

FirstACER Decision on the amendment of the HCZCA methodology: Annex I

<u>Amendment to the</u> Methodology for a harmonised allocation process of cross-zonal capacity for the exchange of balancing capacity or sharing of reserves per timeframe

in accordance with Article 38(3) of Commission Regulation (EU) 2017/2195 of 23 November 2017 establishing a guideline on

electricity balancing

31 July 2024

Purpose:	- methodology draft	☐ for public consultation
	☐ for ACER approval	☐ for final publication
Status:	<mark>□ draft</mark>	<mark>⊠ final</mark>
TSO approval:	☐ for approval	⊠ approved

NRA approval:	⊠ outstanding	□ approved	

All TSOs, taking into account the following:

29 January 2025

Whereas

- (1) This document provides an amendment to the Methodology for a harmonised allocation process of cross-zonal capacity for the exchange of balancing capacity or sharing of reserves per timeframe (hereafter referred to as "'harmonised cross-zonal capacity allocation methodology")methodology') in accordance with Article 38(3) of Commission Regulation (EU) 2017/2195 of 23 November 2017 establishing a guideline on electricity balancing ("(the 'EB Regulation")Regulation') following the ACER decisionDecision No- 11/2023 of 19 July 2023 on the TSOs' proposal for the harmonised cross-zonal capacity allocation methodology. With the approval came a request for amendment of specific parts of the methodology, which must be submitted by 31 July 2024.
- (2) The harmonised cross zonal capacity allocation methodology was approved by ACER on 19 July 2023. With the approval came a request for amendment of specific parts of the methodology, which should be submitted by 31 July 2024. The request for amendment concerned the below governance provisions, a voluntary analysis to the maximum volume assessment per Critical Network Element Contingency (CNEC) and the transition of the Congestion Income Distributions (CID) provisions concerning balancing from CACM to the harmonised cross zonal capacity allocation methodology. Furthermore, the definitions of "interdependency" and "Set of Requirements " were added to the harmonised cross zonal capacity allocation methodology together with a derogation provision on the implementation deadline for already operational TSO (according to EB Regulation Article 41(1)).
- (3) The harmonised cross-zonal capacity allocation methodology foresees that All TSOs jointly develop the set of requirements for the market-based cross-zonal capacity allocation optimisation function (CZCAOF) (software which is to be used only by those TSOs in a balancing capacity cooperation applying the market-based allocation process. Due to the different levels of involvement of TSOs, All TSOs consider it necessary to develop a change request process for future changes on the CZCAOF software which reflects the governance situation accordingly. Therefore, a two-layer change request process is introduced. All TSOs have the possibility to request a change to the software with given reasons. If the change proposed is not in line with the functional ities of the software developed with the initial set of requirements, All TSOs have to approve or discard the proposed change. If an operational change within the initial set of requirements is requested, only the application TSOs have a decision right on the proposed change.
- (4) For the avoidance of doubt: change requests are always considered as change requests concerning the operation of the software. When a change request also affects the functionality, it is to be approved by All TSOs for their final approval. A change in the functionality of the software is expected to result in a change in the operation of the software. In contrast, a change in the operation of the CZCAOF software does not require a change in the functionality of the software. In line with the cost sharing principles set out in the methodology, costs arising from a change request shall be shared among all application TSOs following the sharing keys defined in Article 28.
- (5) All application TSOs per balancing capacity platform have to establish three processes for the operation of such platform: the CZCAOF, the forecast of day ahead energy bids and the validation process of this forecast. To decide on any matter related to

these processes, All TSOs propose to establish a joint decision making body for the balancing capacity platform in which every application TSO of that platform is represented. This decision making body shall decide on matters and questions related to the balancing capacity platform. Any decisions to be taken by the decision making body shall follow the rules defined in the harmonised cross zonal capacity allocation methodology. If new members are to join an existing application, the joint decision making body of the balancing capacity platform shall treat this request in good faith and support the new member to join the platform and the respective decision making body. All TSOs believe that in such a way a non-discriminatory and transparent decision making process is established to consider all interests of affected TSOs.

- (6) For the operation of the beforementioned processes run on a balancing capacity plat form, All TSOs consider that all application TSOs of that platform shall jointly decide on and designate the entities responsible to run these processes. These entities shall be TSOs or companies owned by TSOs except for the forecast validation task which in accordance with the harmonised cross zonal capacity allocation methodology shall be performed by a RCC. In addition, it is the application TSOs freedom to designate the same entity to operate more than one process. Any decision on the designation of an entity has to follow the decision making rules set out in the harmonised cross zonal capacity allocation methodology.
- (7) When two or more TSOs agree on an application of cross border procurement of capacity and together establishes a balancing capacity platform, the application should also come to a common agreement on a single gate closure time (GCT) for the balancing capacity platform. Such decision should follow the provisions added to the amended harmonised cross-zonal capacity allocation methodology in Article-16(9). As the decision of GCT has a big influence in the market, the provision requires the application TSOs to publicly consult the stakeholders at least three (3) months ahead of its implementation and sets the minimum required consultation time for the market, which is at least two (2) weeks. Furthermore, it is specified that the announcement of the decided GCT should be made at least four (4) weeks ahead of taking effect. The announcement shall include also exceptions for instances such as GCT delay or reopening of the bidding window. If such an instance occurs the application TSOs shall publish the information as soon as possible and with a reasonable lead time before the affected MTU.—
- (8) The harmonised cross-zonal capacity allocation methodology allows for two or more TSOs, who wish to do cross border procurement of balancing capacity, to apply for a common market, which is enabled through a common balancing capacity platform utilised by the applications. Such applications might afterwards evolve over time with either more TSOs joining an already established BC platform, or new applications and thereby also new balancing capacity platforms being established. In such cases, a process for the possible evolvement of BC platforms should be in place. Article 16(1)(a) and Article 16(1)(b) describes the ruleset to follow when establishing a balancing capacity platform. The rules are linked to the definition of "*Interdependency*", which is explained further in whereas (9), where possible situations and effects of several balancing capacity platforms is considered. If a situation occurs where applications are forced to use the same balancing capacity platform to choose. If no agreement between the involved TSOs can be found, quality majority voting rules apply.

- (9) In the harmonised cross zonal capacity allocation methodology amendment, a defini tion of the term "Interdependency" has been added in Article 2(g). The definition was not part of the approved version of the harmonised cross zonal capacity allocation methodology but has been added to avoid any possible misunderstandings of Article 16(1)(a) and 16(1)(b). The two articles relate to situations where applications need to use the same platform and the decision on which platform to choose which is a natural consequence of the regional setup that is possible in the harmonised cross-zonal capacity allocation methodology. As several applications within Europe can be live at the same time and TSOs can take part in several applications at the same time, situations where one application affects another application might occur. Such situations might be due to a TSO being in one application for positive aFRR whereas it is in another for positive mFRR. As aFRR and mFRR partially interfere it can happen that the TSO applies substitution of reserves between the two applications. Another situa tion of interdependency of applications could be if two or more applications are part of the same flow based regime. Here, the flow based capacity calculation affects both applications. To manage such situations, applications should join the same BC plat form where it can then be taken into account. The definition added reflect such situations and reads: "Interdependency' means any situation with two or more applications being part of one flow based regime or where one TSO applies substitution of reserves between two or more applications".
- (10) In the harmonised cross-zonal capacity allocation methodology amendment, a definition of the term "Set of Requirements" has been added in Article 2(h). The definition refers to the set of requirements that the CZCAOF software shall satisfy.
- (11) In accordance with the harmonised cross zonal capacity allocation methodology. those applications that are already in operation with a market based application according to EB Regulation Article 41(1) before the development of the market based CZCAOF software, have an implementation deadline no later than twelve (12) months after the finalisation of the common optimisation function software (latest 31 July 2025). This deadline concerns the Nordic and Baltics TSOs and means that the two regions should be compliant with the harmonised cross zonal capacity allocation methodology no later than 31 July 2026. The Baltic and Nordic TSOs have analysed and examined this deadline further and finds that it will be extremely difficult to achieve. The implementation of the common optimisation function software and compliancy with the harmonised cross zonal capacity allocation methodology in general, is very dependent on both the development timeline of the software itself but also the implementation task locally. Both Baltic and Nordic TSOs see a high level of complexity related to both tasks and fear that a situation of in compliance for already op erational markets could be a potential result. Therefore, in Article 27(5) of the harmonised cross zonal capacity allocation methodology a maximum 24 month derogation has been added, which can be granted by the respective regulatory authorities if deemed necessary. This derogation should be justified towards the respective regula tory authorities according to Article 27(5)(a), (b), (c) and (d). The derogation option should be understood as a maximum 2 year prolonging of the implementation dead line of 31 July 2026, meaning that Baltic and Nordic TSOs potential derogation period could run until maximum 31 July 2028.
- (12) In the decision of the harmonised cross zonal capacity allocation methodology ACER invited TSOs to investigate the possibilities to allow for different maximum

limits for the exchange of balancing capacity or sharing of reserves per CNEC in a flow based region. All TSOs performed a study showing the feasibility of different limits per CNEC, which are the result of different intended limits per bidding zone border. The study can be found in the explanatory document. As the most suitable process to define the limits per CNEC might differ between different applications due to geographic and local network characteristics, no harmonized process to define the limits per CNEC has been defined, but guidelines for developing this process have been set. These guidelines guarantee that concerns of affected TSOs and Regulatory Authorities are respected in the process.

- (13) During the amendment of the congestion income distribution (CID) methodology (methodology of Article 73 of the CACM Regulation) further details about the congestion income requirements in the harmonised cross-zonal capacity allocation methodology were defined. Therefore, formulas have been provided on how to compare the congestion income calculated from exchange of balancing capacity or sharing of reserves with the congestion income which could have been generated for the amount of cross-zonal capacity allocated for the exchange of balancing capacity or sharing of reserves if allocated to the single day-ahead coupling instead. If the comparison found a reduced congestion income due to exchange of balancing capacity or sharing of reserves, a compensation must be paid by the application TSOs. In Article 17(3) a formula has been introduced to define the distribution of the compensation calculated previously to each border of the CCR. Furthermore, a provision has been added to Article 17(2) that a CCR can decide to omit the comparison and the following compensation process. This possibility was added especially for CCRs, where all bidding zones in the CCR are part of a balancing capacity cooperation.
- (2) The following elements of the harmonised cross-zonal capacity allocation methodology have been amended:
 - a) definitions;
 - b) governance for change requests for the cross-zonal capacity allocation optimisation function software;
 - c) governance and decision-making process of the balancing capacity platforms;
 - d) process and governance framework for the increase of maximum limits;
 - e) sharing of congestion income resulting from exchanging balancing capacity or sharing reserves;
 - f) implementation deadline for the market-based cross-zonal capacity allocation optimisation function software and for the application of the harmonised methodology; and
 - g) general improvements to enhance clarity and/or consistency.
- (14)(3) For the purposes of this amendment to the harmonised cross-zonal capacity allocation methodology, the terms used have the meaning given to them in Article 2 of the Electricity Regulation, Article 2 of the EB Regulation, Article 2 of the Transparency Regulation, Article 2 of the CACM Regulation, Article 3 of the System Operation (SO) Regulation and Article 2 of the harmonised cross-zonal capacity allocation methodology.
- (15) Article 38(3) of the EB Regulation requires All TSOs to develop the harmonised

cross zonal capacity allocation methodology. The TSOs who are responsible for the development of the proposal and for its submission to ACER are the following: APG -Austrian Power Grid AG, VÜEN Vorarlberger Übertragungsnetz GmbH, Elia Elia Transmission Belgium S.A., ESO Electroenergien Sistemen Operator EAD, HOPS Croatian Transmission System Operator Ltd, ČEPS ČEPS, a.s., Energinet Energinet, Elering Elering AS, Fingrid Fingrid OyJ, Kraftnät Åland Ab, RTE Réseau de Transport d'Electricité, S.A. Amprion Amprion GmbH, TransnetBW TransnetBW GmbH. TenneT GER TenneT TSO GmbH. 50Hertz 50Hertz Trans mission GmbH, IPTO Independent Power Transmission Operator S.A., MAVIR ZRt. MAVIR Magyar Villamosenergia ipari Átviteli Rendszerirányító Zártkörűen Működő Részvénytársaság ZRt., EirGrid EirGrid plc, Terna Terna SpA, Augstspriegumatikls - AS Augstspriegumatikls, LITGRID - LITGRID AB, CREOS Luxembourg CREOS Luxembourg S.A., TenneT TSO TenneT TSO B.V., PSE PSE S.A., REN Rede Eléctrica Nacional, S.A., Transelectrica C.N. Transelectrica S.A., SEPS Slovenská elektrizačná prenosovú sústava, a.s., ELES ELES, d.o.o., REE Red Eléctrica de España S.A.U, Svenska Kraftnät Affärsverket Svenska Kraftnät, SONI System Operator for Northern Ireland Ltd.

SUBMIT THE FOLLOWING PROPOSAL FOR AMENDMENT OF THE HARMONISED CROSS ZONAL CAPACITY ALLOCATION METHODOLOGY TO ACER

(4) This amendment to the harmonised cross-zonal capacity allocation methodology does not have any negative impact on the fulfilment of the objectives of the EB Regulation as assessed in ACER Decision No 11/2023.

Article 1

Interdependency and Set of Requirements definitions Definitions

Article 2 – Definitions – of the harmonised cross-zonal capacity allocation methodology shall be amended as follows:

a) <u>A new definition gThe following definitions</u> shall be included and be read accordingly:

«'Interdependency' means any situation with two or more applications being part of one flow based regime or where one TSO applies substitution of reserves between two or more applications. »

- a) A new definition h shall be included and be read accordingly:
 - a. «""Additional aggregated flow' means additional aggregated flow as defined in the methodology developed pursuant to Article 73(1) of the CACM Regulation.
 - b. 'Advanced hybrid coupling' means advanced hybrid coupling as defined in the methodology developed pursuant to Article 73(1) of the CACM Regulation.
 - c. 'Allocation constraint' means allocation constraint as defined in the methodology developed pursuant to Article 73(1) of the CACM Regulation.
 - d. 'Application TSO' means a TSO which participates in an application.
 - e. 'Expert group' means a body composed of nominated experts of all application TSOs of a balancing capacity platform and established by the steering committee.

<u>'Set of Requirements' requirements'</u> means the requirements that the crosszonal capacity allocation optimisation function software (Article 2 (c))-shall satisfy.

Article 2

Linking of SBCP bids and sensitivity of TSO demand

Article 6 Linking of SBCP bids and sensitivity of TSO demand of the harmonised eross zonal capacity allocation methodology shall be amended as follows:

a) The paragraph 3 shall be amended and be read accordingly:

«Each TSO may link its TSO demand across the different SBCPs for the purpose of substitution of reserves for volume shortage and cost minimisation by applying this methodology in accordance with Article 6(2)(b) and (c). »

Article 3 Specific requirements for market-based allocation

Article 14 Specific requirements for market based allocation — of the harmonised crosszonal capacity allocation methodology shall be amended as follows:

a) The paragraph 1 shall be amended and be read accordingly:

«The single gate closure time per balancing capacity platform in accordance with Article 4(4) shall be agreed on by all application TSOs per each balancing capacity platform in accordance with the decision making process pursuant to Article 16(9). When deciding on a single gate closure time per balancing capacity platform, the relevant application TSOs shall consider the timings of the capacity calculation processes of the relevant CCRs for a timely provisions of the data pursuant to paragraph (4) and Article 5(2)(a) and (b). »

b) The paragraph 3 shall be amended and be read accordingly:

a.<u>f.</u> «For the market based allocation process a market based cross zonal capacity allocation optimisation function software shall be used. The market based cross zonal capacity allocation optimisation function software shall be developed and which have been approved by all market based application TSOs in accordance with Article 27(3) and installed on a balancing capacity platform to perform the task in accordance with Article -16(2)(a). The market based cross zonal capacity allocation optimisation function software shall be subject to the governance of all market based application-TSOs in accordance with Article 15 - (2)(b) and Article 27(1)(c).

a) The paragraph 4 shall be amended and be read accordingly:

- g. <u>«If 'Shadow price' means shadow price as defined in the RCC carrying out the</u> coordinated capacity calculation is not also designated to perform the market based cross zonal capacity allocation methodology developed pursuant to Article 16(3), the RCC carrying out the coordinated capacity calculation for the relevant CCR in accordance with the capacity calculation methodology pursuant to Article 2073(1) of the CACM Regulation-shall provide; in the absence of such definition, it means the dual price of a critical network element with contingency (CNEC) or allocation constraint representing the increase in the economic surplus if a constraint is increased by one (1) MW.
- h. 'Steering committee' means the decision-making body of the balancing capacity platform, consisting of nominated representatives from all application TSOs of that balancing capacity platform.
- i. 'Virtual hub' means virtual hub as defined in the pre-final day ahead capacity calculation results to methodology developed pursuant to Article 73(1) of the entity operatingCACM Regulation."

b) The following definitions shall be amended and be read accordingly:

- a. <u>"Application' means</u> the market based application by two or more TSOs of a cross-zonal capacity allocation optimisation function software pursuant process for the exchange of balancing capacity or sharing of reserves of at least one SPBC based on an approved proposal for that application according to Article 16(3) by no later than the gate closure time in accordance with paragraph (1). <u>*38(1) of the EB Regulation.</u>
- c) <u>The paragraph 5 The list of definitions shall be sorted alphabetically.</u>

Article 2

<u>General principles on allocating cross-zonal capacity for the exchange of balancing</u> <u>capacity or sharing of reserves</u>

Article 4 – General principles on allocating cross-zonal capacity for the exchange of balancing capacity or sharing of reserves – shall be amended as follows:

a) Paragraph 4 shall be amended and be read accordingly:-

«All RCCs carrying out capacity calculation in the affected CCRs"TSOs applying this methodology shall provide a confirmation once they received the data pursuant define one single gate closure time for BSPs submitting bids of SPBC to Article 5(3)(b). their respective connecting TSOs. The results pursuant to Article 5(2) by the market based single gate closure time shall apply for each operation of a cross-zonal capacity allocation optimisation function software shall only be considered final once all RCCs carrying out capacity calculation in the affected CCRs provided such confirmation. Once these confirmations are provided, the entity operating the market based per balancing capacity platform and shall take into account time zone differences, such that one single gate closure time applies to all BSPs connected to a TSO applying this methodology."

Article 3

Requirements for the cross-zonal capacity allocation optimisation function

<u>Article 5 – Requirements for the</u> cross-zonal capacity allocation optimisation function software in accordance with Article 16(3) shall send the results to the other entities in accordance with Article 5(4). If the RCC carrying out the coordinated capacity calculation_shall be amended as follows:

a) Paragraph 2 shall be amended and be read accordingly:

<u>"When this methodology</u> is also designated to perform the market based eross zonal capacity allocation pursuant to Article 16(3), such confirmation process is not necessary. »

Article-4

<u>Change request for the market based applied, a</u> cross-zonal capacity allocation optimisation function <u>softwareshall produce at least the following results per market time</u> <u>unit:</u>

- a. allocated volumes of cross-zonal capacity for the exchange of balancing capacity or sharing of reserves of each SPBC per bidding zone border in each direction;
- b. allocated volumes of cross-zonal capacity for the exchange of energy in SDAC;
- c. marginal clearing prices and volumes of each SPBC per bidding zone; and
- d. activation status of all SPBC bids."
- b) Paragraph 3 shall be amended and be read accordingly:

"In case of cross-zonal capacity from a capacity calculation region (CCR) where the flowbased approach is applied, the relevant cross-zonal capacity allocation optimisation function shall provide the results pursuant to point 2(a) also in the form of flow-based parameters."

<u>Article 4</u> <u>Linking of SPBC bids and sensitivity of TSO demand</u>

Article 6 – Linking of SBCP bids and sensitivity of TSO demand – shall be amended as follows:

a) Paragraph 4 shall be amended and be read accordingly:

"BSPs may submit cross-product linked bids of SPBC in case a TSO is involved in an application with two or more SPBC. In those cases, the capacity procurement optimisation functions shall match the cross-product linked bids under the same application such that the bids of SPBC are selected where they minimise the overall socioeconomic procurement costs pursuant to Article 58(3)(a) of the EB Regulation."

<u>Article 5</u> <u>Governance for all market-based application TSOs</u>

Article 15 – Governance for all market-based application TSOs – of the harmonised cross-zonal capacity allocation methodology shall be amended as follows:

a) The paragraphParagraph 2 shall be amended and be read accordingly:-

<u>"</u>To ensure an effective change request process for the market-based cross-zonal capacity allocation optimisation function software, the following change request rules shall be implemented:

a. <u>All change Any TSO may submit a change request to the cross-zonal capacity</u> <u>allocation optimisation function software.</u>

- a.b. Change requests to the cross-zonal capacity allocation optimisation function software that concern provisions as defined<u>are not</u> in <u>line with</u> the existing set of requirements and approved by All TSOs, shall be approved by <u>Allsubject to the approval of all</u> TSOs.
- b.c. All changeChange requests to the cross-zonal capacity allocation optimisation function software that concern the operationsoperation of the balancing capacity platforms, and are in line with the existing set of requirements shall be approved subject to the approval by all application TSOs. of all balancing capacity platforms."

b) A new paragraph 3 shall be included and be read accordingly:

a. <u>"</u>Any TSO can submit a approved change request to the cross zonal capacity allocation optimisation function software.

By default, any change request submitted <u>under point 2(b) which</u> is considered to be operational as defined in paragraph (2)(b) as long as it is in line with the existing set of requirements. If a change request contradicts with the existing set of requirements, it is considered as change request <u>not</u> in accordance with paragraph $\frac{(2)(a)}{(a)}$. this methodology shall be pursued via an amendment of this methodology and be subject to regulatory approval, in accordance with Article 6(3) of the EB Regulation."

c) A new paragraph 4 shall be included and be read accordingly:

"Costs <u>pursuant to Article 15(2)incurred for the implementation of change requests</u> shall be shared among the <u>countriesMember States</u> of all application TSOs in accordance with the principles set out in Article 28(5)."

Article <u>56</u> Governance of balancing capacity platforms

Article 16 Governance of and decision-making process of the balancing capacity platforms-

<u>Article 16 – Governance and decision-making process</u> of the <u>harmonised cross zonal</u><u>balancing</u> capacity <u>allocation methodologyplatforms</u> – shall be amended as follows:

a) The paragraphParagraph 1 shall be amended and be read accordingly:-

<u>«"Two or more</u> TSOs, which want to jointly allocate cross-zonal capacity <u>via the marketbased allocation process</u> to support the cross-border procurement of balancing capacity for one or more <u>SBCPs and applying SPBC shall jointly establish an application or join</u> an existing one."

b) Paragraph 2 shall be amended and be read accordingly:

"Two or more applications may continue to operate independently from each other as long as, for each application, the procurement of balancing capacity for one or more SPBC remains within the geographic scope of the same application. In case any application TSO or a TSO with the prospect of submitting an application proposal pursuant to Article 38(1)(b) of the EB Regulation intends to exchange balancing capacity or share reserves with a bidding zone of a market based allocation shall jointly establish or join a balancing capacity platform.different application, the respective TSOs shall submit a joint application proposal in accordance with Article 38(1)(b) of the EB Regulation to the competent regulatory authorities for approval. Among others, the application proposal shall indicate which balancing capacity platform is to be used by the concerned application TSOs."

- a. In case there are interdependencies between different applications in accordance with Article 2(g), these applications shall use the same balancing capacity platform pursuant to paragraph (1).
- b. All TSOs of the interdependent applications pursuant to paragraph (1)(a) shall come to a unanimous agreement on a common balancing capacity platform to be used by all interdependent applications jointly. Where unanimity cannot be reached, qualified majority voting applies following the principles set out in paragraph (8). »
- a) The paragraph 3 shall be amended and be read accordingly:

«All application TSOs per each balancing capacity platform shall designate one TSO or a company owned by TSOs to perform the CZCAOF pursuant to paragraph (2)(a) and a TSO or company owned by TSOs to perform the forecasting process of day ahead energy bids for the relevant bidding zones pursuant to paragraph (2)(b). All application TSOs per each balancing capacity platform may decide to designate the same entity for the different processes pursuant to paragraph (2). » b) The paragraph 4 shall be amended and be read accordingly:

«All application TSOs per each balancing capacity platform shall designate one RCC for the forecast validation process under paragraph (2)(c).»

a) A new paragraph 5 shall be included and be read accordingly:

«The entities designated to perform the processes shall be acting for the benefit and on behalf of all application TSOs of each balancing capacity platform. They shall fulfil their tasks in accordance with the objectives of the EB Regulation, this methodology, the contractual framework of the respective applications, the decision making body's decisions and the operational procedures. »

b)c)The paragraph 6Paragraph 3 shall be amended and be read accordingly:

«When designating an entity pursuant to paragraphs (3) and (4), TSOs shall consider impacts on the efficiency of operation of the functions under paragraph (2) concerning the required exchanges of data mentioned in this methodology. The requirements in this methodology for the exchange of data between processes do not apply, if these processes, between which the data needs to be exchanged, are operated by the same entity. »

b)a)A new paragraph 7 shall be included and be read accordingly:

«^CIn order to make effective and non-discriminatory decisions, each balancing capacity platform shall establish a <u>steering committee</u>, which constitutes the decision-making body for all TSOs being part of at least one application of this platform. Each application TSO-of the balancing capacity platform. The steering committee shall-appoint one regular representative. The decision-making body decides:

- b. Organise the management of the implementation and the operation of the balancing capacity platform. This shall include the establishment and amendment of operational procedures.
- c. Take binding decisions according to the decision-making principles laid down in this methodology.
- d. Monitor the implementation of its decisions."
- d) Paragraph 4 shall be amended and be read accordingly:

"The steering committee of a balancing capacity platform may establish an expert group. The expert group shall be the expert body of the balancing capacity platform, shall prepare background materials for the steering committee and shall evaluate and propose concepts in relation to the implementation of the balancing capacity platform."

e) Paragraph 5 shall be amended and be read accordingly:

"At the latest when a new application proposal in accordance with Article 38(1)(b) of the EB Regulation is approved, all TSOs of the concerned application shall either establish a steering committee or, in case at least another application runs on the same balancing

capacity platform, be integrated into the existing steering committee of the concerned balancing capacity platform."

f) Paragraph 6 shall be amended and be read accordingly:

"Each application TSO shall appoint at least one regular representative to the steering committee and, where it is established, at least one regular representative to the expert group of the balancing capacity platform."

g) Paragraph 7 shall be amended and be read accordingly:

"Any TSO with the prospect of joining a balancing capacity platform may participate in the steering committee and, where it is established, in the expert group as observer."

h) Paragraph 8 shall be amended and be read accordingly:

"All application TSOs of a balancing capacity platform shall establish the following processes:

- a. calculation of the results pursuant to Article 5(2) by using the market-based crosszonal capacity allocation optimisation function software;
- b. the forecast of day-ahead energy bids for all relevant bidding zones and MTUs in accordance with Article 18(5); and
- c. the forecast validation process in accordance with Article 19."
- i) Paragraph 9 shall be amended and be read accordingly:

"All application TSOs of a balancing capacity platform shall designate:

- a. a TSO, an RCC or any other company owned by TSOs to perform the cross-zonal capacity allocation optimisation function pursuant to point 8(a);
- b. a TSO, an RCC or any other company owned by TSOs to perform the forecasting process of day-ahead energy bids for the relevant bidding zones pursuant to point 8(b); and
- c. an RCC for the forecast validation process under point 8(c)."
- e_{j} A new paragraph $\frac{810}{10}$ shall be included and be read accordingly:

<u>«"All application TSOs of a balancing capacity platform may decide to designate the same entity for some or all the different processes pursuant to paragraph 8. With regard to the forecast validation process under point 8(c), this entity shall be an RCC."</u>

k) A new paragraph 11 shall be included and be read accordingly:

"For the avoidance of doubt, the designated entities may contract third parties for executing supporting tasks, subject to the agreement of the steering committee."

1) A new paragraph 12 shall be included and be read accordingly:

"The entities designated to perform the processes shall be acting for the benefit and on behalf of all application TSOs of each balancing capacity platform. They shall fulfil their tasks in accordance with the objectives of the EB Regulation, this methodology, the contractual framework of the respective applications, the steering committee's decisions and the operational procedures."

m) A new paragraph 13 shall be included and be read accordingly:

"When designating an entity pursuant to paragraphs 9 and 10, TSOs shall consider impacts on the efficiency of operation of the functions under paragraph 8 concerning the required exchanges of data mentioned in this methodology. The requirements in this methodology for the exchange of data between processes do not apply, if these processes, between which the data needs to be exchanged, are operated by the same entity."

n) A new paragraph 14 shall be included and be read accordingly:

"Decisions related to the governance and operation of a balancing capacity platform shall be made unanimously by <u>allthe</u> application TSOs of the concerned <u>balancing capacity</u> platform via the <u>joint decision making body</u>. Where steering committee. For balancing <u>capacity platforms composed of more than five Member States</u>, where unanimity cannot be reached, <u>decisions shall be based on qualified majority voting applies which shall</u> require a. The qualified majority of: shall be determined by applying the majority rates and conditions defined in Article 4(4) of the EB Regulation to the application TSOs."

a. Application TSOs representing at least 55 % of the countries being part of all affected applications; and

b. Application TSOs representing countries comprising at least 65% of the population of countries of all affected applications.

Decisions of a balancing capacity platform composed of five or less countries shall be decided based on unanimity. »

 $(4)_{0}$ A new paragraph 9_{15} shall be included and be read accordingly:

e)p)TheA new paragraph 1016 shall be amended included and be read accordingly:

«<u>"</u>TSOs proposing an application of the harmonised market-based allocation process in accordance with Article 38(1)(b) <u>of the EB</u> Regulation shall consider for the relevant implementation timeline of such proposal the time needed to get all processes pursuant to paragraph (<u>2)8</u> operational. If <u>the submission of such application needsproposal triggers</u> the need to joinenlarge the geographic scope of an existing balancing capacity <u>platformapplication</u> in accordance with paragraph (<u>1),2</u>, the proposing TSOs shall contact the TSOs and entities of the relevant balancing capacity platform<u>application</u>(s), inform them about the expected amendments needed for integrating the proposed application, and all concerned parties shall jointly assess the time needed for the implementation of such proposal."

Article 6

Process₇

<u>The process</u> to define the maximum volume of allocated cross-zonal capacity <u>for</u> <u>the exchange of balancing capacity or sharing of reserves for market-based</u> <u>allocation</u>

Article 17 – The process to define the maximum volume of allocated cross-zonal capacity for the exchange of balancing capacity or sharing of reserves for market-based allocation—of the harmonised cross zonal capacity allocation methodology – shall be amended as follows:

a) The paragraphParagraph 1(b) shall be amended and be read accordingly:-

<u>« to</u>"In accordance with Article 41(1)(d) of the EB Regulation, the process to define the maximum volume of allocated cross-zonal capacity for the exchange of balancing capacity or sharing of reserves for the market-based allocation shall be as follows:

- a. The maximum volume of cross-zonal capacity allocated to the exchange of balancing capacity or sharing of reserves shall be ten (10) percent of cross-zonal capacity calculated for the day-ahead market timeframe in accordance with the capacity calculation methodologies developed pursuant to Article 20(2) of the CACM Regulation.
- b. To resolve a situation where the limit for the maximum volume of cross-zonal capacity allocated forto the exchange of balancing capacity or sharing of reserves in a market-based allocation in accordance with paragraph 1(point a) is not sufficient to satisfy TSO demand in a bidding zone, the percentage limit pursuant to paragraph 1(point a) for the relevant day-ahead market time unitsMTUs may be increased based on the exemption rule pursuant to Article 41(2) of the EB Regulation. The limit for the maximum volume of cross-zonal capacity allocated forto the exchange of balancing capacity or sharing of reserves for market-based allocation shall only be increased to the point until the TSO demand is satisfied and up to a maximum up to of twenty (20%) percent of the calculated cross-zonal capacity calculated for the day-ahead market timeframe. If this maximum limit is still not sufficient to satisfy a TSO demand, a fallback procedure pursuant to Article 4-(9) shall be initiated.
- c. If increases pursuant to point b occur due to a structural local shortage of BSPs' bids for a SPBC in a bidding zone, the limit for the maximum volume of crosszonal capacity allocated to the exchange of balancing capacity in accordance with point a may be increased by two (2) percentage points. Such increase of the default limit shall be reported to stakeholders and all regulatory authorities at least two weeks in advance of application. This process can be performed repeatedly until the maximum limit of twenty (20) percent is reached. The applied default limits shall be published in accordance with Article 26(7)(e)."
- b) Paragraph 2 shall be amended and be read accordingly:

"All TSOs of a CCR may submit a proposal to the relevant regulatory authorities for setting a limit other than the one defined under point 1(a), 1(b) and 1(c) in accordance with Article 39(6) of the EB Regulation. For CCRs where the coordinated net transmission capacity approach is applied, each bidding zone border in each direction shall only apply one common limit for all SPBC in accordance with paragraph 1. For CCRs where the flow-based approach is applied, all TSOs of the CCR may develop a process to derive a different limit per CNEC starting from intended limits per bidding zone border. Any different limit shall be justified with respect to the objectives set out in Article 3 of the EB Regulation and Article 3 of the Electricity Regulation and, in particular, ensure effective competition, non-discrimination and transparency in balancing capacity markets. This proposal shall include an assessment of the forecast efficiency in accordance with Article 39(6) of the EB Regulation and Article 18(8)."

c) Paragraph 3 shall be amended and be read accordingly:

"TSOs shall publish and notify all the regulatory authorities and neighbouring TSOs in case of CCRs where NTC the coordinated net transmission capacity approach is applied and all TSOs inof the CCR-in-case of CCRs where the flow-based approach is applied about each increase of the limit for the maximum volume of cross-zonal capacity allocated forto the exchange of balancing capacity or sharing of reserves for market-based allocation above the threshold limits set in paragraph-point 1(a). This notification shall include at least the final volume percentage of cross-zonal capacity allocated forto the exchange of balancing capacity or sharing of reserves for market-based allocation and the reasons for the shortage of balancing capacity bids in the importing bidding zone. The annual impact of such increases shall be reported pursuant to Article 26-(7)-((e);*)."

a) The paragraph 2 shall be amended and be read accordingly:

«For CCRs where the coordinated net transmission capacity approach is applied each bidding zone border in each direction shall only apply one common limit in accordance with paragraph (1) for all SBCPs. »

b)d) A new paragraph 34 shall be included and be read accordingly:

«For CCRs where the flow based approach is applied each Critical Network Element Contingency (CNEC) in each direction shall apply one common limit in accordance with paragraph (1) for all SBCPs. The TSOs of the corresponding application may develop a process to derive the limit per CNEC from intended limits per bidding zone border:

- a. The process to define the maximum limits per CNEC shall consider the impact of the limitation on all bidding zone borders in the CCR. The aim of the process is to efficiently realize different intended limits per bidding zone border. If contradicting intended limits occur due to a close interconnection of borders in the flow based region, application TSOs shall aim to reach a unanimous decision on the implementation of the limits. If no unanimous decision can be reached, qualified majority voting applies.
- b. Before submitting an application proposal according to 38(1) EB regulation, application TSOs shall consult with all TSOs in the CCR on the process to define the maximum limit per CNEC and the intended limits per bidding zone border.
- c. TSOs may increase the limit beyond 10% according to 17(1)(d), if they expect an unsatisfied TSO BC demand in a bidding zone or if their application has established a reliable and robust forecasting of the day ahead market and significant welfare can be gained by an increased limit.
- d. If an application sets the intended limit for one or more borders to more than 10% according to paragraph 17(1)d, TSOs of the concerned CCR have the right to veto against the decision based on market concerns. The veto shall be justified by showing the expected negative impact on the (day ahead) market to application TSOs.

e. the final process to define the maximum limits and the intended limits per bidding zone border shall be part of the application proposal according to EB regulation Article 38(1). »

c)a)A new paragraph 4 shall be included and be read accordingly:

<u>"</u>The exchange of balancing capacity or sharing of reserves shall, in addition to the limit defined in accordance with paragraph 1, be limited by the rules for the exchange and sharing of reserves in accordance with Title 8, Chapter 1 and 2 of the SO Regulation through the:

- a. maximum procurement volume of balancing capacity per direction for a specific bidding zone, or a set of bidding zones due to operational security requirements pursuant to Article 165(3)(g) of the SO Regulation;
- b. minimum procurement volume of balancing capacity per direction for a specific bidding zone, or a set of bidding zones defined in accordance with the dimensioning process pursuant to Article 157(2)(g) of the SO Regulation...»."

Article 78

Determination of the forecasted market value of cross-zonal capacity for the exchange of energy for market-based allocation

Article 18 – Determination of the forecasted market value of cross-zonal capacity for the exchange of energy for market-based allocation — of the harmonised cross-zonal capacity allocation methodology _ shall be amended as follows:

a) The paragraph 6 Paragraph 8 shall be amended and be read accordingly:-

«Each entity determining forecasted day ahead energy bids pursuant to Article 16(3) shall apply a forecast method for forecasting day ahead energy bids which is agreed upon the application TSOs of the respective balancing capacity platform in accordance with Article 16 (8) and shall aim for determining the forecasted day ahead energy bids for each bidding zone and each market time unit most accurately. »

a) -- "The paragraph 7 shall be amended and be read accordingly:-

«Each entity determining forecasted day ahead energy bids pursuant to Article 16(3) shall consider the forecast error pursuant to Article 19(1). By no more than one year of operation of the harmonised market-based allocation process with at least two applications, All TSOs shall submit an amendment to this methodology in accordance with Article 27(4) to include provisions for a harmonised consideration of the forecast errors to protect the SDAC against over allocation of cross zonal capacity due to incorrect forecast. All TSOs shall base their amendments on an impact assessment considering the expected forecast accuracy and different measures to mitigate the negative impact on SDAC from inaccurate forecasts. More specifically, TSOs shall at least assess the impact of mark-up values or factors on the forecasted market value of cross-zonal capacity for the exchange of energy versus the impact of reducing the related impact on the SDAC shall be taken into account when considering a <u>limit for the maximum volume limit for the allocation of cross zonal capacity for the exchange of balancing capacity.</u>

Article 8 Forecast validation process

Article 19 Forecast validation process of the harmonised cross zonal capacity allocation methodology shall be amended as follows:

b) The paragraph 1 shall be amended and be read accordingly:

«The RCC designated in accordance with Article 16(4) shall carry out forecast validation to monitor the efficiency of determining the forecasted market value of cross zonal capacity for the exchange of energy. Such forecast validation shall include at least:

a. the determination of forecast errors; and

b. analysis of the method for forecasting day ahead energy bids and resulting recommendation for eventual improvements. »

c) The paragraph 2 shall be amended and be read accordingly:

«The RCC carrying out the forecast validation shall provide the results of the validation process pursuant to paragraph (1) to the application TSOs of the respective balancing capacity platform, to all TSOs of the involved CCR(s) and, if the RCC performing forecast validation is not also designated to perform forecasting of day ahead energy bids pursuant to Article 16 (3) to the entity performing this forecasting of dayahead energy bids. »

d) The paragraph 6 shall be amended and be read accordingly:

« For the calculation of forecast error two, the RCC carrying out the forecast validation shall compare per day-ahead market-time unit the amount of cross zonal capacity for the exchange of balancing capacity or sharing of reserves of allocated with the market based allocation process with the optimal allocation based on actual day ahead energy bids from the relevant day instead of forecasted bids. If the market based allocation resulted in higher allocation of cross-zonal capacity for the exchange of balancing capacity or sharing of reserves than what would have been allocated with actual day ahead energy bids, the difference shall be used for forecast error two. For the determination of forecast error two, the volume of this over allocated cross zonal capacity for the exchange of balancing capacity or sharing of reserves shall be weighted with the welfare impact pursuant to paragraph (4). The validation period considered for such weighting factor shall be specified by all application TSOs of the relevant balancing capacity platform in accordance with Article 16(8). »

e) The paragraph 7 shall be amended and be read accordingly:

«If the RCC performing forecast validation is not also designated to perform the market-based cross-zonal capacity allocation pursuant to Article-16(3), all application TSOs of a balancing capacity platform shall provide the RCC with the data pursuant to Article 21(2)(b) and (c) and Article 21(3) and other data necessary to carry-out forecast validation pursuant to paragraph (1)(a). »

f) The paragraph 8 shall be amended and be read accordingly:

«If the RCC performing forecast validation is not also designated to perform the market based cross zonal capacity allocation pursuant to Artiele 16(3), the entity operating the cross zonal capacity allocation pursuant to Article 16(3) shall provide the RCC access to the market based cross zonal capacity allocation optimisation function software and shall submit to the RCC the results pursuant to Article 5(2)(a) and (b) to carry out forecast validation pursuant to paragraph (1)(a). »

g) The paragraph 9 shall be amended and be read accordingly:

«If the RCC performing forecast validation is not also designated to perform forecasting of day ahead energy bids pursuant to Article 16(3), the entity determining the forecasted day ahead energy bids shall provide the RCC with the data pursuant to Article 21(2)(a), relevant details related to application the forecast method defined in accordance with Article 18(6) and other data necessary to carry out forecast validation pursuant to paragraph (1)(b). »

Article 9

Determination of the allocated volume of cross-zonal capacity for the exchange of balancing capacity or sharing of reserves for market-based allocation

Article 21 Determination of the allocated volume of cross-zonal capacity for the exchange of balancing capacity or sharing of reserves for market-based allocation of the harmonised cross zonal capacity allocation methodology shall be amended as follows: pursuant to Article 17(1)(d). For the consideration of such limit, the relevant TSOs shall include in their submission an impact assessment of the proposed application on the SDAC including an assessment of the expected forecast accuracy. The application of harmonised rules for the consideration of the forecast error in accordance with paragraph (7) and resulting mitigating effects on the impact on the SDAC shall also be taken into account when considering such limit."

a) The paragraph 3 shall be amended and be read accordingly:

«The constraints for market based cross zonal capacity allocation by the market based cross zonal capacity allocation optimisation function software are:-

- a. the maximum volume of allocated cross zonal capacity for the exchange of balancing capacity or sharing of reserves defined pursuant to Article 17 (1); and
- b. the minimum and maximum procurement volume of balancing

capacity defined pursuant to Article 17 (4); and links between bids for different SPCP in accordance u

e. links between bids for different SBCP in accordance with Article 6 (4), if any. »

Article 10

Congestion income distribution for the balancing timeframe-

Article 9

Sharing of congestion income from cross-zonal capacity

Article 24 – Sharing of congestion income from cross-zonal capacity — of the harmonised crosszonal capacity allocation methodology — shall be amended as follows:

a) The paragraph 1 shall be amended and be read accordingly:

«The congestion income coming from any application using an allocation process as defined in this methodology will be considered as dayahead congestion income and as such shall be shared in accordance with the methodology of Article 73 of the CACM Regulation and in accordance with Article 40(3) and Article 41(4) of the EB Regulation.»

d)a)A new paragraphParagraph 2 shall be included amended and be read accordingly:-

«<u>"</u>On a monthly basis, TSOs of an application applying the market-based allocation <u>process</u> in accordance with Article-<u>38(1)(b)</u> of the EB Regulation, or the entity to whom the task is delegated, shall compare the monthly congestion income calculated in accordance with paragraph (1) with the congestion income which could have been generated for the amount of cross-zonal capacity allocated <u>forto</u> the exchange of balancing capacity or sharing of reserves if allocated to <u>the single day ahead</u> <u>couplingSDAC</u> instead <u>(CI'_{CCR,T,m})</u>, as calculated <u>withaccording to</u> the <u>belowfollowing</u> formulas:

a. For <u>cNTC-CCRs</u> <u>Cl'_{CCR,T}</u> is calculated according to <u>applying</u> the formula coordinated net transmission capacity approach:

CI+ CCR,F_

$$CI'_{CCR,T_m} = adj_{CCR,T} \times \sum_{t \in T, b \in B_{CCR}} S_{b,t}^{BC} \times \frac{max(0, MS_{b,t})}{max(0, MS_{b,t})}$$

b. For FB-CCRs CI'_{CCR,F} is calculated according to applying the formula flowbased approach:

$$CI'_{CCR,T_m} = adj_{CCR,T} \times \sum_{t \in T, o \in CNEC_{CCR}} \mu_{o,t}^{CNEC} \times BEC_{o,t}$$

Where:

Where:

T is the set of MTUs in a given month.

m corresponds to a given month.

 B_{CCR} is the set of directed <u>bidding zone</u> borders in a CCR (i.e. this set includes both borders A-B and B-A).

CNEC_{CCR} is the set of CNECs in a given CCR.

 $S_{b,t}{}^{BC}$ is the cross-zonal capacity reserved by allocation for allocated to the exchange of balancing capacity or sharing of reserves on directed <u>bidding zone</u> border b in MTU t.

MS_bMS_{b,t} isis the market spread for <u>day-ahead</u> energy on directed <u>bidding zone</u> border b in MTU t (in the case of <u>AHC/Allocation Constraints</u>, i.e. the price difference between the two bidding zones sharing border b (in case of advanced hybrid coupling or allocation constraints, the market spread is the price difference between the <u>Virtual Bidding Zones</u>)virtual hubs).

 $\mu_{o,t}^{CNEC}$ is the <u>Shadow Priceshadow price</u> of CNEC o in MTU t.

 $\frac{\text{BEC}_{o,t}}{\text{is the capacity reserved on CNEC } o \text{ in MTU t by allocation of the BEC_{o,t} is the cross-zonal capacity for allocated to the exchange of balancing capacity or sharing of reserves on CNEC o in MTU t.$

adj_{CCR,T}adj_{CCR,T} is the adjustment factor which is used to adjust the compensation amounts per CCR.

<u>The monthly compensation</u> By default, it is set to 1. If there is agreement<u>at the</u> <u>CCR level shall be calculated with the</u> following the<u>formula</u>:

$$C_{CCR,T_m} = \max \left(CI'_{CCR,T_m} - EBCI_{CCR,T_m}, 0 \right)$$

Where:

EBCI_{CCR,T_m} is the congestion income from balancing capacity generated in a CCR in a given month."

b) Paragraph 3 shall be amended and be read accordingly:

<u>"The respective voting arrangement at CCR level, TSOs of each application shall</u> inform all TSOs and regulatory authorities of the concerned relevant CCR(s) and ACER of the outcome of the assessment carried out pursuant to paragraph 2."

c) A new paragraph 4 shall be included and be read accordingly:

<u>may define a different "The</u> adjustment factor. The adjustment factor adj_{CCR,T} for <u>Cl'_{CCR,T} can be used to account for adj_{CCR,T} shall reflect</u> the overestimation of the congestion income which could have been generated in the day-ahead market due to the fact that the expected price spreads with the increased <u>capacities_capacity</u> would be smaller compared to the price spreads obtained with the actually allocated <u>capacities_capacity</u> in day-_ahead. The adjustment factor shall be set to 1. TSOs of the concerned CCR may define a different adjustment factor. Such definition shall be based on a unanimous agreement of the TSOs. For CCRs composed of more than five Member States, where unanimity cannot be reached, such definition shall be based on a decision taken by qualified majority voting. The qualified majority shall be determined by applying the majority rates and conditions defined in Article 4(4) of the EB Regulation to the TSOs of the concerned CCR."

d) A new paragraph 5 shall be included and be read accordingly:

"TSOs of

The monthly compensation on the <u>concerned</u> CCR level shall be calculated with <u>communicate</u> any such change in the below formula:

$$C_{\overline{CCR,T}} = \max(CI_{\overline{CCR,T}}^{\star} - EBCI_{\overline{CCR,T}}, 0)$$

Where:

EBCI_{CCRT}, is value of the congestion income from balancing capacity generated in a CCR in a given month.

 $CI'_{CCR,T}$, is the congestion income in a given CCR in a given month which could have been generated adjustment factor, including a justification for the amount of cross-zonal capacity allocated for the exchange of balancing capacity or sharing of reserves if allocated this change, to the single day ahead coupling instead.

The respective TSOs of the application shall inform all TSOs and relevant regulatory authorities of the relevant CCR(s) and ACER of the outcome of this assessment, without delay."

e) The A new paragraph 6 shall be included and be read accordingly:

"Application TSOs of a balancing capacity platform may decide to not apply the compensation process described in Article 24 (paragraph 2) can be omitted in case there is agreement among theall TSOs of the concerned a CCR following the respective voting arrangement. ware part of a balancing capacity platform."

f) A new paragraph 7 shall be included and be read accordingly:

a) A new paragraph 3 shall be included and be read accordingly:

"If the comparison pursuant to paragraph 2 shows a deficit on a monthly basis of generated congestion income following the allocation of cross-zonal <u>capacitiescapacity</u> for the exchange of balancing capacity <u>andor</u> sharing of reserves, the TSOs of an application applying the market-based allocation <u>process</u> in accordance with Article-38(1)(b) of the EB Regulation shall pay compensation to the single day ahead <u>couplingSDAC</u> to cover such deficit. The costs of such compensation shall be split among the TSOs of the respective application in accordance with the distribution of shares of overall decreased procurement costs per TSO from the application of the market-based allocation <u>process</u> in the relevant month. The compensation₇ calculated in accordance with paragraph 2 <u>shouldshall</u> be shared among all TSOs of the relevant CCR(s) in accordance with the shares of decreased congestion income per <u>bidding zone</u> border and MTU (CI_{DEC}^{DEC})-after reduction of received congestion income from balancing capacity.-

For both FB and eNTC CCRs, a part of <u>To determine</u> the compensation assigned to give to each border, first the decrease of congestion income from <u>day-ahead</u> for period T foreach bidding zone border b is calculated using the following formula:

$$\frac{c_{b,t}}{C_{b,t}} = \frac{\sum_{t \in T, b \in B_{CCR}} max(Cl_{b,t}^{DEC} \times Corr_{t} - EBCl_{b,t}, 0)}{\sum_{t \in T, b \in B_{CCR}} max(Cl_{b,t}^{DEC} \times Corr_{t} - EBCl_{b,t}, 0)} at MTU t (CI_{b,t}^{DEC}) shall be \times C_{CCR,T}$$

For cNTC CCRs $CI_{b,t}^{DEC}$ is calculated according to the formula: following formulas:

a. For CCRs applying the coordinated net transmission capacity approach:

$$CI_{b,t}^{DEC} = \sum_{p \in P} \max(MS_{b,t}, 0) \times CF_b^{BC,p}$$

b. For FB-CCRs CI^{DEC} is calculated according to applying the formula: flowbased approach:

$$\begin{split} CI_{b,t}^{DEC} = & \frac{\sum_{p \in P} |MS_{b,t} \times \max\left(AAF_{b,t}^{BC,p}, 0\right) \times SF_{\epsilon}| \sum_{p \in P} |MS_{b,t} \times \max\left(AAF_{b,t}^{BC,p}, 0\right) \times SF_{t}| \text{ if } AAF_{b,t} \geq 0 \end{split}$$

$$CI_{b,t}^{DEC} = 0$$
 if $AAF_{b,t} < 0$

Where:

Since the sum of decreased congestion income CI^{DEC}_{b,t} (used for sharing the compensation) for all borders b may be smaller than the congestion income that could have been generated CI'_{CCR,t} (used when calculating compensation amount), a correction factor Corr_t is needed to ensure that not all compensation to be shared:

$$\frac{Corr_{\pm}}{\sum_{b \in B_{CCD}} CI_{b\pm}^{DEC}}$$

Where:

T is the set of MTUs in a given month

P is the set of products available for the exchange or sharing of reserves <u>SPBC</u> used in a balancing capacity platform.

 B_{CCR} is the set of directed borders in a CCR (i.e. this set includes both borders A B and B A)

 $CF_{b,t}^{BC,p}$ <u>CF_{b,t}BC,p</u> is the allocated capacity on directed <u>bidding zone</u> border b from product <u>SPBC</u> p in MTU t.

 $AAF_{b,t}^{BC,p}$ <u>AAF_{b,t}</u> <u>AAF_{b,t}</u> is the resulting <u>AAF</u> on <u>directed</u> <u>additional</u> <u>aggregated</u> flow from balancing capacity exchanges or sharing of reserves on directed bidding zone border b from product p in MTU t.</u>

 $AAF_{b,t}$ <u>AAF_{b,t}</u> is the resulting <u>AAF on directed border b from</u><u>addi-</u> <u>tional aggregated flow from day-ahead</u> energy <u>exchange exchanges on</u> <u>directed bidding zone border b</u> in MTU t $(AAF_{A \rightarrow 2}B, t = -AAF_{B \rightarrow 2}A, t)).$

 $MS_{b,t}$ is MS_{b,t} is the market spread for <u>day-ahead</u> energy on directed <u>bidding zone</u> border b in MTU t-(in the case of AHC/Allocation Constraints, i.e. the price difference between the two bidding zones sharing border b (in case of advanced hybrid coupling or allocation constraints, the market spread is the price difference between the <u>Virtual Bidding Zones</u>)virtual hubs).

 $SF_{t}SF_{t}$ is the scaling factor used for scaling the negative CL congestion income from day-ahead energy congestions in MTU t (as defined in Art 7.2 of Congestion Income Distribution the methodology developed pursuant to Art. 74 of Commission Regulation (EU) 2015/1222 of 24 July 2015 establishing a guideline on capacity allocation and congestion management).

Afterwards, $c_{b,r}$ is distributed between the relevant TSOs for border b using the same sharing keys as those used for sharing congestion income from energy for this border. »

Article 11 Fallback Procedures

Article 25 Fallback Procedures of the harmonised cross zonal capacity allocation methodology shall be amended as follows:

a) The paragraph 2 shall be amended and be read accordingly:

«All application TSOs per balancing capacity platform shall agree in accordance with Article 16(8) on fallback procedures in case of the cross-zonal capacity allocation process based on market based allocation cannot be conducted fully or partially in due time, considering the timings of the capacity calculation processes of the relevant CCRs for a timely provisions of the data pursuant to Article 14(4) and Article 5(2)(a) and (b). Such a fallback procedure shall be described by the applicant TSOs in the proposal pursuant to Article 3373(1) of the EBCACM Regulation. »

Article 12 Publication of Information

Article 26 Publication of Information of For CCRs applying either the harmonised crosszonalcoordinated net transmission capacity allocation methodology shall be amended as follows:

a) The paragraph 7 shall be amended and be read accordingly:

«Each RCC carrying out forecast validation in accordance with Article 16(4) shall at least every three (3) months from approach or the start of an application, publish a report on the forecast efficiency. The report shall include at least:

a. statistics on the welfare loss from inefficient forecasts indicated

by forecast error one in accordance with Article 19(4);

- b. statistics of a comparison of forecast error one accordance with Article 19(4) with the overall welfare generated by the market-<u>flow</u>-based allocation process in accordance with Article 19(5);
 c. statistics on the over allocation indicated by forecast error two
- in accordance with Article 19(6);
- d. statistics on the welfare loss from the forecast error two consideration pursuant to Article 18(7);
- e. an assessment of occurred increases of the limits<u>approach</u>, the <u>compensation assigned</u> for the maximum volume of cross zonal capacity allocated<u>period T</u> for the exchange of balancing capacity, including statistics on the number of incidents, increased volumes and percentages, reasons for the incidents and an analysis of the economic surplus effects on the SDAC;

an assessment of impacts on the economic surplus of the SDAC and economic surplus from the exchange of balancing capacity from the application of the market based and the specific impact bidding zone border b (c_b) is calculated using the following an increase of a default limit for the maximum volume of cross-zonal capacity allocated for the exchange of balancing capacity; formula:

$$c_{b} = \frac{\sum_{t \in T} max \left(CI_{b,t}^{DEC} \times Corr_{t} - EBCI_{b,t}, 0 \right)}{\sum_{t \in T, b \in B_{CCR}} max \left(CI_{b,t}^{DEC} \times Corr_{t} - EBCI_{b,t}, 0 \right)} \times C_{CCR,T}$$

Where:

- f. $Corr_t = \frac{CI_{CCR,t}}{\sum_{b \in B_{CCR}} CI_{b,t}^{DEC}}$ where necessary, recommendations pursuant to Article 19(1)(b) to improve the accuracy of the forecast method pursuant to Article 18(6); and
- g. an assessment of forecast efficiency and welfare potential a possible increase of the maximum volume limit of cross-zonal capacity in accordance with Article 17(1) and if relevant recommendations for amendments of these limits. »

Article 13 Implementation timeline

Article 27 Implementation timeline of the harmonised cross zonal capacity allocation methodology shall be amended as follows:

a) The paragraph 1 shall be amended and be read accordingly:

«At the latest by 31 July 2024, All TSOs shall:

a. submit a proposal for an amendment of this methodology to complement this methodology in accordance with Article 15(2), Article 16(7), Article 16(8) and Article 16(9);

submit a proposal for an amendment of is the correction factor which is needed to ensure that not all compensation c_b is zero when there is compensation to be shared.

This is necessary because the sum of decreased congestion income $CI_{b,t}^{DEC}$ (used for sharing the compensation) for all borders B_{CCR} may be smaller than the congestion income that could have been generated $CI'_{CCR,T}$ (used when calculating the compensation amount).

<u>EBCI_{b.t} is</u> the congestion income distribution methodology pursuantattributed to Article 73 of CACM Regulation to consider congestion income frombidding zone border b at MTU t for the exchange of balancing capacity or sharing of reserves, calculated in accordance with the methodology developed pursuant to Article 24; and 73(1) of the CACM Regulation.

develop any further requirements <u>T is the set of MTUs in a given month.</u>

B_{CCR} is the set of directed borders in a CCR (i.e. this set includes both borders A-B and B-A).

cb is distributed between the relevant TSOs for bidding zone border b using the same sharing keys as those used for sharing congestion income from day-ahead energy for this bidding zone border and defined in accordance with the methodology developed pursuant to Article 73(1) of the CACM Regulation."

<u>Article 10</u> Implementation timeline

Article 27 – Implementation timeline – shall be amended as follows:

a) Paragraph 3 shall be amended and be read accordingly:

<u>"All TSOs</u> which are not-subject to approval of this methodology but necessary for the designation of entities an application pursuant to Article 16 (3), for 38(1)(b) of the EB Regulation or which intend to apply the development of market-based allocation process shall develop the market-based cross-zonal capacity allocation optimisation function software, and for the fulfilment of the publication requirements pursuant to Article 26.» considering all relevant requirements of this methodology and specified in accordance with paragraph (1)(c) and ensure that it is ready for application at the latest by 30 June 2026."

a)b)The paragraphParagraph 5 shall be amended and be read accordingly:-

«<u>"</u>TSOs subject to a methodology pursuant to Article-38(1)(b) of the EB-Regulation, i.e. for the application of a methodology pursuant to Article 41(1) of the EB Regulation, which was approved before the implementation pursuant to paragraph (3) for the application of a CCR's methodology pursuant to Article 41(1) of the EB Regulation, may continue their application with a non-harmonised market based allocation process for no longer than twelve (12) months after the implementation deadline pursuant to paragraph (3). An additional-3, shall operate the market-based allocation process in accordance with this methodology by no later than 30 June 2027."

c) Paragraph 6 shall be amended and be read accordingly:

"By way of derogation of maximum 24 month to this Article may be granted by the respective regulatory authorities if deemed necessary. The request for derogation shall include the from paragraph 5, the TSOs referred to in paragraph 5 may apply provisions of the methodology pursuant to Article 41(1) of the EB Regulation related to the forecast activities instead of the requirements specified under Article 18 and Article 19 of this methodology and the requirements following information from references to

those Articles in other provisions of this methodology. The derogation of this paragraph shall cease to apply according to the following timeline:

- a. the provisions from which a derogation is requested;
- b. the requested derogation period;
- c. a detailed plan and timeline specifying how to address and ensure the implementation of the concerned provisions of this Methodology after expiration of the derogation period; and
- d. an assessment of the consequences of requested derogation on adjacent markets. »
- a. <u>The paragraph 6In case at least one new application proposal pursuant to Article</u> <u>38(1)(b) of the EB Regulation is approved, for TSOs other than the ones which</u> <u>are already subject to such a methodology, between 29 January 2025 and 30 June</u> <u>2026, the derogation shall end by 30 September 2027;</u>
- b. In case no new application proposal pursuant to Article 38(1)(b) of the EB Regulation is approved, for TSOs other than the ones which are already subject to such a methodology, between 29 January 2025 and 30 June 2026, the derogation shall end by whichever is later:
 - i. six (6) months after the date of approval of a new application proposal pursuant to Article 38(1)(b) of the EB Regulation; or
 - ii. 31 December 2027.

After the derogation ceases to apply, any market-based allocation process shall be operated in accordance with this methodology."

Article 11

Categorisation of costs and detailed principles for sharing the common and regional costs for market-based allocation

Article 28 – Categorisation of costs and detailed principles for sharing the common and regional costs for market-based allocation – shall be amended as follows:

a) <u>Paragraph 5</u> shall be amended and be read accordingly:-

<u>«If an</u>"Costs pursuant to paragraph 3 shall be shared among the Member States of all application intends to apply the harmonised market based allocation process, which has interdependencies TSOs in accordance with the following principles set out by Article-16 23 of the EB Regulation:

- a. one-eighths (1)(a) with the existing/8) of common costs shall be divided equally between each Member State of the market-based application pursuant to paragraphTSOs;
- b. five-eighths (5), the /8) of common costs shall be divided proportionally to the consumption of each Member State of the market-based application pursuant to TSOs; and
- c. two-eighths (2/8) of common costs shall be divided equally between the marketbased application TSOs."
- b) Paragraph 6 shall be amended and be read accordingly:

"The common costs for technically developing, implementing or amending and operating a balancing capacity platform in accordance with paragraph (5) shall not use 4 shall be

shared among the Member States of the application TSOs of the respective balancing capacity platform in accordance with the following principles set out by Article 23 of the EB Regulation:

- a. one-eighths (1/8) of common costs shall be divided equally between each Member State of the market-based application TSOs of the respective balancing capacity platform;
- b. five-eighths (5/8) of common costs shall be divided proportionally to the consumption of each Member State of the market-based application TSOs of the respective balancing capacity platform; and
- c. two-eighths (2/8) of common costs shall be divided equally between the marketbased application TSOs of the respective balancing capacity platform."
- c) Paragraph 9 shall be amended and be read accordingly:

"In case of several application TSOs are active in a non-harmonised market based allocation process once the interdependent allocation is operational. »Member State, the Member State's share of the costs shall be distributed among those application TSOs proportionally to the consumption in the application TSOs' monitoring areas."

Article 12 Miscellaneous

- a) 'SBCP' shall be replaced by 'SPBC' in Article 2, Article 4, Article 5, Article 6, Article 7, Article 8, Article 9, Article 10, Article 12, Article 13, Article 14, Article 20, Article 21, Article 23 and Article 26.
- b) Cross-references in Article 8, Article 14, Article 18, Article 19, Article 25, Article 26, Article 27 and Article 28 shall be updated accordingly.