CACM Regulation.

Article 2 Definitions and interpretation

- 1. Terms used in this document shall have the meaning of the definitions included in Article 2 of the CACM Regulation.
- 2. In this document, unless the context requires otherwise:
 - a) the singular indicates the plural and vice versa;
 - b) the table of contents, headings and examples are inserted for convenience only and do not affect the interpretation of this document;
 - c) any reference to legislation, regulations, directive, order, instrument, code or any other enactment shall include any modification, extension or re-enactment of it then in force; and
 - d) in case of inconsistency between any of the provisions in Title 2 and the maps included in the Appendix to this document the provisions in Title 2 shall prevail; and
 - e) any reference to the bidding zones of Germany/Luxembourg (DE/LU) or Austria (AT) for the definition of the bidding zone borders in this document shall also be read as the bidding zone of Germany/Austria/Luxembourg (DE/AT/LU) for the purposes of capacity allocation on the affected bidding zone borders until the requirements described in Article 5(3) of this document are fulfilled.



3. This document shall be binding upon and shall ensure to the benefit of the TSOs as referred to herein and their permitted successors and assigns and irrespective of any change in the TSOs' names.

TITLE 2

Capacity Calculation Regions

Article 3 Capacity Calculation Region 1: Nordic

The CCR Nordic shall include the bidding zone borders listed below and shown on the map No 1 included in the Appendix to this document as attributed to the referred TSOs:

- a) Denmark 1 Sweden 3 (DK1-SE3), Energinet.dk and Svenska kraftnät;
- b) Denmark 2 Sweden 4 (DK2-SE4), Energinet.dk and Svenska kraftnät;
- c) Denmark 1 Denmark 2 (DK1-DK2), Energinet.dk;
- d) Sweden 4 Sweden 3 (SE4-SE3), Svenska kraftnät;
- e) Sweden 3 Sweden 2 (SE3-SE2), Svenska kraftnät;
- f) Sweden 2 Sweden 1 (SE2-SE1), Svenska kraftnät;
- g) Sweden 3 Finland (SE3-FI), Svenska kraftnät and Fingrid Oyj; and
- h) Sweden 1 Finland (SE1-FI), Svenska kraftnät and Fingrid Oyj.

Article 4

Capacity Calculation Region 2: Hansa

The CCR Hansa shall include the bidding zone borders listed below and shown on the map No 2 included in the Appendix to this document as attributed to the referred TSOs:

- a) Denmark 1 Germany/Luxembourg (DK1-DE/LU), Energinet.dk and TenneT TSO GmbH;
- b) Denmark 2 Germany/Luxembourg (DK2-DE/LU), Energinet.dk and 50Hertz Transmission GmbH; and
- c) Sweden 4 Poland (SE4 PL), Svenska Kraftnät and PSE S.A..

Article 5 Capacity Calculation Region 3: Core

- 1. The CCR Core shall include the bidding zone borders listed below and shown on the map No 3 included in the Appendix to this document as attributed to the referred TSOs:
 - a) France Belgium (FR BE), RTE Réseau de transport d'électricité and Elia System Operator NV/SA;
 - b) Belgium Netherlands (BE NL), Elia System Operator NV/SA and TenneT TSO B.V.;
 - c) France Germany/Luxembourg (FR DE/LU), RTE- Réseau de transport d'électricité; Amprion GmbH and TransnetBW GmbH;
 - d) Netherlands Germany/Luxembourg (NL DE/LU), TenneT TSO B.V. and TenneT TSO GmbH and Amprion GmbH; and
 - e) Belgium Germany/Luxembourg (BE-DE/LU), Elia System Operator NV/SA and Creos Luxembourg S.A..
 - f) Germany/Luxembourg Poland (DE/LU PL), 50Hertz Transmission GmbH and PSE S.A.;
 - g) Germany/Luxembourg Czech Republic (DE/LU CZ), TenneT TSO GmbH, 50Hertz Transmission GmbH and ČEPS, a.s.;
 - h) Austria Czech Republic (AT CZ), Austrian Power Grid AG and ČEPS, a.s.;



- i) Austria Hungary (AT HU), Austrian Power Grid AG and MAVIR Hungarian Independent Transmission Operator Company Ltd.;
- j) Austria Slovenia (AT SI), Austrian Power Grid AG and ELES, d.o.o.;
- k) Czech Republic Slovakia (CZ SK), ČEPS, a.s. and Slovenská elektrizačná prenosová sústava, a.s.;
- l) Czech Republic Poland (CZ PL), ČEPS, a.s. and PSE S.A.;
- m) Hungary Slovakia (HU SK), MAVIR Hungarian Independent Transmission Operator Company Ltd. and Slovenská elektrizačná prenosová sústava, a.s.;
- n) Poland Slovakia (PL SK), PSE S.A. and Slovenská elektrizačná prenosová sústava, a.s.;
- o) Croatia Slovenia (HR SI), Croatian Transmission System Operator Ltd. (HOPS d.o.o.), ELES, d.o.o.;
- p) Croatia Hungary (HR HU), Croatian Transmission System Operator Ltd. (HOPS d.o.o.), MAVIR Hungarian Independent Transmission Operator Company Ltd.;
- q) Romania Hungary (RO HU), Compania Națională de Transport al Energiei Electrice "Transelectrica" S.A., MAVIR Hungarian Independent Transmission Operator Company Ltd.;
- r) Hungary Slovenia (HU SI), MAVIR Hungarian Independent Transmission Operator Company Ltd., ELES, d.o.o.; and
- s) Germany/Luxembourg Austria (DE/LU AT), Austrian Power Grid AG, TransnetBW GmbH, TenneT TSO GmbH and Amprion GmbH.
- 2. The assignment of the bidding zone border BE-DE/LU to the CCR Core shall be effective from the date of operation of the interconnection on this bidding zone border.
- 3. For the avoidance of doubt, capacity allocation on the DE/LU AT border shall be introduced in line with an implementation calendar to be agreed upon by the relevant regulatory authorities and TSOs and at the latest when implementation of flow-based capacity calculation takes places in the CCR Core in accordance with the CACM Regulation.
- 4. The assignment of the bidding zone border HU-SI to the CCR Core shall be effective from the date of operation of the interconnection on this bidding zone border.

Article 6 Capacity Calculation Region 4: Italy North

The CCR Italy North shall include the bidding zone borders listed below and shown on the map No 4 included in the Appendix to this document as attributed to the referred TSOs:

- a) Italy NORD France (NORD FR), TERNA Rete Elettrica Nazionale S.p.A. and RTE- Réseau de transport d'électricité;
- b) Italy NORD Austria (NORD AT), TERNA Rete Elettrica Nazionale S.p.A. and Austrian Power Grid AG; and
- c) Italy NORD Slovenia (NORD SI), TERNA Rete Elettrica Nazionale S.p.A. and ELES d.o.o.

Article 7

Capacity Calculation Region 5: Greece-Italy (GRIT)

The CCR GRIT shall include the bidding zone borders listed below and shown on the map No 5 included in the Appendix to this document as attributed to the referred TSOs:

a) Italy BRNN - Greece (BRNN - GR), TERNA Rete Elettrica Nazionale S.p.A. and Independent Power Transmission Operator S.A.;



- b) Italy NORD Italy CNOR (NORD CNOR), TERNA Rete Elettrica Nazionale S.p.A.;
- c) Italy CNOR Italy CSUD (CNOR CSUD), TERNA Rete Elettrica Nazionale S.p.A.;
- d) Italy CNOR Italy SARD (CNOR SARD), TERNA Rete Elettrica Nazionale S.p.A.;
- e) Italy SARD Italy CSUD (SARD CSUD), TERNA Rete Elettrica Nazionale S.p.A.;
- f) Italy CSUD Italy SUD (CSUD SUD), TERNA Rete Elettrica Nazionale S.p.A.;
- g) Italy SUD Italy BRNN (SUD BRNN), TERNA Rete Elettrica Nazionale S.p.A.;
- h) Italy SUD Italy FOGN (SUD FOGN), TERNA Rete Elettrica Nazionale S.p.A.;
- i) Italy SUD Italy ROSN (SUD ROSN), TERNA Rete Elettrica Nazionale S.p.A.;
- j) Italy ROSN Italy SICI (ROSN SICI), TERNA Rete Elettrica Nazionale S.p.A; and
- k) Italy SICI Italy PRGP (SICI PRGP), TERNA Rete Elettrica Nazionale S.p.A.

Article 8 Capacity Calculation Region 6: South-west Europe (SWE)

The CCR SWE shall include the bidding zone borders listed below and shown on the map No 6 included in the Appendix to this document as attributed to the referred TSOs:

- a) France Spain (FR ES), RTE Réseau de transport d'électricité and REE Red Eléctrica de España, S.A.U.; and
- b) Spain Portugal (ES PT), REE Red Eléctrica de España, S.A.U. and REN Rede Eléctrica Nacional, S.A..

Article 9

Capacity Calculation Region 7: Ireland and United Kingdom (IU)

The CCR IU shall include the bidding zone border between Great Britain and Single Energy Market in Ireland and Northern Ireland attributed to the EirGrid, Moyle Interconnector (Moyle), National Grid Electricity Transmission plc (NGET) and SONI. The IU CCR is shown on the map No 7 included in the Appendix to this document.

Article 10 Capacity Calculation Region 8: Channel

The CCR Channel shall include the bidding zone borders listed below and shown on the map No 8 included in the Appendix to this document as attributed to the referred TSOs:

- a) France Great Britain (FR GB), RTE Réseau de transport d'électricité, National Grid Electricity Transmission plc (NGET) and National Grid Interconnectors Limited (NGIC); and
- b) Netherlands Great Britain (NL GB), BritNed Development Limited (BritNed) and TenneT TSO B.V..

Article 11 Capacity Calculation Region 9: Baltic

The CCR Baltic shall include the bidding zone borders listed below and shown on the map No 9 included in the Appendix to this document as attributed to the referred TSOs:

- a) Estonia Latvia (EE LV), Elering AS and Augstsprieguma tīkls;
- b) Latvia Lithuania (LV LT), Augstsprieguma tikls and Litgrid AB; and
- c) Estonia Finland (EE FI), Elering AS and Fingrid Oyj;
- d) Lithuania Sweden 4 (LT-SE4), Litgrid AB and Svenska kraftnät; and



e) Lithuania- Poland (LT-PL), Litgrid AB and PSE S.A..

Article 12 Capacity Calculation Region 10: South-east Europe (SEE)

The CCR SEE shall include the bidding zone borders listed below and shown on the map No 10 included in the Appendix to this document as attributed to the referred TSOs:

- a) Greece Bulgaria (GR BG), Independent Power Transmission Operator S.A. and Elektroenergien Sistemen Operator (ESO) EAD; and
- b) Bulgaria Romania (BG RO), Elektroenergien Sistemen Operator (ESO) EAD and Compania Națională de Transport al Energiei Electrice "Transelectrica" S.A..

TITLE 3

Final provisions

Article 13 Implementation date of CCRs

The TSOs shall apply the CCRs as described in Title 2 as soon as the decision has been taken by the Agency in accordance with Article 9(11) and 9(12) of the CACM Regulation.

Article 14

Language

The official language for this document shall be English. For the avoidance of doubt, where TSOs need to translate this document into their national language(s), in the event of inconsistencies between the English version published by TSOs in accordance with Article 9(14) of the CACM Regulation and any version in another language, the interpretation of the English version published by TSOs shall prevail.

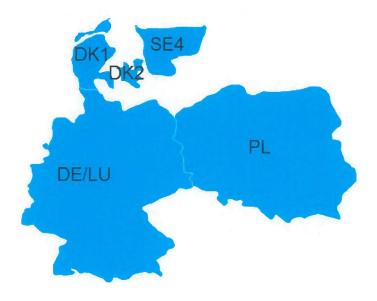


Appendix: Maps of the proposed CCRs

1. Capacity Calculation Region 1: Nordic



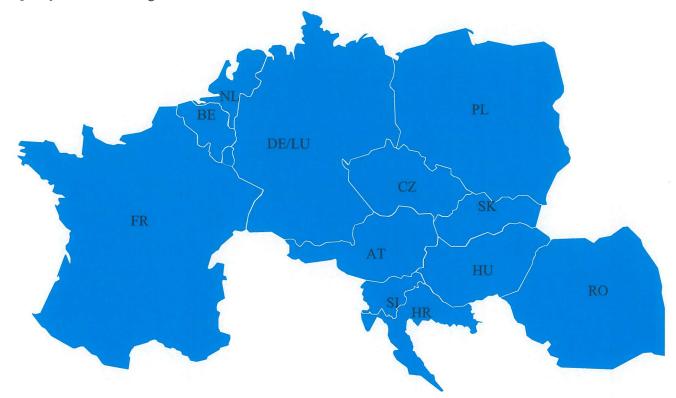
2. Capacity Calculation Region 2: Hansa (PL-DE/LU, DK2-SE4 and DK1-DK2 bidding zone borders are not part of this CCR)



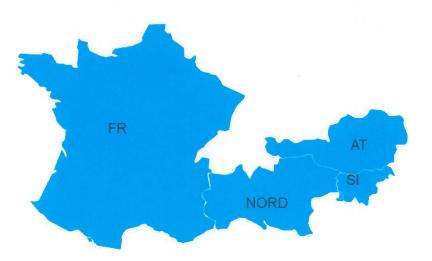
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3. Capacity Calculation Region 3: Core



4. Capacity Calculation Region 4: Italy North (AT-SI bidding zone border is not part of this CCR)

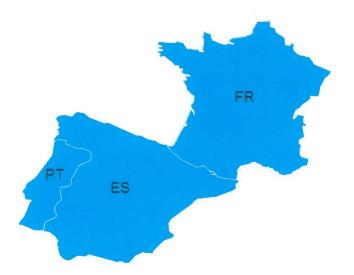




5. Capacity Calculation Region 5: Greece-Italy (GRIT)



6. Capacity Calculation Region 6: South-west Europe (SWE)

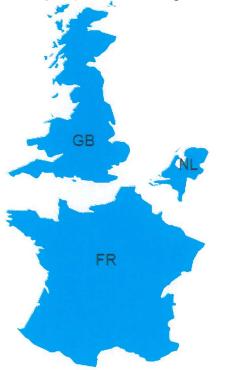




7. Capacity Calculation Region 7: Ireland and United Kingdom (IU)

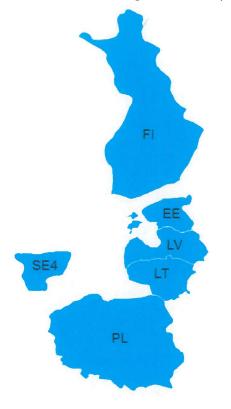


8. Capacity Calculation Region 8: Channel





9. Capacity Calculation Region 9: Baltic (SE4-PL bidding zone border is not part of this CCR)



10. Capacity Calculation Region 10: South-east Europe (SEE)



