Transmission System Operators for Electricity

European Network of entso

All TSOs' proposal on list of standard products for balancing capacity for frequency restoration reserves and replacement reserves pursuant to Article 25(2) of

Commission Regulation (EU) 2017/2195 of 23 November 2017 establishing a guideline on electricity balancing

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18 December 2019

**ACER Decision on SPBC: Annex I** 



# Methodology for a list of standard products for balancing capacity for frequency restoration reserves and replacement reserves

in accordance with Article 25(2) of Commission Regulation (EU) 2017/2195 of 23 November 2017 establishing a guideline on electricity balancing

17 June 2020



### **Contents**

### Content

Whereas	<u>4</u> 3
Article 1 Subject matter and scope	<u>7</u> 5
Article 2 Definitions and interpretation	<u>7</u> 5
Article 3 General principles	86
Article 4 Characteristics of standard product for balancing capacity	96
Article 5 General provision for standard product for balancing capacity bid	
Article 6 Implementation timeline	107
Article 7 Publication of the SPBC proposal	
Article 8 Language	



#### ALL TSOS, TAKING INTO ACCOUNT THE FOLLOWING:

#### Whereas

- (1) This document is a common proposal developed by all Transmission System Operators (hereafter referred to as "TSOs") regardingThis document describes the methodology on the list of standard products for balancing capacity for frequency restoration reserves and replacement reserves pursuant to Article 25(2) of the Regulation (EU) 2017/2195 establishing a guideline on electricity balancing (hereafter referred to as the "EB Regulation"). Regulation"). This proposal is hereafter referred to as the "SPBC proposal"."
- (2) The SPBC proposalmethodology takes into account the general principles and goals set in the EB Regulation, the Regulation (EU) 2017/1485 establishing a guideline on electricity transmission system operation (hereafter referred to as the "SO Regulation"), Regulation"), the Regulation (EU) 2019/943 of the European Parliament and of Council of 5 June 2019 on the internal market for electricity (recast) (hereafter referred to as the "Electricity Regulation"). Regulation").
- (3) The goal of the EB Regulation is the integration of balancing markets. To facilitate this goal, it is necessary to develop implementation frameworks for European platforms for balancing energy exchange from frequency restoration reserves with automatic and manual activation, replacement reserves and imbalance netting process pursuant to Article 19 to 22 of the EB Regulation. Additionally, Article 25 of the EB Regulation formulates the standard products for balancing capacity.
- (4) In accordance with Article 25(4) of the EB Regulation, the list of standard products for balancing energy and balancing capacity may set out at least preparation period, ramping period, full activation time, minimum and maximum quantity, deactivation period, minimum and maximum duration of delivery period, validity period and mode of activation of a standard product bid. In addition, in accordance with Article 25(5) of the EB Regulation, this list shall set out at least price of the bid, divisibility, location and minimum duration between the end of deactivation period and the following activation as the variable characteristics of a standard product to be determined by the balancing service providers during the prequalification or when submitting the standard product bid.
- (5) In accordance with Article 25(6) of the EB Regulation, standard products for balancing energy and balancing capacity shall: ensure an efficient standardisation, foster cross-border competition and liquidity, and avoid undue market fragmentation as well as facilitate the participation of demand facility owners, third parties and owners of power generating facilities from renewable energy sources as well as owners of energy storage units as balancing service providers.
- (6) Article 16(8) of the EB Regulation specifies that "for each product for balancing capacity, the reserve providing unit, the reserve providing group, the demand facility or the third party and the associated balance responsible parties, shall belong to the same scheduling area."
- (7) Article 32(3) of the EB Regulation defines the procurement rules, requiring that "the procurement of upward and downward balancing capacity for at least the frequency restoration reserves and the replacement reserves shall be carried out separately."



- (8) The EB Regulation recital (9) states that "each balancing service provider intending to provide balancing energy or balancing capacity should successfully pass a qualification process defined by the TSOs in close cooperation with DSOs where necessary."
- (9) The SPBC proposal fulfils the objectives stated in Article 3 of the EB Regulation as follows:
- (9) The SPBC proposal fulfils the requirements of Article 25(2) of the EB Regulation by specifying a list of For the specific case of mFRR which has two activation types (scheduled and direct activation), the procured standard products product for balancing capacity must be able to deliver a mFRR standard product for balancing energy with direct activation for the purpose of restoring frequency within the Time to Restore Frequency (TTRF).
- (10) The application and implementation of this SPBC methodology is mandatory for all TSOs that intend to use exchanging balancing capacity in accordance with Article 33 of the EB Regulation. The SPBC methodology is also applicable for each TSO, when this TSO has defined capacity products for frequency restoration reserves and replacement reserves. If a TSO uses standard balancing capacity products for frequency restoration reserves and replacement reserves or to exchange then this TSO has to implement this SPBC methodology. If a TSO has defined specific products for balancing capacity in accordance with Article 3326 of the EB Regulation, then this TSOs does not need to implement this SPBC methodology.
- (11) This SPBC methodology fulfils the objectives stated in Article 3 of the EB Regulation as follows:
  - (a) The SPBC proposalmethodology contributes to the efficiency, fostering effective competition and integration of balancing markets, as required by Article 3(1)(a) of the EB Regulation, by defining the list of standard products for balancing capacity for frequency restoration reserves and replacement reserves, including the respective bid parameters.
  - (b) The This SPBC proposal methodology is non-discriminatory, as required by Article 3(1)(a) of the EB Regulation, as it applies the same rules for all TSOs and BSPs. balancing service providers (hereafter 'BSPs'). In particular, the standard product for balancing capacity is based on TSOs' need and not on the technical characteristics of the providers, and it does not differ between technologies.
  - (c) The This SPBC proposal methodology contributes to the transparency in balancing markets, as required by Article 3(1)(a) of the EB Regulation, by specifying requirements on publication with respect to bid submission.
  - (d) This SPBC methodology enhances efficiency of balancing as well as the efficiency of the European and national balancing markets, as required by Article 3(1)(b) of the EB Regulation by defining a list of standard products for balancing capacity from frequency restoration reserves and replacement reserves especially for the exchange between TSOs to foster cost efficient procurement.
  - (e)(e) This SPBC methodology, as required by Article 3(1)(c) of the EB Regulation, contributes to integrating balancing markets and promoting the possibilities for exchange of balancing services while contributing to operational security and considers the agreed European standards and technical specification by fulfilling. The definition of the list for standard products for balancing capacity, accommodating TSOs' needs, promotes the usage of these products, limiting the need for using specific products for balancing capacity, thus increasing the possibilities for exchanges of balancing capacity. The rules included in this SPBC methodology, especially on the need for

All TSOs' proposal on list of standard products for balancing capacity for frequency restoration reserves and replacement reserves pursuant to Article 25(2) of Commission Regulation (EU) 2017/2195 of 23 November 2017 establishing a guideline on electricity



direct activation for frequency restoration reserves with manual activation take into account the requirements of the SO Regulation and its supporting documents., contributing to operational security.

(d) In conclusion, the SPBC proposal meets the objectives of the EB Regulation.

SUBMIT THE FOLLOWING SPBC PROPOSAL TO THE AGENCY FOR THE COOPERATION **OF ENERGY REGULATORS:** 



- (f) This SPBC methodology, as required by Article 3(1)(d) of the EB Regulation, contributes to the efficient long-term operation and development of the electricity transmission system by optimising the procurement of balancing capacity on a cross-border level with efficient use of cross-zonal capacities. Additionally, as required by Article 3(1)(d) of the EB regulation, the SPBC methodology facilitates the efficient and consistent functioning of day-ahead, intraday and balancing markets, by clearly separating the timeframes.
- (g) This SPBC methodology, as required by Article 3(1)(e) of the EB Regulation, contributes to fair, objective, transparent and market-based procurement of balancing capacity, by specifying non-discriminatory rules for TSOs and BSPs. Additionally, as also required by Article 3(1)(e), this SPBC methodology avoids undue barriers to entry for new entrants and fosters the liquidity of balancing markets by specifying the characteristics of the standard products for balancing capacity. These are based on the TSOs needs and not on the BSPs characteristics and the SPBC methodology establishes a framework for further harmonisation for TSOs who exchange balancing capacity.
- (h) This SPBC methodology, as required by Articles 3(1)(f) and (g) of the EB Regulation, facilitates the participation of demand response including aggregation facilities, energy storage and renewable energy sources, by establishing a level-playing field for all BSPs, through the nondiscriminatory and transparent rules and the harmonisation of the standard products for balancing capacity characteristics.

### Article 1 Subject matter and scope

- The SPBC proposal is the common proposal of all TSOsmethodology developed in accordance with Article 25(2), Article 25(4) and Article 25(5) of the EB Regulation and establishes a legal framework for a list of standard products for balancing capcity.
- The SPBC proposalmethodology defines the requirements of standard product for balancing capacity for
  frequency restoration reserves with automatic activation (hereafter referred to as "aFRR"), frequency
  restoration reserves with manual activation (hereafter referred to as "mFRR") and replacement reserves
  (hereafter referred to as "RR").
- 3. This proposal applies solely for the requirements for standard product for balancing capacity from RR, mFRR and aFRR. The prequalification process, TSO-BSP settlement, monitoring and other obligations related to procurement of standard product for balancing capacity bids from RR, mFRR and RR and related to standard products for balancing energy in accordance with the EB Regulation and the SO Regulation are out of the scope of this SPBC proposal methodology and will be treated in separate documents.

### Article 2 Definitions and interpretation

For the purposes of the SPBC proposalmethodology, the terms used shall have the meaning given to them
in Article 2 of the Electricity Regulation, Article 3 of the SO Regulation and Article 2 of the EB
Regulation. In addition, in this SPBC methodology the following terms shall apply:



#### (1) In addition, in the SPBC proposal the following terms shall apply:

- (a) 'balancing capacity validity period' means the period for which the single standard product for balancing capacity bid (i.e. each submitted capacity volume has one single bid price) is offered and for which the accepted standard product for balancing capacity bid could be activated as standard balancing energy bid where all the characteristics of the standard balancing energy product are respected. The balancing capacity validity period is defined by a start time and an end time.
- (a) \_'standard aFRR balancing capacity product' means the standard product for balancing capacity from frequency restoration reserves with automatic activation;
- (b) 'standard mFRR balancing capacity product' means the standard product for balancing capacity from frequency restoration reserves with manual and direct activation;
- (c) 'standard RR balancing capacity product' means the standard product for balancing capacity from replacement reserves;
- 2. In the SPBC proposal, unless the context requires otherwise:
  - (a) the singular indicates the plural and vice versa;
  - (b) headings are inserted for convenience only and do not affect the interpretation of the SPBC proposalmethodology;
  - (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; and
  - (d) any reference to an article without an indication of the document shall mean a reference to the the SPBC proposal.methodology.

## Article 3 General principles

- For each contracted standard RR balancing capacity product, each BSP shall provide corresponding
  capacity in the form of integrated scheduling process bids or standard RR balancing energy product
  bid(s), defined in the all TSOs' proposal for the implementation framework for a European platform for
  the exchange of balancing energy from RR pursuant to Article 19 of the EB Regulation.
- 2. For each contracted standard mFRR balancing capacity product, each BSP shall provide corresponding capacity in the form of integrated scheduling process bids or standard mFRR balancing energy product bid(s), defined in the all TSOs' proposal for the implementation framework for a European platform for the exchange of balancing energy from mFRR pursuant to Article 20 of the EB Regulation. Such bids shall be for direct activationactivatable bids, provided that the delivery period does not exceed the end of the last validity period for which the BSP is contracted.
- 3. For each contracted standard aFRR balancing capacity product, each BSP shall provide corresponding capacity in the form of integrated scheduling process bids or standard aFRR balancing energy product bid(s), defined in the all TSOs' proposal for the implementation framework for a European platform for the exchange of balancing energy from aFRR pursuant to Article 21 of the EB Regulation.
- 4. The validity period of bids from standard balancing capacity products shall be equal to the day-ahead market time unit or be a multiple of the day-ahead market time unit.
- 4-5. Each TSO applying a central dispatching model shall use integrated scheduling process bids for the exchange of balancing capacity or sharing of reserves pursuant to Article 27(1) of the EB Regulation and



- convert as far as possible the integrated scheduling process bids to the standard product for balancing capacity product bids if the TSO exchanges balancing capacity or shares reserves for a given type of a standard product for balancing capacity.
- 5.6. Each connecting TSO is responsible for the prequalification for the provision of the standard product for balancing capacity of the reserve-providing units and/or reserve-providing group in theits LFC Area under its responsibility, including LFC areas consisting of more than one TSO or with a designated TSO according to article, in accordance with Article 159(5) of the SO Regulation.
- 6-7. Each balancing service providerBSP intending to provide standard product for balancing capacity product bids shall have passed successfully have passed a qualification process defined by the connecting TSO pursuant to Article 16 of the EB Regulation and processed pursuant to Article 159 and Article 162 of the SO Regulation.
- 7-8. In case of the TSO is applying a central dispatching model and if the TSO exchanges balancing capacity or shares reserves, the rules for converting integrated scheduling process bids to standard product for balancing capacity product bids shall be defined in the terms and conditions for BSPs pursuant to Article 18 paragraph (8-)(d) of the EB Regulation.

### Article 4 Characteristics of the standard product for balancing capacity product

- All standard products for balancing capacity products shall have the following characteristics, to be defined by TSOs, which jointly procuring procure a standard product for balancing capacity product for exchanging balancing capacity or sharing of reserves in accordance with Annex 1:
  - (a) the balancing capacity validity period; pursuant to Article 3(4);
  - (b) the direction of the standard balancing capacity: upward product: positive or downwardnegative;
  - (c) the minimum duration between the end of the deactivation period and the following activation.

#### Article 5

### General provision for standard product for balancing capacity product bid

- Each standard <del>product for</del> balancing capacity <u>product</u> bid submitted by each BSP shall fulfil the following characteristics:
  - (a) The standard product for balancing capacity product bid price shall be submitted in (EUR/MW)/h and has a resolution of 0.01 (EUR/MW)/h;
  - (b) Thethe price of each bid shall be positive or zero and the payment shall be from TSO to BSP;
  - (c) Thethe minimum bid quantity and granularity shall be 1 MW;
  - (d) Forfor indivisible bids, the bid quantity shall not exceed the value defined by the TSOs exchanging balancing capacity or sharing of reserves;
  - (e) Thethe location of the bid shall be at least the smallest of LFC Area or bidding zone in which the providing units and/or providing groups are connected to. More detailed locational information may be required in terms and conditions for BSPs pursuant to Article 18(5) of the EB Regulation.
- 2. Each standard product for balancing capacity product bid submitted by each BSP shall contain at least:



- (a) Thethe volume of the bid in MW;
- (b) Thethe price of the bid;
- (c) Thethe minimum duration between the end of deactivation period and the following activation;
- (d) Volumevolume divisibility: divisible with a minimum granularity of 1 MW or indivisible bids;
- (e) Thethe location.
- 3. AIn addition, a TSO may define additional characteristics of standard products for balancing capacity product bids—in accordance with Articles 25(4) and (5) of the EB Regulation. Additional characteristics for standard balancing capacity product bids defined in national terms and conditions for BSPs shall respect the requirements of Article 25(6) of the EB Regulation. In case, two or more TSOs jointly procure balancing capacity for the exchange of balancing capacity or sharing of reserves, all additionalthe characteristics of the jointly procured products shall be harmonised between such TSOs-and defined in the common proposal in accordance with Article 33 of the EB Regulation.
- 4. In case of the TSO applying a central dispatching model, all characteristics of the standard product for balancing capacity product bid may be determined by the connecting TSO based on integrated scheduling process bids submitted by BSPs following the rules for converting bids in a central dispatching model into standard product for balancing capacity product bids pursuant to Article 27 of the EB Regulation.

### Article 6 Implementation timeline

All TSOs that intend to use standard balancing capacity products for frequency restoration reserves or replacement reserves or exchange balancing capacity in accordance with Article 33 of the EB Regulation The SPBC Proposalmethodology shall be considered implement the SPBC methodology ed whenno later than 18 months after its approval by the European Union Agency for the Cooperation of Energy Regulators has approved the SPBC Proposal in accordance with Article 5(2) of 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 (hereafter referred to as the 'ACER Regulation').

### Article 7 Publication of the SPBC proposalmethodology

All TSOs shall publish the SPBC proposal methodology without undue delay pursuant to Article 7 of the EB Regulation after a decision has been adopted made by the European Union Agency for the Cooperation of Energy Regulators in accordance with Article 5(2) of the ACER Regulation or after. If all TSOs submit an amended proposal under amendment to this methodology by request of one or several regulatory authorities, in accordance with Article 6(1) of the EB Regulation, or on their own initiative, in accordance with Article 6(3) of the EB Regulation amended and approved SPBC methodology shall be published without undue delay by all TSOs.

#### Article 8 Language

The reference language for thethis SPBC proposalmethodology shall be English. For the avoidance of doubt, where TSOs need to translate the SPBC proposalmethodology into their national language(s), in the event of inconsistencies between the English version published by TSOs in accordance with Article 7 of the EB

All TSOs' proposal on list of standard products for balancing capacity for frequency restoration reserves and replacement reserves pursuant to Article 25(2) of Commission Regulation (EU) 2017/2195 of 23 November 2017 establishing a guideline on electricity



Regulation and any version in another language, the relevant TSOs shall be obliged to dispel any inconsistencies by providing a revised translation of the SPBC proposal methodology to their relevant national regulatory authorities.



### Annex 1

### List of standard products for balancing capacity

RR Product	#1	#2	#3	#4	#5		
Balancing Capacity Validity period	15 minutes	1 hour	4 hours	1 day	1 week		
The minimum duration between the end of deactivation period and the following activation	0 minutes						
Direction	<del>Upward</del> Positive or <del>downward</del> negative						

mFRR Product	#1	#2	#3	#4	#5	#6	#7
Balancing Capacity Validity period	15 1	15 minutes 1 hour		hour	4 hours	1 day	1 week
The minimum duration between the end of deactivation period and the following activation	0	0-8 hours	0	0-8 hours	0	0	0
Direction	<del>Upward</del> <u>Positive</u> or <del>downward</del> negative						

aFRR Product	#1	#2	#3	#4	#5		
Balancing Capacity-Validity period	15 minutes	1 hour	4 hours	1 day	1 week		
The minimum duration between the end of deactivation period and the following activation	0 minutes						
Direction	UpwardPositive or downwardnegative						

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