Hansa CCR TSOs’ methodology for a market-based allocation process of cross-zonal capacity for the exchange of balancing capacity in accordance with Article 41(1) of the Commission Regulation (EU) 2017/2195 of 23 November 2017 establishing a guideline on electricity balancing

20 September 2019
For public consultation
Hansa CCR TSOs’ methodology on a market-based allocation process of cross-zonal capacity for the exchange of balancing capacity in accordance with Article 41(1) of the Commission Regulation (EU) 2017/2195 of 23 November 2017

Contents

Whereas

Abbreviations

TITLE 1 General provisions ................................................................. 7
Article 1 Subject matter and scope ................................................. 7
Article 2 Definitions and interpretation ......................................... 7
TITLE 2 Methodology for market-based allocation process of CZC for the exchange of balancing capacity or sharing of reserves 8
Article 3 Market principles of each balancing capacity cooperation in the CCR Hansa applying MB ................................................................. 8
Article 4 Notification process for the use of the market-based allocation process ................................................................. 8
Article 5 Maximum volume of allocated CZC for the exchange of balancing capacity or sharing of reserves ................................................................. 9
Article 6 Determination of the market value of CZC ................................................................. 9
Article 7 Determination of the allocated volume of CZC for the exchange of balancing capacity or sharing of reserves ................................................................. 10
Article 8 Pricing of CZC ................................................................. 11
Article 9 Firmness regime ................................................................. 12
Article 10 Sharing of congestion income ........................................ 12
Article 11 Publication of information ............................................. 13
TITLE 3 Final provisions ................................................................. 14
Article 12 Publication of the Methodology ..................................... 14
Article 13 Language ................................................................. 14
All TSOs of Hansa Capacity Calculation Region, taking into account the following,

**Whereas**

(1) This document is a common methodology developed in accordance with Article 41(1) of Commission Regulation (EU) 2017/2195 of 23 November establishing a guideline on electricity balancing (hereafter referred to as the “EBGL”) by all Transmission System Operators (hereinafter referred to as “TSOs”) in the geographic area covering Hansa capacity calculation region (hereafter referred to as “CCR Hansa”) as defined in accordance with Article 15 of Commission Regulation (EU) 2015/1222 of 24 July 2015 establishing a guideline on capacity allocation and congestion management (hereafter referred to as “CACM Regulation”) regarding a methodology for a market-based allocation process of cross zonal capacity (CZC) for the exchange of balancing capacity in the CCR Hansa. This methodology is hereinafter referred to as “Hansa MB Methodology”.


(3) The goal of the EBGL is to establish an EU-wide set of technical, operational and market rules to govern the functioning of electricity balancing markets. It sets out rules for the procurement of balancing capacity, the activation of balancing energy and the financial settlement of balance responsible parties. It also requires the development of harmonised methodologies for the allocation of CZC for balancing purposes. Such rules will increase the liquidity of short-term markets by allowing for more cross-zonal trade and for a more efficient use of the existing grid for the purposes of balancing energy.

(4) The Hansa MB Methodology shall define the details of market-based allocation methodology to enable future balancing capacity cooperations by Hansa TSOs within the CCR Hansa.

(5) The Hansa MB Methodology shall include the following elements: (i) the notification process for the use of the market-based allocation process; (ii) a detailed description of how to determine the actual 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; (iii) a detailed description of the pricing method, the firmness regime and the sharing of congestion income for the CZC that has been allocated for the exchange of balancing capacity or sharing of reserves via the market-based allocation process; (iv) the process to define the maximum volume of allocated CZC for the exchange of balancing capacity.

(6) CZC allocated for the exchange of balancing capacity or sharing of reserves shall be limited to 10% of the available capacity for the exchange of energy of the previous relevant calendar year between the respective bidding zones. For new interconnectors this will be 10% of the total installed technical capacity of these new interconnectors. The CZC allocated for the exchange of balancing capacity or sharing of reserves will be used only for the exchange of balancing capacity and the associated exchange of balancing energy.

(7) The methodology for market-based allocation is based on a comparison of the actual market value of CZC for the exchange of balancing capacity and the forecasted market value of the CZC capacity for the exchange of energy. The pricing method, the firmness regime and sharing of congestion income for CZC that has been allocated for the exchange of balancing capacity ensures equal treatment with CZC allocated for the exchange of energy.

(8) The calculation of the market value of CZC shall apply the following requirements: (i) the market value of the CZC shall be based on the actual or forecasted market values of CZC; (ii) the actual market value of CZC for the exchange of balancing capacity shall be calculated based on balancing capacity bids submitted to the capacity procurement optimisation function; (iii) the forecasted market value shall be based on the use of forecasting methodology enabling the accurate and reliable assessment of the market value of CZC based on expected differences in day-ahead market prices, and include additional relevant factors that influence generation and demand, where appropriate. In addition, the Hansa TSOs of each balancing capacity cooperation will collect information for reviewing the efficiency of the forecasting methodology, including a comparison of forecasted and actual market values.

(9) The Hansa TSOs of each balancing capacity cooperation shall publish, at the latest 24 hours after the allocation and no later than 6 hours before the use of the allocated CZC, information on CZC allocation for the exchange of balancing capacity or sharing of reserves and, as well as information on the use of CZC for the exchange of balancing capacity or sharing of reserves at the latest one week after the use of allocated CZC.
(10) Article 5(5) of the EBGL requires that the expected impact of the Hansa MB Methodology on the objectives of the EBGL is described. The impact is presented below (points (11) to (15) of this Whereas Section).

(11) The Hansa MB Methodology contributes and does not in any way hamper the achievement of the objectives of Article 3 of the EBGL. In particular, the Hansa MB Methodology serves the objectives of fostering effective competition, non-discrimination and transparency in balancing markets (Article 3(1)(a) of the EBGL), enhancing efficiency of balancing as well as efficiency of European and national balancing markets (Article 3(1)(b) of the EBGL), integrating balancing markets and promoting the possibilities for exchanges of balancing services while contributing to operational security (Article 3(1)(c) of the EBGL), contributing to the efficient long-term operation and development of the electricity transmission system and electricity sector in the Union while facilitating the efficient and consistent functioning of day-ahead, intraday and balancing markets (Article 3(1)(d)) of the EBGL and ensuring that the procurement of balancing services is fair, objective, transparent and market-based, avoids undue barriers to entry for new entrants, fosters the liquidity of balancing markets while preventing undue distortions within the internal market in electricity (Article 3(1)(e) of the EBGL).

(12) The Hansa MB Methodology fosters effective competition, non-discrimination and transparency in balancing markets (Article 3(1)(a) of the EBGL) by defining common and harmonised rules for the allocation of CZC for the exchange of balancing capacity and/or sharing of reserves by balancing capacity cooperations within the CCR Hansa. Each balancing capacity cooperation within the CCR Hansa will contribute to non-discriminatory, effective cross-border competition, market liquidity and a level playing field for BSPs. Transparency will be ensured by requirement set in the Hansa MB Methodology.

(13) The Hansa MB Methodology enhances efficiency of balancing as well as efficiency of European and national balancing markets (Article 3(1)(b) of the EBGL) and contributes to the objective of integrating balancing markets and promoting the possibilities for exchanges of balancing services while contributing to operational security (Article 3(1)(c) of the EBGL) as the allocation of CZC together with the common and harmonised rules and processes for the exchange and procurement of balancing capacity developed in accordance with Article 33 of the EBGL enhances efficiency of balancing by enabling effective and market-based allocation of reserves between bidding zones within the CCR Hansa and contributes to operational security by improving the procurement of balancing capacity necessary for secure balancing.
(14) The Hansa MB Methodology enables that the procurement of balancing services is fair, objective, transparent and market-based, avoids undue barriers to entry for new entrants, fosters the liquidity of balancing markets while preventing undue distortions within the internal market in electricity (Article 3(1)(e) of the EB Balancing) by applying market-based allocation process for CZC.

(15) In conclusion, the Hansa MB Methodology contributes to the general objectives of the EBGL to the benefit of all market participants and electricity end consumers.

**Abbreviations**

The list of abbreviations used in this Hansa MB Methodology is following:

- aFRR: frequency restoration reserve with automatic activation
- BSP: balancing service provider
- BZB: bidding zone border
- CACM: Commission Regulation (EU) 1222/2015 establishing a guideline on capacity allocation and congestion management
- CZC: cross zonal capacity
- CZCA: cross zonal capacity allocation
- EBGL: Commission Regulation (EU) 2195/2017 establishing a guideline on electricity balancing
- ENTSO-E: European Network of Transmission System Operators for Electricity
- FRR: frequency restoration reserve
- GCT: gate closure time
- MB: market-based
- mFRR: frequency restoration reserve with manual activation
- MTU: market time unit
- NRA: national regulatory authority
- RR: replacement reserves
TITLE 1
General provisions

Article 1
Subject matter and scope

1. The Hansa MB Methodology shall be considered as the common methodology for any application of a market-based allocation process within the CCR Hansa for the exchange of balancing capacity in accordance with Article 41 of the EBGL taking into account calculation of market value of CZC in accordance with Article 39 of the EBGL.

2. This Methodology covers the bidding zones and bidding zone borders of the CCR Hansa as defined in accordance with Article 15 of the CACM Regulation.

3. This Methodology shall apply for the exchange of balancing capacity and sharing of reserves for standard products RR, mFRR, and aFRR.

4. The scope of this Methodology does not extend to the assignment of roles and responsibilities to specific parties. The governance framework for specific roles or responsibilities and TSO- TSO settlement rules are out of scope of this Methodology. These aspects shall be defined by Hansa TSOs of each balancing capacity cooperation within the CCR Hansa, where required in accordance with Article 33 and Article 38 of the EBGL.

5. The implementation of the allocation of CZC applying the market-based allocation methodology is a voluntary initiative by two or more Hansa TSOs or at the request of their relevant Hansa NRAs in accordance with Article 37 of Directive 2009/72/EC and is therefore not mandatory.

Article 2
Definitions and interpretation

1. For the purposes of the Hansa MB Methodology, terms used in this Methodology shall have the meaning of the definitions included in Article 2 of the EBGL, Article 3 of the SO Regulation and Article 2 of the CACM Regulation, Regulation (EC) 714/2009, Commission Regulation (EU) No 543/2013 of 14 June 2013 on submission and publication of data in electricity markets and amending Annex I to Regulation (EC) No 714/2009 of the European Parliament and of the Council (hereafter referred to as "Transparency Regulation") and Directive 2009/72/EC.

2. In addition, in the Hansa MB Methodology, unless the context requires otherwise, the following terms shall have the meaning below:
   - “Balancing capacity cooperation” means two or more TSOs that apply the exchange of balancing capacity or sharing of reserves in a geographical area sharing common BZB(s).
   - “reference day” means the day which is used to define forecasted value of CZC;
• “mark-up” means correction of the forecasted market value of CZC for the exchange of energy in order to be conservative for allocating CZC to the exchange of balancing capacity or sharing of reserves. 
• “adjustment factor” means correction of the forecasted market value of CZC for the exchange of energy, in order to improve forecasting during application in the capacity procurement optimisation function based on the used reference day.

3. In the Hansa MB 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 the Hansa MB Methodology; and
   c) any reference to legislation, regulation, directive, order, instrument, code or any other enactment shall include any modification, extension or re-enactment of it then in force.

TITLE 2
Methodology for market-based allocation process of CZC for the exchange of balancing capacity or sharing of reserves

Article 3
Market principles of each balancing capacity cooperation in the CCR
Hansa applying MB

1. The minimum validity period of balancing capacity bids shall be equal or a multiple of the day-ahead market time unit and have a maximum validity period of 24 hours.

2. The CZC allocated for the exchange of balancing capacity and/or sharing of reserves per product (either RR, mFRR or aFRR) that will not be used in the relevant timeframe by the Hansa TSOs which allocated it, shall be released to all TSOs of the same timeframe if possible, and at least, shall be released to all TSOs for the exchange of balancing energy with shorter activation times or for operating the imbalance netting process.

Article 4
Notification process for the use of the market-based allocation process

1. Each balancing capacity cooperation implementing the Hansa MB Methodology shall inform all European TSOs through an announcement on the ENTSO-E website. This announcement shall include:
a) Detailed description of the balancing capacity cooperation specifications
b) transmission system operators involved;
c) involved bidding zone borders;
d) duration of application or the allocation of CZC;
e) expected date for the balancing capacity market pursuant to Article 33(1) of the EBGL with the CZC allocation to enter into operation;
f) expected amount of power interchange due to cross-zonal balancing capacity activation process;
g) balancing capacity product and maximum amount of exchange of balancing capacity; and
h) timeframe of exchange of balancing capacity.

2. The Hansa TSOs of each balancing capacity cooperation shall make the notification at least 3 months before the CZC allocation process enters into operation.

**Article 5**

**Maximum volume of allocated CZC for the exchange of balancing capacity or sharing of reserves**

1. This methodology imposes no further limitations on the maximum volume of CZC to be allocated for the exchange of balancing capacity or sharing of reserves according to Article 41(2) of the EBGL.

2. The use of additional limits by each balancing capacity cooperation for the maximum volume of allocated CZC for the exchange of balancing capacity or sharing of reserves shall be set out in the proposal according to article 33(1) of the EBGL.

**Article 6**

**Determination of the market value of CZC**

1. The actual market value of CZC for the exchange of balancing capacity or sharing of reserves between two bidding zones in the balancing capacity market shall be calculated per day-ahead MTU.

2. When calculating the actual market value of CZC for the exchange of balancing capacity or sharing of reserves, the balancing capacity bids for each bidding zone submitted to the balancing capacity procurement optimisation function shall be used. The balancing capacity procurement optimisation function is out of scope of this methodology and will be defined in accordance with article 33(1) of the EBGL if the Hansa MB Methodology is applied by two or more Hansa TSOs starting a balancing capacity cooperation within the CCR Hansa.
3. The actual market value of CZC for the exchange of balancing capacity or sharing of reserves shall be based on balancing capacity bids from standard products. For a Hansa TSO applying the central dispatching model and using integrated scheduling process bids for the exchange of balancing services or sharing of reserves according to article 27 of the EBGL, the bids submitted by the Hansa TSO after application of conversion rules will be used to determine the market value of CZC for the exchange of balancing capacity or sharing of reserves.

4. The actual market value of CZC for the exchange of balancing capacity or sharing of reserves shall be calculated as the per-MW reduction in total balancing capacity procurement costs resulting from an incremental increase of CZC allocated for the exchange of balancing capacity or sharing of reserves.

5. The forecasted market value of CZC for the exchange of energy between two bidding zones in the day-ahead market timeframe shall be calculated for each day-ahead MTU.

6. The forecasted market value of CZC for the exchange of energy between bidding zones shall be calculated as the difference in the day-ahead prices of the corresponding hour in the relevant bidding zones of selected reference days in the congested direction. The forecasted market value of CZC for the exchange of energy is 0 EUR/MW in the opposite direction of the congested direction.

7. Any application in a balancing capacity cooperation 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.

8. The Hansa TSOs of each balancing capacity cooperation implementing the Hansa MB Methodology shall monitor and report to the Hansa TSOs the efficiency of the forecasting methodology, 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 7
Determination of the allocated volume of CZC 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 actual 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 balancing capacity procurement optimisation function shall allocate CZC for the exchange of balancing capacity or sharing of reserves simultaneously with the selection of balancing capacity bids.
3. The balancing capacity procurement optimization function shall ensure that the allocated volume of CZC for the exchange of balancing capacity or sharing of reserves implies that the value of the actual market value of CZC for the exchange of balancing capacity or sharing of reserves exceeds the forecasted market value of CZC for the exchange of energy between two bidding zones taking into account any adjustment factors according to Article 6 of this methodology.

4. In the balancing capacity procurement optimisation process, balancing capacity bid selection together with the CZC allocation are optimised to maximize socioeconomic benefit. The balancing capacity procurement optimisation shall minimise the overall costs of procuring the demanded volume of balancing capacity.

5. The overall costs of procurement of the demanded volume of balancing capacity include the cost of the selected balancing capacity bids and cost of allocating CZC for the exchange of balancing capacity or sharing of reserves calculated as allocated volume multiplied with forecasted market value of CZC for the exchange of energy for each BZB.

6. Any application in a balancing capacity cooperation of mark-ups to the forecasted market 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.

Article 8
Pricing of CZC

1. Each balancing capacity cooperation allocating CZC for the exchange of balancing capacity or sharing of reserves applying the market-based methodology within the CCR Hansa 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, BZB and balancing capacity product, i.e. up and downward standard balancing capacity product separately.

3. In case pay-as-cleared (cross border marginal pricing) is applied for the TSO-BSP settlement, the CZC price shall be equal to the difference in marginal prices of the standard product of each bidding-zone border. The price difference equals the marginal price in the area importing balancing capacity minus the marginal price in the area exporting balancing capacity.

4. In case the TSO-BSP settlement is not based on cross border marginal pricing and one or more restrictions on exchange or sharing of balancing capacity is binding for the procurement optimisation outcome, the CZC price for each bidding zone border and exchange direction shall be equal to the highest of the accepted standard balancing capacity product bid prices in the area importing balancing capacity minus the highest of the accepted standard balancing capacity product
bid prices in the area exporting balancing capacity. The CZC price shall not be lower than the highest of the accepted standard balancing capacity product bid prices in the area exporting balancing capacity plus the forecasted market value of CZC (including eventual adjustment factors and mark-up) used in the optimisation.

5. In case no restrictions on the exchange of balancing capacity or sharing of reserves are binding for the procurement optimisation outcome, the CZC price shall be 0EUR/MW.

**Article 9**

**Firmness regime**

1. 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 balancing capacity procurement optimisation function in accordance with 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 associated exchange of balancing energy for the same product if possible, and at least it shall be released to all TSOs for the exchange of balancing energy with shorter activation times or for operating the imbalance netting process.

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 paragraph 1 of this Article, the costs associated with mitigating the effects of curtailment shall be borne by the relevant Hansa TSOs. 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.

4. Hansa TSOs shall not increase the reliability margin calculated pursuant to Article 21 of the CACM Regulation due to the exchange of balancing capacity or sharing of reserves for frequency restoration reserves or replacement reserves.

**Article 10**

**Sharing of congestion income**

1. For each BZB the congestion income is calculated as the price of CZC pursuant to Article 8 of this methodology multiplied with the volume of balancing capacity that have been exchanged for the relevant product and direction on that BZB.

2. For the BZB of the balancing capacity cooperation where congestion income results from the exchange of balancing capacity or sharing of reserves, the Hansa TSOs on each side of the balancing capacity border shall receive their share of net border balancing income based on a 50%-50% sharing key.
3. In cases where the ownership shares or the shares of investments costs of Hansa TSOs on both sides of specific interconnectors on the concerned BZB are different from a 50%-50% split, the concerned Hansa 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 Hansa 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.

4. In case the BZBs of the balancing capacity cooperation consists of several interconnectors with different sharing keys, on which are owned by different Hansa TSOs, the net border balancing income shall be assigned first to the respective interconnectors on that balancing capacity border based on each interconnector’s contribution to the allocated CZC. The parameters defining the contribution of each interconnector will be agreed by the Hansa TSOs on the BZB of the balancing capacity cooperation. 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.

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

---

**Article 11**

**Publication of information**

1. The Hansa TSOs applying the market-based allocation process in the CCR Hansa shall publish all relevant and required information on the transparency website of ENTSOe according to article 3(5) of the EBGL.

2. The Hansa TSOs applying market-based allocation process in the CCR Hansa shall publish information on offered volumes as well as offered prices of procured balancing capacity, anonymised where necessary, no later than one hour after the results of the procurement have been notified to the bidders, pursuant to article 12(3)(e) of the EBGL.


---

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.
capacity or sharing of reserves pursuant to article 38 of the EBGL at the latest 24 hours after the allocation and no later than 6 hours before the use of the allocated CZC, pursuant to article 12(3)(h) of the EBGL:

a) date and time when the decision on allocation was made;
b) period of the allocation;
c) volumes allocated;
d) market values used as a basis for the allocation process in accordance with article 39 of the EBGL;

4. Hansa TSOs that will apply the market-based allocation process in the CCR Hansa 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:

a) volume of allocated and used CZC per MTU,
b) volume of released CZC for subsequent timeframes per MTU;
c) estimated realised costs and benefits of the allocation process;

5. Hansa TSOs that will apply the market-based allocation process in the CCR Hansa shall publish the approved methodologies at least one month before its application pursuant to article 12(3)(j) of the EBGL.

6. Only when subject to approval pursuant to article 18 of the EBGL, a Hansa TSO may withhold the publication of information on offered prices and volumes of balancing capacity if justified for reasons of market abuse concerns and if not detrimental to the effective functioning of the electricity markets. A Hansa TSO shall report such withholdings at least once a year to the relevant regulatory authority in accordance with article 37 of Directive 2009/72/EC and pursuant to article 12(4) of the EBGL.

### TITLE 3
Final provisions

#### Article 12
Publication of the Methodology

1. Hansa TSOs shall publish this Hansa MB Methodology without undue delay after all regulatory authorities of the CCR Hansa have approved the Methodology or a decision has been taken by the Agency for the Cooperation of Energy Regulators in accordance with article 5(6), article 5(7), article 6(1) and article 6(2) of the EBGL.

#### Article 13
Language

1. The reference language for the Hansa MB Methodology shall be English. For the avoidance of doubt, where Hansa TSOs need to translate the Methodology into their national language(s), in the event of inconsistencies between the English
version published by Hansa TSOs in accordance with article 7 of the EBGL and any version in another language, the relevant Hansa TSOs shall, in accordance with national legislation, provide the relevant Hansa NRAs with an updated translation of the Hansa MB Methodology.