Core CCR TSOs’ Methodology for an allocation process of cross-zonal capacity for the exchange of balancing capacity or sharing of reserves based on economic efficiency analysis in accordance with article 42 of the Commission Regulation on (EU) 2017/2195 of 23 November 2017 establishing a guideline on electricity balancing

20 September 2019
For public consultation
Core CCR TSOs’ Methodology for an allocation process of cross-zonal capacity for the exchange of balancing capacity or sharing of reserves based on economic efficiency analysis in accordance with article 42 of the Commission Regulation on (EU) 2017/2195 of 23 November 2017 establishing a guideline on electricity balancing.

DISCLAIMER
This document is released on behalf of the Core transmission system operators (“TSOs”) only for the purposes of the public consultation on the proposal for a methodology for an allocation process of cross zonal capacity for the exchange of balancing capacity or sharing of reserves based on economic efficiency analysis (“EE CZCA proposal”) in accordance with Article 42 of Commission Regulation (EU) 2017/2195 establishing a guideline on electricity balancing. This version of the EE CZCA proposal does not in any case represent a firm, binding or definitive Core TSOs’ position on the content.

Contents
Whereas 3
Abbreviations ..................................................................................................................................................5
Article 1 Subject matter and scope .............................................................................................................6
Article 2 Definitions........................................................................................................................................6
Article 3 Principles for each balancing capacity cooperation within the CCR Core............................7
Article 4 Notification process for the use of the allocation process based on economic efficiency analysis 8
Article 5 Timeframe of the allocation process based on economic efficiency analysis ......................9
Article 6 Process to define the maximum volume of allocated cross zonal capacity for the exchange of balancing capacity or sharing of reserves .................................................................................10
Article 7 Determination of the forecasted market value of cross zonal capacity for the exchange of energy 10
Article 8 Determination of the forecasted market value of cross zonal capacity for the exchange of balancing capacity or sharing of reserves ........................................................................11
Article 9 Determination of the allocated volume of cross zonal capacity for the exchange of balancing capacity or sharing of reserves .................................................................11
Article 10 Pricing of cross zonal capacity ..................................................................................................12
Article 11 Firmness regime of cross zonal capacity .......................................................................................12
Article 12 Sharing of congestion income from cross-zonal capacity ..........................................................13
Article 13 Publication .................................................................................................................................14
Article 14 Language .......................................................................................................................................15
Core Transmission System Operators taking into account the following:

Whereas

1. This document is the methodology by the Core Transmission System Operators (TSOs) of the Core Capacity Calculation Region as defined in the latest methodology in accordance to article 15 of the CACMGL (hereafter referred to as “CCR Core”). The document provides a methodology for an allocation process of cross zonal capacity for the exchange of balancing capacity or sharing of reserves based on economic efficiency analysis (hereafter referred to as “EE CZCA methodology”) in accordance with article 42 of Commission Regulation (EU) 2017/2195 establishing a guideline on electricity balancing (hereafter referred to as “EBGL”).

2. The EE CZCA methodology takes into account the general principles and goals set in the EBGL, the Regulation (EC) 2017/1485 establishing a guideline on electricity transmission system operation (hereafter referred to as the “SOGL”), Commission Regulation (EU) 2015/1222 of 24 July 2015 establishing a guideline on capacity allocation and congestion management (hereafter referred to as the “CACMGL”) as well as Regulation (EU) No 2019/943 of 5 June 2019 on the internal market for electricity (hereafter referred to as the “Electricity Regulation”) as well as Regulation (EU) No 543/2013 of 14 June 2013 on submission and publication of data in electricity markets (hereafter referred to as the “Transparency Regulation”).

3. The EE CZCA methodology takes into account the general principles, goals and other methodologies set out in the EBGL. The goal of the EBGL is the integration of balancing markets while contributing to operational security. To facilitate this goal, while contributing to operational security, it is necessary to integrate balancing markets and promoting the possibilities for exchanges of balancing services while contributing to operational security.

4. Article 42 of the EBGL constitutes the legal basis for this methodology.

5. The EE CZCA methodology generally contributes to achieving the objectives stated in article 3 of the EBGL. In particular, this EE CZCA methodology serves the following objectives of the EBGL:

   (a) The EE CZCA methodology answers the requirements set out in article 42 of the EBGL;

   (b) The EE CZCA methodology serves the objective of fostering effective competition, non-discrimination and transparency in balancing markets as stated in article 3(1)(a) of the EBGL by defining the principles necessary for establishing a balancing capacity cooperation (BCC), using allocation process based on economic efficiency analysis, and how to notify it as described in articles 3 and 4 of this EE CZCA methodology;

   (c) The EE CZCA methodology facilitates the objective for the integration of the balancing markets and for promoting the possibilities for the exchanges of balancing services while using market-based mechanisms and contributing to operational security as stated in article 3(1)(c) and article 3(2)(d) of the EBGL by means of defining the rules for the procurement of the balancing capacity, through the allocation of cross-zonal capacity for the balancing capacity market, together with the allocation of cross zonal capacity of the day ahead energy market, as detailed in articles 5-10 of this EE CZCA methodology;

   (d) The EE CZCA methodology ensures that the development of the day-ahead market is not compromised in accordance with article 3(2)(e) of the EBGL. It is specified in Articles 3 and 12 of
this EE CZCA methodology, that not used CZC allocated to the exchange of balancing capacity or sharing of reserves shall be released for the exchange of balancing energy with shorter activation times or for operating the imbalance netting process according to article 38(9) of the EBGL;

(e) The EE CZCA methodology ensures that the procurement of balancing capacity is done in a fair, objective, transparent way and uses the market-based mechanisms as stated in article 3(1)(e) of the EBGL. This EE CZCA methodology states in articles 8-10 how the market value and volume as well as the offered volumes and prices are determined;

(f) The EE CZCA methodology aims at respecting the responsibility assigned to the relevant TSOs in order to ensure system security, including as required by national legislation in accordance with article 3(2)(f) of the EBGL by establishing the maximum limitations to be applied by the BCC as is defined in articles 7 of this EE CZCA methodology;

(g) This EE CZCA methodology may be applied before the go-live of DA FB MC in Core and before the go-live of the balancing energy platforms (TERRE, MARI and PICASSO).

(h) In conclusion, the EE CZCA methodology meets the objectives of the EBGL.
Abbreviations

The list of abbreviations used in this EE CZCA methodology is the following:

- aFRR: frequency restoration reserve with automatic activation
- BCC: balancing capacity cooperation
- BSP: balancing service provider
- CACMGL: Commission Regulation (EU) 1222/2015 establishing a guideline on capacity allocation and congestion management
- CMOL: common merit order list
- CZC: cross-zonal capacity
- CZCA: cross-zonal capacity allocation
- DC: direct current
- EBGL: guideline on electricity balancing
- EE: economic efficiency
- ENTSO-E: European Network of Transmission System Operators for Electricity
- FRR: frequency restoration reserve
- GCT: gate close time
- MCO: market coupling operator
- mFRR: frequency restoration reserve with manual activation
- MTU: market time unit
- NRA: national regulatory authority
- RR: replacement reserve
- SDAC: single day-ahead coupling
- SOGL: Commission Regulation (EU) 2017/1485 establishing a guideline on electricity transmission system operation TSO: transmission system operator
Article 1 Subject matter and scope

1. This methodology specifies the CZC for the exchange of balancing capacity or sharing of reserves for the CCR Core, which is based on the forecasted market values of CZC for the exchange of energy and the forecasted market values for the exchange of balancing capacity or sharing of reserves.

2. The scope of the EE CZCA methodology does not extend to the assignment of roles and responsibilities to specific parties. Also, the governance framework for specific roles or responsibilities and TSO-TSO settlement rules are out of scope of the EE CZCA methodology.

3. The application of this EE CZCA methodology is a voluntary initiative by two or more TSOs of a BCC or at the request of their relevant regulatory authorities (NRAs) in accordance with article 38(1) of the EBGL and article 59 of Directive 2019/944.

4. The application of this EE CZCA methodology by two or more TSOs of a BCC shall be subject to TSO notification pursuant to article 150 of the SOGL.

5. All Core TSOs of a BCC applying the EE CZCA methodology shall establish common and harmonised rules and processes for the exchange and procurement of balancing capacity pursuant to article 32 and article 33 of the EBGL.

6. According to article 38(4) of the EBGL, CZC allocated for the exchange of balancing capacity or sharing of reserves shall be used by the BCC TSOs, exclusively for the product where it was allocated for, being aFRR, mFRR, or RR. If the CZC is not used for the product where it was allocated for, the CZC shall be used by all TSOs for the exchange of balancing energy with shorter activation times or for operating the imbalance netting process. The reliability margin calculated pursuant to CACMGL shall be used only for operating and exchanging frequency containment reserves, except on Direct Current (‘DC’) interconnectors for which CZC for operating and exchanging frequency containment reserves may also be allocated in accordance with article 38(1) of the EBGL.

Article 2 Definitions

1. For the purposes of this EE CZCA methodology, the terms used shall have the definition given to them in article 2 of the Electricity Regulation, article 2 of the Transparency Regulation, article 2 of the CACMGL, article 3 of the SOGL and article 2 of the EBGL.

2. The following additional definitions shall also apply:
   (a) ‘Allocation of cross-zonal capacity’ means CZC that is exclusively allocated for a certain market and consequently not available for another market.
   (b) ‘Balancing capacity cooperation’ means at least two TSOs that apply the exchange of balancing capacity or sharing of reserves in a geographical area separated by a bidding zone border.
   (c) ‘Cross-zonal capacity allocation optimisation function’ means the algorithm applied for the allocation of CZC for the exchange of balancing capacity or sharing of reserves of each BCC in which balancing capacity is exchanged or reserves are shared.
Core CCR TSOs’ Methodology for an allocation process of cross-zonal capacity for the exchange of balancing capacity or sharing of reserves based on economic efficiency analysis in accordance with article 42 of the Commission Regulation on (EU) 2017/2195 of 23 November 2017 establishing a guideline on electricity balancing

(d) ‘Market value of cross-zonal capacity for the exchange of balancing capacity or sharing of reserves’ means the change in the economic surplus of the balancing capacity market (the sum of buyer surplus and if applicable seller surplus and congestion income) resulting from the incremental increase of the CZC allocated for the exchange of balancing capacity or sharing of reserves.

(e) ‘Market value of cross-zonal capacity for the exchange of energy in SDAC’ means the change in the economic surplus of the SDAC (the sum of the producer surplus, consumer surplus and congestion income) resulting from the incremental increase of the CZC allocated for the exchange of energy.

(f) ‘Release of cross-zonal capacity for the exchange of balancing capacity or sharing of reserves’ means CZC allocated for the exchange of balancing capacity or sharing of reserves that is no longer needed and is released as soon as possible and returned in the subsequent capacity allocation timeframes.

(g) ‘Use of cross-zonal capacity for the exchange of balancing capacity or sharing of reserves’ means allocated CZC used for the exchange of balancing capacity or sharing of reserves, either for the exchange of balancing capacity in terms of dimensioning and compliance or for physical use of CZC for the actual transfer of balancing energy.

3. In this EE CZCA methodology, unless the context requires otherwise:

(a) the singular indicates the plural and vice versa;

(b) the table of contents and headings are inserted for convenience only and do not affect the interpretation of this EE CZCA methodology;

(c) any reference to legislation, regulations, directives, orders, instruments, codes or any other enactment shall include any modification, extension or re-enactment of it when in force;

(d) any reference to an Article without an indication of the document shall mean a reference to this EE CZCA methodology.

Article 3 Principles for each balancing capacity cooperation within the CCR Core

1. The Core TSOs that want to establish a BCC, shall share with Core TSOs the cost-benefit analysis of such a BCC.

2. Each BCC applying this EE CZCA methodology shall use standard balancing capacity products pursuant to article 25(2) of the EBGL.

3. Each BCC applying this EE CZCA methodology shall use separate standard upward and downward balancing capacity products pursuant to article 32(3) of the EBGL.

4. TSOs of a BCC can apply to their relevant NRAs for an exemption to separate procurement of upward and downward balancing capacity pursuant to article 5(4)(f) of the EBGL.

5. Irrespective of an exemption, the CZCA optimisation function will allocate CZC for the exchange of balancing capacity or sharing of reserves for each direction (upward for downward bids) separately.
6. For each BCC within the CCR Core applying this EE CZCA methodology, the minimum contracting period of balancing capacity bids shall be a multiple of the day-ahead MTU and have a contracting period of more than 1 (one) day. The maximum contracting period shall not exceed the time between the balancing capacity auction and the actual provision of the balancing capacity.

7. For each BCC of the CCR Core applying this EE CZCA methodology, the minimum validity period of balancing capacity bids shall be equal or a multiple of the day-ahead MTU. The maximum balancing capacity validity period shall not exceed the contracting period of the procurement of balancing capacity.

8. For each BCC applying this EE CZCA methodology, the TSO-BSP pricing rules shall be harmonised within each BCC. In case of a Core TSO applying a central dispatching model, the TSO-BSP pricing rules of standard balancing capacity products procured within a BCC are defined by the Core TSO in the terms and conditions related to BSPs and shall include conversion rules of integrated scheduling process bids into standard balancing capacity products defined pursuant to article 27 of the EBGL.

9. The Core TSOs shall regularly assess whether the CZC allocated for the exchange of balancing capacity or sharing of reserves is still needed for that purpose. If subsequent assessments show that CZC allocated for the exchange of balancing capacity or sharing of reserves is no longer needed for that purpose, it shall be returned in subsequent capacity allocation timeframes.

10. The CZC allocated for the exchange of balancing capacity or sharing of reserves that has not been used for the associated exchange of balancing energy, shall be released for the exchange of balancing energy with shorter activation times or for operating the imbalance netting process pursuant to article 38(9) of the EBGL.

11. Each BCC shall include fallback procedures and curtailment procedures on firmness regime of CZC in the implementation methodology of the BCC according to article 38 of the EBGL, commonly agreed by all Core TSOs of the CCR Core.

**Article 4 Notification process for the use of the allocation process based on economic efficiency analysis**

1. In addition to the notification process as referenced to in Article 1.4 of this methodology, all Core TSOs of each BCC within the CCR Core applying this EE CZCA methodology shall inform the Core TSOs latest by three months ahead of the application of the EE CZCA methodology forecast technique consisting of the use of reference days and adjustment factors to determine the forecasted market value of CZC for the exchange of energy. Core TSOs may provide remarks not later than one month ahead of the application. The BCC TSOs shall take remarks by the Core TSOs properly into account.

2. Each BCC of the CCR Core applying this EE CZCA methodology shall share the applied CZCA optimisation function with all Core TSOs.

3. Each BCC applying the EE CZCA methodology shall inform all stakeholders and Core TSOs through an online announcement, at least 1 (one) month prior to entering into operation. This information will include a detailed description of the BCC specifications: the type of product for balancing capacity.
exchanged or shared, the bidding zone borders, the market timeframe, the duration of application or the allocation of CZC and time for entering into operation.

**Article 5  Timeframe of the allocation process based on economic efficiency analysis**

1. The allocation process based on economic efficiency analysis to allocate CZC for the exchange of balancing capacity and sharing of reserves shall include the following consecutive timings for each BCC of the CCR Core applying this EE CZCA methodology:
   a. The TSO-BSP GCT of standard upward balancing capacity bids and of standard downward balancing capacity bids shall be equal within a balancing cooperation and organised before week-ahead of the SDAC.
   b. For TSOs of the balancing capacity cooperation who are applying a central dispatching model, BSPs may submit only integrated scheduling bids (instead of standard balancing capacity bids), which may be converted where possible into standard upward and/or standard downward balancing capacity bids by the connecting TSO in accordance with Article 27 of the EBGL. The TSO-BSP GCT for integrated scheduling process bids shall be defined pursuant to Articles 24(5) and 24(6) of the EBGL.
   c. Notification to the BSPs of selected upward balancing capacity bids and/or downward balancing capacity bids by TSOs shall be done before the GOT of the SDAC.

2. The allocation process based on economic efficiency analysis to allocate CZC for the exchange of balancing capacity and for sharing of reserves shall include the following steps:
   a. The TSOs shall calculate the forecasted market value of CZC for the exchange of balancing capacity and/or for sharing of reserves and shall calculate the forecasted market value of CZC for the exchange of energy.
   b. TSOs of the BCC shall perform the CZCA optimisation function and determine the allocation of CZC for the exchange of balancing capacity or sharing of reserves.
   c. The TSOs performing the CZCA optimisation function shall send the allocated CZC values for the exchange of balancing capacity or sharing of reserves to all TSOs of the BCC.
   d. After the allocation of CZC to the exchange of balancing capacity or sharing of reserves, the BSPs submit standard upward and standard downward balancing capacity bids to their balancing capacity market operator.
   e. The TSOs of the BCC establish the CMOL of balancing capacity bids using the procurement optimisation function, respecting the allocated CZC for the exchange of balancing capacity or sharing of reserves. The procurement optimisation function minimises the overall balancing capacity procurement costs pursuant to article 58(3) of the EBGL.
   f.
Article 6  Process to define the maximum volume of allocated cross-zonal capacity for the exchange of balancing capacity or sharing of reserves

1. The process to define the maximum volume of allocated CZC for the exchange of balancing capacity and/or sharing of reserves shall comply with article 42(2) of the EBGL.

2. The 5% of CZC allocated on a market-based process on a Core BZB is determined as 5% of the hourly average offered capacity on that Core BZB for the SDAC in the period from 01 November two years ahead until 31 October of the previous (relevant) calendar year. The respective resulting CZC shall be published by Core TSOs.

3. New interconnectors are those interconnectors that went operational for the exchange of energy after 18.12.2019. 10% of the installed capacity means 10% of the active power capacity of the interconnector capable to be transferred continuously within the designed safe security margins of the interconnector.

4. The volume limitation of article 42(2) of the EBGL may not apply for bidding zone borders connected through DC interconnectors until the co-optimised or market-based allocation processes are harmonised at Union level pursuant to article 38(3) of the EBGL.

5. The maximum volume of allocated CZC for the exchange of balancing capacity or sharing of reserves shall respect the rules for exchange of FRR and of RR within a synchronous area in accordance with articles 167 and 169 of the SOGL.

6. Core TSOs and Core NRAs of each BCC of the CCR Core may commonly apply additional limits besides the limitations of article 41(2) of the EBGL for the maximum volume of allocated CZC for the exchange of balancing capacity or sharing of reserves within their own BCC.

Article 7  Determination of the forecasted market value of cross-zonal capacity for the exchange of energy

1. When calculating the forecasted market value of CZC in day-ahead market timeframe, it shall be calculated in accordance with the methodology pursuant to article 37(2) of the CACMGL.

2. The forecasted market value of CZC for the exchange of energy between bidding zones shall be defined per MTU of SDAC and shall be calculated in accordance with article 39(5) of the EBGL.

3. The forecasted market value of CZC for the exchange of energy between bidding zones shall be based on the difference in the day-ahead prices of the corresponding hour in the relevant bidding zones of a reference period in the congested direction. The forecasted market value of CZC for the exchange of energy is 0 EUR/MW if the market value of CZC for the exchange of balancing capacity or sharing of reserves is in the opposite direction of the congestion direction.

4. Any application in a BCC of adjustment factors to the forecasted value of CZC for the exchange of energy between bidding zones shall be included and justified in the methodology for the establishment of
common and harmonized rules and processes for the exchange and procurement of balancing capacity according to article 33(1) of the EBGL.

5. If the adjustment factors are used, they shall be used in a transparent way to incorporate improved forecasting and not to give preference to the exchange of balancing capacity or sharing of reserves on the expense of CZC allocated to the exchange of energy.

6. The methodology for calculating the forecasted value of CZC for the exchange of energy between bidding zones shall take into account the negative effect that the potential reduction of CZC from SDAC may have on the different, relevant network elements of the CCR.

7. The Core TSOs of each BCC of the CCR Core implementing this EE CZCA methodology shall monitor and report to the Core TSOs the efficiency of the forecasting methodology on at least a yearly basis, including a comparison of the forecasted and actual market values of the CZC for the exchange of energy and take appropriate actions, where needed.

**Article 8  Determination of the forecasted market value of cross zonal capacity for the exchange of balancing capacity or sharing of reserves**

1. The forecasted market value of CZC for the exchange of balancing capacity or sharing of reserves between bidding zones shall be defined per MTU of SDAC and shall be calculated in accordance with article 39(5) of the EBGL.

2. The forecasted market value of CZC for the exchange of balancing capacity or sharing of reserves between bidding zones shall be based on submitted bids of selected reference period(s) with the option to include adjustment factors.

3. If the adjustment factors are used, they shall be used in a transparent way to incorporate improved forecasting and not to give preference to the exchange of balancing capacity or sharing of reserves on the expense of CZC allocated to the exchange of energy.

4. The reference period shall be based on the latest available information.

5. The TSOs shall monitor at least once a year the efficiency of the forecasting methodology, including a comparison of the forecasted and actual market values of the CZC for the exchange of balancing capacity or sharing of reserves and take appropriate actions where needed.

**Article 9  Determination of the allocated volume of cross zonal capacity for the exchange of balancing capacity or sharing of reserves**

1. The determination of allocation of CZC to the exchange of balancing capacity or sharing of reserves shall be based on a comparison of the forecasted market value of CZC for the exchange of balancing capacity or sharing of reserves and the forecasted market value of CZC for the exchange of energy.

2. The allocation of CZC for the exchange of balancing capacity or sharing of reserves is determined before the selection of balancing capacity bids by the capacity procurement optimisation function.

3. The objective for the allocation of CZC between SDAC and the exchange of balancing capacity or sharing of reserves shall be the maximisation of the expected total economic surplus for the sum of
the expected exchange of energy and the expected exchange of balancing capacity or sharing of reserves.

4. The optimisation resolution for the allocation of CZC for the exchange of balancing capacity and sharing of reserves equals the optimisation resolution of the optimisation function of the SDAC. Standard upward balancing capacity bids and downward balancing capacity bids with a granularity larger than the MTU of SDAC are considered as block bids in the optimisation.

5. Each marginal volume of CZC shall be allocated to the exchange of energy in case the marginal economic surplus of CZC for the exchange of balancing capacity or sharing of reserves is lower or equal to the expected marginal economic surplus of CZC for the exchange of energy.

6. Netting of CZC allocated to the exchange of balancing capacity or sharing of reserves is not possible between:
   (a) standard upward and downward balancing capacity bids;
   (b) standard balancing capacity bids of different balancing products;
   (c) standard balancing capacity bid and exchange of energy bid.

7. Core TSOs and Core NRAs of a BCC may commonly apply additional thresholds and/or margins to reduce CZC allocation for the exchange of balancing capacity or sharing of reserves between bidding zones.

**Article 10 Pricing of cross zonal capacity**

1. Each BCC allocating CZC for the exchange of balancing capacity or sharing of reserves applying the allocation process based on economic efficiency analysis of the CCR Core shall calculate the CZC price for the volume of CZC that is allocated for the exchange of balancing capacity or sharing of reserves.

2. The price of CZC allocated for the exchange of balancing capacity or sharing of reserves shall be calculated separately for each MTU, bidding zone border and balancing capacity product, i.e. separately for each upward and downward standard balancing capacity product.

3. The price of the volume of CZC allocated for the exchange of balancing capacity or sharing of reserves applying this EE CZCA methodology shall be 0 EUR/MW within an uncongested area.

4. The CZC price resulting from the allocation of CZC for the exchange of balancing capacity or sharing of reserves applying the allocation process based on economic efficiency analysis with pay-as-cleared for the TSO-BSP pricing shall correspond for each direction to the difference between the marginal prices of the standard product balancing capacity in each direction on each side of the BZB. If the procured balancing capacity is not settled based on cross border marginal pricing, the price of CZC for the exchange of balancing capacity or sharing of reserves shall be based on the difference between the highest bid price of the accepted balancing capacity bids in each direction in each bidding zone.

**Article 11 Firmness regime of cross zonal capacity**
1. The allocated CZC for the exchange of balancing capacity or sharing of reserves shall be firm after the selection of standard upward balancing capacity bids or standard downward balancing capacity bids by the capacity procurement optimisation function pursuant to article 33(3) of the EBGL.

2. According to article 38(9) of the EBGL, when CZC allocated for the exchange of balancing capacity or sharing of reserves has not been used for the associated exchange of balancing energy, of the product it was allocated for, it shall be released to all TSOs for the exchange of balancing energy for the same product if possible, and at least it shall be released to all European TSOs for the exchange of balancing energy with shorter activation times or for operating the imbalance netting process according to articles 19-22 of the EBGL. Each BCC shall at any time inform all Core TSOs, on who is the holder of the allocated capacity.

3. The costs of ensuring firmness or in the case of curtailment of firm CZC in the event of force majeure or emergency situations, in accordance with Article 11(1), the costs associated with mitigating the effects of curtailment shall be borne by the relevant Core TSOs of the BCC. These costs include the additional costs from the procurement of balancing capacity due to the non-availability of the balancing capacity given the curtailment of CZC. Each TSOs shall be entitled to set a cost compensation cap.

4. Core TSOs shall not increase the reliability margin calculated pursuant to article 21 of CACMGL due to the exchange of balancing capacity and or sharing of reserves for frequency restoration reserves and replacement reserves.

**Article 12 Sharing of congestion income from cross-zonal capacity**

1. Congestion income generated by the allocation of CZC for the exchange of balancing capacity or sharing of reserves shall be shared with the congestion income distribution process of the CCR Core in accordance with the methodology based on article 73 of Regulation (EU) 2015/1222.

2. The amount of congestion income to be shared with the day-ahead congestion income process of the CCR Core is determined as the sum of the congestion income determined for each BZB of the BCC as set out in Article 12(3).

3. For each MTU of SDAC and for each BZB of the BCC, the allocated CZC for the exchange of balancing capacity or sharing of reserves shall be multiplied with the actual day-ahead market spread at the concerned BZB and the direction for the concerned MTU resulting from the SDAC only in case the price difference is positive in the direction of the allocated CZC for the exchange of balancing capacity or sharing of reserves per MTU of SDAC. Otherwise, the congestion income is 0 EUR/MWh.

4. Remaining congestion income generated by the allocation of CZC for the exchange of balancing capacity or sharing of reserves after the parts as determined per MTU of SDAC in accordance with Article 12(2) and (3) shall be collected on a separate account. This account is to be established and operated by the respective Core TSOs of each BCC. Related costs are to be borne by the respective Core TSOs of each BCC.

5. If the congestion income generated by the allocation of CZC for the exchange of balancing capacity or sharing of reserves as determined per MTU of SDAC in accordance with Article 12(2) and (3) is
Core CCR TSOs’ Methodology for an allocation process of cross-zonal capacity for the exchange of balancing capacity or sharing of reserves based on economic efficiency analysis in accordance with article 42 of the Commission Regulation on (EU) 2017/2195 of 23 November 2017 establishing a guideline on electricity balancing

not sufficient to provide enough money to share required congestion income with the day-ahead congestion income process of the CCR Core, missing money shall be balanced with remaining congestion income from other MTUs of SDAC within the consolidation period.

6. If at the end of the consolidation period a surplus remains on the separate account, it shall be assigned to relevant BZBs of the BCC on pro-rata basis according to the congestion income originally generated by the exchange of balancing capacity or sharing of reserves.

7. If at the end of the consolidation period a deficit remains on the separate account, the deficit shall be equally borne by the Core TSOs of the BCC.

8. For the BZB where congestion income results from the exchange of balancing capacity or sharing of reserves, the Core TSOs on each side of the BZB shall receive their share of net border balancing income based on a 50%-50% sharing key.

9. In cases where the ownership shares or the share of investments costs of Core TSOs on both sides of specific interconnectors on the concerned BZBs are different from a 50%-50% split, the concerned Core TSOs may also use a sharing key due to the different ownership shares, different shares of investments costs, exemption decisions1 or decisions on cross-border cost allocation2 by competent NRAs or the Agency. The sharing keys for these specific cases shall be published in a common document by ENTSO-E on its web page for information purposes only. This document shall list all these specific cases with the name of the interconnector, the BZB, the involved TSOs/Parties, the specific sharing key applied and the motivation / reasons for the deviation from the 50%-50% sharing key. The document shall be updated and published promptly as soon as any changes occur. Each publication shall be announced in an ENTSO-E’s newsletter.

10. In case the BZB consists of several interconnectors with different sharing keys, on which are owned by different Core TSOs, the net border balancing capacity congestion income shall be assigned first to the respective interconnectors on that BZB based on each interconnector’s contribution to the allocated CZC. The parameters defining the contribution of each interconnector will be agreed by the Core TSOs on the BZB. They shall be published in a common document by ENTSO-E on its web page for information purposes only. The document shall be updated and published promptly as soon as any changes occur. Each publication shall be announced in an ENTSO-E’s newsletter. The balancing capacity congestion income assigned to each interconnector shall subsequently be shared between the Core TSOs on each side of the interconnector using the principles described in Article 12(3) and (4).

11. In case specific interconnectors are owned by entities other than Core TSOs, the reference to TSOs in this article shall be understood as referring to those entities.

Article 13 Publication

1 Exemption decision granted to these entities by relevant competent Authorities in accordance with article 17 of Regulation (EC) 714/2009.
2 Decisions on cross-border cost allocation granted to these entities by relevant competent Authorities or the Agency in accordance with article 12(4) or 12(6) of Regulation (EC) 347/2013.
1. Core TSOs of each BCC shall publish the EE CZCA methodology without undue delay after the approval by the concerned Core NRAs or a decision has been taken by the Agency in accordance with article 5(7), article 6(1) and article 6(2) of the EBGL.

2. Each TSO participating in a BCC shall publish information on offered volumes as well as offered prices of procured balancing capacity, anonymised where necessary, no later than 1 (one) hour after the results of the procurement have been notified to the bidders, pursuant to article 12(3)(e) of the EBGL.

3. Each TSO participating in a BCC shall publish information in accordance with article 12(3)(h) of the EBGL on the allocation of CZC for the exchange of balancing capacity or sharing of reserves pursuant to article 38(1)(a) of the EBGL as defined in Article 5(1)(a) of this EE CZCA methodology and no later than 6 (six) hours before the use of the allocated CZC.

4. Each Core TSO participating in a BCC shall inform on the use of allocated CZC for the exchange of balancing capacity or sharing of reserves pursuant to article 38 of the EBGL at the latest one week after the use of allocated CZC, pursuant to article 12(3)(i) of the EBGL.

5. Each TSO participating in a BCC shall publish the approved methodologies at least one month before its application pursuant to article 12(3)(j) of the EBGL.

6. Subject to approval pursuant to article 18 of the EBGL, a Core TSO may withhold the publication of information on offered prices and volumes of balancing capacity or balancing energy bids if justified for reasons of market abuse concerns and if not detrimental to the effective functioning of the electricity markets. A Core TSO shall report such withholdings at least once a year to the relevant regulatory authority in accordance with article 59 of Directive (EU) 2009/944 and pursuant to article 12(5) of the EBGL.

7. Core TSOs of each BCC applying the EE CZCA methodology shall publish the efficiency of the forecasted market value for the exchange of balancing capacity or sharing of reserves and the efficiency of the forecasted market value for the exchange of energy.

Article 14 Language

The reference language for this Core TSOs’ EE CZCA methodology shall be English. For the avoidance of doubt, where Core TSOs need to translate this Core TSOs’ EE CZCA methodology into their national language(s), in the event of inconsistencies between the English version published by Core TSOs in accordance with article 7 of the EBGL and any version in another language, the relevant Core TSOs shall be obliged to dispel any inconsistencies by providing a revised translation of this Core TSOs’ EE CZCA methodology to their relevant Core NRAs.