











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

13 October 2020

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 "EB Regulation") 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 (cross-zonal capacity) for the exchange of balancing capacity in the CCR Hansa. This methodology is hereinafter referred to as "methodology for market-based allocation".
- (2) The methodology for market-based allocation takes into account the general principles and goals set in the EB Regulation as well as the Commission Regulation (EU) 2017/1485 of 2 August 2017 establishing a guideline on electricity transmission system operation (hereafter referred to as "SO Regulation"), the CACM Regulation and Regulation (EU) No 2019/943 of the European Parliament and of the Council of 5 June 2019 on the internal market for electricity (recast) (hereafter referred to as "Regulation (EU) No 2019/943").
- (3) The goal of the EB Regulation 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 cross-zonal capacity 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 methodology for market-based allocation shall define the details of market-based allocation methodology to enable future application of the methodology of market-based allocation by Hansa TSOs within the CCR Hansa.
- (5) The methodology for market-based allocation 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 cross-zonal capacity for the exchange of balancing capacity or sharing of reserves, and the forecasted market value of cross-zonal capacity for the exchange of energy; (iii) a detailed description of the pricing method, the firmness regime and the sharing of congestion income for the cross-zonal capacity 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 cross-zonal capacity for the exchange of balancing capacity or sharing of reserves.
- (6) The methodology for market-based allocation is based on a comparison of the actual market value of cross-zonal capacity for the exchange of balancing capacity and the forecasted market value of the cross-zonal capacity for the exchange of energy. The pricing method, the firmness regime and sharing of congestion income for cross-zonal capacity that has been

- allocated for the exchange of balancing capacity ensure equal treatment with cross-zonal capacity allocated for the exchange of energy.
- (7) The calculation of the market value of cross-zonal capacity shall apply the following requirements: (i) the market value of the cross-zonal capacity shall be based on the actual or forecasted market values of cross-zonal capacity; (ii) the actual market value of cross-zonal capacity for the exchange of balancing capacity or sharing of reserves shall be calculated based on balancing capacity bids submitted to the balancing capacity procurement optimisation function; (iii) the forecasted market value of cross-zonal capacity for the exchange of energy shall be based on the rules of forecasting enabling the accurate and reliable assessment of the market value of cross-zonal capacity based on expected differences in day-ahead market prices, where relevant and possible, expected bids of market participants in the intraday markets, and include additional relevant factors that influence generation and demand, where appropriate. In addition, the Hansa TSOs of each application of the methodology of market-based allocation will collect information for reviewing the efficiency of the forecasting, including a comparison of forecasted and actual market values.
- (8) The Hansa TSOs of each application of the methodology of market-based allocation shall publish, as soon as possible but no later than 24 (twenty-four) hours after the allocation and no later than 6 (six) hours before the use of the allocated cross-zonal capacity, information on cross-zonal capacity allocation for the exchange of balancing capacity or sharing of reserves and, as well as information on the use of cross-zonal capacity for the exchange of balancing capacity or sharing of reserves as soon as possible, but no later than one week after the use of allocated cross-zonal capacity.
- (9) Article 5(5) of the EB Regulation requires that the expected impact of the methodology for market-based allocation on the objectives of the EB Regulation is described. The impact is presented below (points (10) to (14) of this Whereas Section).
- (10)The methodology for market-based allocation contributes to and does not in any way hamper the achievement of the objectives of article 3 of the EB Regulation. In particular, the methodology for market-based allocation serves the objectives of fostering effective competition, non-discrimination and transparency in balancing markets (article 3(1)(a) of the EB Regulation), enhancing efficiency of balancing as well as efficiency of European and national balancing markets (article 3(1)(b) of the EB Regulation), integrating balancing markets and promoting the possibilities for exchanges of balancing services while contributing to operational security (article 3(1)(c) of the EB Regulation), contributing to the efficient longterm 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 EB Regulation) 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 EB Regulation).

- (11) The methodology for market-based allocation fosters effective competition, non-discrimination and transparency in balancing markets (article 3(1)(a) of the EB Regulation) by defining common and harmonised rules for the allocation of cross-zonal capacity for the exchange of balancing capacity and/or sharing of reserves by application of the methodology of market-based allocations within the CCR Hansa. Each application of the methodology of market-based allocation 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 methodology for market-based allocation.
- (12) The methodology for market-based allocation enhances efficiency of balancing as well as efficiency of European and national balancing markets (Article 3(1)(b) of the EB Regulation) 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 EB Regulation) as the allocation of cross-zonal capacity 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 EB Regulation 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.
- (13) The methodology for market-based allocation 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 Regulation) by applying market-based allocation process for cross-zonal capacity.
- (14) In conclusion, the methodology for market-based allocation contributes to the general objectives of the EB Regulation to the benefit of all market participants and electricity end consumers.

Abbreviations

The list of abbreviations used in this methodology for market-based allocation is as follows:

- aFRR: frequency restoration reserve with automatic activation
- BSP: balancing service provider
- BZB: bidding-zone border
- CACM Regulation: Commission Regulation (EU) 1222/2015 establishing a guideline on capacity allocation and congestion management
- CCR: capacity calculation region
- EB Regulation: Commission Regulation (EU) 2195/2017 establishing a guideline on electricity balancing
- ENTSO-E: European Network of Transmission System Operators for Electricity
- GCT: gate closure time
- mFRR: frequency restoration reserve with manual activation
- MTU: market time unit
- NRA: national regulatory authority
- RR: replacement reserve
- SDAC: single day-ahead coupling
- SO Regulation: Commission Regulation (EU) 2017/1485 establishing a guideline on electricity transmission system operation
- TSO: transmission system operator

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TITLE 1 General provisions

Article 1 Subject matter and scope

- This methodology for market-based allocation specifies the market-based process of the allocation of
 cross-zonal capacity for the exchange of balancing capacity or sharing of reserves for the CCR Hansa;
 the market-based process is based on the forecasted market values of cross-zonal capacity for the
 exchange of energy and the actual market values of cross-zonal capacity for the exchange of balancing
 capacity or sharing of reserves.
- 2. The application of the methodology of market-based allocation is subject to a proposal for application, which may be developed by two or more TSOs at their own initiative or at the request of their relevant regulatory authorities in accordance with article 38(1) of the EB Regulation and subject to approval by the competent regulatory authorities.
- 3. The proposal for the application of the market-based allocation shall include the BZBs, the market timeframe, the duration of application and the detailed description of a methodology to be applied in accordance with article 38(2)(a) of the EB Regulation.
- 4. Two or more Hansa TSOs exchanging balancing capacity by applying the methodology of market-based allocation shall use a common and harmonised set of rules and processes for the exchange and procurement of balancing capacity in accordance with article 33 of the EB Regulation.
- 5. The list of standard products for balancing capacity for RR, mFRR, and aFRR is subject to the methodology pursuant to article 25(2) of the EB Regulation and out of the scope of this methodology of market-based allocation.
- 6. The scope of this methodology for market-based allocation 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 application of the methodology of market-based allocation within the CCR Hansa, where required in accordance with articles 33 and 38 of the EB Regulation.

Article 2 Definitions and interpretation

- 1. For the purposes of the methodology for market-based allocation, terms used in this methodology shall have the meaning of the definitions included in article 2 of the EB Regulation, article 3 of the SO Regulation and article 2 of the CACM Regulation, Regulation (EU) 2019/943, 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 (EU) 2019/944.
- 2. The following additional definitions shall also apply:
 - "Adjustment factor" means correction of the forecasted market value of cross-zonal capacity
 for the exchange of energy, in order to improve forecasting during application in the balancing
 capacity procurement optimisation function based on the used reference day.

- 'Economic surplus from the exchange of balancing capacity or sharing of reserves' means the sum for the relevant time period of (i) the TSOs' surplus for the exchange of balancing capacity or sharing of reserves, (ii) the balancing service providers' surplus for the exchange of balancing capacity or sharing of reserves and (iii) the congestion income. Surplus for balancing service providers being the difference between the clearing price per capacity unit and the price of the accepted bid multiplied by the accepted capacity volume of the bid. Surplus for TSOs being the difference between the technical price limit and the clearing price per capacity unit multiplied by the volume of the satisfied balancing capacity demand.
- "Mark-up" means an addition to the forecasted market value of cross-zonal capacity for the
 exchange of energy calculated in order to take into account the uncertainty in the forecasted
 market value of cross-zonal capacity for the exchange of energy during the allocation of the
 cross-zonal capacity for the exchange of balancing capacity.
- "Reference day" means the day which is used to define forecasted market value of cross-zonal capacity for the exchange of energy;
- 3. In the methodology for market-based allocation, 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 methodology for market-based allocation;
 - 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; and
 - d) any reference to an article without an indication of the document shall mean a reference to this methodology for market-based allocation.

TITLE 2

Methodology for market-based allocation process of cross-zonal capacity for the exchange of balancing capacity or sharing of reserves

Article 3 Principles for applying market-based cross-zonal capacity allocation

- 1. In the context of this methodology for market-based allocation, an application of the market-based methodology consists of two or more Hansa TSOs that apply the exchange of balancing capacity or sharing of reserves in a geographical area sharing common BZB(s).
- 2. The Hansa TSOs that want to establish an application of the methodology of market-based allocation shall publish 3 (three) months ahead of the application of this methodology for market-based allocation on the ENTSO-E website the expected costs and benefits of such an application of the methodology of market-based allocation.
- 3. The settlement of standard balancing capacity bids for each application of this methodology for market-based allocation between TSOs and BSPs shall be based on cross-zonal marginal pricing (payas-cleared).
- 4. For each application of the market-based methodology, the contracting period of standard balancing capacity bids shall be equal to or a multiple of the day-ahead MTU and shall be less or equal to the total amount of day-ahead MTU of the concerned day. The contracting period is the period for which a BSP can submit one or more balancing capacity bids during the procurement process of balancing capacity.
- 5. For each application of the market-based methodology, the validity period of standard balancing capacity bids shall be equal or a multiple of the day-ahead MTU and shall be less or equal to the total amount of day-ahead MTU of the concerned day. The validity period of standard balancing capacity bids is the period for which the single standard product for balancing capacity bid is offered, i.e. each submitted capacity volume has one single bid price.
- 6. For each application of the market-based methodology, the TSO-BSP pricing rules shall be harmonised. In case of a Hansa TSO applying a central dispatching model and applying this market-based methodology, the TSO-BSP pricing rules of standard balancing capacity products procured within the application of the market-based methodology are defined by the Hansa TSO in the national 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 EB Regulation.

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

1. Each TSO intending to apply this market-based allocation process shall notify Hansa TSOs 3 (three) months prior to entering into operation in accordance with article 150 of the SO Regulation and inform all stakeholders and all TSOs through an announcement on the ENTSO-E website, at least 3

(three) months prior to entering into operation. The announcement on the ENTSO-E website shall include a detailed description of the specifications in accordance with article 38(2) of the EB Regulation as well as the type of standard balancing capacity product which will be exchanged or shared and foreseen date of entry into operation.

2. Each application of the market-based methodology shall share the applied cross-zonal capacity allocation optimisation function with all Hansa TSOs.

Article 5 Timeframe of market-based allocation

- The market-based allocation process to allocate cross-zonal capacity for the exchange of balancing capacity and/or sharing of reserves shall include the following consecutive timings for each application of the methodology of market-based allocation of the CCR Hansa applying this methodology for market-based allocation:
 - a. The GCT for BSPs to submit to TSOs (TSO-BSP GCT) the standard balancing capacity bids shall be the same for each BSP within each application of the methodology of marketbased allocation (per standard product and per direction) and shall be organised in between 1 (one) week in advance of the provision of the balancing capacity and sufficiently before sending the final results of the capacity calculation for cross-zonal capacity of the SDAC pursuant to ACER decision 02/2019 to NEMOs.
 - b. For Hansa TSOs of an application of the methodology of market-based allocation applying a central dispatching model, the GCT for BSPs to submit the integrated scheduling process bids that are converted to the standard balancing capacity bids shall be defined in the national terms and conditions pursuant to articles 24(5) and 24(6) of the EB Regulation.
 - c. Each application of the methodology of market-based allocation shall send the allocated cross-zonal capacity per product and per direction to the respective modules for the management of cross-zonal capacity of the European platforms for the exchange of balancing energy, within 1 (one) hour after the results of balancing capacity procurement optimisation are known.
 - d. Each application of the methodology of market-based allocation shall notify the BSPs about their selected standard upward balancing capacity bids or downward balancing capacity bids at the same point in time within each application of the methodology of market-based allocation. The notification shall be done before subsequent TSO-BSP GCTs within the application of the methodology of market-based allocation, and at the latest 1 (one) hour before the GCT of the SDAC.
 - e. Notification to all market participants of allocated cross-zonal capacity for the exchange of balancing capacity and/or sharing of reserves shall be done at the same point in time as described in paragraph *d*.
 - 2. The market-based allocation process to allocate cross-zonal capacity for the exchange of balancing capacity and/or sharing of reserves shall include the following steps:

- a. Standard upward and standard downward balancing capacity bids shall be submitted to the respective application of the methodology of market-based allocation.
- b. For TSOs of an application of the methodology of market-based allocation applying a central dispatching model, BSPs may submit only integrated scheduling process 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 EB Regulation.
- c. Hansa TSOs of each application of the methodology of market-based allocation of the CCR Hansa shall perform the balancing capacity procurement optimisation function after the TSO-BSP GCT of standard balancing capacity bids and determine the allocation of cross-zonal capacity for the exchange of balancing capacity or sharing of reserves.
- d. Hansa TSOs of each application of the methodology of market-based allocation of the CCR Hansa shall determine the allocated cross-zonal capacity for the exchange of balancing capacity or sharing of reserves per standard product and per direction.
- e. Hansa TSOs of each application of the methodology of market-based allocation of the CCR Hansa shall procure balancing capacity using a balancing capacity procurement optimisation function and respecting the allocated cross-zonal capacity for the exchange of balancing capacity or sharing of reserves.
- Cross-zonal capacity allocated for the exchange of balancing capacity and/or sharing of reserves for each product within each application of the methodology of market-based allocation in the CCR Hansa shall be deducted from the result of the capacity calculation in accordance with the Capacity Calculation Methodology for CCR Hansa, following article 20(2) of the CACM Regulation (EU) 2015/1222.

Article 6

Maximum volume of allocated cross-zonal capacity for the exchange of balancing capacity or sharing of reserves

- 1. Hansa TSOs and Hansa NRAs of each application of the methodology of market-based allocation of the CCR Hansa may commonly apply additional lower limits besides the limitations of article 41(2) of the EB Regulation for the maximum volume of allocated cross-zonal capacity for the exchange of balancing capacity or sharing of reserves within their own application of the methodology of market-based allocation. The use of additional lower limits by each application for the maximum volume of allocated cross-zonal capacity for the exchange of balancing capacity or sharing of reserves shall be set out in the proposal to article 33(1) of the EB Regulation.
- 2. The maximum volume limitations of allocated cross-zonal capacity for the exchange of balancing capacity and/or sharing of reserves shall be applicable per BZB and include the cumulative allocation of all balancing capacity products per direction.

Article 7

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

- 1. The forecasted market value of cross-zonal capacity for the exchange of energy shall be based on the use of a forecasting methodology and shall be calculated for each day-ahead MTU, where the cross-zonal capacity is calculated in accordance with the Capacity Calculation Methodology for CCR Hansa, following article 20(2) of the CACM Regulation (EU) 2015/1222.
- 2. The forecasted market value of cross-zonal capacity for the exchange of energy between bidding zones per MW allocated cross-zonal capacity shall be calculated as the difference in the day-ahead prices of the corresponding MTU in the relevant bidding zones of selected reference days in the congested direction. The forecasted market value of cross-zonal capacity for the exchange of energy is 0 EUR/MW in the opposite direction of the congested direction.
- 3. The forecasting methodology using price differences may include:
 - a. adjustment factors to improve the accuracy of the forecasting of the forecasted market value of cross-zonal capacity for the exchange of energy;
 - b. mark-ups to reduce the allocation of cross-zonal capacity for the exchange of balancing capacity or sharing of reserves.
- 4. By default, the following reference days shall be chosen:
 - a. the previous working day whenever cross-zonal capacity is allocated for a working day;
 - b. the previous weekend day whenever cross-zonal capacity is allocated for a weekend day; and
 - c. the previous Sunday or bank holiday whenever cross-zonal capacity is allocated for a bank holiday in the respective bidding zone.

In case the CBA pursuant to Article 3.2 or the analysis of the efficiency pursuant to Article 7.6 of the forecasting shows that different reference days are more suitable on a specific border, the application of the methodology of market-based allocation shall choose the more accurate reference day, or a combination of them.

- 5. The concept and computation of adjustment factors and mark-ups to the forecasted market value of cross-zonal capacity for the exchange of energy between bidding zones shall be included and justified in the methodology for the establishment of common and harmonised rules and processes for the exchange and procurement of balancing capacity according to article 33(1) of the EB Regulation.
- 6. The Hansa TSOs of each application of the methodology of market-based allocation applying the methodology for market-based allocation shall monitor, demonstrate and publish on the ENTSO-E website the efficiency of the forecasting and the appropriateness of the choice of reference days, and application of adjustment factors and mark-ups on at least a yearly basis, including a comparison of the forecasted and actual market values of the cross-zonal capacity for the exchange of energy and take appropriate actions, where needed.

Article 8

Determination of the market value of cross-zonal capacity for the exchange of balancing capacity and sharing of reserves

- The actual market value of cross-zonal capacity for the exchange of balancing capacity or sharing of reserves between all bidding zones where the market-based allocation methodology is applied shall be:
 - a. the change of economic surplus from the exchange of balancing capacity or sharing of reserves per MW of cross-zonal capacity;
 - b. defined per day-ahead MTU;
 - c. calculated per product and per direction, separately;
 - d. calculated based on standard upward balancing capacity bids or downward balancing capacity bids submitted to the capacity procurement optimisation function pursuant to article 33(3) of the EB Regulation; and
 - e. calculated based on Hansa TSOs' demand.
- 2. In accordance with Article 8(1)(a), the actual market value of cross-zonal capacity for the exchange of balancing capacity or sharing of reserves between bidding zones where the market-based methodology is applied shall be calculated based on the change of economic surplus from the exchange of balancing capacity or sharing of reserves, resulting from the change of available cross-zonal capacities allocated for the exchange of balancing capacity or sharing of reserves.
- 3. 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 EB Regulation, the bids submitted by the Hansa TSO after application of conversion rules will be used to determine the market value of cross-zonal capacity for the exchange of balancing capacity or sharing of reserves.

Article 9

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

- The determination of allocation of cross-zonal capacity to the exchange of balancing capacity or sharing of reserves shall be based on a comparison of the actual market value of cross-zonal capacity for the exchange of balancing capacity or sharing of reserves and the forecasted market value of cross-zonal capacity for the exchange of energy.
- 2. The cross-zonal capacity allocation optimisation function shall allocate cross-zonal capacity for the exchange of balancing capacity or sharing of reserves simultaneously with the selection of balancing capacity bids via the balancing capacity procurement optimisation function.
- 3. The objective of the cross-zonal capacity allocation optimisation function shall be the maximisation of the sum of expected economic surplus for SDAC and the economic surplus from the exchange of balancing capacity or sharing of reserves per trading day.
- 4. In the balancing capacity procurement optimisation process, balancing capacity bid selection together with the cross-zonal capacity allocation are optimised to maximize socioeconomic welfare given the constraints defined in common and harmonised rules and processes for the exchange and procurement of balancing capacity in accordance with article 33 of the EB Regulation. The

procurement optimisation shall minimise the overall costs of procuring the demanded volume of balancing capacity. The overall costs include the cost of balancing capacity bids and cost of allocating cross-zonal capacity to exchange of balancing capacity calculated as allocated volume multiplied with forecasted market value of cross-zonal capacity for the exchange of energy for each bidding zone border.

- 5. A mark-up may be added to the forecasted market value of cross-zonal capacity for the exchange of energy calculated in accordance with Article 7(1), in order to take into account the uncertainty of the forecasted market value of cross-zonal capacity for the exchange of energy. Mark-ups added on the forecasted market value of cross-zonal capacity for the exchange of energy are defined as follows:
 - a. for each MTU;
 - b. per direction;
 - c. in EUR/MWh.
- 6. The inputs of the cross-zonal capacity allocation optimisation function are:
 - a. the forecasted market value of cross-zonal capacity for the exchange of energy for each marginal MW;
 - b. the standard balancing capacity bids per direction;
 - c. the TSOs' demand for the respective standard balancing capacity product;
 - d. the tolerance band for the reduced TSO balancing capacity demand dependent on the available cross-zonal capacities, based on sharing of reserves agreement of two or more TSOs to be applied with market-based allocation;
 - e. the minimum and maximum procurement volume of balancing capacity;
 - f. mark-ups and adjustment factors if relevant;
 - g. additional cross-zonal capacity allocation limitations for the exchange of balancing capacity or sharing of reserves in accordance with Article 6(1) if relevant; and
 - h. the maximum volume of allocated cross-zonal capacity for the exchange of balancing capacity or sharing of reserves if relevant.

Article 10 Pricing of cross-zonal capacity

- 1. Each application of the methodology of market-based allocation allocating cross-zonal capacity for the exchange of balancing capacity or sharing of reserves within the CCR Hansa shall calculate the cross-zonal capacity price for the volume of cross-zonal capacity that is allocated for the exchange of balancing capacity or sharing of reserves.
- 2. The price of cross-zonal capacity 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. The cross-zonal capacity price per MW shall be equal to the difference in cross-zonal 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.

Article 11 Firmness regime

- 1. The allocated cross-zonal capacity 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 EB Regulation.
- 2. According to article 38(4) of the EB Regulation, cross-zonal capacity allocated for the exchange of balancing capacity or sharing of reserves shall be used exclusively for the product where it was allocated for, being RR, mFRR or aFRR. In accordance with article 38(9) of the EB Regulation, if the cross-zonal capacity allocated for the exchange of balancing capacity or sharing of reserves has not been used for the associated exchange of balancing energy, it shall be released to all TSOs for the exchange of balancing energy with shorter activation times or for operating the imbalance netting process. Each application of the market-based methodology shall at any time inform all Hansa TSOs, on who is the TSO for which cross-zonal capacity has been allocated for balancing capacity. The reliability margin calculated pursuant to CACM Regulation shall be used only for operating and exchanging frequency containment reserves, except on direct current interconnectors for which cross-zonal capacity for operating and exchanging frequency containment reserves may also be allocated in accordance with article 38(1) of the EB Regulation.
- 3. For each application of the methodology for market-based allocation, the relevant Hansa TSOs shall determine fallback procedures and curtailment procedures on firmness regime of cross-zonal capacity according to article 38 of the EB Regulation
- 4. In the event of force majeure or emergency situations, curtailment of cross-zonal capacities which were allocated shall be proportionally distributed between the affected cross-zonal capacity allocated for the exchange of energy and for the exchange of balancing capacity or sharing of reserves in accordance with article 41(3) of the EB Regulation. Hansa TSOs can deviate from this principle by proposing a more cost efficient, non-discriminatory solution in the proposal pursuant to article 33(1) of the EB Regulation.
- 5. Costs of ensuring firmness of cross-zonal capacity allocated for the exchange of balancing capacity or sharing of reserves shall include follow up costs or ensuring firmness of procured balancing capacity bids in accordance with Article 11(1), which are caused by the curtailment of firm cross-zonal capacity in the event of force majeure or emergency situations. These costs also include the additional costs from the procurement of balancing capacity due to the non-availability of the balancing capacity given the curtailment of cross-zonal capacity.
- The costs of ensuring firmness shall be shared in accordance with the regional methodologies developed in accordance with article 74 of the CACM Regulation for cases which are within the scope of these methodologies.
- 7. Any costs of ensuring firmness which are outside the scope of the methodologies referred to in Article 11(6) shall be borne by the Hansa TSO requesting the curtailment.
- 8. Hansa TSOs shall not increase the reliability margin calculated pursuant to article 33(7) of the EB Regulation due to the exchange of balancing capacity or sharing of reserves for RR, mFRR, and aFRR.

Article 12 Sharing of congestion income

- 1. For each BZB the congestion income is calculated as the price of cross-zonal capacity pursuant to Article 10 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 application of the methodology of market-based allocation 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 investment 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 website 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 via the ENTSO-E's website.
- 4. In case the BZBs of the application of the methodology of market-based allocation consist of several interconnectors with different sharing keys, 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 cross-zonal capacity. The parameters defining the contribution of each interconnector will be agreed by the Hansa TSOs on the BZB of the application of the methodology of market-based allocation. They shall be published in a common document by ENTSO-E on its website for information purposes only. The document shall be updated and published promptly as soon as any changes occur. Each publication shall be announced via the ENTSO-E's website.
- 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 13 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 ENTSO-E according to article 12(5) of the EB Regulation.

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 articles 12(4) or 12(6) of Regulation (EC) 347/2013.

- 2. The Hansa TSOs applying market-based allocation process in the CCR Hansa shall publish information on the allocation of cross-zonal capacity for the exchange of balancing capacity or sharing of reserves pursuant to article 38 of the EB Regulation as soon as possible but no later than 24 (twenty-four) hours after the allocation and no later than 6 (six) hours before the use of the allocated cross-zonal capacity, pursuant to article 12(3)(h) of the EB Regulation:
 - 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 EB Regulation.
- 3. Hansa TSOs that will apply the market-based allocation process in the CCR Hansa shall inform on the use of allocated cross-zonal capacity for the exchange of balancing capacity or sharing of reserves pursuant to article 38 of the EB Regulation as soon as possible but no later than 1 (one) week after the use of allocated cross-zonal capacity, pursuant to article 12(3)(i) of the EB Regulation:
 - a) volume of allocated and used cross-zonal capacity per MTU;
 - b) volume of released cross-zonal capacity for subsequent time frames per MTU;
 - c) estimated realised costs and benefits of the allocation process.
- 4. Hansa TSOs that will apply the market-based allocation process in the CCR Hansa shall publish the approved methodologies for application at least 3 (three) months before its application pursuant to article 12(3)(j) of the EB Regulation.
- 5. Only when subject to approval pursuant to article 18 of the EB Regulation, a Hansa TSO applying the market-based methodology 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 applying this market-based methodology shall report such withholdings at least once a year to the relevant regulatory authority in accordance with article 59 of Directive (EU) 2019/944 and pursuant to article 12(4) of the EB Regulation.

TITLE 3 Final provisions

Article 14 Implementation timeline

This methodology shall be considered implemented when the Hansa NRAs have approved this methodology for market-based allocation in accordance with article 5(3)(h) of the EB Regulation and article 5(3) of the Regulation (EU) 2019/942 of the European Parliament and of the Council of 5 June 2019 establishing a European Union Agency for the Cooperation of Energy Regulators.

Article 15 Publication of the Methodology

Hansa TSOs shall publish this methodology for market-based allocation without undue delay on the ENTSO-E website after all NRAs of the CCR Hansa have approved this methodology for market-based allocation.

Article 16 Language

The reference language for this Hansa TSOs' methodology for market-based allocation shall be English. For the avoidance of doubt, where Hansa TSOs need to translate this 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 EB Regulation 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 methodology for market-based allocation.