

Pursuant to Article 228 paragraph 1 of the Law on Cross-Border Exchange of Electricity and Natural Gas (Official Gazette of Montenegro, No. 2/2026), and Article 45 paragraph 1 item 32 of the Statute of the Montenegrin Electricity Transmission System AD, No. 6209 of 1 July 2021, the Board of Directors of the Company, at its meeting held on 08.05.2026. adopted

(draft)

**TERMS AND CONDITIONS FOR BALANCING SERVICE
PROVIDERS ON THE BALANCING SERVICES MARKET
OF MONTENEGRO**

Contents

1. GENERAL PROVISIONS FOR BALANCING THE POWER SYSTEM OF MONTENEGRO	4
2. GENERAL CONDITIONS FOR THE PROVISION OF BALANCING SERVICES OF THE POWER SYSTEM	13
3. FREQUENCY CONTROL AND BALANCING OF THE POWER SYSTEM	16
4. FREQUENCY CONTAINMENT PROCESS (FCP)	21
4.1. Definition of products and bids.....	21
4.2. Requirements for FCR balancing service providers	23
4.3. Procurement of FCR balancing capacity and secondary market.....	26
4.3.1. Conditions for participation.....	26
4.3.2. Requirements for the collection of FCR bids.....	27
4.3.3. Transfer of balancing capacity	28
4.4. Activation of FCR balancing energy	30
4.5. Determination of the quantity of activated balancing energy	30
4.6. Settlement and financial compensation of balancing capacity	33
4.7. Consequences of non-compliance with the BSP Terms and Conditions.....	34
4.8. Invoicing and financial settlement for FCR.....	38
5. AUTOMATIC FREQUENCY RESTORATION RESERVE (aFRR)	40
5.1. Definition of the product and bids	40
5.1.1. aFRR balancing capacity	41
5.1.2. aFRR balancing energy	43
5.2. Requirements for aFRR balancing service providers.....	45
5.3. Procurement of aFRR balancing capacity and secondary market.....	48
5.3.1. Conditions for participation.....	48
5.3.2. Requirements for conducting the auction	49
5.3.3. Gate opening time and gate closure time.....	49
5.3.4. Procurement of balancing capacity.....	50
5.3.5. Transfer of balancing capacity – secondary capacity market.....	50
5.4. Submission of bids for aFRR balancing energy	53
5.4.1. Requirements for bid submission	53
5.4.2. Deadlines for the submission of bids	53
5.5. Activation of bids for aFRR balancing energy.....	54

5.6.	Determination of the volume of activated aFRR balancing energy	55
5.7.	Calculation and financial settlement of aFRR balancing capacity and balancing energy..	57
5.8.	Consequences of non-compliance with the BSP Terms and Conditions.....	63
5.9.	Invoicing and financial settlement for aFRR.....	73
6.	MANUAL FREQUENCY RESTORATION RESERVE (mFRR)	75
6.1.	Definition of products and bids.....	75
6.1.1.	mFRR balancing capacity	76
6.1.2.	mFRR balancing energy	78
6.2.	Requirements for mFRR balancing service providers.....	80
6.3.	Procurement of balancing capacity and secondary mFRR market	83
6.3.1.	Conditions for participation.....	83
6.3.2.	Requirements for conducting the auction	84
6.3.3.	Deadlines for bid submission	85
6.3.4.	Procurement of balancing capacity	85
6.3.5.	Transfer of balancing capacity – secondary capacity market.....	86
6.4.	Submission of bids for mFRR balancing energy	88
6.4.1.	Requirements for the submission of bids	88
6.4.2.	Deadlines for the submission of bids	88
6.5.	Activation of bids for mFRR balancing energy	89
6.6.	Determination of the quantity of activated mFRR balancing energy for settlement and schedule correction.....	91
6.7.	Calculation and financial settlement of mFRR balancing capacity and balancing energy	96
6.8.	Consequences of non-compliance with the Terms and Conditions.....	100
6.9.	Invoicing and financial settlement for mFRR.....	109
7.	REPLACEMENT RESERVE (RR)	111
8.	TRANSITIONAL AND FINAL PROVISIONS	113
	ANNEX 1: Procurement of balancing services in the event of the absence of competition or unsuccessful market procurement.....	114

1. GENERAL PROVISIONS FOR BALANCING THE POWER SYSTEM OF MONTENEGRO

Subject matter

Article 1

- (1) These Terms and Conditions for Balancing Service Providers (hereinafter referred to as: Terms and Conditions for BSPs) regulate the rights and obligations of Balancing Service Providers (hereinafter referred to as: BSPs) participating in the balancing services market in Montenegro.
- (2) The Electricity Transmission System Operator (hereinafter referred to as: TSO), by means of these Terms and Conditions for BSPs, regulates:
 1. Obligations with which BSPs are required to comply for the purpose of providing balancing services;
 2. The organisation and management of the balancing services market, including:
 - the procedure for procurement of balancing capacity;
 - the procedure for procurement and activation of balancing energy;
 - settlement and payment of balancing energy and balancing capacity;
 - monitoring of the provision of balancing services by BSPs, i.e., implementation of measures in the event of non-compliance with the provisions of these Terms and Conditions for BSPs;
 3. The TSO, by means of these Terms and Conditions for BSPs, systematically regulates the organisation of the balancing services market in Montenegro, as well as the provision of balancing services within the Load-Frequency Control area of Montenegro (hereinafter referred to as: LFC area), using:
 - the Frequency Containment Process (hereinafter referred to as: FCP);
 - the automatic Frequency Restoration Process (hereinafter referred to as: aFRP);
 - the manual Frequency Restoration Process (hereinafter referred to as: mFRP);
 - the Replacement Reserve Process (hereinafter referred to as: RRP).

Content

Article 2

(1) The Terms and Conditions for Balancing Service Providers shall contain:

1. rules of the qualification procedure on the basis of which an entity becomes a balancing service provider in accordance with Article 226 of the Law on Cross-Border Exchange of Electricity and Natural Gas (hereinafter referred to as: the Law);
2. rules, requirements and timelines for the procurement and transfer of balancing capacity in accordance with Articles 241 to 243 of the Law;
3. conditions for the existence of market competition for the procurement of balancing services and rules in the event that such conditions are not met;
4. rules in the event of unsuccessful market procurement;
5. rules and conditions for the aggregation of demand facilities, energy storage facilities and electricity generation facilities within the scheduling area so that they may become balancing service providers;
6. data and information requirements to be submitted to the TSO and, where applicable, to the Distribution System Operator (hereinafter referred to as: DSO), during the prequalification procedure and the operation of the balancing services market;
7. rules and conditions for the allocation of each balancing energy bid by the service provider to one or more balance responsible parties in accordance with Article 228 paragraph 5 item 4 of the Law;
8. data and information requirements to be submitted to the connecting TSO and, where applicable, to the connecting DSO for the purpose of evaluating the provision of balancing services in accordance with the regulation governing the operation of the transmission system;
9. definition of the location for each standard and specific product, taking into account Article 228 paragraph 5 item 3 of the Law;
10. rules for determining the quantity of balancing energy subject to settlement for the balancing service provider in accordance with Article 250 of the Law;
11. settlement rules for balancing service providers defined in accordance with Articles 250 to 254 and Articles 261 and 262 of the Law;
12. the maximum period for finalising the settlement of balancing energy with the balancing service provider in accordance with Article 250 of the Law, for each imbalance settlement period;
13. consequences in the event of non-compliance with these Terms and Conditions for BSPs.

Objectives and principles

Article 3

(1) These Terms and Conditions for BSPs are aimed at:

1. defining the types of and conditions for the provision of balancing services;
2. defining the conditions and requirements for the participation of BSPs in the balancing services market;
3. promoting competitiveness, non-discrimination and transparency in the balancing services market;
4. improving the efficiency of balancing of the power system (EES);
5. regional and European integration of the balancing services market and promoting the possibility of exchange of balancing services, while simultaneously increasing operational security;
6. enabling equal and competitive integration of BSPs providing balancing services by means of demand response or from energy storage facilities.

(2) Balancing in accordance with these Terms and Conditions for BSPs shall be based on the following principles:

1. optimisation aimed at achieving the highest overall efficiency and the lowest overall costs for all involved parties;
2. transparency;
3. the use of market-based mechanisms to the greatest possible extent, in order to ensure the security and stability of the power system (EES).

Scope of application

Article 4

(1) These Terms and Conditions for BSPs shall apply to BSPs offering balancing services, as well as to the TSO using those services for the purpose of balancing the power system (EES) and managing the balancing services market.

(2) These Terms and Conditions for BSPs shall apply in all operating states of the power system (EES) defined by the regulation governing the operation of the transmission system.

(3) The TSO shall have the right to partially or fully suspend the application of the Terms and Conditions for BSPs in accordance with the regulation governing the suspension and restoration of market activities and the regulation governing system operation in emergency and restoration states.

Definitions

Article 5

- (1) **aggregation** means a function performed by a natural or legal person that combines the loads of multiple customers or generated electricity for the purpose of sale, purchase or auction in any electricity market;
- (2) **activated balancing energy** means the quantity of energy determined on the basis of an activation request;
- (3) **activation request for aFRR** means an instruction for activation of balancing energy issued by AGC – SCADA;
- (4) **activation request for mFRR** means an instruction for activation of balancing energy issued by the TSO via dispatch or by means of an electronic order generated through the Platform;
- (5) **balancing of electricity** means all activities and processes, in all timeframes, by which transmission system operators continuously ensure that system frequency is maintained within a predefined stability range and that the required reserve levels for the desired balancing quality are met;
- (6) **balancing energy** means energy used by the TSO for balancing, provided by the BSP;
- (7) **balancing capacity** means the amount of capacity that a BSP has agreed to reserve and for which it has agreed to submit bids for the corresponding quantity of balancing energy to the TSO during the term of the contract;
- (8) **direct activation (DA)** means the activation of mFRR balancing energy which the TSO may request from the BSP at any time within the timeframe designated for DA;
- (9) **direct and scheduled activation bid (DASA bid)** means a type of bid for mFRR balancing energy submitted by the BSP which may be activated by the TSO in the process of direct and/or scheduled activation;
- (10) **divisible bid for mFRR balancing energy** means a bid where the minimum quantity of offered mFRR balancing energy that the TSO may activate is less than the maximum offered quantity of mFRR balancing energy;
- (11) **bid divisibility** means the right of the TSO to use only a part of a balancing energy bid or balancing capacity bid submitted by the BSP, either in terms of quantity (e.g. procurement of balancing capacity or activation of balancing energy) or in terms of duration;

- (12) **HUPX_{hi}** – day-ahead market price on the Hungarian Power Exchange (HUPX) in Budapest for the relevant hour (€/MWh), where $i=1, 2, \dots, 24$;
- (13) **selected bid** means the bid from the list of bids which is the most economically advantageous for the TSO and is binding for both the BSP and the TSO;
- (14) **energy-limited units (units or sources with limited energy reservoirs) (LER)** means a unit or a group of units which, without the application of energy storage management methods, is not capable of continuously providing balancing services at the full capacity of the standard product for a duration longer than two hours;
- (15) **qualification procedure** means the procedure that a balancing service provider must satisfy in order to participate in auctions for balancing capacity, to be able to participate in the transfer of balancing capacity and to be able to submit bids for balancing energy;
- (16) **qualified capacity** means the maximum capacity which a BSP is capable of providing for the provision of balancing services, while fulfilling all conditions of that service, and which is specified in the BSP qualification certificate;
- (17) **qualified balancing service provider** means a BSP that has obtained a qualification certificate for participation in auctions in accordance with these Terms and Conditions for BSPs and the Auction Rules;
- (18) **electricity storage module** means a synchronous or non-synchronous module enabling the conversion of electrical energy into a form that can be stored, its storage in an energy storage system, and its subsequent reconversion into electrical energy for the purpose of providing balancing services or other system services. This module must enable active power control (regulation) in both directions (charging and discharging). It does not include passive electricity storage equipment that does not support regulation;
- (19) **indivisible bid for mFRR balancing energy** means a bid where the minimum quantity of offered mFRR balancing energy that the TSO may activate is equal to the maximum offered quantity of mFRR balancing energy;
- (20) **normal operation mode (NOM)** means the operating mode of LER in which the LER has a sufficient amount of energy in the energy storage system, and in this mode operates as a source without limited energy storage;
- (21) **load-frequency control area or LFC area** means a part of a synchronous area or an entire synchronous area, physically delimited by metering points on interconnectors towards other LFC areas, operated by one or more TSOs and fulfilling obligations with regard to interchange power control and frequency control;

- (22) **balancing settlement interval** means the shortest time interval during which the TSO performs the settlement of balancing energy;
- (23) **settlement period** means the period for which the settlement of balancing capacity or energy is carried out;
- (24) **optimisation cycle** means the time period in which, for a selected market time unit, the aFRR or mFRR platform, on the basis of received requests, bids and constraints, selects the most economically advantageous bids for aFRR or mFRR balancing energy by means of an optimisation algorithm;
- (25) **scheduled activation (SA)** means activation of mFRR balancing energy at a precisely defined moment in time (i.e., at the starting point of scheduled activation), which the TSO may request for a specific 15-minute balancing settlement interval;
- (26) **scheduled activation bid (SA bid)** means a type of bid for mFRR balancing energy submitted by the BSP which may be activated by the TSO in the process of scheduled activation;
- (27) **platform** means a dedicated platform (application software) for collecting bids and conducting auctions for balancing capacity, as well as for activating mFRR balancing energy bids. By means of the Platform, the TSO collects bids for FCR, aFRR and mFRR balancing capacity, conducts auctions for FCR, aFRR and mFRR balancing capacity, collects bids for aFRR and mFRR balancing energy, and issues activation requests for selected mFRR balancing energy bids. The TSO also uses the Platform for conducting a fallback procurement procedure, i.e. for securing FCR, aFRR and mFRR balancing capacity;
- (28) **bid** means a bid for balancing capacity or balancing energy submitted by a qualified BSP;
- (29) **portfolio** means a set of one or more control units;
- (30) **qualification certificate for participation in auctions** means a certificate confirming the qualification of a BSP to participate in auctions, issued by the TSO;
- (31) **certificate of technical capability of the BSP** means a certificate issued by the TSO confirming that the BSP is technically capable of providing a specific system service and which is valid for the LFC area of Montenegro;
- (32) **fully divisible bid for aFRR or mFRR balancing energy** means a bid for which the minimum quantity of offered aFRR or mFRR balancing energy that the TSO may activate is equal to 0 MW;

- (33) **prequalification procedure** means the procedure for verifying the compliance of a unit or group for the provision of balancing capacity with the requirements set by the TSO;
- (34) **Frequency Containment Process (FCP)** means the process of maintaining system frequency using FCR;
- (35) **automatic Frequency Restoration Process (aFRP)** means an automated process aimed at restoring system frequency to the nominal value and restoring active power to the level defined by the schedule for a synchronous area consisting of one or more LFC areas;
- (36) **manual Frequency Restoration Process (mFRP)** means a process of manual activation aimed at restoring system frequency to the nominal value and restoring active power to the level defined by the schedule for a synchronous area consisting of one or more LFC areas;
- (37) **delivery point** means a point in the power system at which the physical delivery of electricity and/or power between the system operator and the system user takes place, at which the boundary of responsibility for electricity and power is established, where measurements for settlement purposes (commercial and balancing) are performed, and where system access and balancing responsibility are defined. The delivery point must be uniquely identified in the connection agreement and in the balancing services agreement, and must be assigned an EIC code in accordance with ENTSO-E rules;
- (38) **balancing service provider (BSP)** means a market participant providing transmission system operators with balancing energy or balancing capacity or both;
- (39) **control group** means a group of one or more control units;
- (40) **control unit** means a set of one or more technical units connected to the network via the same connection point, through which the BSP provides an individual balancing service;
- (41) **reference active power (P_{ref})** means the desired (setpoint) active power of a technical unit excluding any FCR activation. It consists of the sum of the base power and activated aFRR and mFRR;
- (42) **Frequency Containment Reserve (FCR)** means active power reserve available to maintain system frequency following a disturbance;
- (43) **automatic Frequency Restoration Reserve (aFRR)** means active power reserve that is automatically activated and available to restore system frequency to the nominal value and to restore the balance of active power in accordance with the

schedule within a synchronous area consisting of more than one load-frequency control area;

- (44) **manual Frequency Restoration Reserve (mFRR)** means active power reserve that is manually activated and available to restore system frequency to the nominal value and to restore the balance of active power in accordance with the schedule within a synchronous area consisting of more than one load-frequency control area;
- (45) **energy-limited mode (ELM)** means an operating mode of LER which is activated no later than five minutes before the moment when, while providing full FCR in one direction, units, sources or groups of units would deplete the available energy from the energy storage system, with the aim of preventing complete depletion and preserving the capability to provide balancing services;
- (46) **standard product** means a harmonised balancing product defined by all TSOs for the purpose of exchanging balancing services;
- (47) **state of charge of the electricity storage (SOC)** represents the relative percentage of charge of the electricity storage, where the value 0 (zero) represents a fully discharged storage and the value 1 (one) represents a fully charged storage;
- (48) **technical unit** means a basic, technically indivisible generation or consumption unit, or both, through which the BSP provides an individual service;
- (49) **gate opening time (GOT)** means the time from which submission or updating of a bid for balancing capacity or energy for a standard product is permitted;
- (50) **gate closure time (GCT)** means the time after which submission or updating of a bid for balancing capacity or energy for a standard product is no longer permitted;
- (51) **Replacement Reserve (RR)** means active power reserve available to restore the required volume of frequency restoration reserve.

Abbreviations

Article 6

Član 1

- (1) **aFRP** – Automatic Frequency Restoration Process;
- (2) **aFRR** – Automatic Frequency Restoration Reserve;
- (3) **DA** – direct activation of mFRR;
- (4) **ENTSO-E** – European Network of Transmission System Operators for Electricity;

- (5) **FCP** – Frequency Containment Process;
- (6) **FCR** – Frequency Containment Reserve;
- (7) **FRR** – Frequency Restoration Reserve consisting of aFRR and mFRR;
- (8) **LFC** – Load-Frequency Control;
- (9) **mFRP** – Manual Frequency Restoration Process;
- (10) **mFRR** – Manual Frequency Restoration Reserve;
- (11) **OT** – entity responsible for the organisation and management of the electricity market;
- (12) **PPAT** – natural or legal person professionally arranging transactions (Persons Professionally Arranging Transactions);
- (13) **RR** – Replacement Reserve;
- (14) **SA** – scheduled activation of mFRR (Scheduled Activation).

2. GENERAL CONDITIONS FOR THE PROVISION OF BALANCING SERVICES OF THE POWER SYSTEM

Verification of technical capability (prequalification) Article 7

- (1) In accordance with Article 226 paragraph 2 of the Law, the successful completion of the prequalification procedure, for which the TSO is responsible, shall be a prerequisite for the completion of the qualification procedure for a balancing service provider.
- (2) The prequalification procedure shall include verification of the technical capability of technical units for the provision of individual balancing services (FCR, aFRR, mFRR and RR), including verification of compliance with technical requirements for technical units and requirements for the exchange of data and information, as well as the conduct of testing.
- (3) The prequalification procedure shall be governed by the Technical Requirements and Rules for the Prequalification Procedure for Balancing Service Providers (hereinafter referred to as: the Prequalification Rules), adopted by the TSO as a separate act in accordance with Articles 150 paragraph 1, 154 paragraph 1, and 157 paragraph 1 of the Regulation establishing a guideline on electricity transmission system operation.
- (4) The TSO shall issue a Certificate of Technical Capability to a candidate BSP upon successful completion of the verification of technical capability in accordance with the Prequalification Rules. The Certificate of Technical Capability shall specify the qualified capacity, i.e. the maximum capacity that the BSP is capable of providing for the provision of the respective balancing service.
- (5) The data and information requirements to be submitted to the TSO and, where applicable, to the DSO during the prequalification procedure, in accordance with Article 228 paragraph 6 item 6 of the Law, shall be defined in the Prequalification Rules.
- (6) The obligation to verify technical capability shall commence upon the entry into force of the Prequalification Rules, except for technical units of a balancing service provider that, on the date of entry into force of the Prequalification Rules, had concluded a contract with the TSO for the procurement of ancillary services and balancing energy pursuant to Article 312 of the Law.

Qualification for participation in the balancing services market

Article 8

- (1) In accordance with Article 228 paragraph 6 item 1 of the Law, these Terms and Conditions for BSPs establish the rules of the qualification procedure on the basis of which the status of a qualified BSP for participation in the balancing services market is obtained.
- (2) The qualification procedure shall apply to all entities wishing to participate in the balancing process and shall consist of fulfilling the following cumulative conditions:
 1. possession of a valid Certificate of Technical Capability for the respective balancing service, issued in accordance with the Prequalification Rules;
 2. fulfilment of formal and legal requirements and conditions set out in the Auction Rules, including registration as a balance responsible party with the TSO and the Market Operator, technical integration with the Platform, and financial guarantees where applicable.
- (3) Upon fulfilment of the conditions referred to in the preceding paragraph, the TSO shall issue a Qualification Certificate for Participation in Auctions, whereby the BSP candidate acquires the status of a qualified BSP.
- (4) The TSO shall issue the Qualification Certificate for Participation in Auctions no later than seven working days from the receipt of complete documentation in accordance with the Auction Rules.
- (5) In the event of withdrawal of the Certificate of Technical Capability, the BSP shall automatically lose the status of a qualified BSP, and the TSO shall consequently withdraw the Qualification Certificate for Participation in Auctions.

Status of a qualified BSP

Article 9

- (1) Qualified BSPs may submit bids for balancing capacity or balancing energy up to the amount specified in the issued Qualification Certificate for Participation in Auctions, subject to the limitations set out in these Terms and Conditions for BSPs.
- (2) A BSP shall have the right to submit bids to its TSO for balancing energy from standard or specific products for which it has successfully completed the prequalification procedure, in accordance with Article 226 paragraph 6 of the Law.

Participation of BSPs in auctions for balancing capacity, transfer of balancing capacity and submission of bids for balancing energy

Article 10

- (1) A BSP may participate in auctions for an individual balancing service as long as it holds a valid status of a qualified BSP for that individual balancing service.
- (2) A qualified BSP whose bids in an auction for balancing capacity (aFRR or mFRR) have been accepted or to whom balancing capacity has been transferred through the balancing capacity transfer process shall be obliged to submit corresponding bids for balancing energy (aFRR or mFRR) within the full volume of the procured and transferred balancing capacity.
- (3) A qualified BSP may submit bids for balancing energy for individual balancing services up to the volume specified in the Qualification Certificate for Participation in Auctions, reduced by already accepted bids. Participation in an auction for balancing capacity shall not be a prerequisite for the submission of bids for balancing energy.
- (4) A qualified BSP may transfer balancing capacity procured by the TSO to another BSP qualified in accordance with these Terms and Conditions for BSPs.

Settlement of balancing capacity and energy

Article 11

- (1) The settlement of balancing capacity and energy for individual balancing services FCR, aFRR, mFRR and RR is defined in Subchapters 4.6, 5.7, 6.7 and Article 112 of these Terms and Conditions for BSPs.

3. FREQUENCY CONTROL AND BALANCING OF THE POWER SYSTEM

Processes and measures for frequency control and system balancing

Article 12

- (1) Reliable operation of the power system is based on the principles of balance between electricity generation and consumption. Any imbalance between generation and consumption within the system is reflected in a deviation of system frequency from its nominal value. In order to maintain the operating frequency as close as possible to the nominal value, frequency control and system balancing measures (hereinafter referred to as: balancing) are applied.
- (2) Balancing measures shall be applied within the framework of the following processes:
 1. Frequency Containment (FCR) – activation of FCR,
 2. automatic Frequency Restoration Reserve (aFRR) – activation of aFRR,
 3. manual Frequency Restoration Reserve (mFRR) – activation of mFRR,
 4. Replacement Reserve Process (RRP) – activation of RR.
- (3) All frequency control and system balancing measures are based on increasing or decreasing the active power of qualified technical (generation/consumption/storage) units that have reserved part of their generation/consumption/storage capacities for frequency control and system balancing. These capacities, i.e. active power reserves, are referred to as FCR, aFRR, mFRR and RR, depending on the control level.
- (4) In addition to the above balancing measures, the TSO may apply the imbalance netting process. This process represents an optimisation function in which transmission system operators from two or more control areas participate, enabling the avoidance of simultaneous activation of automatic Frequency Restoration Reserve (aFRR) in opposite directions, taking into account Area Control Error (ACE), with appropriate adjustments of aFRR input data.
- (5) For the purpose of optimising balancing costs and procuring missing quantities of balancing energy, in addition to the above balancing measures, the TSO may, on the basis of concluded agreements with transmission system operators and/or BSPs from other control areas, additionally carry out the purchase and sale of balancing energy.

- (6) In the event of a deviation of system frequency from its nominal value, technical units participating in FCP shall be activated first (within a few seconds). The volume of activation is directly proportional to the system frequency deviation and is synchronised among different TSOs within the synchronous area of Continental Europe. FCP can only limit or stabilise the deviation of system frequency from its nominal value. The restoration of frequency to its nominal value is ensured by aFRP and, where necessary, by mFRP.
- (7) In the event of system frequency deviation, aFRP is activated automatically and reaches full activation within several minutes, depending on deviations in generation, consumption and interchange power. The response of aFRP is automated through a controller ensuring that the process does not conflict with FCP.
- (8) The TSO shall manually activate mFRP or the services referred to in paragraph (5) of this Article in the event of outages of large generation units or in the case of prolonged surplus or deficit of electricity in the power system. The main objective of mFRP is to release the activated aFRP reserves.
- (9) For the purpose of relieving FRR, the TSO may activate Replacement Reserves (RR).

Procedures for the procurement of balancing services in the absence of competition or in the event of unsuccessful market procurement

Article 13

- (1) The quantities of procured capacity for frequency control and system balancing within the LFC area of Montenegro shall be sufficient to ensure stable and reliable system operation and shall be determined in accordance with the regulation governing the operation of the electricity transmission system.
- (2) The TSO shall determine whether a dominant BSP exists within the meaning of the law governing competition protection, taking into account the potential scope of technical units for the provision of individual balancing services referred to in Article 1 of these Terms and Conditions for BSPs, expressed in MW of balancing capacity, for which the qualification procedure has been completed.
- (3) Where, in the balancing services market for an individual service referred to in Article 1 of these Terms and Conditions for BSPs, a dominant BSP exists, it shall be deemed that there is an insufficient level of competition in the balancing services market and, upon request of the TSO, all qualified BSPs shall be obliged, within the shortest reasonable period determined by the TSO, to conclude a

balancing services agreement with the TSO under the conditions set out in Annex 1.

- (4) Exceptionally, where in the balancing services market for an individual service referred to in Article 1 of these Terms and Conditions for BSPs, in addition to a dominant BSP there is at least one other qualified BSP for the respective balancing service, the TSO may proceed with conducting an auction for balancing capacity for the respective service.
- (5) Where no qualified BSP exists in the balancing services market, the TSO shall declare the absence of competition and, upon request of the TSO, all owners of technical units for which the prequalification procedure has been completed shall be obliged, within the shortest reasonable period determined by the TSO, to conclude a balancing services agreement with the TSO under the conditions set out in Annex 1.
- (6) Where, following the conduct of an auction, the TSO has not procured sufficient quantities of capacity to ensure stable and reliable system operation, it shall be obliged to repeat the auction procedure.
- (7) Where, following the repeated auction procedure, the TSO is unable to procure sufficient balancing capacity on the balancing services market, all qualified BSPs shall, upon request of the TSO, be obliged, within the shortest possible period, to conclude a balancing services agreement with the TSO for the missing capacity under the conditions set out in Annex 1.
- (8) Exceptionally, where the TSO is unable to procure sufficient balancing capacity on the balancing services market and where there is insufficient available capacity of technical units of qualified BSPs, all owners of technical units for which the prequalification procedure has been completed shall, upon request of the TSO, be obliged, within the shortest reasonable period determined by the TSO, to conclude a balancing services agreement with the TSO.
- (9) When concluding balancing services agreements under the conditions set out in Annex 1, the TSO shall allocate the required quantity of balancing capacity among qualified BSPs proportionally to their qualified capacity, reduced by already contracted balancing capacity, taking into account the need to avoid disruption of market activities, i.e. to minimise the impact on the electricity market as much as possible.
- (10) Exceptionally, where no qualified BSP exists in the electricity balancing market, the TSO shall, when concluding balancing services agreements under the conditions set out in Annex 1, allocate the missing balancing capacity to technical units for which the prequalification procedure for the respective balancing service has been completed, proportionally to their share in the total capacity of

prequalified units, taking into account the need not to disrupt the functioning of the electricity market, i.e. to minimise any disruption to the electricity market as much as possible.

- (11) The TSO shall, on its official website and on the Platform, immediately upon determining the existence of a dominant BSP, or the absence of competition or unsuccessful market procurement, publish a Notice on the absence of market competition or a Notice on unsuccessful market procurement of balancing capacity in the balancing services market. Thereafter, upon request of the TSO, all qualified BSPs shall be obliged, within the shortest reasonable period determined by the TSO, to conclude a balancing services agreement with the TSO under the conditions set out in Annex 1.
- (12) The TSO shall carry out the procedure for determining the status of a dominant BSP referred to in paragraph (2) of this Article once a year, as well as during the qualification process of each new BSP. Exceptionally, the TSO may carry out an extraordinary procedure in the event of significant changes in market structure or the availability of balancing capacities which may substantially affect the level of competition.
- (13) Upon accession to European platforms for energy exchange, the conditions set out in Annex 1 relating to the price cap mechanism for balancing energy shall cease to apply, and balancing energy prices shall be determined in accordance with the rules of operation of the respective platforms.

Definition of technical units, control units, groups and portfolios

Article 14

- (1) BSPs shall provide balancing services through a portfolio consisting of technical units.
- (2) Technical units are the basic technically indivisible generation or consumption units used by the BSP for the provision of individual services (FCR, aFRR or mFRR).
- (3) A control unit is the basic control entity consisting of one or more technical units connected to the transmission or distribution network through the same connection point.
- (4) A control group consists of one or more control units.
- (5) A portfolio consists of one or more control groups.

European platforms for the exchange of balancing energy and imbalance netting

Article 15

- (1) These Terms and Conditions for BSPs establish, in accordance with the frameworks for the establishment of European platforms for the exchange of balancing energy and the imbalance netting process, the requirements for standard products for bids for:
1. Frequency Containment Process (FCP),
 2. automatic Frequency Restoration Process (aFRP),
 3. manual Frequency Restoration Process (mFRP),
 4. imbalance netting process.
- (2) As of the date of accession of the TSO to European platforms for the exchange of balancing energy and the imbalance netting process, in accordance with the Law, the bids referred to in paragraph (1) of this Article shall be used for balancing in accordance with the requirements of the respective European platforms.

4. FREQUENCY CONTAINMENT PROCESS (FCP)

4.1. Definition of products and bids

General principles

Article 16

- (1) For the purpose of implementing FCP, the TSO shall procure FCR balancing capacity in accordance with the rules and procedures defined in these Terms and Conditions for BSPs.
- (2) Bids for the FCR product may be submitted only by a BSP qualified for the balancing service referred to in paragraph (1) of this Article.
- (3) All technical units within a single control unit may offer the FCR service only on behalf of one BSP.

Submission of bids

Article 17

- (1) The BSP shall submit bids in accordance with the FCR requirements defined in Articles 18 and 19 of these Terms and Conditions for BSPs.

General requirements for the FCR product

Article 18

- (1) The general requirements for the FCR balancing capacity product and bids are presented in Table 1.
- (2) The BSP may form bids based on portfolio bidding, such as generators, electricity consumers and electricity storage modules.
- (3) Linking of bids for technical or economic reasons shall not be permitted, i.e., the BSP may not submit two or more bids that are mutually conditional in terms of quantity or time.
- (4) The TSO reserves the right to set a maximum bid price up to which it is willing to accept bids for balancing capacity, and such a limitation shall be published in advance on the Platform.
- (5) The TSO reserves the right to modify technical constraints on bid prices.

Product	Symmetrical ¹
Product location	LFC area of Montenegro
Product duration	4-hour block
Bidding method	Portfolio
Full activation time	30 s
Activation	Automatic, depending on system frequency at the connection point of the technical unit to the network
Minimum bid quantity	1 MW
Maximum bid quantity	≤ qualified capacity
Minimum bid price ²	0.01 €/MW
Technical price cap ³	999,99 €/MW
Bid divisibility	Divisible and indivisible bids are permitted. All divisible bids are divisible down to 1 MW; the size of indivisible bids is limited to a maximum of 3 MW.
Bid linking	Not permitted
Bid resolution	1 MW

Table 1. Definition of the FCR balancing capacity product and bids

Period of procurement of FCR balancing capacity Article 19

- (1) The BSP shall offer FCR balancing capacity for the products referred to in Article 18 of these Terms and Conditions for BSPs.
- (2) The TSO shall procure balancing capacity on an annual and monthly basis, while daily procurement shall be carried out no later than day-ahead (D-1) for the entire period of the following day.
- (3) The TSO may determine the procurement period referred to in paragraph (2) of this Article differently and shall be obliged to notify BSPs thereof at least 30 days prior to the commencement of application of the new procurement period.

¹ The volume represents a symmetrical value for upward and downward balancing – for example, 5 MW means a reserve range of $[P_{ref} - 5 \text{ MW}, P_{ref} + 5 \text{ MW}]$.

² The price shall be submitted per individual product.

³ The technical price cap represents a technical limitation for entering the maximum value on the Platform. However, it does not in any way constitute a limit on the price at which the TSO is willing to procure FCR balancing capacity. The price is determined per product.

Balancing energy within the FCR process

Article 20

BSPs shall be obliged to activate FCR balancing capacity in accordance with the technical requirements defined in the Prequalification Rules, for as long as the system frequency deviation persists.

4.2. Requirements for FCR balancing service providers

General technical requirements for BSPs

Article 21

- (1) A BSP may provide FCR through a portfolio of qualified technical units for the provision of the FCR service.
- (2) During the provision of the FCR service, a BSP may modify the current composition of technical units providing the corresponding FCR range, provided that such units have successfully completed the verification of technical capability. It shall be the responsibility of the BSP to ensure, at all times, an FCR control range at least equal to the total volume of all selected bids of the BSP for FCR balancing capacity.

Conditions for participation of BSPs in the provision of the FCR service

Article 22

- (1) A BSP may provide the FCR service if it meets the following conditions:
 1. It manages one or more control units connected to the transmission system and/or one or more control units connected to the distribution system;
 2. The control centre and all control units are located within the LFC area of Montenegro, but may belong to different balancing groups. The control centre may also be located outside the LFC area of Montenegro, provided that the BSP ensures communication with the TSO in the Montenegrin language;
 3. The BSP is a balance responsible party, registered with the TSO and the Market Operator;

4. All technical units intended to provide the FCR service have successfully completed the verification of technical capability in accordance with the Prequalification Rules;
5. The BSP holds a valid Qualification Certificate for Participation in Auctions, as defined in the Auction Rules.

Technical constraints of control units

Article 23

- (1) The BSP shall activate and manage all control units only within the control ranges defined in the qualification process, as well as within permanent and temporary constraints determined by the TSO, taking into account activations of control units that, in addition to FCR, result from the provision of other balancing services.
- (2) In the event of non-compliance with the obligations referred to in paragraph (1) of this Article, the TSO may withdraw the Certificate of Technical Capability for the provision of the FCR service issued to the BSP.

Availability of procured FCR balancing capacity

Article 24

- (1) The entire FCR balancing capacity offered by the BSP shall be available continuously throughout the entire duration of the procurement period. Technical units providing the FCR balancing service must, during that period, be capable at any time of activating their FCR range in accordance with deviations of system frequency at their connection point.
- (2) The BSP shall continuously monitor the technical units within its portfolio and shall immediately notify the TSO if it is unable to fully meet its contractual obligations for the provision of FCR.
- (3) In the event of unavailability, the BSP shall, within 14 days from the occurrence of such unavailability, submit to the TSO a detailed explanation of the causes of unavailability together with a proposal of measures to improve FCR availability.
- (4) In the event of repeated unavailability, the TSO may withdraw the Certificate of Technical Capability for the provision of the FCR service.

Simultaneous provision of other balancing services

Article 25

Technical units providing FCR may form part of a control unit that also participates in the provision of aFRR and mFRR. This shall be permitted provided that the provision of the FCR service is not jeopardised and that all control groups through which the BSP simultaneously provides FCR and aFRR and/or mFRR contain the same control and technical units.

Exchange and archiving of data between the BSP and the TSO

Article 26

The BSP shall, in cooperation with the TSO, ensure real-time data exchange and data archiving. The types of data, the method and frequency of exchange, as well as the method of archiving, shall be defined in the Prequalification Rules.

Exchange of data between the BSP and balance responsible parties and the DSO

Article 27

- (1) Where a BSP includes in its portfolio balancing resources with delivery points belonging to another balancing group, the BSP shall, for such delivery points, provide the balance responsible party of that balancing group with data on the participation of those delivery points in the provision of balancing services, as well as the quantity of activated balancing energy, no later than 12:00 on the day following the completion of activation.
- (2) The BSP shall submit the data referred to in paragraph (1) of this Article, as well as data on its own activation, to the entity responsible for the organisation and management of the electricity market (hereinafter referred to as: the Market Operator) no later than 12:00 on the day following the completion of activation, or on the next working day if the activation was carried out on a non-working day or weekend. The quantities of activated FCR balancing energy shall be submitted to the Market Operator in electronic format, disaggregated by balance responsible parties.
- (3) Where a BSP includes in its portfolio resources with delivery points in the distribution network of the DSO, the BSP shall, for such delivery points, submit to the DSO all data on realised balancing energy per individual metering point no later than 08:00 on the day following the completion of activation, or on the next working day if the activation was carried out on a non-working day or weekend.

- (4) In the event of non-compliance with the obligations referred to in paragraphs (1), (2) and (3) of this Article, the TSO may, upon request of the balance responsible party of another balancing group, the Market Operator or the DSO, withdraw from the BSP the Certificate of Technical Capability for the provision of the FCR service.

4.3. Procurement of FCR balancing capacity and secondary market

4.3.1. Conditions for participation

General conditions

Article 28

- (1) Only qualified BSPs for the provision of the FCR service may participate in the procurement of FCR balancing capacity and in the transfer of procured FCR balancing capacity on the secondary market.
- (2) The TSO shall grant the status of a qualified BSP for the provision of the FCR service to those BSP candidates that hold a valid Certificate of Technical Capability for the provision of the FCR service in accordance with the Prequalification Rules and fulfil all FCR requirements set out in the Auction Rules.
- (3) The TSO shall publish the Auction Rules on its official website.
- (4) On the basis of the Certificate of technical capability for the provision of FCR services and compliance with the requirements set out in the Auction Rules, the TSO shall issue to the BSP a Certificate of qualification for participation in the auction for the provision of the FCR service no later than seven working days from the receipt of complete documentation in accordance with the Auction Rules.
- (5) In the event of submission of incomplete documentation referred to in paragraph 4 of this Article, the TSO shall, no later than 10 days from the receipt of such documentation, notify the BSP candidate in writing to remedy the deficiencies therein.
- (6) The BSP candidate shall, in accordance with the notification referred to in paragraph 5 of this Article, remedy the deficiencies in the documentation within 10 days from the date of receipt of the notification referred to in paragraph 5 of this Article.
- (7) If the applicant referred to in paragraph 5 of this Article fails to remedy the deficiencies within the prescribed time limit, the TSO shall not issue the BSP with

a Certificate of qualification for participation in the auction for the provision of the FCR service.

- (8) In the event of withdrawal of the Certificate of technical capability for the provision of FCR services, the BSP shall automatically lose the status of a qualified BSP for the provision of the FCR service, and the TSO shall accordingly withdraw the Certificate of qualification for participation in the auction for the provision of the FCR service.

4.3.2. Requirements for the collection of FCR bids

Collection of bids for FCR balancing capacity

Article 29

- (1) The TSO shall conduct auctions for FCR balancing capacity within the Platform.
- (2) The BSP shall submit bids for FCR balancing capacity via the Platform, which is operated and supervised by the TSO.
- (3) The BSP may submit bids for FCR balancing capacity on the Platform for individual four-hour products (00:00–04:00, 04:00–08:00, 08:00–12:00, 12:00–16:00, 16:00–20:00, 20:00–24:00).
- (4) The TSO shall rank the accepted bids for FCR balancing capacity based on price and timestamp, applying the principle that bids with lower prices have priority. Where two or more bids have the same price, priority shall be given to the bid received earlier by the TSO, i.e., with an earlier timestamp. Following each FCR balancing capacity auction, the TSO shall select the most economically advantageous bids for the procurement of FCR balancing capacity.
- (5) In selecting the most economically advantageous bids, the TSO shall first take into account the procurement of the requested volume. This means that the procured volume may exceed the requested volume. Such a situation may arise where the last selected bid is indivisible.
- (6) In selecting the most economically advantageous bids, the TSO shall, as a second criterion, take into account the minimisation of procurement costs. This means that, for the purpose of cost optimisation, the TSO may exclude lower-priced (divisible or indivisible) bids and instead select higher-priced (divisible or indivisible) bids, where such selection results in lower overall procurement costs.
- (7) Where, following the auction for FCR balancing capacity, the TSO has not procured balancing capacity in the volume determined in accordance with Article

13(1) of these BSP Terms and Conditions, the TSO shall repeat the auction for the missing balancing capacity.

- (8) Where, following the repeated auction for FCR balancing capacity, the TSO has not procured balancing capacity in the volume determined in accordance with Article 13(1), BSPs shall, upon request of the TSO, be obliged to conclude contracts for the provision of balancing services with the TSO under the conditions defined in Annex 1 to these BSP Terms and Conditions, within the shortest reasonable time period determined by the TSO.

Time limits for the collection of bids for FCR balancing capacity

Article 30

- (1) The BSP may submit bids for FCR balancing capacity on the Platform from GOT (Gate Opening Time) until GCT (Gate Closing Time).
- (2) The TSO shall define GOT and GCT for the collection of bids for the procurement of FCR balancing capacity in the Auction Rules.
- (3) The type of product, product resolution, volume subject to auction, GOT, GCT, any price limits and other relevant information shall be published by the TSO on the Platform through auction specifications, as a rule at least one day prior to each individual auction.

4.3.3. Transfer of balancing capacity

Transfer of FCR balancing capacity

Article 31

- (1) A BSP shall have the right to transfer FCR balancing capacity procured by the TSO from that BSP, in whole or in part (in terms of volume and/or time), to another BSP. The provisions applicable to the FCR product set out in Article 18(1) of these BSP Terms and Conditions shall apply to such transfers.
- (2) The transfer of FCR balancing capacity may only be carried out to a BSP that has already obtained the status of a qualified BSP, and only up to the amount of FCR qualified capacity that has not already been procured from the receiving BSP.

- (3) Both BSPs participating in the transaction shall notify the TSO of the transfer of FCR balancing capacity in electronic form and in the format specified by the TSO, by submitting via the Platform at least the following data:
1. identification data of the BSP transferring the procured capacity;
 2. identification data of the BSP receiving the procured capacity;
 3. the service subject to the transfer;
 4. the balancing settlement intervals subject to the transfer;
 5. the quantities of FCR balancing capacity per individual balancing settlement interval (15-minute duration) subject to the transfer.
- (4) The BSP transferring the procured capacity shall notify the transfer of FCR balancing capacity to the receiving BSP no earlier than two hours after the publication of the results of the day-ahead auction. Any transfer notification received by the TSO prior to this deadline shall be automatically rejected.
- (5) The BSP transferring the procured capacity may transfer FCR balancing capacity to the receiving BSP no later than one hour before the start of the delivery day. Any transfer notifications received by the TSO after the notification deadline shall be automatically rejected.
- (6) The transfer of FCR balancing capacity shall be valid only if confirmed by the TSO through an appropriate notification submitted by both BSPs. In the confirmation process, the TSO shall verify:
1. that the notification has been received from both the transferring BSP and the receiving BSP, in accordance with the requirements set out in paragraph 3, points 4 and 5 of this Article;
 2. that the submitted data match in both notifications provided by the BSPs;
 3. that the conditions set out in paragraphs 2 and 4 of this Article are fulfilled;
 4. the level of qualified FCR balancing capacity.
- (7) Where, during the verification process, the TSO determines that the BSPs do not fulfil all obligations referred to in paragraph 6 of this Article, the TSO shall reject the transaction in its entirety. Any errors arising during the notification process must be corrected by the BSPs through the submission of a new transfer notification.
- (8) The TSO may, prior to the start of the balancing settlement interval, reject an already confirmed transfer of balancing capacity where such a transaction would:
1. jeopardise the operational security of the power system;
 2. result in a breach of operational limits referred to in Articles 158 to 174 of the Regulation establishing guidelines on electricity transmission system operation.

- (9) The rejection of an already confirmed transfer referred to in paragraph 8 of this Article shall be implemented by requiring the notification of a reverse transfer transaction between the BSPs involved in the rejected transaction. The rejection does not necessarily apply to all previously confirmed balancing settlement intervals within the transfer period, but only to those intervals exhibiting the characteristics referred to in paragraph 8 of this Article.
- (10) The transfer of FCR balancing capacity to the receiving BSP shall not be possible during the conduct of FCR balancing capacity auctions.
- (11) By transferring FCR balancing capacity, the obligations of the transferring BSP related to the provision of balancing services shall be transferred to the receiving BSP. The payment obligation for the transferred FCR balancing capacity shall be settled by the TSO with the BSP that transferred the capacity.
- (12) The TSO reserves the right to amend the deadlines for the transfer of FCR balancing capacity. Any such changes shall be published on the TSO's official website no later than 30 days prior to their entry into force.
- (13) In the event of unavailability of the Platform, the transfer of FCR balancing capacity shall not be possible.

4.4. Activation of FCR balancing energy

Activation of FCR balancing energy Article 32

Activation of FCR balancing energy shall be carried out automatically at the level of the technical unit, taking into account the deviation of system frequency, in accordance with the technical requirements defined in the Prequalification Rules.

4.5. Determination of the quantity of activated balancing energy

Determination of activated FCR balancing energy Article 33

- (1) The basis for the calculation of activated balancing energy within the FCP shall be minute-level data on the FCR regulation range and the participation status of control groups in the provision of FCR, obtained from the TSO's control system (SCADA). The participation of a control group in the provision of FCR shall be

determined based on the FCR provision status signal, whereby a control group shall be deemed to have participated in minute t if the participation signal was active throughout the entire minute t . For calculation purposes, the TSO's frequency measurement used for the implementation of aFRP shall be applied.

- (2) The TSO shall provide the data for the previous day to the BSP for review no later than eight hours after the end of the following day. The BSP shall review the submitted data and notify the TSO whether it agrees with them, or otherwise submit an objection along with proposed amendments. Confirmation of the data or any objection with proposed amendments shall be submitted to the TSO on each working day no later than 13:00 hours, except on weekends and public holidays. Data for weekends and public holidays shall be reviewed no later than 13:00 hours on the first subsequent working day. The TSO reserves the right to amend the deadline by which the BSP must submit confirmation or an objection, subject to prior publication on its official website.
- (3) Where the BSP proposes amendments, the TSO shall decide, based on the justification provided and comparison with other available data, whether to accept the amendments or retain the data previously submitted to the BSP. The decision of the TSO shall be final and shall not be subject to further reconciliation with the BSP, unless explicitly requested by the TSO.
- (4) Where the TSO does not have access to the required data on quantities, or where such data are evidently inaccurate, the TSO may:
 1. use data submitted by the BSP;
 2. adjust the data by appropriately using available data from neighbouring time intervals;
 3. use data determined on the basis of the BSP's historical behaviour.

In the cases referred to in paragraph 4 of this Article, the TSO shall endeavour to align the data used with the BSP. Where alignment is not possible, the TSO shall independently determine the final data based on one or a combination of the principles set out in paragraph 4 of this Article and shall inform the BSP accordingly.

- (5) The activated FCR balancing energy⁴ of control group j in minute t ($W_{\text{FCR},j,t}$) shall be determined based on the average minute value of the FCR regulation range of control group j and the average minute value of the frequency deviation in that minute, as follows:

⁴ Positive balancing energy is the energy injected into the network by the control group. Negative balancing energy is the energy absorbed from the network by the control group.

$$W_{FCR,j,t} = -P_{FCR,j,t} * \frac{\Delta f_t}{0,2 \text{ Hz}} * \Delta t * State_{FCR,j,t}$$

Where:

$W_{FCR,j,t}$ – activated FCR balancing energy of control group j in minute t [MWh, rounded to ten decimal places];

$P_{FCR,j,t}$ – average minute value of the FCR regulation range of control group j in minute t [MW, rounded to ten decimal places];

$State_{FCR,j,t}$ – FCR provision status in control group j in minute t (value 1 if group j provides FCR, otherwise 0);

Δf_t – average minute value of the frequency deviation in minute t [Hz, rounded to ten decimal places]; calculated as the difference between the average measured frequency in minute t and the nominal frequency value of 50 Hz;

Δt – duration of the interval for which the activated balancing energy is determined (one minute, i.e. 1/60 h);

j – index denoting the control group.

- (6) The activated FCR balancing energy of the entire BSP portfolio in minute t ($W_{FCR,t}$) shall be determined as the sum of the activated balancing energy of all individual control groups j , as follows:

$$W_{FCR,t} = \sum_{j \in J} W_{FCR,j,t}$$

Where:

$W_{FCR,t}$ – activated FCR balancing energy of the entire BSP portfolio in minute t [MWh, rounded to ten decimal places];

$W_{FCR,j,t}$ – activated FCR balancing energy of control group j in minute t [MWh];

j – control group from the set of control groups J ;

J – set of control groups within the BSP portfolio.

- (7) Activated balancing energy within the FCP for the entire BSP portfolio in balancing settlement interval i ($W_{FCR+,i}$ i $W_{FCR-,i}$) shall be calculated as the sum of the activated FCR balancing energy of the entire BSP portfolio over all minutes t belonging to interval i , as follows.

$$W_{FCR+,i} = \sum_{t \in i} \max(W_{FCR,t}; 0)$$

$$W_{FCR-,i} = \sum_{t \in i} \min(W_{FCR,t}; 0)$$

Where:

$W_{FCR+,i}$ – positive activated FCR balancing energy in balancing settlement interval i [MWh, rounded to three decimal places];

$W_{FCR-,i}$ – negative activated FCR balancing energy in balancing settlement interval i [MWh, rounded to three decimal places];

$W_{FCR,t}$ – activated FCR balancing energy of the entire BSP portfolio in minute t [MWh];

i – balancing settlement interval

- (8) The duration of balancing settlement interval i for determining activated FCR balancing energy shall be 15 minutes.
- (9) The TSO shall provide the activated FCR balancing energy per individual settlement interval referred to in paragraph 7 of this Article to the market operator (MO) for the purposes of imbalance settlement.
- (10) Balancing energy resulting from the FCP shall not be subject to calculation or financial settlement between the TSO and the BSP.

4.6. Settlement and financial compensation of balancing capacity

Calculation of FCR balancing capacity

Article 34

- (1) The TSO shall calculate procured FCR balancing capacity based on the results (quantities and prices) of the relevant auctions in accordance with Article 29 of these BSP Terms and Conditions, or in accordance with the conditions set out in Annex 1 where FCR balancing capacity is allocated in accordance with Article 13(3) or (7) of these BSP Terms and Conditions. The TSO shall calculate the quantities of FCR balancing capacity at the prices resulting from the individual procurement procedure.
- (2) The cost of balancing capacity in balancing settlement interval i ($S_{FCR,zak,i}$) shall be determined on the basis of the quantity and price of balancing capacity ($P_{FCR,zak,i}$ and $C_{FCR,zak,i}$) referred to in paragraph 1 of this Article, as follows:

$$S_{FCR,zak,i} = \frac{1}{K} * C_{FCR,zak,i} * P_{FCR,zak,i}$$

Where:

$S_{FCR,zak,i}$ - cost of FCR balancing capacity in balancing settlement interval i [EUR, rounded to ten decimal places];

$C_{FCR,zak,i}$ - price of FCR balancing capacity per hour, of which balancing settlement interval i forms a part [EUR/MW/h, rounded to ten decimal places]; where the price of FCR balancing capacity is defined for a product covering multiple hours, the hourly balancing price shall be determined as the price of the FCR balancing capacity product applicable to that interval divided by the number of hours included in the FCR balancing capacity price;

$P_{FCR,zak,i}$ - quantity of reserve selected at the auction for FCR balancing capacity for balancing settlement interval i [MW, positive value, rounded to ten decimal places];

K - number of balancing settlement intervals i within one hour, $K = 4$ [1/h].

- (3) The total cost of balancing capacity in settlement period M ($S_{FCR,zak,M}$) shall be determined as the sum of the costs of FCR balancing capacity over all the settlement intervals i belonging to settlement period M .

$$S_{FCR,zak,M} = \sum_{i \in M} S_{FCR,zak,i}$$

Where:

$S_{FCR,zak,M}$ - cost of FCR balancing capacity in settlement period M [EUR, rounded to two decimal places];

$S_{FCR,zak,i}$ - cost of balancing capacity in settlement interval i [EUR];

M - settlement period, as defined in Article 38(1) of these BSP Terms and Conditions.

4.7. Consequences of non-compliance with the BSP Terms and Conditions

Verification of the adequacy of the provision of procured FCR balancing capacity Article 35

- (1) The TSO shall verify the adequacy of the provision of procured FCR balancing capacity based on archived time series of measurement data, which the BSP is required to archive in accordance with the data and information exchange requirements defined in the Prequalification Rules.
- (2) Where the TSO determines inadequate delivery of FCR activation at the level of a technical unit, it may restrict the BSP that fails to meet the requirements from submitting FCR bids for a period of 14 days.
- (3) Where the BSP fails to comply with the requirements set out in these rules, the TSO reserves the right to withdraw the Certificate of technical capability for the provision of the FCR service.

Procedure for the assessment and calculation of consequences in case of non-compliance with the BSP Terms and Conditions

Article 36

- (1) For the purpose of monitoring service provision, the TSO shall assess and calculate the consequences for the BSP arising from missing FCR balancing capacity.
- (2) Minute-averaged data from the TSO's control system (SCADA on the TSO side) shall be used for the assessment and calculation of consequences.

- (3) The TSO shall provide the data for the previous day to the BSP for review no later than eight hours after the end of the following day. The BSP shall review the submitted data and notify the TSO whether it agrees with them; otherwise, it shall submit an objection and proposed corrections. Confirmation of the data or any objection with proposed corrections shall be submitted to the TSO on each working day no later than 13:00 hours, except on weekends and public holidays. Data for weekends and public holidays shall be reviewed no later than 13:00 hours on the first subsequent working day. The TSO reserves the right to amend the deadline rules, subject to prior publication on its official website.
- (4) Where the BSP proposes corrections, the TSO shall decide, based on the justification provided and comparison with other data, whether to accept the corrections or retain the data previously provided. The decision of the TSO shall be final and shall not be subject to reconciliation with the BSP, unless explicitly requested by the TSO.
- (5) Where the TSO does not have access to quantity data, or where such data are evidently inaccurate, the TSO may:
1. use data submitted by the BSP;
 2. adjust the data using available data from adjacent time intervals;
 3. use data determined on the basis of the BSP's historical behaviour.
- (6) In the case referred to in paragraph 5 of this Article, the TSO shall endeavour to align the data used with the BSP. Where alignment is not possible, the TSO shall independently determine the final data based on one or a combination of the principles set out in paragraph 5 of this Article and shall inform the BSP accordingly.

Assessment and calculation of consequences due to missing FCR balancing capacity
Article 37

- (1) FCR balancing capacity shall be deemed missing where the selected BSP fails to provide balancing capacity in the total volume of the reserve awarded at the auction in accordance with Article 29 of these BSP Terms and Conditions and the FCR balancing capacity allocated by the TSO to the BSP in accordance with Article 13 of these BSP Terms and Conditions, adjusted for subsequent transfers of balancing capacity between BSPs in accordance with Article 31 of these BSP Terms and Conditions.

- (2) For the calculation of the recognised delivered FCR volume ($R_{FCR,pri,i}$), minute data (average values) on the offered FCR volume and the FCR provision status for individual control groups within the BSP portfolio shall be used, as obtained from the TSO's control system. The participation of a control group in FCR provision shall be determined based on the FCR provision status signal, whereby a control group shall be deemed to have participated in minute t if the participation signal was active throughout the entire minute t .
- (3) The recognised volume of FCR balancing reserve in minute t shall be calculated as follows:

$$R_{FCR,pri,t} = \sum_{j \in J} \min(P_{FCR,j,t}, K_j) * State_{FCR,j,t}$$

Where:

$R_{FCR,pri,t}$ – recognised FCR balancing reserve regulation range in minute t [MW, rounded to ten decimal places];

$P_{FCR,j,t}$ – average minute value of the FCR regulation range of control group j in minute t [MW, rounded to ten decimal places];

K_j – maximum qualified FCR balancing reserve regulation range of control group j [MW, rounded to ten decimal places];

$State_{j,t}$ – FCR provision status of control group j in minute t ($State_{FCR,j,t}$ equals 1 when control group j provides FCR, otherwise 0);

j – control group j from the set of control groups J ;

J – set of FCR control groups within the BSP portfolio.

- (4) The recognised FCR balancing reserve regulation range in balancing settlement interval i ($R_{FCR,pri,i}$) shall be calculated as the average recognised FCR balancing reserve regulation range over all minutes t belonging to settlement interval i , as follows:

$$R_{FCR,pri,i} = \frac{1}{N} \sum_{t \in i} \min(R_{FCR,pri,t}, P_{FCR,zak,i})$$

Where:

$R_{FCR,pri,i}$ – recognised FCR balancing reserve regulation range in balancing settlement interval i [MW, rounded to ten decimal places];

$R_{FCR,pri,t}$ – recognised FCR balancing reserve regulation range in minute t [MW];

$P_{FCR,zak,i}$ – quantity of reserve procured at the FCR balancing capacity auction for settlement interval i [MW, positive value, rounded to ten decimal places];

N – number of minutes in settlement interval i (15 minutes);

i – settlement interval.

- (5) In the event that the BSP's communication system is unavailable due to reasons attributable to the BSP, and the TSO is therefore unable to obtain the relevant

- data, the FCR balancing reserve shall be deemed unavailable for that period. The TSO shall take this into account when calculating missing FCR balancing capacity.
- (6) Missing FCR balancing capacity in balancing settlement interval i ($R_{FCR,zak,i}$) shall be equal to the difference between the FCR balancing capacity procured at auction, transfers of balancing capacity between BSPs, FCR balancing capacity allocated in accordance with Article 13 of these BSP Terms and Conditions, and the recognised regulation range of balancing capacity.

$$R_{FCR,zak,i} = \max \left(P_{FCR,zak,i} + \sum_{p \in BSP_{purchase}} P_{FCR,p,i} + P_{FCR,dod,i} - \sum_{p \in BSP_{sale}} P_{FCR,p,i} - R_{FCR,pri,i}; 0 \right)$$

Where:

$R_{FCR,zak,i}$ - missing FCR balancing capacity in balancing settlement interval i [MW, rounded to ten decimal places];

$R_{FCR,pri,i}$ - recognised FCR balancing reserve regulation range in settlement interval i [MW];

$P_{FCR,zak,i}$ - quantity of procured capacity at the FCR balancing capacity auction for settlement interval i [MW, positive value, rounded to ten decimal places];

$P_{FCR,dod,i}$ - quantity of capacity allocated in accordance with Article 13 of these BSP Terms and Conditions for settlement interval i [MW, positive value, rounded to ten decimal places];

$P_{FCR,p,i}$ - quantity of the p -th transfer of FCR balancing capacity in settlement interval i to or from the BSP for which the missing balancing capacity is being calculated [MW, positive value, rounded to ten decimal places];

$BSP_{purchase}$ - set of transfers of FCR balancing capacity to the BSP for which the missing balancing capacity is being calculated for settlement interval i ;

BSP_{sale} - set of transfers of FCR balancing capacity from the BSP for which the balancing capacity is being calculated for other BSPs for settlement interval i [MW, positive value, rounded to ten decimal places];

p - p -th transfer of balancing capacity to or from the BSP for which the missing balancing capacity is being calculated.

- (7) The assessment of consequences due to missing FCR balancing capacity ($PEN_{FCR,i}$) for a given balancing settlement interval i shall be calculated as follows:

$$PEN_{FCR,i} = R_{FCR,zak,i} * C_{FCR,i} * F_{FCR}$$

Where:

$PEN_{FCR,i}$ - value of the consequence due to missing FCR balancing capacity in settlement interval i [EUR, rounded to two decimal places];

$R_{FCR,zak,i}$ - missing FCR balancing capacity in settlement interval i [MW];

$C_{FCR,i}$ - price of FCR balancing capacity in settlement interval i , determined as the highest price of the selected bid for FCR balancing capacity for the purposes of the TSO's control area applicable to that interval in the respective direction, regardless of the procurement method (auction,

fallback procedure, etc.), divided by the number of settlement intervals included in the FCR balancing capacity price [EUR/MW, rounded to ten decimal places];
F_{FCR} - penalty factor for missing FCR balancing capacity, F_{FCR} = 2.

- (8) The total value of consequences due to the missing volume of FCR balancing capacity in settlement period M ($PEN_{FCR,M}$) shall be calculated as the sum of the values of consequences for the missing volume of FCR balancing capacity in all time intervals i belonging to settlement period M , by applying the following formula:

$$PEN_{FCR,M} = \sum_{i \in M} PEN_{FCR,zak,i}$$

Where:

PEN_{FCR,M} - total value of consequences due to missing FCR balancing capacity in settlement period M [EUR, rounded to two decimal places];

PEN_{FCR,zak,i} - value of the consequence due to missing FCR balancing capacity in settlement interval i [EUR];

M - settlement period, as defined in Article 38(1) of these BSP Terms and Conditions.

4.8. Invoicing and financial settlement for FCR

Determination of the settlement period, procedure for invoicing and payment Article 38

- (1) The settlement period for FCR balancing capacity and the consequences of non-compliance with the BSP Terms and Conditions shall be one month and shall commence on the first day of the month at 00:00 hours and end on the last day of the month at 24:00 hours.
- (2) The TSO shall submit to the BSP the calculation for the procured FCR balancing capacity no later than the seventh working day following the end of the settlement period.
- (3) Based on the calculation referred to in paragraph 2 of this Article, the BSP shall issue an invoice to the TSO no later than the tenth working day following the end of the settlement period.
- (4) The TSO shall submit to the BSP the calculation of consequences of non-compliance with the provisions of these BSP Terms and Conditions no later than the seventh working day following the end of the settlement period.

- (5) Based on the calculation referred to in paragraph 4 of this Article, the TSO shall issue an invoice to the BSP no later than the tenth working day following the end of the settlement period.
- (6) Invoices shall be delivered by electronic mail to the addresses specified in accordance with the Auction Rules.
- (7) The payment deadline shall be 10 days from the date of issuance of the invoice. If the due date falls on a non-working day (Saturday, Sunday, public holiday in Montenegro, or a day when the European EUR payment and settlement system is not operational), the due date shall be postponed to the first following working day.
- (8) Prior to payment, the TSO and the BSP may perform financial netting (set-off of claims), where there are receivables and liabilities relating to the same type of service.

5. AUTOMATIC FREQUENCY RESTORATION RESERVE (aFRR)

5.1. Definition of the product and bids

General principles

Article 39

- (1) For the purposes of implementing the aFRP, the TSO shall procure aFRR balancing capacity in accordance with the rules and procedures defined in these BSP Terms and Conditions.
- (2) The aFRP products or services are aFRR balancing capacity and aFRR balancing energy.
- (3) Bids for aFRR balancing capacity or aFRR balancing energy may be submitted only by qualified BSPs.
- (4) Bids for aFRR balancing capacity and for aFRR balancing energy shall be submitted separately.
- (5) Bids for aFRR balancing capacity and for aFRR balancing energy, with respect to the balancing direction, shall be submitted separately.
- (6) The BSP shall be obliged to submit bids for aFRR balancing energy in accordance with the requirements set out in Articles 43 and 44 of these BSP Terms and Conditions:
 1. If it has procured a certain volume of aFRR balancing capacity at the auction;
 2. If aFRR balancing capacity has been allocated to it by the TSO in accordance with Article 13 of these BSP Terms and Conditions;
 3. If aFRR balancing capacity has been transferred to it in accordance with Article 56 of these BSP Terms and Conditions.
- (7) In the case of transfer of aFRR balancing capacity from the BSP from which the procured capacity is transferred to the BSP to which the procured capacity is transferred, the submission of bids for aFRR balancing energy for the transferred volumes shall not be mandatory for the BSP from which the procured capacity is transferred, whereas the BSP to which the procured capacity has been transferred shall be obliged to submit bids for aFRR balancing energy.
- (8) The volume of submitted bids of all qualified BSPs for aFRR balancing energy shall be equal to or greater than the sum of:

1. the procured volume of aFRR balancing capacity at auctions for balancing capacity;
2. the volume of allocated balancing capacity for which the BSP and the TSO, in accordance with Article 13 of these BSP Terms and Conditions, have concluded a contract for the provision of aFRR balancing capacity;
3. the volume of transferred aFRR balancing capacity, reduced by the volumes of aFRR balancing capacity which the BSP has transferred to another BSP, in accordance with Article 56 of these BSP Terms and Conditions.

(9) All BSPs shall have the possibility to submit bids for aFRR balancing energy up to the total qualified balancing capacity.

5.1.1. aFRR balancing capacity

Submission of bids for aFRR balancing capacity

Article 40

The BSP shall submit bids for aFRR balancing capacity which comply with the requirements for aFRR balancing capacity defined in Articles 41 and 42 of these BSP Terms and Conditions.

General requirements for aFRR balancing capacity

Article 41

(1) The general requirements for the product and bids for aFRR balancing capacity, used in the aFRP, are set out in Table 2.

Product	Separate product for positive and negative balancing direction
Product location	LFC area of Montenegro
Product duration	Hour, day, week, month, year
Minimum bid volume	1 MW
Maximum bid volume	≤ unused qualified reserve
Minimum bid price	0.01 €/MW/h
Technical bid price cap	999.99 €/MW/h
Bid divisibility	Indivisible bids are not allowed. All bids are divisible down to 1 MW.

Linking of bids	Not allowed
Bid resolution	1 MW
Availability	Continuous and at any time (100% availability), taking into account the products referred to in Article 43 of these BSP Terms and Conditions
Minimum bid volume	1 MW

Table 2. Definition of the product and bids for aFRR balancing capacity

- (2) The BSP shall have the possibility to form bids for aFRR balancing capacity based on the entire portfolio bidding, such as generators, consumers, aggregators and/or electricity storage modules.
- (3) The linking of bids for aFRR balancing capacity from a technical or economic perspective shall not be permitted. This means that the BSP may not submit two or more bids for aFRR balancing capacity whose selection is mutually conditional in terms of quantity or time.
- (4) Selected bids for aFRR balancing capacity shall be settled according to the pay-as-bid principle.
- (5) The BSP shall submit bids for aFRR balancing capacity with a price expressed in EUR/MW/h, regardless of the product duration.
- (6) The TSO reserves the right to limit the maximum price at which it is willing to accept bids for aFRR balancing capacity, whereby such limitation shall be announced in advance.

Period of procurement of aFRR balancing capacity

Article 42

- (1) The TSO may procure aFRR balancing capacity for the following time periods:
 1. annual procurement;
 2. monthly procurement;
 3. weekly procurement;
 4. daily procurement.
- (2) For each procurement period referred to in paragraph 1 of this Article, the TSO may define one or more product i.e., bid time resolutions:

1. annual product – means that the BSP submits a bid for aFRR balancing capacity for the entire product period, i.e., the product duration is one year;
2. monthly product – means that the BSP submits a bid for aFRR balancing capacity for the entire product period, i.e., the product duration is one month;
3. weekly product – means that the BSP submits a bid for aFRR balancing capacity for the entire product period, i.e., the product duration is seven calendar days;
4. daily product – means that the BSP submits a bid for aFRR balancing capacity for the entire product period, i.e., the product duration is one day;
5. hourly product – means that the BSP submits a bid for aFRR balancing capacity for the entire product period, i.e., the product duration is one hour.

(3) The TSO shall conduct the auction for the procurement of aFRR balancing capacity referred to in paragraph 1 of this Article:

1. at least 30 calendar days before the day on which the procurement period of aFRR balancing capacity for annual procurement begins;
2. at least seven calendar days before the day on which the procurement period of aFRR balancing capacity for monthly procurement begins;
3. at least three calendar days before the day on which the procurement period of aFRR balancing capacity for weekly procurement begins;
4. for daily procurement of aFRR balancing capacity, at least 10 hours before the day of procurement of balancing capacity.

(4) The TSO may determine the procurement period referred to in paragraph 1 of this Article and/or the time resolutions of bids or products referred to in paragraph 2 of this Article differently. The TSO shall notify BSPs thereof by electronic mail at least 30 calendar days before the entry into force of the change and publish a notice on its official website.

5.1.2. aFRR balancing energy

Submission of bids for aFRR balancing energy

Article 43

- (1) The BSP shall submit bids that are in accordance with the requirements for aFRR balancing energy set out in Article 44 of these BSP Terms and Conditions.
- (2) The BSP may submit one or more bids for aFRR balancing energy, in a total volume which, in a single balancing settlement interval, shall not exceed the qualified reserve of the BSP, taking into account the limitations set out in Article 25, Article 49 and Article 84 of these BSP Terms and Conditions.

General requirements for aFRR balancing energy
Article 44

- (1) The general requirements for bids for aFRR balancing energy used in the aFRP are set out in Table 3.

Product location	LFC area of Montenegro
Full activation time (FAT) ⁵	5 minutes
Activation method	Automatic
Minimum bid volume	1 MWh
Technical minimum bid price	-9,999.99 €/MWh
Technical maximum bid price	9,999.99 €/MWh
Maximum bid volume	≤ unused qualified aFRR reserve
Price resolution	0.01 €/MWh
Bid divisibility	All bids are fully divisible. Indivisible bids are not allowed.
Linking of bids	Not allowed
Bid resolution	1 MW
Bid validity period	15 min

Table 3. Definition of the product and bids for aFRR balancing energy

- (2) The linking of bids from a technical or economic perspective shall not be permitted. This means that the BSP may not submit two or more bids whose activation is mutually conditional in terms of quantity or time.
- (3) The BSP may freely define the size and number of bids for aFRR balancing energy, in compliance with the general requirements of these BSP Terms and Conditions.
- (4) The TSO reserves the right to limit the maximum bid price up to which it is willing to select bids for balancing energy, whereby such limitation shall be publicly announced in advance.

⁵ The full activation time refers to both activation time and deactivation time.

- (5) In the case of application of the balancing capacity allocation procedure pursuant to Article 13 of these BSP Terms and Conditions, the limitations defined in Annex 1 shall apply.

5.2. Requirements for aFRR balancing service providers

General technical requirements for BSPs

Article 45

- (1) The BSP may provide the aFRR service through a portfolio of control units qualified for the provision of the aFRR service.
- (2) An individual control unit may provide the aFRR service only within the portfolio of a single BSP.

Conditions for participation of BSPs in the provision of aFRR service

Article 46

The BSP may provide the aFRR service if it fulfils the following conditions:

1. It operates one or more control units connected to the transmission system and/or one or more control units connected to the distribution system;
2. The control centre and all control units are located within the control area of Montenegro, but may belong to different balancing groups. The control centre may also be located outside the control area of Montenegro, provided that the BSP ensures communication with the TSO in the Montenegrin language;
3. The BSP is a balancing responsible party, registered with the TSO and the market operator;
4. A technical capability verification procedure has been successfully carried out on all technical units intended to provide the aFRR service, in accordance with the Prequalification Rules;
5. The BSP holds a valid Certificate of qualification for participation in auctions, as defined in the Auction Rules.

Technical limitations of control units

Article 47

- (1) The BSP shall provide the aFRR balancing service only within the control ranges that have successfully passed the qualification procedure, as well as within the permanent and temporary limitations set by the TSO. The BSP shall also take into account any additional activations of control units resulting from the provision of other balancing services.
- (2) In the event of non-compliance with the obligations referred to in paragraph 1 of this Article, the TSO may revoke the certificates of recognition of technical capability for the provision of aFRR.

Availability of procured aFRR balancing capacity

Article 48

- (1) The entire procured aFRR balancing capacity provided by the BSP shall be available continuously throughout the entire procurement period.
- (2) The TSO shall have the right, at any time during the period for which aFRR capacity has been procured, to activate aFRR.
- (3) The BSP shall continuously monitor its technical units and immediately notify the TSO if it is unable to fully meet its contractual obligations for the provision of aFRR.
- (4) In the event of unavailability for which the BSP is responsible, the BSP shall, within 14 days from the occurrence of such unavailability, submit to the TSO a detailed explanation of the cause of the unavailability and a proposal of measures that the BSP will undertake in order to improve the availability of aFRR.
- (5) In the event of repeated unavailability of the BSP, the TSO may revoke the validity of the certificate of recognition of technical capability for the provision of aFRR.

Parallel provision of other balancing services

Article 49

- (1) Control units providing aFRR may also participate in the provision of FCR and mFRR.
- (2) Participation in the provision of the services referred to in paragraph 1 of this Article shall be possible provided that this does not jeopardise the provision of the aFRR service and that all control groups with which the BSP simultaneously provides aFRR and FCR and/or mFRR contain the same control units.

Data exchange and archiving between the BSP and the TSO

Article 50

- (1) The BSP shall, in cooperation with the TSO, ensure real-time data exchange and the archiving thereof.
- (2) The types of data referred to in paragraph 1 of this Article, the method and frequency of exchange, as well as the method of archiving, are defined in the Prequalification Rules.

Data exchange between the BSP and balancing responsible parties, DSOs and the market operator

Article 51

- (1) Where the BSP, within its portfolio, has balancing resources with connection points belonging to another balancing group, the BSP shall, for such connection points, submit to the responsible representative of that other balancing group data on the participation of those points in the provision of services and on the volume of delivered balancing energy no later than 12:00 hours on the day following the completion of activation.
- (2) The BSP shall submit the data referred to in paragraph 1 of this Article, as well as data on its own activation, to the market operator no later than 12:00 hours on the day following the completion of activation, or on the next working day if the activation was carried out on a non-working day or weekend. For the purposes of performing the tasks of the market operator, BSPs shall be obliged to submit on a daily basis the volume of activated aFRR balancing energy in electronic format, broken down by balancing mechanism participants (balancing responsible parties).
- (3) Where the BSP has, within its portfolio, resources with connection points in the distribution system of the DSO, the BSP shall, for such connection points, submit to the DSO all data on the delivered balancing energy per individual metering point no later than 08:00 hours on the day following the completion of activation, or on the next working day if the activation was carried out on a non-working day or weekend.
- (4) In the event of non-compliance with the obligations referred to in paragraphs 1, 2 and 3 of this Article, the TSO may, upon request of the responsible representative of another balancing group, the market operator or the DSO, revoke the validity of the BSP's certificate of recognition of technical capability for the provision of aFRR.

5.3. Procurement of aFRR balancing capacity and secondary market

5.3.1. Conditions for participation

General conditions

Article 52

- (1) Only qualified BSPs for the provision of the aFRR service may participate in the procedure for the procurement of aFRR balancing capacity and the transfer of procured aFRR balancing capacity on the secondary market.
- (2) The TSO shall grant the status of a qualified BSP for the provision of the aFRR service to those BSP candidates who hold a valid Certificate of recognition of technical capability for the provision of the aFRR service and fulfil all conditions for aFRR set out in the Auction Rules.
- (3) The TSO shall publish the Auction Rules on its official website.
- (4) On the basis of the certificate of recognition of technical capability for the provision of aFRR services and the fulfilment of the conditions set out in the Auction Rules, the TSO shall issue to the BSP a certificate of qualification for participation in the auction for the provision of the aFRR service no later than seven working days from the receipt of complete documentation in accordance with the Auction Rules.
- (5) In the event of submission of incomplete documentation referred to in paragraph 4 of this Article, the TSO shall, no later than 10 days from the receipt of the documentation, notify the BSP candidate in writing to remedy the deficiencies therein.
- (6) The BSP candidate shall, in accordance with the notification referred to in paragraph 5 of this Article, remedy the deficiencies in the documentation within 10 days from the date of receipt of such notification.
- (7) If the applicant referred to in paragraph 5 of this Article fails to remedy the deficiencies within the period referred to in paragraph 6 of this Article, the TSO shall not issue to the BSP a certificate of qualification for participation in the auction for the provision of the aFRR service.
- (8) In the event of revocation of the certificate of recognition of technical capability for the provision of aFRR services, the BSP shall automatically lose the status of a qualified BSP for the provision of the aFRR service, as a result of which the TSO

shall revoke the certificate of qualification for participation in the auction for the provision of the aFRR service.

5.3.2. Requirements for conducting the auction

Auction rules for aFRR balancing capacity

Article 53

- (1) The TSO shall conduct the auction in accordance with the applicable Auction Rules for aFRR balancing capacity.
- (2) The BSP shall submit bids for aFRR balancing capacity to the Platform, which is operated and supervised by the TSO.
- (3) In the Auction Rules, the TSO shall determine at least the following:
 1. conditions for participation in the auction;
 2. the procurement period and product time resolution;
 3. the required volumes of aFRR balancing capacity and the deadline for their publication;
 4. the auction schedule and the method of bid submission;
 5. the selection criteria;
 6. the selection of the most economically advantageous bids and the publication of auction results.

5.3.3. Gate opening time and gate closure time

Deadlines for the submission of bids for aFRR balancing capacity

Article 54

- (1) The BSP may submit bids for aFRR balancing capacity on the Platform from the Gate Opening Time (GOT) until the Gate Closure Time (GCT).
- (2) The TSO shall determine the GOT and GCT for the submission of bids for the procurement of aFRR balancing capacity in the Auction Rules.
- (3) The TSO shall publish on the Platform, through auction specifications, the product type, product time resolution, the volume subject to the auction, GOT, GCT, any price limits and other relevant information, as a rule at least one day prior to each individual auction.

5.3.4. Procurement of balancing capacity

Procurement of aFRR balancing capacity

Article 55

- (1) In the auction for aFRR balancing capacity, the TSO shall select BSP bids in accordance with the provisions of the Auction Rules.
- (2) The BSP shall submit bids for aFRR balancing capacity to the Platform, which is operated and supervised by the TSO.
- (3) The BSP may submit bids for aFRR balancing capacity on the Platform in accordance with the products defined in Article 41 of these BSP Terms and Conditions.
- (4) The TSO shall rank the accepted bids for aFRR balancing capacity based on price and the timestamp of the accepted bids, according to the principle that bids with a lower price have priority. Where two or more bids have the same price, priority shall be given to the bid that was received earlier by the TSO, i.e., has an earlier timestamp. Upon completion of each auction for aFRR balancing capacity, the TSO shall select the most economically advantageous bids for the procurement of aFRR balancing capacity.
- (5) Where, following the conducted auction for aFRR balancing capacity, the TSO has not procured balancing capacity in the volume determined in accordance with Article 13 paragraph 1 of these BSP Terms and Conditions, the TSO shall repeat the auction for the missing balancing capacity.
- (6) Where, following the repeated auction for aFRR balancing capacity, the TSO is unable to procure balancing capacity in the volume determined in accordance with Article 13 paragraph 1 of these BSP Terms and Conditions, upon request of the TSO, BSPs shall be obliged to conclude, within the shortest reasonable period determined by the TSO, a contract for the provision of balancing services with the TSO under the conditions defined in Annex 1 of these BSP Terms and Conditions.

5.3.5. Transfer of balancing capacity – secondary capacity market

Transfer of aFRR balancing capacity

Article 56

- (1) The BSP shall have the right to transfer aFRR balancing capacity procured by the TSO from it, in whole or in part (in terms of volume or time), to another BSP. The provisions applicable to the aFRR product defined in Article 41 paragraph 1 of these BSP Terms and Conditions shall apply to such transfer.
- (2) The transfer of aFRR balancing capacity may be carried out only to a BSP that has already acquired the status of a qualified BSP, and only up to the amount of qualified aFRR capacity that has not been procured from the BSP to which the capacity is being transferred.
- (3) Both BSPs participating in the transaction shall notify the TSO of the transfer of aFRR balancing capacity in electronic form and in the format defined by the TSO, by submitting on the Platform at least the following data:
 1. identification data of the BSP from which the procured capacity is transferred;
 2. identification data of the BSP to which the procured capacity is transferred;
 3. the service subject to the transfer;
 4. the balancing settlement interval subject to the transfer;
 5. the volumes of aFRR balancing capacity for each individual balancing settlement interval (duration of 15 minutes) subject to the transfer.
- (4) The BSP from which the procured capacity is transferred may notify the transfer of aFRR balancing capacity to the BSP to which the procured capacity is transferred no earlier than two hours after the publication of the results of the daily auction. Any notifications of transfer received by the TSO before this deadline shall be automatically rejected.
- (5) The BSP from which the procured capacity is transferred may transfer aFRR balancing capacity to the BSP to which the procured capacity is transferred no later than one hour before the start of the delivery day. Any notifications of transfer received by the TSO after the notification deadline shall be automatically rejected.
- (6) The transfer of aFRR balancing capacity to the BSP to which the procured capacity is transferred shall be valid only if the TSO confirms such transfer by means of an appropriate notification delivered to the respective BSPs. In the process of confirming the transfer of aFRR balancing capacity, the TSO shall verify the following:
 1. whether the notification has been received from both BSPs, i.e., from the BSP from which the balancing capacity is transferred and from the BSP to which the balancing capacity is transferred, in accordance with the requirements set out in paragraph 3 points 4 and 5 of this Article;
 2. whether the submitted data match in both notifications provided to the TSO by the BSPs;

3. whether the conditions set out in paragraphs 2 and 4 of this Article have been fulfilled;
 4. the volume of qualified aFRR reserve and the quantity of already submitted bids for aFRR balancing energy.
- (7) Where, during the verification procedure, the TSO determines that the BSPs do not fulfil all obligations referred to in paragraph 6 of this Article, the TSO shall reject such transaction in full. Errors arising during the notification to the TSO shall be remedied by the BSPs by submitting a new notification of transfer of balancing capacity.
- (8) The TSO may, prior to the start of the balancing settlement interval, reject an already confirmed transfer of balancing capacity in cases where such a transaction would:
1. endanger the operational security of the power system;
 2. result in the violation of operational limits referred to in Articles 158 to 174 of the Regulation establishing a guideline on electricity transmission system operation.
- (9) The rejection of an already confirmed transfer of balancing capacity referred to in paragraph 8 of this Article shall be carried out by requiring the notification of an opposite transfer transaction between the BSPs involved in the rejected transaction. The rejection does not have to apply to all already confirmed balancing settlement intervals forming part of the transfer period of aFRR balancing capacity, but only to those intervals that exhibit the characteristics of the transaction referred to in paragraph 8 of this Article.
- (10) The transfer of aFRR balancing capacity to the BSP to which the procured capacity is transferred shall not be possible during the conduct of auctions for aFRR balancing capacity.
- (11) By transferring aFRR balancing capacity, the obligations of the BSP from which the procured capacity is transferred with regard to the provision of balancing services shall be transferred to the BSP to which the procured capacity is transferred. The payment obligation for the transferred aFRR balancing capacity shall be settled by the TSO to the BSP that transferred the balancing capacity.
- (12) The TSO reserves the right to modify the deadlines for the execution of transfers of aFRR balancing capacity. The TSO shall publish such changes on its official website no later than 30 days prior to their entry into force.
- (13) In the event of malfunction of the Platform, the procedure for the transfer of aFRR balancing capacity shall not be possible.

5.4. Submission of bids for aFRR balancing energy

General conditions

Article 57

Each BSP qualified for the provision of aFRR services shall have the possibility to submit bids for aFRR balancing energy up to the recognised qualified volume, regardless of whether aFRR balancing capacity has been procured from it.

5.4.1. Requirements for bid submission

Rules for the submission of bids for aFRR balancing energy

Article 58

- (1) The BSP shall submit bids for aFRR balancing energy to the Platform, which is operated and supervised by the TSO.
- (2) The obligation to submit bids for balancing energy by the BSP is defined in Article 39 of these BSP Terms and Conditions.
- (3) The BSP shall be financially and technically responsible for the implementation of the Application Programming Interface (API) for access to the Platform on the side of its information and communication infrastructure.
- (4) The BSP shall submit bids for aFRR balancing energy on the Platform for each 15-minute balancing settlement interval.
- (5) The TSO shall organise the accepted bids for aFRR balancing energy into an ordered list of bids based on price and the timestamp of the accepted bids for aFRR balancing energy.

5.4.2. Deadlines for the submission of bids

Deadlines for the submission of bids for aFRR balancing energy

Article 59

- (1) BSPs shall submit bids on the Platform from GOT to GCT for aFRR balancing energy, for a specific 15-minute balancing settlement interval.

- (2) The GOT for all balancing time intervals of the following day shall be at D-1 at 14:00.
- (3) The GCT for a specific balancing settlement interval shall be T-25 minutes.
- (4) The TSO reserves the right to modify the GOT and GCT for the submission of bids for aFRR balancing energy. The TSO shall publish such changes on its official website no later than 30 days prior to their entry into force.

5.5. Activation of bids for aFRR balancing energy

Order of activation of aFRR bids

Article 60

- (1) Bids for aFRR balancing energy shall be activated up to the level of the total activation request for aFRR balancing energy, such that the most economically advantageous bids are activated first, followed by the others according to the merit order list, where bids are ranked by price.
- (2) Where two or more bids have the same price, priority shall be given to the bid received earlier by the TSO, i.e., the one with the earlier timestamp.

Technical method of aFRR activation

Article 61

Bids for aFRR balancing energy shall be activated automatically via the TSO's control system (AGC–SCADA), which sends to the BSP a signal with the requested activation power for aFRR in accordance with the communication requirements defined in the Prequalification Rules.

Alternative aFRR activation procedure

Article 62

- (1) In the event of malfunction of the Platform or failure of the controller, the TSO shall use an alternative order of activation of bids for the activation of aFRR services, which may differ from that defined in Article 60 of these BSP Terms and Conditions, as follows:
 1. in the event of malfunction of the Platform, the TSO shall activate based on the last known list of bids;

2. in the event of malfunction of the SCADA system, the TSO shall notify the BSP of the activation request for aFRR by telephone.
- (2) In both cases referred to in paragraph 1 of this Article, BSPs shall comply with the instructions issued by the TSO.
- (3) In the event of major issues with the operation of the Platform or controller failure, the TSO shall inform the relevant BSPs.

5.6. Determination of the volume of activated aFRR balancing energy

Determination of activated aFRR balancing energy

Article 63

- (1) For the calculation of activated aFRR balancing energy, four-second data of the aFRR activation request from automatic generation control (AGC–SCADA) shall be used.
- (2) The activated aFRR balancing energy referred to in paragraph 1 of this Article shall be settled at the level of the BSP portfolio.
- (3) The TSO shall provide the BSP with data for the previous day for review no later than eight hours after the end of the following day. The BSP shall be obliged to review the submitted data and notify the TSO whether it agrees with the data, or submit an objection and proposed corrections. Confirmation of the data or any objection with proposed corrections shall be submitted to the TSO on each working day no later than 13:00 hours, except on weekends and public holidays. Data for weekends and public holidays shall be reviewed no later than 13:00 hours on the first following working day. The TSO reserves the right, upon prior notification on its official website, to modify the rules regarding the deadline for submission of confirmation or objection by the BSP.
- (4) Where the BSP proposes corrections, the TSO shall decide, based on justification and comparison with other data, whether to accept the corrections or retain the data previously submitted to the BSP.
- (5) The decision of the TSO referred to in paragraph 4 of this Article shall be final and shall not be subject to further alignment with the BSP, unless the TSO explicitly requests such alignment.
- (6) Where the TSO does not have access to volume data or where its data are evidently incorrect, the TSO may:
 1. use data provided by the BSP;

2. adjust the data using appropriate data from adjacent time intervals;
3. use data based on the historical behaviour of the BSP.

In this case, the TSO shall seek to align the data used with the BSP. Where such alignment is not possible, the TSO shall determine the final data independently and notify the BSP thereof.

- (7) The TSO shall determine, for each BSP, the activation request for positive and negative aFRR balancing energy in each optimisation cycle ts ($P_{aFRR+,akt,ts}$, $P_{aFRR-,akt,ts}$), based on the magnitude of the aFRR activation request, taking into account the limitations of accepted BSP bids, by applying the following formula:

$$P_{aFRR+,akt,ts} = \min \left(\max(P_{aFRR,akt,ts}; 0); \sum_{k \in E_+} P_{aFRR+,akt,bid\ k,ts} \right)$$

$$P_{aFRR-,akt,ts} = \max \left(\min(P_{aFRR,akt,ts}; 0); - \sum_{k \in E_-} P_{aFRR-,akt,bid\ k,ts} \right)$$

Where:

$P_{aFRR+,akt,ts}$ - activation request for positive aFRR balancing energy in optimisation cycle ts [MW, rounded to ten decimal places, positive value];

$P_{aFRR-,akt,ts}$ - activation request for negative aFRR balancing energy in optimisation cycle ts [MW, rounded to ten decimal places, negative value];

$P_{aFRR,akt,ts}$ - FRR activation request in optimisation cycle ts [MW, rounded to ten decimal places];

$P_{aFRR+,akt,bid\ k,ts}$ - volume of accepted bid k in the auction for positive aFRR balancing energy in optimisation cycle ts , belonging to balancing settlement interval i [MW, positive value, rounded to ten decimal places];

$P_{aFRR-,akt,bid\ k,ts}$ - volume of accepted bid k in the auction for negative aFRR balancing energy in optimisation cycle ts , belonging to balancing settlement interval "i" [MW, positive value, rounded to ten decimal places];

E_+ , E_- - set of accepted BSP bids in the auction for positive or negative aFRR balancing energy for balancing settlement interval "i".

- (8) The TSO shall calculate, for each BSP, activated positive and negative aFRR balancing energy in each optimisation cycle ts ($W_{aFRR+,akt,ts}$, $W_{aFRR-,akt,ts}$), on the basis of the activation request for aFRR balancing energy in that optimisation cycle, by applying the following formula:

$$W_{aFRR+,akt,ts} = P_{aFRR+,akt,ts} * \Delta t$$

$$W_{aFRR-,akt,ts} = P_{aFRR-,akt,ts} * \Delta t$$

Where:

$W_{aFRR+,akt,ts}$ - activated positive aFRR balancing energy in optimisation cycle ts [MWh, rounded to ten decimal places, positive value];

$W_{aFRR-,akt,ts}$ - activated negative aFRR balancing energy in optimisation cycle ts [MWh, rounded to ten decimal places, negative value];

$P_{aFRR+,akt,ts}$ - activation request for positive aFRR balancing energy in optimisation cycle ts [MW];

$P_{aFRR-,akt,ts}$ - activation request for negative aFRR balancing energy in optimisation cycle ts [MW];

Δt - duration of optimisation cycle ts [four seconds or 1/900 h].

- (9) The TSO shall determine, for each BSP, activated positive and negative aFRR balancing energy in balancing settlement interval i ($W_{aFRR+,akt,i}$; $W_{aFRR-,akt,i}$) as the sum of activated aFRR balancing energy in all ts optimisation cycles belonging to balancing settlement interval i , by applying the following formula:

$$W_{aFRR+,akt,i} = \sum_{ts \in i} W_{aFRR+,akt,ts}$$

$$W_{aFRR-,akt,i} = \sum_{ts \in i} W_{aFRR-,akt,ts}$$

Where:

$W_{aFRR+,akt,i}$ - activated positive aFRR balancing energy in balancing settlement interval "i" [MWh, positive value, rounded to three decimal places];

$W_{aFRR-,akt,i}$ - activated negative aFRR balancing energy in balancing settlement interval "i" [MWh, negative value, rounded to ten decimal places];

$W_{aFRR+,akt,ts}$ - activated positive aFRR balancing energy in optimisation cycle ts [MWh];

$W_{aFRR-,akt,ts}$ - activated negative aFRR balancing energy in optimisation cycle ts [MWh];

i - balancing settlement interval.

- (10) The TSO shall report to the market operator, for the purposes of imbalance settlement, the quantities of activated positive and negative aFRR balancing energy ($W_{aFRR+,akt,i}$ i $W_{aFRR-,akt,i}$) in individual settlement intervals, calculated in accordance with this Article, as a correction of the market schedule between the TSO and the BSP.

5.7. Calculation and financial settlement of aFRR balancing capacity and balancing energy

Calculation of aFRR balancing capacity

Article 64

- (1) The TSO shall calculate aFRR balancing capacity on the basis of the results (volumes, prices and product duration) of the relevant auctions (annual, monthly, weekly and daily) in accordance with Article 55, or on the basis of the allocated mFRR balancing capacity in accordance with Article 13 paragraphs 3 or 7 of these

BSP Terms and Conditions. The costs of procurement of positive and negative aFRR balancing capacity in balancing settlement interval i ($S_{aFRR+,zak,i}$ i $S_{aFRR-,zak,i}$) shall be determined by applying the following formula:

$$S_{aFRR+,zak,i} = \frac{1}{K} \sum_{k \in P_+} (C_{aFRR+,zak,bid\ k,i} * P_{aFRR+,zak,bid\ k,i})$$

$$S_{aFRR-,zak,i} = \frac{1}{K} \sum_{k \in P_-} (C_{aFRR-,zak,bid\ k,i} * P_{aFRR-,zak,bid\ k,i})$$

Where:

$S_{aFRR+,zak,i}$ - cost of procurement of positive aFRR balancing capacity in balancing settlement interval "i" [EUR, rounded to ten decimal places];

$S_{aFRR-,zak,i}$ - cost of procurement of negative aFRR balancing capacity in balancing settlement interval "i" [EUR, rounded to ten decimal places];

$P_{aFRR+,zak,bid\ k,i}$ - volume of selected bid "k" in the auction for positive aFRR balancing capacity for balancing settlement interval "i" [MW, positive value, rounded to ten decimal places];

$P_{aFRR-,zak,bid\ k,i}$ - volume of selected bid "k" in the auction for negative aFRR balancing capacity for balancing settlement interval "i" [MW, positive value, rounded to ten decimal places];

$C_{aFRR+,zak,bid\ k,i}$ - price of selected bid "k" in the auction for positive aFRR balancing capacity for balancing settlement interval "i" [EUR/MW/h, rounded to ten decimal places].

Exceptionally, in the case of implementation of the procedure pursuant to Article 13 of these BSP Terms and Conditions, the price for aFRR balancing capacity in balancing settlement interval i shall be calculated in accordance with Annex 1;

$C_{aFRR-,zak,bid\ k,i}$ - price of selected bid "k" in the auction for negative aFRR balancing capacity for balancing settlement interval "i" [EUR/MW/h, rounded to ten decimal places].

Exceptionally, in the case of implementation of the procedure pursuant to Article 13 of these BSP Terms and Conditions, the price for aFRR balancing capacity in balancing settlement interval i shall be calculated in accordance with Annex 1;

k - k -th selected bid in the auction for positive or negative aFRR balancing capacity from the set of selected bids "P";

P_+, P_- - set of selected BSP bids in the auction for positive or negative aFRR balancing capacity for balancing settlement interval "i";

K - number of balancing settlement intervals "i" within one hour, $K = 4$ [1/h].

(2) The total cost of aFRR balancing capacity in settlement period M ($S_{aFRR+,zak,M}$ i $S_{aFRR-,zak,M}$) shall be calculated separately for each balancing direction as the sum of the costs of aFRR balancing capacity in all balancing settlement intervals i belonging to settlement period M , by applying the following formula:

$$S_{aFRR+,zak,M} = \sum_{i \in M} S_{aFRR+,zak,i}$$

$$S_{aFRR-,zak,M} = \sum_{i \in M} S_{aFRR-,zak,i}$$

Where:

$S_{aFRR+,zak,M}$ - cost of procurement of positive aFRR balancing capacity in settlement period M [EUR, rounded to two decimal places];

$S_{aFRR-,zak,M}$ - cost of procurement of negative aFRR balancing capacity in settlement period M [EUR, rounded to two decimal places];

$S_{aFRR+,zak,i}$ - cost of procurement of positive aFRR balancing capacity in balancing settlement interval " i " [EUR];

$S_{aFRR-,zak,i}$ - cost of procurement of negative aFRR balancing capacity in balancing settlement interval " i " [EUR];

M - settlement period, as defined in Article 72 paragraph 1 of these BSP Terms and Conditions.

Determination of the price of aFRR balancing energy

Article 65

- (1) The TSO shall determine the price of activated aFRR balancing energy in each balancing direction for each market time unit ts belonging to balancing settlement interval i :

$$C_{aFRR+,akt,bid\ k,ts} = \begin{cases} C_{aFRR+,akt,mp,ts} & \text{ako } C_{aFRR+,akt,mp,ts} \text{ exists} \\ C_{aFRR+,akt,bid\ k,i} & \text{ako } C_{aFRR+,akt,mp,ts} \text{ doesn't exist} \end{cases}$$

$$C_{aFRR-,akt,bid\ k,ts} = \begin{cases} C_{aFRR-,akt,mp,ts} & \text{ako } C_{aFRR-,akt,mp,ts} \text{ exists} \\ C_{aFRR-,akt,bid\ k,i} & \text{ako } C_{aFRR-,akt,mp,ts} \text{ doesn't exist} \end{cases}$$

Where:

$C_{aFRR+,akt,bid\ k,ts}$ - price of bid " k " for activated positive aFRR balancing energy in optimisation cycle ts belonging to balancing settlement interval " i " [EUR/MWh, rounded to ten decimal places];

$C_{aFRR-,akt,bid\ k,ts}$ - price of bid " k " for activated negative aFRR balancing energy in optimisation cycle ts belonging to balancing settlement interval " i " [EUR/MWh, rounded to ten decimal places];

$C_{aFRR+,akt,mp,ts}$ - marginal price of activated positive aFRR balancing energy in optimisation cycle " ts ", belonging to balancing settlement interval " i ", representing the highest price of activated bids [EUR/MWh, rounded to ten decimal places];

If the aFRR activation request in optimisation cycle " ts " of one or more BSPs is opposite to that of other BSPs, the direction determined by the sum of the requests of all BSPs shall be taken into account for the calculation of the marginal price;

$C_{aFRR-,akt,mp,ts}$ - marginal price of activated negative aFRR balancing energy in optimisation cycle " ts ", belonging to balancing settlement interval " i ", representing the lowest price of activated bids [EUR/MWh, rounded to ten decimal places];

If the aFRR activation request in optimisation cycle " ts " of one or more BSPs is opposite to that of other BSPs, the direction determined by the sum of the requests of all BSPs shall be taken into account for the calculation of the marginal price;

$C_{aFRR+,akt,bid\ k,i}$ - price of bid " k " for activated positive aFRR balancing energy in balancing settlement interval " i " [EUR/MWh, rounded to ten decimal places];

$C_{aFRR-,akt,bid\ k,i}$ – price of bid “k” for activated negative aFRR balancing energy in balancing settlement interval “i” [EUR/MWh, rounded to ten decimal places];
 ts – market time unit [four seconds or 1/900 hour];
 i – balancing settlement interval;
 k – k-th bid for aFRR balancing energy.

- (2) Exceptionally, in the case of implementation of the procedure pursuant to Article 13 paragraphs 3 or 7 of these BSP Terms and Conditions, the price limit for aFRR balancing energy in balancing settlement interval i is defined in Annex 1, for each individual balancing direction.

Calculation of aFRR balancing energy Article 66

- (1) The TSO shall, in each ts optimisation cycle, calculate the share of selection of individual bids for aFRR balancing energy ($d_{+,bid\ k,ts}$, $d_{-,bid\ k,ts}$). In the calculation, it shall take into account:
1. the activation requests for aFRR in the respective optimisation cycle ts , as defined in Article 63 of these BSP Terms and Conditions;
 2. the principles of the aFRR merit order defined in Article 60 of these BSP Terms and Conditions.

In the calculation of shares, the following shall apply:

$$P_{aFRR+,akt,ts} = \sum_{k \in E_+} d_{+,bid\ k,ts} * P_{aFRR+,akt,bid\ k,ts}$$

$$|P_{aFRR-,akt,ts}| = \sum_{k \in E_-} d_{-,bid\ k,ts} * P_{aFRR-,akt,bid\ k,ts}$$

Where:

$P_{aFRR+,akt,ts}$ - average request for positive aFRR activation in optimisation cycle “ts” [MW];

$P_{aFRR-,akt,ts}$ - average request for negative aFRR activation in optimisation cycle “ts” [MW];

$P_{aFRR+,akt,bid\ k,ts}$ - volume of accepted bid “k” in the auction for positive aFRR balancing energy in optimisation cycle “ts”, belonging to balancing settlement interval “i” [MW, positive value, rounded to ten decimal places];

$P_{aFRR-,akt,bid\ k,ts}$ - volume of accepted bid “k” in the auction for negative aFRR balancing energy in optimisation cycle “ts”, belonging to balancing settlement interval “i” [MW, positive value, rounded to ten decimal places];

k - k-th bid for aFRR balancing energy from the set of accepted bids “E”;

$d_{+,bid\ k,ts}, d_{-,bid\ k,ts}$ - share of selection of bid “k” for positive or negative aFRR balancing energy in optimisation cycle “ts” [value between 0 and 1, where 0 means that the accepted bid is not activated and 1 that it is fully activated, rounded to ten decimal places];

$E+, E-$ – set of accepted BSP bids in the auction for positive or negative aFRR balancing energy for balancing settlement interval “i”.

- (2) The TSO shall determine the price of activated aFRR balancing energy for each BSP in each optimisation cycle ts in accordance with Article 65 of these BSP Terms and Conditions.
- (3) The TSO shall determine the value of activated balancing energy in each individual ts optimisation cycle ($S_{aFRR+,akt,ts}$ i $S_{aFRR-,akt,ts}$), belonging to balancing settlement interval i , as the sum of the products of the volumes of selected aFRR balancing energy bids, determined in paragraph 1 of this Article, and the prices of activated aFRR balancing energy bids, determined in paragraph 2 of this Article, by applying the following formula:

$$S_{aFRR+,akt,ts} = \sum_{k \in E_+} (P_{aFRR+,akt,bid\ k,ts} * d_{+,bid\ k,ts} * C_{aFRR+,akt,bid\ k,ts} * \Delta t)$$

$$S_{aFRR-,akt,ts} = \sum_{k \in E_-} (-P_{aFRR-,akt,bid\ k,ts} * d_{-,bid\ k,ts} * C_{aFRR-,akt,bid\ k,ts} * \Delta t)$$

Where:

$S_{aFRR+,akt,ts}$ - value of activated positive aFRR balancing energy in optimisation cycle “ ts ” (a negative value represents revenue for the TSO or a cost for the BSP, while a positive value represents a cost for the TSO or revenue for the BSP) [EUR, rounded to ten decimal places];

$S_{aFRR-,akt,ts}$ - value of activated negative aFRR balancing energy in optimisation cycle “ ts ” (a negative value represents revenue for the TSO or a cost for the BSP, while a positive value represents a cost for the TSO or revenue for the BSP) [EUR, rounded to ten decimal places];

$P_{aFRR+,akt,bid\ k,ts}$ - volume of accepted bid “ k ” in the auction for positive aFRR balancing energy in optimisation cycle “ ts ”, belonging to balancing settlement interval “ i ” [MW, positive value, rounded to ten decimal places];

$P_{aFRR-,akt,bid\ k,ts}$ - volume of accepted bid “ k ” in the auction for negative aFRR balancing energy in optimisation cycle “ ts ”, belonging to balancing settlement interval “ i ” [MW, positive value, rounded to ten decimal places];

$C_{aFRR+,akt,bid\ k,ts}$ – price of accepted bid “ k ” for activated positive aFRR balancing energy in optimisation cycle “ ts ”, belonging to balancing settlement interval “ i ” [EUR/MWh, rounded to ten decimal places];

$C_{aFRR-,akt,bid\ k,ts}$ – price of accepted bid “ k ” for activated negative aFRR balancing energy in optimisation cycle “ ts ”, belonging to balancing settlement interval “ i ” [EUR/MWh, rounded to ten decimal places];

k – k -th bid for positive or negative aFRR balancing energy from the set of bids “ E ”;

Δt – duration of market time unit “ ts ” [four seconds or 1/900 hour];

$d_{+,bid\ k,ts}$, $d_{-,bid\ k,ts}$ – activation share of bid “ k ” for positive or negative aFRR balancing energy in optimisation cycle “ ts ” [value between 0 and 1, where 0 means that the accepted bid is not activated and 1 that it is fully activated];

$E+, E-$ – set of accepted BSP bids in the auction for positive or negative aFRR balancing energy for balancing settlement interval “ i ”.

- (4) The TSO shall calculate the value of activated aFRR balancing energy for each balancing settlement interval i ($S_{aFRR+,akt,i}$ i $S_{aFRR-,akt,i}$) by summing the values of activated balancing energy across all market time units belonging to balancing settlement interval i , by applying the following formula:

$$S_{aFRR+,akt,i} = \sum_{ts \in i} S_{aFRR+,akt,ts}$$

$$S_{aFRR-,akt,i} = \sum_{ts \in i} S_{aFRR-,akt,ts}$$

Where:

$S_{aFRR+,akt,i}$ – value of activated positive aFRR balancing energy in balancing settlement interval “ i ” (a negative value represents revenue for the TSO or a cost for the BSP, while a positive value represents a cost for the TSO or revenue for the BSP) [EUR, rounded to two decimal places];

$S_{aFRR-,akt,i}$ – value of activated negative aFRR balancing energy in balancing settlement interval “ i ” (a negative value represents revenue for the TSO or a cost for the BSP, while a positive value represents a cost for the TSO or revenue for the BSP) [EUR, rounded to two decimal places];

$S_{aFRR+,akt,ts}$ – value of activated positive balancing energy in optimisation cycle “ ts ” [EUR];

$S_{aFRR-,akt,ts}$ – value of activated negative aFRR balancing energy in optimisation cycle “ ts ” [EUR];

ts – market time unit;

i – balancing settlement interval.

- (5) The total value of aFRR balancing energy in settlement period M ($S_{aFRR+,akt,M}$ i $S_{aFRR-,akt,M}$) shall be calculated separately for each balancing direction as the sum of the values of activated aFRR balancing energy in all balancing settlement intervals belonging to settlement period M , by applying the following formula:

$$S_{aFRR+,akt,M} = \sum_{i \in M} S_{aFRR+,akt,i}$$

$$S_{aFRR-,akt,M} = \sum_{i \in M} S_{aFRR-,akt,i}$$

Where:

$S_{aFRR+,akt,M}$ - value of activated positive aFRR balancing energy in settlement period “ M ” (a negative value represents revenue for the TSO or a cost for the BSP, while a positive value represents a cost for the TSO or revenue for the BSP) [EUR, rounded to two decimal places];

$S_{aFRR-,akt,M}$ - value of activated negative aFRR balancing energy in settlement period “ M ” (a negative value represents revenue for the TSO or a cost for the BSP, while a positive value represents a cost for the TSO or revenue for the BSP) [EUR, rounded to two decimal places];

$S_{aFRR+,akt,i}$ - value of activated positive aFRR balancing energy in balancing settlement interval "i" [EUR];

$S_{aFRR-,akt,i}$ - value of activated negative aFRR balancing energy in balancing settlement interval "i" [EUR];

M - settlement period, as defined in Article 72 paragraph 2 of these BSP Terms and Conditions.

5.8. Consequences of non-compliance with the BSP Terms and Conditions

Procedure for the assessment and calculation of consequences in case of non-compliance with the BSP Terms and Conditions

Article 67

- (1) The TSO shall assess and calculate the consequences for the BSP arising from:
 1. failure to submit bids for aFRR balancing energy;
 2. inadequate aFRR response during the activation phase.
- (2) Minute averages of data from the TSO control system (SCADA on the TSO side) shall be used for the assessment and calculation of consequences.
- (3) The TSO shall provide the BSP with data for the previous day for review no later than eight hours after the end of the following day. The BSP shall be obliged to review the submitted data and notify the TSO whether it agrees with the data; otherwise, it shall submit an objection and proposed corrections. Confirmation of the data or any objection with proposed corrections shall be submitted to the TSO on each working day no later than 13:00 hours, except on weekends and public holidays. Data for weekends and public holidays shall be reviewed no later than 13:00 hours on the first following working day. The TSO reserves the right, upon prior publication on its official website, to modify the rules regarding the deadline by which the BSP must submit confirmation or an objection.
- (4) Where the BSP proposes corrections, the TSO shall decide, based on justification and comparison with other data, whether to accept the corrections or retain the data provided by the TSO to the BSP. The decision of the TSO shall be final and shall not be subject to further alignment with the BSP, unless the TSO explicitly requires such alignment.
- (5) Where the TSO does not have access to volume data or where its data are evidently incorrect, the TSO may:
 1. use data provided by the BSP;
 2. adjust the data by reasonably using available data from adjacent time intervals;

3. use data determined on the basis of the historical behaviour of the BSP.

In the case referred to in paragraph 5 of this Article, the TSO shall seek to align the data used with the BSP. Where such alignment is not possible, the TSO shall determine the final data independently, based on one of the principles referred to in paragraph 5 of this Article or a combination thereof, and shall notify the BSP accordingly.

Assessment and calculation of consequences of failure to submit bids for aFRR balancing energy
Article 68

- (1) Failure to submit bids for aFRR balancing energy shall mean a situation where the BSP, in accordance with Article 39 paragraph 6 of these BSP Terms and Conditions, does not submit a bid for aFRR balancing energy in balancing settlement interval i , by the deadline specified in Article 59 paragraph 3 of these BSP Terms and Conditions;
- (2) The volume of unsubmitted bids for positive and negative aFRR balancing energy for balancing settlement interval i ($R_{aFRR+,zak,i}$ and $R_{aFRR-,zak,i}$) shall be calculated as the difference between the volume of aFRR balancing capacity procured from the BSP in the auction, transfers of capacity between BSPs, aFRR balancing capacity allocated in accordance with Article 13 paragraphs 3 or 7 of these BSP Terms and Conditions, and the volume of submitted bids for aFRR balancing energy submitted by the BSP on the Platform within the specified deadline, by applying the following formula:

$$R_{aFRR+,zak,i} = \max \left(\sum_{k \in P_+} P_{aFRR+,zak,bid\ k,i} + \sum_{p \in PUB_+,purchase} P_{aFRR+,p,i} + \sum_{k \in D_+} P_{aFRR+,dod,k,i} - \sum_{p \in BSP_+,sale} P_{aFRR+,p,i} - \sum_{k \in E_+} P_{aFRR+,akt,bid\ k,i} ; 0 \right)$$

$$R_{aFRR-,zak,i} = \max \left(\sum_{k \in P_-} P_{aFRR-,zak,bid\ k,i} + \sum_{p \in BSP-,purchase} P_{aFRR-,p,i} + \sum_{k \in D_+} P_{aFRR-,dod,k,i} - \sum_{p \in BSP-,sale} P_{aFRR-,p,i} - \sum_{k \in E_-} P_{aFRR-,akt,bid\ k,i} ; 0 \right)$$

Where:

$R_{aFRR+,zak,i}$ - Missing volume of submitted bids for positive aFRR balancing energy in balancing settlement interval "i" [MW, positive value, rounded to ten decimal places];

$R_{aFRR-,zak,i}$ - Missing volume of submitted bids for negative aFRR balancing energy in balancing settlement interval "i" [MW, positive value, rounded to ten decimal places];

$P_{aFRR+,akt,bid\ k,i}$ - Volume of accepted bid "k" in the auction for positive aFRR balancing energy in balancing settlement interval "i"; the bid shall be taken into account only if it was available for more than half of balancing settlement interval "i" [MW, positive value, rounded to ten decimal places];

$P_{aFRR-,akt,bid\ k,i}$ - Volume of accepted bid "k" in the auction for negative aFRR balancing energy in balancing settlement interval "i"; the bid shall be taken into account only if it was available for more than half of balancing settlement interval "i" [MW, positive value, rounded to ten decimal places];

$P_{aFRR+,zak,bid\ k,i}$ - Volume of selected bid "k" in the auction for positive aFRR balancing capacity for balancing settlement interval "i" [MW, positive value, rounded to ten decimal places];

$P_{aFRR-,zak,bid\ k,i}$ - Volume of selected bid "k" in the auction for negative aFRR balancing capacity for balancing settlement interval "i" [MW, positive value];

$P_{aFRR+,p,i}$, $P_{aFRR-,p,i}$ - Volume of the p-th transfer of positive or negative aFRR balancing capacity in balancing settlement interval "i" to or from the BSP for which the missing positive and negative balancing capacity is calculated [MW, positive value, rounded to ten decimal places];

$P_{aFRR+,dod,k,i}$ - Volume of allocated positive balancing capacity in accordance with Article 13 paragraphs 3 or 7 of these BSP Terms and Conditions;

$P_{aFRR-,dod,k,i}$ - Volume of allocated negative balancing capacity in accordance with Article 13 paragraphs 3 or 7 of these BSP Terms and Conditions;

k - k-th bid in the auction for positive or negative aFRR balancing capacity or aFRR balancing energy;

$PUB_{+,purchase}$, $PUB_{-,purchase}$ - Set of transfers of positive or negative aFRR balancing capacity to the BSP for which the missing positive and negative balancing capacity is calculated for balancing settlement interval "i";

$PUB_{+,sale}$, $PUB_{-,sale}$ - Set of transfers of positive or negative aFRR balancing capacity from the BSP to other BSPs for balancing settlement interval "i";

p - p-th transfer of balancing capacity to or from the BSP for which the missing positive and negative balancing capacity is calculated;

P_+ , P_- - set of selected BSP bids in the auction for positive or negative aFRR balancing capacity for balancing settlement interval "i";

E_+ , E_- - set of accepted BSP bids in the auction for positive or negative aFRR balancing energy for balancing settlement interval "i";

D_+ , D_- - set of allocated positive or negative aFRR balancing capacity of the BSP in balancing settlement interval i.

- (3) The value of consequences of failure to submit sufficient volumes of bids for aFRR balancing energy in balancing settlement interval i shall be calculated by applying the following formula:

$$PEN_{aFRR+,zak,i} = R_{aFRR+,zak,i} * C_{aFRR+,zak,i} * F_{aFRR,zak}$$

$$PEN_{aFRR-,zak,i} = R_{aFRR-,zak,i} * C_{aFRR-,zak,i} * F_{aFRR,zak}$$

Where:

$PEN_{aFRR+,zak,i}$ - value of the consequence of failure to submit bids for positive aFRR balancing energy in balancing settlement interval "i" [EUR, rounded to two decimal places];

$PEN_{aFRR-,zak,i}$ - value of the consequence of failure to submit bids for negative aFRR balancing energy in balancing settlement interval "i" [EUR, rounded to two decimal places];

$R_{aFRR+,zak,i}$ - missing volume of submitted bids for positive aFRR balancing energy in balancing settlement interval "i" [MW];

$R_{aFRR-,zak,i}$ - missing volume of submitted bids for negative aFRR balancing energy in balancing settlement interval "i" [MW];

$C_{aFRR+,zak,i}$ - price for positive aFRR balancing capacity in balancing settlement interval "i", determined as the highest price of selected bids for aFRR balancing capacity applicable to that interval in the given direction, regardless of the method of procurement of balancing capacity (auction, fallback procedure), divided by the number of settlement intervals included in the price of aFRR balancing capacity [EUR/MW, rounded to ten decimal places];

$C_{aFRR-,zak,i}$ - price for negative aFRR balancing capacity in balancing settlement interval "i", determined as the highest price of selected bids for aFRR balancing capacity applicable to that interval in the given direction, regardless of the method of procurement of balancing capacity (auction, fallback procedure), divided by the number of settlement intervals included in the price of aFRR balancing capacity [EUR/MW, rounded to ten decimal places];

$F_{aFRR,zak}$ - penalty factor for failure to submit bids for aFRR balancing energy, where $F_{aFRR,zak} = 2$.

- (4) Exceptionally, in the case of implementation of the procedure pursuant to Article 13 paragraphs 3 or 7 of these BSP Terms and Conditions, the consequence due to failure to submit sufficient volumes of bids for aFRR balancing energy in balancing settlement interval i shall be calculated in accordance with Annex 1.
- (5) The total value of consequences of failure to submit bids for aFRR balancing energy in settlement period M ($PEN_{aFRR,zak,M}$) shall be calculated as the sum of the values of consequences of failure to submit bids for aFRR balancing energy in all balancing settlement intervals i belonging to settlement period M , as follows:

$$PEN_{aFRR,zak,M} = \sum_{i \in M} (PEN_{aFRR+,zak,i} + PEN_{aFRR-,zak,i})$$

Where:

$PEN_{aFRR,zak,M}$ - value of consequences of failure to submit bids for aFRR balancing energy in settlement period "M" [EUR, rounded to two decimal places];

$PEN_{aFRR+,zak,i}$ - value of consequences of failure to submit bids for positive aFRR balancing energy in balancing settlement interval "i" [EUR];

$PEN_{aFRR-,zak,i}$ - value of consequences of failure to submit bids for negative aFRR balancing energy in balancing settlement interval "i" [EUR];

M – settlement period, as defined in Article 72 paragraph 1 of these BSP Terms and Conditions.

Assessment and calculation of consequences of inadequate aFRR response

Article 69

- (1) The compliance of the BSP's response to the aFRR activation request shall be determined on the basis of a comparison of minute data of the aFRR activation request and the calculated delivery of aFRR balancing capacity.
- (2) For each minute interval, the response tolerance range shall be calculated separately, limited by the upper and lower limits of the tolerance range. If the delivered aFRR balancing capacity is within the response tolerance range, then the tracking of the aFRR activation request in that minute interval shall be appropriate. Otherwise, it shall not be appropriate.
- (3) The aFRR response in minute t shall be deemed inadequate where the minute quantity of delivered aFRR balancing capacity is not within the limits of the relevant response tolerance range.
- (4) The basis for calculating the aFRR balancing capacity activation request shall be four-second data from automatic generation control (AGC-SCADA) on the TSO side. The average activation request for aFRR balancing capacity of the BSP portfolio, denoted as $P_{aFRR,akt,t}$ in minute t , shall be calculated as the sum of the requests for activation of positive and negative aFRR balancing energy in all four-second intervals t_s within minute t , as follows:

$$P_{aFRR,akt,t} = \frac{1}{K} \sum_{t_s \in t} (P_{aFRR+,akt,t_s} + P_{aFRR-,akt,t_s}) * \Delta t$$

Where:

$P_{aFRR,akt,t}$ – balancing energy activation request in minute t [MW, rounded to ten decimal places; a positive value means activation of positive aFRR balancing energy, while a negative value denotes activation of negative aFRR balancing energy];

P_{aFRR+,akt,t_s} – activation request for positive aFRR balancing energy in market time unit t_s , calculated in accordance with Article 63 paragraph 7 of the Terms and Conditions for BSPs [MW];

P_{aFRR-,akt,t_s} – activation request for negative aFRR balancing energy in market time unit t_s , calculated in accordance with Article 63 paragraph 7 of the Terms and Conditions for BSPs [MW];

Δt – duration of interval t_s for which energy is calculated (4 seconds);

t – minute interval (60 seconds);

K – constant with a value of 60 seconds.

- (5) The basis for calculating delivered aFRR balancing capacity shall be minute metering data on active generation power (SCADA) on the TSO side. Delivered aFRR balancing capacity shall be calculated at the level of the BSP portfolio, taking into account only those control groups that actually participated in the provision of the aFRR service. The participation of a control group in the provision of aFRR shall be determined on the basis of the signal on the participation status of the control group in aFRR, whereby a control group shall be deemed to have participated in minute t if the participation signal was active throughout the entire minute t .

Delivered balancing capacity of control group j in minute t shall be determined as the difference between the minute value of the measured power of control group j , corrected for the quantity of activated FCR balancing capacity, and the base power of control group j , as follows:

$$P_{aFRR,real,j,t} = \left(P_{real,j,t} - \frac{W_{FCR,j,t}}{\Delta t} - P_{aFRR,base,j,t} \right) * State_{aFRR,j,t}$$

Where:

$P_{aFRR,real,j,t}$ – delivered aFRR balancing power of control group j in minute t [MW, rounded to ten decimal places];

$P_{real,j,t}$ – average delivered (measured) power of control group j in minute t [MW, rounded to ten decimal places];

$W_{FCR,j,t}$ – activated FCR balancing energy of control group j , which participated in the provision of FCR in minute t , calculated in accordance with Article 33 paragraph 5 of the Terms and Conditions for BSPs [MWh];

$P_{aFRR,base,j,t}$ – average base power of control group j in minute t [MW, rounded to ten decimal places];

$State_{aFRR,j,t}$ – aFRR provision status at control group j in minute t [$State_{aFRR,j,t}$ has the value 1 when control group j provides aFRR, otherwise 0];

Δt – duration of the interval for which estimated activated FCR energy is calculated (one minute, i.e. 1/60 h).

Delivered aFRR balancing capacity of the entire BSP portfolio in minute t shall be determined as the sum of delivered balancing capacities of individual control groups j that participated in aFRR in that minute, as follows:

$$P_{aFRR,real,t} = \sum_j P_{aFRR,real,j,t}$$

Where:

$P_{aFRR,real,t}$ – delivered aFRR balancing power of the entire BSP portfolio in minute t [MW, rounded to ten decimal places];

$P_{aFRR,real,j,t}$ – delivered aFRR balancing power of control group j in minute t [MW];

j – control group.

- (6) The permitted deviation of delivered aFRR balancing power $P_{aFRR,DO,t}$ in minute t shall depend on the power of accepted bids for positive and negative aFRR balancing energy in settlement interval i to which minute t belongs, in accordance with the equation.

$$P_{aFRR,DO,t} = 0,1 * \max \left(\sum_{k \in E_+} P_{aFRR+,akt,bid k,i}, \sum_{k \in E_-} P_{aFRR-,akt,bid k,i} \right)$$

Where:

$P_{aFRR,DO,t}$ – permitted deviation of delivered aFRR balancing power in minute t [MW, positive value, rounded to ten decimal places];

$P_{aFRR+,akt,bid k,i}$ - volume of accepted bid k for positive aFRR balancing energy in settlement interval i to which minute t belongs; the bid shall be taken into account only if it was available for more than half of settlement interval i [MW, positive value, rounded to ten decimal places];

$P_{aFRR-,akt,bid k,i}$ – volume of accepted bid k for negative aFRR balancing energy in settlement interval i to which minute t belongs; the bid shall be taken into account only if it was available for more than half of settlement interval i [MW, positive value, rounded to ten decimal places];

k – k -th bid on the list for positive or negative aFRR balancing energy for settlement interval i ;

E_+, E_- - set of accepted BSP bids on the list for positive or negative aFRR balancing energy for settlement interval i .

- (7) The upper and lower limits of the tolerance range of the relevant response ($TP_{aFRR,+,t}$ and $TP_{aFRR,-,t}$) in minute t shall be calculated as follows:

$$TP_{aFRR,+,t} = \max(P_{aFRR,akt,t-6}, \dots, P_{aFRR,akt,t}) + P_{aFRR,DO,t}$$

$$TP_{aFRR,-,t} = \min(P_{aFRR,akt,t-6}, \dots, P_{aFRR,akt,t}) - P_{aFRR,DO,t}$$

Where:

$TP_{aFRR,+,t}$ - power of the upper limit of the tolerance range of the relevant aFRR response in minute t [MW, rounded to ten decimal places];

$TP_{aFRR,-,t}$ - power of the lower limit of the tolerance range of the relevant aFRR response in minute t [MW, rounded to ten decimal places];

$P_{aFRR,DO,t}$ - permitted deviations of delivered aFRR balancing power in minute t [MW];

$P_{aFRR,akt,t-6}, \dots, P_{aFRR,akt,t}$ - aFRR balancing energy activation request in minutes from $t-6$ to t [MW].

- (8) The share of inadequate response during activation of aFRR balancing energy in settlement interval i shall be determined on the basis of the ratio between the aFRR energy activation request and deviation energy, i.e., the energy when the power of delivered aFRR balancing capacity was outside the tolerance range.

The aFRR response deviation power of the entire BSP portfolio in minute t ($P_{aFRR,ods,t}$) shall be determined for each minute as follows:

$$P_{aFRR,ods,t} = \begin{cases} |P_{aFRR,real,t} - TP_{aFRR,+t}| & \text{gdje je } P_{aFRR,real,t} > TP_{aFRR,+t} \\ |P_{aFRR,real,t} - TP_{aFRR,-t}| & \text{gdje je } P_{aFRR,real,t} < TP_{aFRR,-t} \\ 0 & \text{ostalo} \end{cases}$$

Where:

$P_{aFRR,ods,t}$ - aFRR response deviation power of the entire BSP portfolio in minute "t" [MW, positive value, rounded to ten decimal places];

$P_{aFRR,real,t}$ - delivered aFRR balancing reserve of the entire BSP portfolio in minute t [MW];

$TP_{aFRR,+t}$ - power of the upper limit of the tolerance range of the relevant response in minute t [MW];

$TP_{aFRR,-t}$ - power of the lower limit of the tolerance range of the relevant aFRR response in minute t [MW].

Calculation of deviation energy and the share of appropriate response during activation of positive or negative aFRR in settlement interval i shall be carried out separately for the positive and negative direction of aFRR activation. For that purpose, the minutes of time interval i shall be divided into minutes when the aFRR activation request was positive (t_+), minutes when there was no aFRR activation request (t_0), and minutes when the aFRR activation request was negative (t_-). The minutes t_+ , t_- and t_0 together must constitute all minutes of settlement interval i .

The aFRR response deviation energy of the entire BSP portfolio during activation of positive or negative aFRR in settlement interval i ($W_{aFRR+,ods,i}$ i $W_{aFRR-,ods,i}$) shall be calculated as follows:

$$W_{aFRR+,ods,i} = \sum_{t \in t_+} P_{aFRR,ods,t} * \Delta t$$

$$W_{aFRR-,ods,i} = \sum_{t \in t_-} P_{aFRR,ods,t} * \Delta t$$

Where:

$W_{aFRR+,ods,i}$ - aFRR response deviation energy of the entire BSP portfolio in settlement interval "i", when the aFRR balancing energy activation request is positive [MWh, positive value, rounded to ten decimal places];

$W_{aFRR-,ods,i}$ - aFRR response deviation energy in settlement interval "i", when the aFRR balancing energy activation request is negative [MWh, positive value, rounded to ten decimal places];

$P_{aFRR,ods,t}$ - aFRR activation deviation power of the entire BSP portfolio in minute t [MW];

i - balancing settlement interval;

Δt - duration of the interval for which aFRR response deviation energy is calculated (one minute, i.e. 1/60 h);

t_+ - minutes of settlement interval "i", where $P_{aFRR,akt,t} > 0$;

t_- - minutes of settlement interval "i", where $P_{aFRR,akt,t} < 0$.

The share of inadequate response during activation of positive or negative aFRR shall be calculated as follows:

$$O_{aFRR+,i} = \begin{cases} \min\left(\frac{W_{aFRR+,ods,i}}{W_{aFRR+,akt,i}}; 1\right); & \text{za } W_{aFRR+,akt,i} \neq 0 \\ 0; & \text{the rest} \end{cases}$$

$$O_{aFRR-,i} = \begin{cases} \min\left(\frac{W_{aFRR-,ods,i}}{W_{aFRR-,akt,i}}; 1\right); & \text{za } W_{aFRR-,akt,i} \neq 0 \\ 0; & \text{the rest} \end{cases}$$

Where:

$O_{aFRR+,i}$ - share of inadequate response during activation of positive aFRR balancing energy in settlement interval "i" [%, rounded to ten decimal places];

$O_{aFRR-,i}$ - share of inadequate response during activation of negative aFRR balancing energy in settlement interval i [%, rounded to ten decimal places];

$W_{aFRR+,ods,i}$ - aFRR response deviation energy of the entire BSP portfolio in settlement interval "i", when the aFRR balancing energy activation request is positive [MWh, positive value];

$W_{aFRR-,ods,i}$ - aFRR response deviation energy of the entire BSP portfolio in settlement interval "i", when the aFRR balancing energy activation request is negative [MWh, negative value];

$W_{aFRR+,akt,i}$ - activated positive aFRR balancing energy of the entire BSP portfolio in settlement interval "i", calculated in accordance with Article 63 paragraph 8 of the Terms and Conditions for BSPs [MWh];

$W_{aFRR-,akt,i}$ - activated negative aFRR balancing energy of the entire BSP portfolio in settlement interval "i", calculated in accordance with Article 63 paragraph 8 of the Terms and Conditions for BSPs [MWh];

i - settlement interval.

- (9) The value of consequences of inadequate response during activation of aFRR balancing energy shall be calculated separately for the positive and negative balancing direction for balancing settlement interval i , by applying the following formula:

$$PEN_{aFRR+,akt,i} = \begin{cases} O_{aFRR+,i} * |S_{aFRR+,akt,i}| * F_{aFRR,akt,1}; & \text{ako } S_{aFRR+,akt,i} \geq 0 \\ O_{aFRR+,i} * |S_{aFRR+,akt,i}| * F_{aFRR,akt,2}; & \text{otherwise} \end{cases}$$

$$PEN_{aFRR-,akt,i} = \begin{cases} O_{aFRR-,i} * |S_{aFRR-,akt,i}| * F_{aFRR,akt,1}; & \text{ako } S_{aFRR-,akt,i} \geq 0 \\ O_{aFRR-,i} * |S_{aFRR-,akt,i}| * F_{aFRR,akt,2}; & \text{otherwise} \end{cases}$$

Where:

$PEN_{aFRR+,akt,i}$ - value of consequences of inadequate response during activation of positive aFRR balancing energy in balancing settlement interval "i" [EUR, rounded to two decimal places];

$PEN_{aFRR-,akt,i}$ - value of consequences of inadequate response during activation of negative aFRR balancing energy in balancing settlement interval "i" [EUR, rounded to two decimal places];

$O_{aFRR+,i}$ - share of inadequate response during activation of positive aFRR balancing energy in balancing settlement interval "i" [%, rounded to ten decimal places];

$O_{aFRR-,i}$ - share of inadequate response during activation of negative aFRR balancing energy in balancing settlement interval "i" [%, rounded to ten decimal places];

$SaFRR+,akt,i$ - value of activated positive aFRR balancing energy in balancing settlement interval "i" for the BSP for which the value of consequences of inadequate response during activation of positive aFRR balancing energy is calculated [EUR];

$SaFRR-,akt,i$ - value of activated negative aFRR balancing energy in balancing settlement interval "i" for the BSP for which the value of consequences of inadequate response during activation of negative aFRR balancing energy is calculated [EUR];

$F_{aFRR,akt,1}$ - penalty factor due to inadequate response during activation of aFRR balancing energy, where $F_{aFRR,akt,1} = 1.2$;

$F_{aFRR,akt,2}$ - penalty factor due to inadequate response during activation of aFRR balancing energy, where $F_{aFRR,akt,2} = 0.2$.

- (10) The total value of consequences for inadequate response to aFRR during the activation phase in settlement period M ($PEN_{aFRR,akt,M}$) shall be calculated as the sum of consequences for inadequate response to activation of aFRR energy in all settlement intervals i belonging to settlement period M , by applying the following formula:

$$PEN_{aFRR,akt,M} = \sum_{i \in M} (PEN_{aFRR+,akt,i} + PEN_{aFRR-,akt,i})$$

Where:

$PEN_{aFRR,akt,M}$ - value of consequences for inadequate response during activation of aFRR energy in settlement period "M" [EUR, rounded to two decimal places];

$PEN_{aFRR+,akt,i}$ - consequences for inadequate response to activation of positive aFRR energy in time interval "i" [EUR];

$PEN_{aFRR-,akt,i}$ - consequences for inadequate response to activation of negative aFRR energy in time interval "i" [EUR];

M - settlement period, as defined in Article 72 paragraph 1 of these Terms and Conditions for BSPs.

Determination of the total value of consequences for non-compliance with the Terms and Conditions for BSPs for aFRR

Article 70

The total value of consequences for non-compliance with the Terms and Conditions for BSPs for aFRR ($PEN_{aFRR,M}$) in settlement period M shall be equal to the sum of the values $PEN_{aFRR,zak,M}$ and $PEN_{aFRR,akt,M}$ for that settlement period.

Failure to provide the aFRR balancing capacity range

Article 71

- (1) Where the BSP does not provide aFRR balancing capacity continuously for the entire period for which it is obliged to provide aFRR in accordance with Article 39 paragraph 6 of these Terms and Conditions for BSPs, the TSO may reduce the amount of prequalified power of the BSP or even withdraw the validity of the Certificate of Technical Capability of the BSP for the provision of the aFRR service.
- (2) As of the date of withdrawal of the Certificate of Technical Capability of the BSP for the provision of aFRR, the BSP's obligation to provide aFRR shall cease.
- (3) As a result of the reduction referred to in paragraph 1 of this Article, the TSO shall offer the missing quantity in the next auction for aFRR balancing capacity.
- (4) In the cases referred to in paragraph 1 of this Article, the TSO shall calculate the higher amount of the following options:
 1. The difference between the value of the cheapest procured aFRR balancing capacity through auctions, by which the TSO compensates for the amended obligation of the BSP, and the value of the procured aFRR balancing capacity for the amended obligation for the period from the change of obligation until the deadline for which the obligation arose;
 2. 20% of the value of aFRR balancing capacity procured through auctions for the amended obligation for the period from the withdrawal or change of obligation until the deadline for which the obligation arose.

5.9. Invoicing and financial settlement for aFRR

Determination of the settlement period, invoicing and payment procedures Article 72

- (1) The settlement period for aFRR balancing capacity and consequences of non-compliance with the Terms and Conditions for BSPs shall be one month and shall run from 00:00 hours on the first day of the month until 24:00 hours on the last day of the month.
- (2) The settlement period for aFRR balancing energy shall be one month and shall run from 00:00 hours on the first day of the month until 24:00 hours on the last day of the month.

- (3) The TSO shall submit the calculation for procured aFRR balancing capacity to the BSP no later than the seventh working day after the end of the settlement period.
- (4) On the basis of the calculation referred to in paragraph 3 of this Article, the BSP shall issue an invoice to the TSO no later than the tenth working day after the end of the settlement period.
- (5) The TSO shall submit to the BSP the calculation of consequences of non-compliance with the provisions of these Terms and Conditions for BSPs no later than the seventh working day after the end of the settlement period.
- (6) The TSO shall submit to the BSP the calculation for activated aFRR balancing energy no later than five working days after the expiry of the settlement period.
- (7) Depending on the direction and price of the activated aFRR balancing energy bid, the TSO and/or the BSP shall issue an invoice for activated aFRR balancing energy, determined in accordance with the Terms and Conditions for BSPs, no later than two working days after receiving the calculation data from the TSO.
- (8) Invoices shall be delivered by electronic mail to the addresses specified in accordance with the Auction Rules.
- (9) The payment deadline shall be 10 days from the issuance of the invoice. If the due date falls on a non-working day (Saturday, Sunday, a public holiday in Montenegro or a day when the European payment and settlement system in EUR is not operational), the due date shall be postponed to the first following working day.
- (10) Before payment is made, the TSO and the BSP may carry out financial netting (set-off of claims), if there are receivables and liabilities for the same type of service.

6. MANUAL FREQUENCY RESTORATION RESERVE (mFRR)

6.1. Definition of products and bids

General principles

Article 73

- (1) The TSO shall procure mFRR balancing capacity for the purposes of implementing mFRP in accordance with the rules and procedures defined in these BSP Terms and Conditions.
- (2) mFRR products or services shall consist of mFRR balancing capacity and mFRR balancing energy.
- (3) Bids for mFRR balancing capacity or mFRR balancing energy may be submitted only by qualified BSPs.
- (4) Bids for mFRR balancing capacity and bids for mFRR balancing energy shall be submitted separately.
- (5) Bids for mFRR balancing capacity and bids for mFRR balancing energy shall be submitted separately per balancing direction.
- (6) The BSP shall be obliged to submit bids for mFRR balancing energy in accordance with the requirements set out in Article 78 of these BSP Terms and Conditions:
 1. if it has procured a certain volume of mFRR balancing capacity in an auction;
 2. if the TSO has allocated mFRR balancing capacity to it in accordance with Article 13 paragraphs 3 or 7 of these BSP Terms and Conditions;
 3. if mFRR balancing capacity has been transferred to it in accordance with Article 91 of these BSP Terms and Conditions.
- (7) In the case of transfer of mFRR balancing capacity from the BSP transferring the procured capacity to the BSP receiving the procured capacity, submission of bids for mFRR balancing energy for the transferred volumes shall not be mandatory for the BSP transferring the procured capacity, while the BSP receiving the transferred procured capacity shall be obliged to submit bids for mFRR balancing energy.
- (8) The volume of submitted direct and scheduled bids of all qualified BSPs for mFRR balancing energy shall be equal to or greater than the sum of:
 1. the procured volume of mFRR balancing capacity in balancing capacity auctions;

2. the volume of allocated balancing capacity for which the BSP and the TSO, in accordance with Article 13 paragraphs 3 or 7 of these BSP Terms and Conditions, have concluded a contract for the provision of mFRR balancing capacity;
3. the volume of transferred mFRR balancing capacity, reduced by the volumes of mFRR balancing capacity that the BSP has transferred to another BSP, in accordance with Article 91 of these BSP Terms and Conditions;

(9) All BSPs shall have the possibility to submit bids for mFRR balancing energy up to the level of the total qualified balancing capacity.

6.1.1. mFRR balancing capacity

Submission of bids for mFRR balancing capacity

Article 74

The BSP shall submit bids for mFRR balancing capacity in accordance with the requirements for mFRR balancing capacity defined in Articles 75 and 76 of these BSP Terms and Conditions.

General requirements for mFRR balancing capacity

Article 75

(1) The general requirements for products and bids for mFRR balancing capacity used in mFRP are set out in Table 4.

Product	Separate product for positive and negative balancing direction
Product location	LFC Montenegro
Product duration	Hour, day, week, month, year
Minimum bid volume	1 MW
Maximum bid volume	≤ unused qualified reserve
Minimum bid price	0.01 EUR/MW/h
Technical price cap	999.99 EUR/MW/h
Divisibility of bids	Indivisible bids are not allowed. All bids shall be divisible down to 1 MW.
Linking of bids	Not allowed
Bid resolution	1 MW

Availability	Continuous at any time (100% availability), taking into account the products referred to in Article 76 of these BSP Terms and Conditions
--------------	--

Table 4. Definition of products in bids for mFRR balancing capacity

- (2) The BSP may formulate bids for mFRR balancing capacity on the basis of its entire portfolio bidding, such as generators, consumers, aggregators and/or energy storage modules.
- (3) Linking of bids for mFRR balancing capacity from a technical or economic perspective shall not be allowed. This means that a BSP may not submit two or more bids for mFRR balancing capacity whose selection is mutually conditional in terms of volume or time.
- (4) Selected bids for mFRR balancing capacity shall be settled according to the pay-as-bid principle.
- (5) The BSP shall submit bids for mFRR balancing capacity with a price expressed in EUR/MW/h, regardless of the product duration.
- (6) The TSO reserves the right to limit the maximum price at which it is willing to select bids for mFRR balancing capacity, and such limitation shall be published in advance.

Procurement period for mFRR balancing capacity

Article 76

- (1) The TSO may procure mFRR balancing capacity for the following time periods:
 1. annual procurement;
 2. monthly procurement;
 3. weekly procurement;
 4. daily procurement.
- (2) For each procurement period referred to in paragraph 1 of this Article, the TSO may define one or more product or bid time resolution:
 1. annual product – means that the BSP submits a bid for mFRR balancing capacity for the entire product period, i.e., the product duration is one year;
 2. monthly product – means that the BSP submits a bid for mFRR balancing capacity for the entire product period, i.e., the product duration is one month;

3. weekly product – means that the BSP submits a bid for mFRR balancing capacity for the entire product period, i.e., the product duration is seven calendar days;
 4. daily product – means that the BSP submits a bid for mFRR balancing capacity for the entire product period, i.e., the product duration is one day;
 5. hourly product – means that the BSP submits a bid for mFRR balancing capacity for the entire product period, i.e., the product duration is one hour.
- (3) The TSO shall conduct auctions for the procurement of mFRR balancing capacity referred to in paragraph 1 of this Article:
1. at least 30 calendar days before the day on which the procurement period for annual mFRR balancing capacity begins;
 2. at least seven calendar days before the day on which the procurement period for monthly mFRR balancing capacity begins;
 3. at least three calendar days before the day on which the procurement period for weekly mFRR balancing capacity begins;
 4. for daily procurement of mFRR balancing capacity, at least 10 hours before the day of procurement.
- (4) The TSO may determine the procurement periods referred to in paragraph 1 of this Article and/or the time resolutions of bids or products referred to in paragraph 2 of this Article differently. The TSO shall notify BSPs thereof by electronic mail at least 30 calendar days prior to the entry into force of the change and shall publish a notice on its official website.

6.1.2. mFRR balancing energy

Submission of bids for mFRR balancing energy

Article 77

- (1) The BSP shall submit bids in accordance with the requirements for mFRR balancing energy. The requirements are defined in Article 78 of these BSP Terms and Conditions.
- (2) The BSP may submit one or more bids for mFRR balancing energy in a total volume which, in a single balancing settlement interval, shall not exceed the BSP's qualified reserve, taking into account the limitations set out in Articles 25, 49 and 84 of these BSP Terms and Conditions.

General requirements for bids for mFRR balancing energy
Article 78

(1) The general requirements for bids for mFRR balancing energy used in mFRP are set out in Table 5.

Product location	LFC Montenegro
Full activation time (FAT)	12.5 minutes
Activation mode	Manual activation
Type of activation	Scheduled or direct activation
Minimum bid volume	1 MW
Maximum bid volume	≤ unused qualified mFRR reserve
Technical minimum bid price	-9,999.99 EUR/MWh
Technical maximum bid price	9,999.99 EUR/MWh
Bid price resolution	0.01 EUR/MWh
Divisibility of bids	All bids are fully divisible. Indivisible bids are not allowed.
Linking of bids	Not allowed
Bid resolution	1 MW

Table 5. Definition of products in bids for mFRR balancing energy

- (2) Linking of bids from a technical or economic perspective shall not be allowed, i.e., the BSP may not submit two or more bids whose activation is mutually conditional in terms of volume or time.
- (3) Based on the selected bids for mFRR balancing energy, the activated mFRR balancing energy shall be settled in accordance with the procedure set out in Article 102 of these BSP Terms and Conditions.
- (4) The BSP may freely determine the size and number of bids for mFRR balancing energy, in compliance with the general requirements of these BSP Terms and Conditions.
- (5) The TSO reserves the right to limit the maximum bid price at which it is willing to select bids for balancing energy, and such limitation shall be published in advance.
- (6) In the case of application of the balancing capacity allocation procedure in accordance with Article 13 paragraphs 3 or 7, the limitations defined in Annex 1 shall apply. These limitations shall apply to energy prices regardless of the type of activation (scheduled or direct one).

6.2. Requirements for mFRR balancing service providers

General technical requirements for BSPs

Article 79

- (1) The BSP may provide the mFRR service through a portfolio of control units qualified for the provision of the mFRR service.
- (2) An individual control unit may provide the mFRR service only within the portfolio of a single BSP.

Conditions for participation of BSP in the provision of mFRR services

Article 80

A BSP may provide mFRR services if it meets the following conditions:

1. It operates one or more control units connected to the transmission system and/or one or more control units connected to the distribution system;
2. The control centre and all control units are located within the control area of Montenegro, but may belong to different balancing groups. The control centre may be located outside the control area of Montenegro, provided that the BSP ensures communication with the TSO in the Montenegrin language;
3. The BSP is a balance responsible party, registered with the TSO and the market operator;
4. All technical units intended to provide the mFRR service have successfully completed the prequalification process in accordance with the Prequalification Rules;
5. The BSP holds a valid Certificate of qualification for participation in auctions as defined in the Auction Rules.

Characteristics of the product for scheduled activation of mFRR balancing energy

Article 81

- (1) The BSP shall comply with the technical characteristics of the mFRR balancing energy product as defined in Table 6.

Period	Duration
Preparation period	2.5 min
Ramp period	10 min
Maximum delivery duration at full capacity for scheduled activation	5 min – scheduled activation

Deactivation period	10 min
Time between two activations	0 min

Table 6. Technical characteristics of the product for mFRR balancing energy

- (2) The preparation period represents the minimum time from the mFRR activation request sent by the TSO to the BSP until the start of ramping.
- (3) The ramping period represents the time of gradual increase/decrease of the physical delivery of mFRR until the full requested power set by the TSO is reached.
- (4) The maximum delivery duration at full capacity represents the period during which the BSP provides the mFRR service at the full power requested by the TSO.
- (5) The deactivation period is the period of gradual transition from full power delivery to the baseline power of the control unit or from full withdrawal to the baseline power of the control unit.
- (6) The BSP shall be capable of activating the portfolio on which it offers mFRR services, i.e. of changing active power in accordance with the TSO request, so as to reach the full requested power value no later than 12.5 minutes after receipt of the mFRR activation request from the TSO (FAT – Full Activation Time).
- (7) Upon receipt of the activation request referred to in paragraph 6 of this Article, the BSP shall start the ramping period no later than within 2.5 minutes, which shall last a maximum of 10 minutes. The start of mFRR balancing energy activation shall be deemed to be at half of the ramping period (maximum 5 minutes) from the beginning of the ramping period. After completion of the ramping period, the BSP shall provide mFRR at the full power requested by the TSO for a duration of 5 minutes (maximum delivery duration at full capacity). Upon expiry of the maximum delivery duration at full capacity, the deactivation period shall follow (gradual transition from full power delivery to the baseline power of the control unit or from full withdrawal to the baseline power of the control unit) with a maximum duration of 10 minutes.

Technical limitations of control units

Article 82

- (1) The BSP shall provide the mFRP balancing service only within the control ranges that have successfully passed the qualification process, as well as within permanent and temporary limitations imposed by the TSO. The BSP shall also take into account all additional activations of control units resulting from the provision of other balancing services.
- (2) In the event of non-compliance with the obligations referred to in paragraph 1 of this Article, the TSO may revoke the validity of the Certificate of technical qualification for the provision of mFRR.

Availability of procured mFRR balancing capacity
Article 83

- (1) The entire procured mFRR balancing capacity provided by the BSP shall be continuously available throughout the entire procurement period.
- (2) The TSO shall have the right to activate mFRR at any time during the period for which the mFRR capacity has been procured.
- (3) The BSP shall continuously monitor its technical units and shall immediately notify the TSO if it is unable to fully meet its contractual obligations for the provision of mFRR.
- (4) In the event of unavailability attributable to the BSP, the BSP shall, within 14 days from the occurrence of the unavailability, submit to the TSO a detailed explanation of the causes of unavailability and a proposal of measures to improve mFRR availability.
- (5) In the event of repeated unavailability of the BSP, the TSO may revoke the validity of the Certificate of technical qualification for the provision of mFRR.

Simultaneous provision of other balancing services
Article 84

- (1) Control units providing mFRR may also participate in the provision of FCR and aFRR.
- (2) Participation in the services referred to in paragraph 1 of this Article shall be possible provided that it does not jeopardise the provision of mFRR and that all control groups through which the BSP simultaneously provides mFRR and FCR and/or aFRR contain the same control units.

Data exchange between BSP and TSO and archiving
Article 85

- (1) The BSP shall, in cooperation with the TSO, ensure real-time data exchange and the archiving thereof.
- (2) The types of data referred to in paragraph 1 of this Article, the method and frequency of exchange, as well as the method of archiving, are defined in the Prequalification Rules.

Data exchange between BSP and balance responsible parties, DSO and market operator
Article 86

- (1) If a BSP has balancing resources in its portfolio with metering points belonging to another balancing group, the BSP shall provide the responsible representative of that other balancing group with data on the participation of those points in service provision and the volume of delivered balancing energy no later than 12:00 on the day following the completion of activation.
- (2) The BSP shall submit the data referred to in paragraph 1, as well as data on its own activation, to the market operator no later than 12:00 on the day following the completion of activation, or on the next working day if activation occurred on a non-working day or weekend. For the purposes of performing the tasks of the market operator, BSPs shall submit daily the volumes of activated mFRR balancing energy in electronic format, disaggregated by balancing mechanism participants (balance responsible parties).
- (3) If a BSP has resources in its portfolio with metering points in the DSO system, the BSP shall provide the DSO with all data on delivered balancing energy per individual metering point no later than 08:00 on the day following the completion of activation, or on the next working day if activation occurred on a non-working day or weekend.
- (4) In the event of non-compliance with the obligations referred to in paragraphs 1, 2 and 3 of this Article, the TSO may, at the request of the responsible representative of another balancing group, the market operator or the DSO, revoke the validity of the Certificate of technical qualification of the BSP for the provision of mFRR.

6.3. Procurement of balancing capacity and secondary mFRR market

6.3.1. Conditions for participation

General conditions
Article 87

- (1) Only BSPs qualified for the provision of mFRR services may participate in the procurement of mFRR balancing capacity and in the transfer of procured mFRR balancing capacity on the secondary market.

- (2) The TSO shall grant the status of a qualified BSP for the provision of mFRR services to those BSP candidates who hold a valid Certificate of technical qualification for the provision of mFRR and meet all mFRR requirements set out in the Auction Rules.
- (3) The TSO shall publish the Auction Rules on its official website.
- (4) On the basis of the Certificate of technical qualification for the provision of mFRR services and compliance with the Auction Rules, the TSO shall issue to the BSP a Certificate of qualification for participation in auctions for the provision of mFRR services no later than seven working days from receipt of complete documentation in accordance with the Auction Rules.
- (5) In the case of submission of incomplete documentation referred to in paragraph 4 of this Article, the TSO shall, within 10 days of receipt of the documentation, notify the BSP candidate in writing to remedy the deficiencies.
- (6) The BSP candidate shall, in accordance with the notification referred to in paragraph 5 of this Article, remedy the deficiencies in the documentation within 10 days from receipt of the notification.
- (7) If the applicant referred to in paragraph 5 of this Article fails to remedy the deficiencies within the deadline referred to therein, the TSO shall not issue the Certificate of qualification for participation in auctions for the provision of mFRR services.
- (8) In the event of revocation of the Certificate of technical qualification for the provision of mFRR services, the BSP shall automatically lose the status of a qualified BSP for the provision of mFRR services, and the TSO shall revoke the Certificate of qualification for participation in auctions for the provision of mFRR services

6.3.2. Requirements for conducting the auction

Auction rules for mFRR balancing capacity

Article 88

- (1) The TSO shall conduct auctions in accordance with the applicable Auction Rules for mFRR balancing capacity.
- (2) The BSP shall submit bids for mFRR balancing capacity to the Platform, which is operated and supervised by the TSO.
- (3) In the Auction Rules, the TSO shall determine at least the following:

1. conditions for participation in the auction;
2. the procurement period and product time resolution;
3. the required volumes of mFRR balancing capacity and the deadline for their publication;
4. the timing of the auction and the method of bid submission;
5. the selection criterion;
6. the selection of the most economically advantageous bids and the publication of auction results.

6.3.3. Deadlines for bid submission

Deadlines for submission of bids for mFRR balancing capacity

Article 89

- (1) The BSP may submit bids for mFRR balancing capacity on the Platform from GOT (Gate Opening Time) to GCT (Gate Closing Time).
- (2) The TSO shall determine GOT and GCT for the submission of bids for the procurement of mFRR balancing capacity in the Auction Rules.
- (3) The type of product, product time resolution, auctioned volume, GOT, GCT, possible price limits and other relevant information shall be published by the TSO on the Platform through auction specifications, as a rule at least one day before each individual auction.

6.3.4. Procurement of balancing capacity

Procurement of mFRR balancing capacity

Article 90

- (1) In auctions for mFRR balancing capacity, the TSO shall select BSP bids in accordance with the provisions of the Auction Rules.
- (2) The BSP shall submit bids for mFRR balancing capacity to the Platform, which is operated and supervised by the TSO.
- (3) The BSP may submit bids for mFRR balancing capacity on the Platform in accordance with the products defined in Article 75.
- (4) The TSO shall rank accepted bids for mFRR balancing capacity based on price and timestamp, according to the principle that bids with a lower price have priority. If two or more bids have the same price, priority shall be given to the bid received

earlier by the TSO, i.e. with an earlier timestamp. After completion of each auction for mFRR balancing capacity, the TSO shall select the most economically advantageous bids for procurement.

- (5) If, following the auction, the TSO has not procured mFRR balancing capacity in the volume determined in accordance with Article 13, the TSO shall repeat the auction for the missing capacity.
- (6) If, following the repeated auction, the TSO has not procured mFRR balancing capacity in the volume determined in accordance with Article 13, BSPs shall, at the request of the TSO, conclude a contract for the provision of balancing services within the shortest reasonable time specified by the TSO, under the conditions defined in Article 13 and Annex 1 of these BSP Terms and Conditions.

6.3.5. Transfer of balancing capacity – secondary capacity market

Transfer of mFRR balancing capacity

Article 91

- (1) The BSP shall have the right to transfer mFRR balancing capacity procured by the TSO, in whole or in part (in terms of volume or time), to another BSP. The provisions applicable to the mFRR product defined in Article 75 paragraph 1 of these BSP Terms and Conditions shall apply to such transfer.
- (2) Transfer of mFRR balancing capacity may only be carried out to a BSP that has already obtained the status of a qualified BSP and only up to the level of qualified mFRR capacity not already procured by that BSP.
- (3) Both BSPs involved in the transaction shall notify the TSO of the transfer of mFRR balancing capacity in electronic form and in a format defined by the TSO, by submitting at least the following data via the Platform:
 1. identification data of the BSP transferring the procured capacity;
 2. identification data of the BSP receiving the procured capacity;
 3. the service subject to transfer;
 4. the balancing settlement intervals i subject to transfer;
 5. the volumes of mFRR balancing capacity for each individual balancing settlement interval (15 minutes) subject to transfer.
- (4) The BSP transferring the procured capacity may announce the transfer no earlier than two hours after the publication of the results of the daily auction. All notifications received before this deadline shall be automatically rejected.

- (5) The BSP transferring the procured capacity may transfer mFRR balancing capacity no later than one hour before the start of the delivery day. All notifications received after this deadline shall be automatically rejected.
- (6) The transfer of mFRR balancing capacity shall be valid only if confirmed by the TSO by means of an appropriate notification to both BSPs. In the confirmation process, the TSO shall verify:
1. whether the notification has been received from both BSPs in accordance with paragraph 3, points 4 and 5 of this Article;
 2. whether the submitted data are consistent in both notifications;
 3. whether the conditions set out in paragraphs 2 and 4 of this Article are fulfilled;
 4. the level of qualified mFRR reserve and the volume of already submitted bids for mFRR balancing energy.
- (7) If the TSO determines during the verification process that the BSPs do not meet all obligations referred to in paragraph 6 of this Article, the TSO shall reject the transaction in full. Any errors in the notification process shall be remedied by submitting a new transfer request.
- (8) The TSO may, before the start of the balancing settlement interval, reject an already confirmed transfer if such transaction would:
1. endanger the operational security of the power system;
 2. result in a breach of operational limits defined in Articles 158 to 174 of the Regulation establishing guidelines on electricity transmission system operation.
- (9) Rejection of an already confirmed transfer referred to in paragraph 8 shall be implemented by requiring the notification of a reverse transfer between the BSPs involved. Not all previously confirmed balancing settlement intervals forming part of the transfer period need to be subject to such rejection.
- (10) Transfer of mFRR balancing capacity shall not be possible during the conduct of mFRR balancing capacity auctions.
- (11) By transferring mFRR balancing capacity, the obligations of the BSP transferring the procured capacity for the provision of balancing services shall be transferred to the receiving BSP. The payment obligation for the transferred mFRR balancing capacity shall be settled by the TSO with the BSP that transferred the capacity.
- (12) The TSO reserves the right to modify deadlines for the implementation of mFRR balancing capacity transfers. Such changes shall be published on the official website at least 30 days before entry into force.

(13) In the event of Platform malfunction, the transfer of mFRR balancing capacity shall not be possible.

6.4. Submission of bids for mFRR balancing energy

General conditions

Article 92

Each BSP qualified for the provision of mFRR services shall have the possibility to submit bids for mFRR balancing energy up to the recognised qualified volume, regardless of whether it has procured mFRR balancing capacity.

6.4.1. Requirements for the submission of bids

Rules for the submission of bids for mFRR balancing energy

Article 93

- (1) The BSP shall submit bids for mFRR balancing energy on the Platform, which is operated and supervised by the TSO.
- (2) The obligation of the BSP to submit bids for energy is defined in Article 73.
- (3) The BSP shall be financially and technically responsible for the implementation of the Application Programming Interface (API) for access to the Platform on the side of its information and communication infrastructure.
- (4) The BSP shall submit bids for mFRR balancing energy on the Platform for each 15-minute balancing settlement interval.
- (5) The TSO shall organise the accepted bids for mFRR balancing energy into an ordered list of bids based on the price and time stamp of the accepted bids for mFRR balancing energy.

6.4.2. Deadlines for the submission of bids

Deadlines for the submission of bids for mFRR balancing energy

Article 94

- (1) BSPs shall submit bids on the Platform from GOT (Gate Opening Time) to GCT for mFRR balancing energy, for a specific 15-minute balancing settlement interval.
- (2) GOT for all balancing intervals of the following day shall be at D-1 at 14:00.
- (3) GCT for a specific balancing settlement interval shall be T-25 minutes.
- (4) The TSO reserves the right to change GOT and GCT for the submission of bids for mFRR balancing energy. The TSO shall publish such changes on its official website at least thirty days before their entry into force.

6.5. Activation of bids for mFRR balancing energy

Activation of selected bids for mFRR balancing energy Article 95

- (1) Bids for mFRR balancing energy shall be activated according to the order up to the level of the total activation request for mFRR balancing energy, such that the lowest-priced bids are activated first, followed by higher-priced bids from the merit order list, where bids are ranked according to price.
- (2) If two or more bids have the same price, priority shall be given to the bid received earlier by the TSO, i.e., the one with the earlier time stamp.

Technical activation of mFRR Article 96

- (1) Activation of selected bids for mFRR balancing energy shall be performed by means of an mFRR activation request sent to the BSP directly from the Platform.
- (2) Regardless of whether the mFRR activation request is submitted via the Platform or through the alternative activation procedure for mFRR described in Article 97 of these Conditions for BSPs, the TSO shall specify:
 1. the start of activation (t_z);
 2. the requested power (P_z);
 3. the end of activation (t_k).
- (3) The moment of activation notification (t_n) shall be the moment when the activation request is delivered to the BSP. The time between t_z and t_n is usually greater than or equal to 7.5 minutes.
- (4) Activation of mFRR shall start at the moment of activation notification t_n , when the TSO sends the activation request for balancing energy to the BSP.

- (5) The period from the moment of activation notification t_n to the moment t_{z-5} shall represent the preparation period and shall be at least 2.5 minutes, during which the BSP shall prepare the technical unit for the implementation of the activation.
- (6) From the moment t_{z-5} , the ramping period shall start, during which the technical unit shall gradually change its power towards the requested activation level.
- (7) The moment of activation start t_z shall be located at the midpoint of the ramping period and shall represent the reference moment for the calculation of activation, whereby the technical unit shall reach the full requested activation level no later than 5 minutes after t_z , i.e. by t_{z+5} .
- (8) The period from t_z to t_k shall represent the maximum delivery duration, during which the technical unit shall provide activated energy in accordance with the TSO request. The maximum delivery duration shall be defined as the period between t_{z+5} and t_{k-5} .
- (9) From the moment t_{k-5} , the deactivation period shall begin, during which the technical unit shall gradually change its power towards the initial power level.
- (10) The moment t_k , i.e., the end of activation, shall be located at the midpoint of the deactivation ramp. From t_k , the deactivation period shall last no longer than 5 minutes, i.e. until t_{k+5} , when the technical unit shall return to the initial power level.

Alternative activation procedure for mFRR

Article 97

- (1) In the event of Platform malfunction, the TSO shall use an order of activation of bids that may differ from that defined in Article 95 of these Conditions for BSPs. In such a case, the TSO shall activate based on the last known list of bids, as follows:
 1. in the event of Platform malfunction, the activation of selected mFRR bids shall be carried out by telephone or by e-mail, in compliance with the technical requirements;
 2. in the case of telephone activation, the TSO shall, within 30 minutes after the end of activation, send the BSP a formal activation request for mFRR (dispatch) by e-mail.
- (2) The BSP shall formally confirm the mFRR activation by e-mail no later than 30 minutes after receipt of the written activation request from the TSO.

6.6. Determination of the quantity of activated mFRR balancing energy for settlement and schedule correction

Calculation of activated mFRR balancing energy for settlement Article 98

- (1) The TSO shall calculate the activated mFRR balancing energy for the purposes of financial settlement between the TSO and the BSP. When determining the quantities of mFRR balancing energy for settlement between the TSO and the BSP, the total activated mFRR balancing energy within the balancing settlement intervals i for which balancing has been performed shall be taken into account;
- (2) Activated mFRR balancing energy represents the energy requested by the TSO from the BSP and which shall be settled with the BSP in accordance with Article 102 of these Conditions for BSPs;
- (3) Activated mFRR balancing energy shall be calculated on the basis of the activation request for mFRR, as well as the start and end times of activation in accordance with the shape of the standard product;
- (4) In addition to the activated energy within the balancing settlement interval for which activation has been performed, the TSO shall also calculate mFRR balancing energy which, in accordance with the shape of the standard product, is activated outside the balancing settlement interval;
- (5) The TSO shall separately calculate activated mFRR balancing energy for scheduled and for direct activation;
- (6) In scheduled activation, the TSO activates balancing energy within one balancing settlement interval. In scheduled activation, the activation start time t_z shall be equal to the beginning of the balancing settlement interval i , and the activation end time t_k shall be equal to the end of the balancing settlement interval i . The activated mFRR balancing energy of the a -th activation in interval i shall be calculated on the basis of the following formula:

$$W_{mFRR+,akt,a,i} = \begin{cases} \frac{P_{z,a}}{K} [t_{ka} - t_{z,a}] & \text{za } P_{z,a} > 0 \\ 0 & \text{ostalo} \end{cases}$$
$$W_{mFRR-,akt,a,i} = \begin{cases} \frac{P_{z,a}}{K} [t_{ka} - t_{z,a}] & \text{za } P_{z,a} < 0 \\ 0 & \text{ostalo} \end{cases}$$

Where:

$W_{mFRR+,akt,a,i}$ - activated positive mFRR balancing energy of the a -th activation in balancing settlement interval i [MWh, positive value, rounded to ten decimal places];

$W_{mFRR-,akt,a,i}$ - activated negative mFRR balancing energy of the a -th activation in balancing settlement interval i [MWh, negative value, rounded to ten decimal places];

$P_{Z,a}$ - requested power of the a -th activation of positive or negative mFRR balancing energy [in MW, positive value in the case of activation of positive mFRR balancing energy, negative value in the case of activation of negative mFRR balancing energy, rounded to ten decimal places];

$t_{Z,a}$ - requested start time of the a -th activation [rounded to the next full minute];

$t_{K,a}$ - requested end time of the a -th activation [rounded to the next full minute];

a - a -th activation of mFRR balancing energy;

i - balancing settlement interval;

K - constant with value $K = 60 \text{ min/h}$.

(7) In the a -th direct activation, the TSO activates balancing energy in two consecutive balancing settlement intervals, namely for intervals i and $i+1$, taking into account that interval i is the one containing the start time of direct activation $t_{Z,a}$. In the case of direct mFRR activation, the requested end time of direct activation shall be equal to the end of balancing settlement interval $i+1$. The activated mFRR balancing energy for individual intervals and balancing direction shall be calculated on the basis of the following formulae:

1. for the first balancing settlement interval i :

$$W_{mFRR+,akt,a,i} = \begin{cases} \frac{P_{Z,a}}{K} [t_{K,a} - t_{Z,a} - 15\text{min}] & \text{za } P_{Z,a} > 0 \\ 0 & \text{the rest} \end{cases}$$

$$W_{mFRR-,akt,a,i} = \begin{cases} \frac{P_{Z,a}}{K} [t_{K,a} - t_{Z,a} - 15\text{min}] & \text{za } P_{Z,a} < 0 \\ 0 & \text{the rest} \end{cases}$$

2. for the second balancing settlement interval $i+1$:

$$W_{mFRR+,akt,a,i+1} = \begin{cases} \frac{P_{Z,a}}{K} [15\text{min}] & \text{za } P_{Z,a} > 0 \\ 0 & \text{the rest} \end{cases}$$

$$W_{mFRR-,akt,a,i+1} = \begin{cases} \frac{P_{Z,a}}{K} [15\text{min}] & \text{za } P_{Z,a} < 0 \\ 0 & \text{the rest} \end{cases}$$

Where:

$W_{mFRR+,akt,a,i}$ - activated positive mFRR balancing energy of the a -th activation in balancing settlement interval i [MWh, positive value, rounded to ten decimal places];

$W_{mFRR-,akt,a,i}$ - activated negative mFRR balancing energy of the a -th activation in balancing settlement interval i [MWh, negative value, rounded to ten decimal places];

$W_{mFRR+,akt,a,i+1}$ - activated positive mFRR balancing energy of the a -th activation in balancing settlement interval $i+1$ [MWh, rounded to ten decimal places];

$W_{mFRR-,akt,a,i+1}$ - activated negative mFRR balancing energy of the a -th activation in balancing settlement interval $i+1$ [MWh, rounded to ten decimal places];

$P_{Z,a}$ - requested power of the a -th activation of positive or negative mFRR balancing energy [in MW, positive value in the case of activation of positive mFRR balancing energy, negative value in the case of activation of negative mFRR balancing energy, rounded to ten decimal places];

$t_{Z,a}$ - requested start time of the a -th activation [rounded to the next full minute];

$t_{K,a}$ - requested end time of the a -th activation [rounded to the next full minute];

i - balancing settlement interval;

a - a -th activation of mFRR balancing energy;

K - constant with value $K = 60 \text{ min/h}$.

- (8) The activated balancing energy subject to settlement between the TSO and the BSP in an individual balancing settlement interval i ($W_{mFRR+,akt,i}$, $W_{mFRR-,akt,i}$) shall be the sum of all direct and scheduled activations of mFRR balancing energy in balancing settlement interval i , and shall be calculated on the basis of the following formulae:

$$W_{mFRR+,akt,i} = \sum_{a \in A} W_{mFRR+,akt,a,i}$$

$$W_{mFRR-,akt,i} = \sum_{a \in A} W_{mFRR-,akt,a,i}$$

Where:

$W_{mFRR+,akt,i}$ - activated positive mFRR balancing energy in balancing settlement interval i [MWh, rounded to three decimal places];

$W_{mFRR-,akt,i}$ - activated negative mFRR balancing energy in balancing settlement interval i [MWh, rounded to three decimal places];

$W_{mFRR+,akt,a,i}$ - activated positive mFRR balancing energy of the a -th activation in balancing settlement interval i [MWh];

$W_{mFRR-,akt,a,i}$ - activated negative mFRR balancing energy of the a -th activation in balancing settlement interval i [MWh];

a - a -th activation of mFRR balancing energy;

A - set of all scheduled and direct activations a .

Calculation of activated mFRR balancing energy for schedule correction Article 99

- (1) The activated mFRR balancing energy requested by the TSO from the BSP shall be reported to the market operator as a correction of the market schedule between the TSO and the BSP.

- (2) The activated balancing energy referred to in paragraph 1 of this Article shall be calculated on the basis of the magnitude of the mFRR activation request, the activation start time t_z and the activation end time t_k , in accordance with the shape of the standard mFRR product. The TSO shall calculate schedule correction in all balancing settlement intervals in which mFRR balancing energy has been activated in accordance with the shape of the standard mFRR product (scheduled or direct mFRR activation).

In the a -th scheduled activation, the TSO shall take into account three balancing settlement intervals: $i-1$, i and $i+1$, for which the schedule correction shall be determined. Interval i shall be the interval starting at time $t_{z,a}$. The schedule for individual balancing settlement intervals shall be calculated on the basis of the following formulae:

$$W_{mFRR,VR,a,i-1} = \frac{P_{z,a}}{K} [1,25 \text{ min}]$$

$$W_{mFRR,VR,a,i} = \frac{P_{z,a}}{K} [12,5 \text{ min}]$$

$$W_{mFRR,VR,a,i+1} = \frac{P_{z,a}}{K} [1,25 \text{ min}]$$

Where:

$W_{mFRR,VR,a,i}$ - schedule of the a -th activation of mFRR balancing energy in balancing settlement interval i [MWh, positive or negative value, rounded to ten decimal places];

$P_{z,a}$ - requested power of the a -th activation of positive or negative mFRR balancing energy [in MW, positive value in the case of activation of positive mFRR balancing energy, negative value in the case of activation of negative mFRR balancing energy, rounded to ten decimal places];

i - balancing settlement interval;

a - a -th activation of mFRR balancing energy;

K - constant with value $K = 60 \text{ min/h}$.

- (3) In the case of direct activation, the balancing settlement interval containing $t_{z,a}$ shall be denoted as balancing settlement interval i . Regardless of the start of activation, the end of activation $t_{k,a}$ shall always be at the end of the next balancing settlement interval following the balancing settlement interval for which direct activation has been requested.
- (4) In the case referred to in paragraph 3 of this Article, the TSO shall take into account three or four balancing settlement intervals, namely $i-1$, i , $i+1$ and $i+2$, for which the corrected schedule shall be determined. The number of balancing settlement intervals, as well as the distribution of energy among them, shall depend on the start time of the a -th direct activation $t_{z,a}$.
- (5) Balancing settlement interval i represents the period between the start (T_i) and end (T_{i+1}) of the balancing settlement interval for which direct activation has been

performed. Time T_{i-1} always denotes the start of the previous balancing settlement interval, while time T_{i+2} denotes the start of the balancing settlement interval following the end of activation. Time T_{i+1} represents the start of the second balancing settlement interval. Based on the requested start time and end time of the a -th activation $t_{z,a}$ and $t_{k,a}$, there are three cases for the calculation of schedule correction for individual balancing settlement intervals as follows:

1. start time of activation $t_{z,a} - 5 \text{ min} \leq T_i$ (start of the ramping period before the beginning of balancing settlement interval i)

$$W_{mFRR,VR,a,i-1} = \frac{P_{z,a}}{K * 20 \text{ min}} (T_i - t_{z-5,a})^2$$

$$W_{mFRR,VR,a,i} = \frac{P_{z,a}}{K} [5 \text{ min} + T_{i+1} - t_{z+5,a}] - W_{mFRR,VR,a,i-1}$$

$$W_{mFRR,VR,a,i+1} = \frac{P_{z,a}}{K} [13,75 \text{ min}]$$

$$W_{mFRR,VR,a,i+2} = \frac{P_{z,a}}{K} [1,25 \text{ min}]$$

2. start time of activation $t_{z,a} - 5 \text{ min} \geq T_i$ and $t_{z,a} + 5 \text{ min} \leq T_{i+1}$: (the entire ramping period is realised within balancing settlement interval i)

$$W_{mFRR,VR,a,i} = \frac{P_{z,a}}{K} [5 \text{ min} + T_{i+1} - t_{z+5,a}]$$

$$W_{mFRR,VR,a,i+1} = \frac{P_{z,a}}{K} [13,75 \text{ min}]$$

$$W_{mFRR,VR,a,i+2} = \frac{P_{z,a}}{K} [1,25 \text{ min}]$$

3. start time of activation $t_{z,a} + 5 \text{ min} \geq T_{i+1}$: (end of the ramping period after the end of balancing settlement interval i)

$$W_{mFRR,VR,a,i} = \frac{P_{z,a}}{K * 20 \text{ min}} (T_{i+1} - t_{z-5,a})^2$$

$$W_{mFRR,VR,a,i+1} = \frac{P_{z,a}}{K} (3,75 \text{ min} + (T_{i+2} - t_{z+5,a})) - W_{mFRR,VR,a,i}$$

$$W_{mFRR,VR,a,i+2} = \frac{P_{z,a}}{K} [1,25 \text{ min}]$$

Where:

$W_{mFRR,VR,a,i}$ – schedule of the a -th activation of mFRR balancing energy in balancing settlement interval i [MWh, positive or negative value, rounded to ten decimal places];
 $P_{z,a}$ – requested power of the a -th activation of positive or negative mFRR balancing energy [in MW, positive value in the case of activation of positive mFRR balancing energy,

negative value in the case of activation of negative mFRR balancing energy, rounded to ten decimal places];

$t_{Z,a}$ - requested start time of the a -th activation [rounded to the next full minute];

$t_{K,a}$ - requested end time of the a -th activation [rounded to the next full minute];

a - a -th activation of mFRR balancing energy;

$t_{Z-5,a}$, $t_{K-5,a}$ - $t_{Z,a}$ - 5 min and $t_{K,a}$ - 5 min;

$t_{Z+5,a}$, $t_{K+5,a}$ - $t_{Z,a}$ + 5 min and $t_{K,a}$ + 5 min;

i - balancing settlement interval;

T_i - start time of balancing settlement interval i ;

K - constant with value $K = 60$ min/h.

- (6) For the calculation of mFRR balancing energy for schedule correction purposes, the case referred to in paragraph 5 of this Article shall be applied in accordance with the start time of the ramping period ($t_{Z-5,a}$).
- (7) The total mFRR balancing energy requested by the TSO from the BSP and reported to the market operator as a correction of the BSP's schedule in a given balancing settlement interval i shall be the sum of the realised balancing energy of all direct and scheduled activations for that interval.

$$W_{mFRR+,VR,i} = \sum_{a \in A} \max(W_{mFRR,VR,a,i}, 0)$$

$$W_{mFRR-,VR,i} = \sum_{a \in A} \min(W_{mFRR,VR,a,i}, 0)$$

Where:

$W_{mFRR+,VR,i}$ - schedule correction of all activations of positive mFRR balancing energy in balancing settlement interval i [MWh, rounded to three decimal places];

$W_{mFRR-,VR,i}$ - schedule correction of all activations of negative mFRR balancing energy in balancing settlement interval i [MWh, rounded to three decimal places];

$W_{mFRR,VR,a,i}$ - schedule correction of the a -th activation of mFRR balancing energy in balancing settlement interval i [MWh];

a - a -th activation of mFRR balancing energy;

A - set of all direct and scheduled activations a .

6.7. Calculation and financial settlement of mFRR balancing capacity and balancing energy

Calculation of mFRR balancing capacity

Article 100

- (1) The TSO performs the calculation of mFRR balancing capacity on the basis of the results (quantity, price and product duration) of the relevant auctions (annual, monthly, weekly and daily) in accordance with Article 87, or on the basis of the allocated mFRR balancing capacity in accordance with Article 13, paragraphs 3 or 7 of these Terms and Conditions for BSPs. The costs of procurement of positive and negative mFRR balancing capacity in the balancing settlement interval i ($s_{mFRR+,zak,i}$ i $s_{mFRR-,zak,i}$) are determined by applying the following formula:

$$s_{mFRR+,zak,i} = \frac{1}{K} \sum_{k \in P_+} (C_{mFRR+,zak,bid\ k,i} * P_{mFRR+,zak,bid\ k,i})$$

$$s_{mFRR-,zak,i} = \frac{1}{K} \sum_{k \in P_-} (C_{mFRR-,zak,bid\ k,i} * P_{mFRR-,zak,bid\ k,i})$$

Where:

$s_{mFRR+,zak,i}$ – cost of procurement of positive mFRR balancing capacity in the balancing settlement interval i [EUR, rounded to ten decimal places];

$s_{mFRR-,zak,i}$ – cost of procurement of negative mFRR balancing capacity in the balancing settlement interval i [EUR, rounded to ten decimal places];

$C_{mFRR+,zak,bid\ k,i}$ – price of the selected bid “ k ” in the auction for positive mFRR balancing capacity for the balancing settlement interval i [EUR/MW/h, rounded to ten decimal places];

By way of exception, in the case of implementation of the procedure pursuant to Article 13, the price for mFRR balancing capacity in the balancing settlement interval i shall be calculated in accordance with Annex 1;

$C_{mFRR-,zak,bid\ k,i}$ – price of the selected bid “ k ” in the auction for negative mFRR balancing capacity for the balancing settlement interval i [EUR/MW/h, rounded to ten decimal places];

By way of exception, in the case of implementation of the procedure pursuant to Article 13, the price for mFRR balancing capacity in the balancing settlement interval i shall be calculated in accordance with Annex 1;

$P_{mFRR+,zak,bid\ k,i}$ – quantity of the selected bid “ k ” in the auction for positive mFRR balancing capacity for the balancing settlement interval i [MW, positive value, rounded to ten decimal places];

$P_{mFRR-,zak,bid\ k,i}$ – quantity of the selected bid “ k ” in the auction for negative mFRR balancing capacity for the balancing settlement interval i [MW, positive value, rounded to ten decimal places];

k – k -th selected bid in the auction for positive or negative mFRR balancing capacity in the set of selected bids P ;

P_+ , P_- – set of selected bids of BSPs in the auction for positive or negative mFRR balancing capacity for the balancing settlement interval i ;

K – number of balancing settlement intervals i in one hour, $K = 4$ [1/h].

- (2) The total cost of mFRR balancing capacity in the settlement period M ($s_{mFRR+,zak,M}$, $s_{mFRR-,zak,M}$) is calculated separately for each balancing direction as the sum of the costs of procured mFRR balancing capacity in all balancing settlement intervals i belonging to the settlement period M , as follows:

$$S_{mFRR+,zak,M} = \sum_{i \in M} S_{mFRR+,zak,i}$$

$$S_{mFRR-,zak,M} = \sum_{i \in M} S_{mFRR-,zak,i}$$

Where:

smFRR+,zak,M – cost of procured positive mFRR balancing capacity in the settlement period *M* [EUR, rounded to two decimal places];

smFRR-,zak,M – cost of procured negative mFRR balancing capacity in the settlement period *M* [EUR, rounded to two decimal places];

smFRR+,zak,i – cost of procured positive mFRR balancing capacity in the balancing settlement interval *i* [EUR];

smFRR-,zak,i – cost of procured negative mFRR balancing capacity in the balancing settlement interval *i* [EUR];

M – settlement period, as defined in Article 108, paragraph 1 of these Terms and Conditions for BSPs.

Determination of the price of mFRR balancing energy

Article 101

- (1) The price of activated mFRR balancing energy in each balancing settlement interval *i* shall be determined separately for the positive and negative balancing directions based on the method of selection of bids for the activation of mFRR balancing energy:
 1. The price shall be determined as a marginal price, calculated by the TSO on the basis of selected bids for the activation of balancing energy. The marginal price of activated bids shall be equal to the highest or lowest price, depending on the balancing direction, of the activated mFRR balancing energy bid in that balancing settlement interval.
 2. In the event of malfunction of the Platform, when the TSO is entitled to activate mFRR balancing energy outside the ordered list of bids, the price shall be determined as a marginal price established by the TSO on the basis of the quantity of activated mFRR balancing energy and the ordered bid curve for mFRR balancing energy from the closest previous balancing settlement interval for which the TSO has received bids.
- (2) The price of an individual activation in a given balancing settlement interval (*C_{mFRR+,akt,a,i}* and *C_{mFRR-,akt,a,i}*) shall be determined depending on the operation of the Platform, whereby for a given direction:

1. All bids with scheduled activation for balancing energy that are activated in the balancing settlement interval i shall have the same price.
 2. All bids with direct activation for balancing energy that are activated in the balancing settlement interval i shall have two prices:
 - i. The price for the balancing settlement interval i for which they are activated;
 - ii. The price for the balancing settlement interval $i+1$, i.e. the balancing settlement interval in which the direct activation ends
- (3) By way of exception, in the case of implementation of the procedure pursuant to Article 13, paragraphs 3 or 7, the price cap for mFRR balancing energy in the balancing settlement interval i shall be defined in Annex 1 for each individual mFRR balancing direction.

Calculation of mFRR balancing energy

Article 102

- (4) For the calculation of revenues or costs arising from the activation of mFRR balancing energy, the TSO shall apply the activated balancing energy of individual mFRR activations in the balancing settlement interval i , calculated in accordance with Article 98 of these Terms and Conditions for BSPs.
- (5) The TSO shall calculate the value of activated balancing energy in each balancing settlement interval i ($S_{mFRR+,akt,i}$ i $S_{mFRR-,akt,i}$) on the basis of the activated balancing energy of individual activations defined in paragraph 1 of this Article and the prices of mFRR balancing energy activation determined in Article 101, by applying the following formula:

$$S_{mFRR+,akt,i} = \sum_{a \in A} W_{mFRR+,akt,a,i} * C_{mFRR+,akt,a,i}$$

$$S_{mFRR-,akt,i} = \sum_{a \in A} W_{mFRR-,akt,a,i} * C_{mFRR-,akt,a,i}$$

Where:

$S_{mFRR+,akt,i}$ – value of activated positive mFRR balancing energy in the balancing settlement interval i (a negative value represents revenue for the TSO, i.e. a cost for the BSP, while a positive value represents a cost for the TSO, i.e. revenue for the BSP) [EUR, rounded to two decimal places];

$S_{mFRR-,akt,i}$ – value of activated negative mFRR balancing energy in the balancing settlement interval i (a negative value represents revenue for the TSO, i.e. a cost for the BSP, while a positive value represents a cost for the TSO, i.e. revenue for the BSP) [EUR, rounded to two decimal places];

$W_{mFRR+,akt,a,i}$ – activated positive mFRR balancing energy for the a-th activation in the balancing settlement interval i [MWh];

$W_{mFRR-,akt,a,i}$ – activated negative mFRR balancing energy for the a-th activation in the balancing settlement interval i [MWh];

$C_{mFRR+,akt,a,i}$ – price of positive mFRR balancing energy for the a-th activation in the balancing settlement interval i [EUR/MWh, rounded to ten decimal places];

$C_{mFRR-,akt,a,i}$ – price of negative mFRR balancing energy for the a-th activation in the balancing settlement interval i [EUR/MWh, rounded to ten decimal places]

i – balancing settlement interval;

a – a-th activation of positive or negative mFRR balancing energy;

A – set of all activations of positive or negative mFRR balancing energy.

- (6) The total value of activated mFRR balancing energy in the settlement period M ($s_{mFRR+,akt,M}$ and $s_{mFRR-,akt,M}$) shall be calculated separately for each balancing direction as the sum of the values of activated mFRR balancing energy in all balancing settlement intervals i belonging to the settlement period M , by applying the following formula:

$$s_{mFRR+,akt,M} = \sum_{i \in M} s_{mFRR+,akt,i}$$

$$s_{mFRR-,akt,M} = \sum_{i \in M} s_{mFRR-,akt,i}$$

Where:

$s_{mFRR+,akt,M}$ – value of activated positive mFRR balancing energy in the settlement period M (a negative value represents revenue for the TSO, i.e., cost for the BSP, while a positive value represents a cost for the TSO, i.e. revenue for the BSP) [EUR, rounded to two decimal places]

$s_{mFRR-,akt,M}$ – value of activated negative mFRR balancing energy in the settlement period M (a negative value represents revenue for the TSO, i.e., cost for the BSP, while a positive value represents a cost for the TSO, i.e. revenue for the BSP) [EUR, rounded to two decimal places];

$s_{mFRR+,akt,i}$ – value of activated positive mFRR balancing energy in the balancing settlement interval i [EUR];

$s_{mFRR-,akt,i}$ – value of activated negative mFRR balancing energy in the balancing settlement interval i [EUR];

M – settlement period, as defined in Article 108, paragraph 2 of these Terms and Conditions for

BSPs.

6.8. Consequences of non-compliance with the Terms and Conditions

Procedure for the assessment and calculation of consequences of non-compliance with the Terms and Conditions

Article 103

- (1) The TSO shall assess and calculate for the BSP the consequences arising due to:
 1. failure to submit bids for mFRR balancing energy;
 2. inadequate mFRR response in the activation phase.
- (2) Minute averages of data from the TSO control system (SCADA on the TSO side) shall be used for the assessment and calculation of consequences.
- (3) The TSO shall provide the BSP with data for the previous day for review no later than eight hours after the end of the following day. The BSP shall review the submitted data and notify the TSO if it agrees with the submitted data, or otherwise submit an objection and a proposal for corrections. Confirmation of the data or any objection must be submitted to the TSO on each working day no later than 13:00 hours, except on weekends and public holidays. Data for weekends and public holidays must be reviewed no later than 13:00 hours on the first following working day. The TSO reserves the right, following prior publication on its website, to amend the rules regarding the deadline by which the BSP must submit confirmation or lodge an objection.
- (4) Where the BSP proposes corrections, the TSO shall, based on the justification and comparison with other data, decide whether to accept the corrections or retain the data submitted by the TSO to the BSP. The decision of the TSO shall be final and shall not be subject to reconciliation with the BSP, unless the TSO explicitly requests reconciliation with the BSP.
- (5) Where the TSO does not have data on quantities or where its data on quantities are manifestly incorrect, the TSO may:
 1. use the data provided by the BSP;
 2. adjust the data, using in a reasonable manner the available data from neighbouring time intervals;
 3. use data determined on the basis of the historical behaviour of the BSP.In this case, the TSO shall endeavour to reconcile the data used with the BSP. Where reconciliation is not possible, the TSO shall determine the final data independently on the basis of one of the principles referred to in this paragraph or a combination thereof and shall inform the BSP accordingly.

**Assessment and calculation of consequences of failure to submit bids for
mFRR balancing energy
Article 104**

- (1) Failure to submit bids for mFRR balancing energy shall mean a situation where the BSP, in accordance with Article 73, paragraph 6, does not submit a bid for

mFRR balancing energy in the balancing settlement interval i by the deadline specified in Article 94, paragraph 3 of these Terms and Conditions for BSPs.

- (2) The quantity of unsubmitted bids for positive and negative mFRR balancing energy for the balancing settlement interval i ($R_{mFRR+,zak,i}$ and $R_{mFRR-,zak,i}$) shall be calculated as the difference between the quantity of mFRR balancing capacity procured from the BSP at auction, transfers of capacity between BSPs, mFRR balancing capacity allocated in accordance with Article 13, and the quantity of submitted bids for mFRR balancing energy that the BSP has submitted to the Platform, by applying the following formula:

$$R_{mFRR+,zak,i} = \max \left(\sum_{k \in P_+} P_{mFRR+,zak,bid\ k,i} + \sum_{p \in PUB_+,purch} P_{mFRR+,p,i} + \sum_{k \in D_+} P_{mFRR+,dod,k,i} - \sum_{p \in PUB_+,sell} P_{mFRR+,p,i} - \sum_{k \in E_+} P_{mFRR+,akt,bid\ k,i} ; 0 \right)$$

$$R_{mFRR-,zak,i} = \max \left(\sum_{k \in P_-} P_{mFRR-,zak,bid\ k,i} + \sum_{p \in PUB_-,purch} P_{mFRR-,p,i} + \sum_{k \in D_-} P_{mFRR-,dod,k,i} - \sum_{p \in PUB_-,sell} P_{mFRR-,p,i} - \sum_{k \in E_-} P_{mFRR-,akt,bid\ k,i} ; 0 \right)$$

Where:

$R_{mFRR+,zak,i}$ – missing volume of submitted bids for positive mFRR balancing energy in the balancing interval i [MW, rounded to ten decimal places];

$R_{mFRR-,zak,i}$ – missing volume of submitted bids for negative mFRR balancing energy in the balancing interval i [MW, rounded to ten decimal places];

$P_{mFRR+,akt,bid\ k,i}$ – quantity of the accepted bid k at the auction for positive mFRR balancing energy in the balancing interval i ; the bid shall be taken into account only if it was available for more than half of the balancing interval i [MW, positive value, rounded to ten decimal places];

$P_{mFRR-,akt,bid\ k,i}$ – quantity of the accepted bid k at the auction for negative mFRR balancing energy in the balancing interval i ; the bid shall be taken into account only if it was available at least until the beginning of the balancing interval i [MW, positive value, rounded to ten decimal places];

$P_{mFRR+,zak,bid\ k,i}$ – quantity of the selected bid k at the auction for positive mFRR balancing capacity in the balancing interval i [MW, positive value, rounded to ten decimal places];

$P_{mFRR-,zak,bid\ k,i}$ – quantity of the selected bid k at the auction for negative mFRR balancing capacity in the balancing interval i [MW, positive value, rounded to ten decimal places];

$P_{mFRR+,dod,k,i}$ – quantity of allocated positive mFRR balancing capacity in accordance with Article 13;

$P_{mFRR-,dod,k,i}$ – quantity of allocated negative mFRR balancing capacity in accordance with Article 13;

k – k -th bid in the auction for positive or negative mFRR balancing capacity or mFRR energy;

$P_{mFRR+,p,i}$, $P_{mFRR-,p,i}$ – quantity of the p -th transfer of positive or negative mFRR balancing capacity in the balancing interval i to or from the BSP for which the missing positive and negative balancing capacity is calculated [MW, positive value, rounded to ten decimal places];

$PUB_{+,purch}$, $PUB_{-,purch}$ – set of transfers of positive or negative mFRR balancing capacity to the BSP for which the missing positive and negative balancing capacity is calculated in the balancing interval i ;

$PUB_{+,sell}$, $PUB_{-,sell}$ – set of transfers of positive or negative mFRR balancing capacity from the BSP for which the missing positive and negative balancing capacity is calculated to other BSPs in the balancing interval i ;

p – p -th transfer of balancing capacity to or from the BSP for which the missing positive and negative balancing capacity is calculated;

P_+ , P_- – set of selected bids of the BSP at the auction for positive or negative mFRR balancing capacity in the balancing interval i ;

E_+ , E_- – set of accepted bids of the BSP at the auction for positive or negative mFRR balancing energy in the balancing interval i , which the TSO may directly activate (DAPA bids);

D_+ , D_- – set of allocated positive or negative mFRR balancing capacity of the BSP in the balancing interval i .

- (3) The value of the consequence of failure to submit sufficient quantities of bids for mFRR balancing energy in the balancing settlement interval i shall be calculated by applying the following formula:

$$PEN_{mFRR+,zak,i} = R_{mFRR+,zak,i} * C_{mFRR+,zak,i} * F_{mFRR,zak}$$

$$PEN_{mFRR-,zak,i} = R_{mFRR-,zak,i} * C_{mFRR-,zak,i} * F_{mFRR,zak}$$

Where:

$PEN_{mFRR+,zak,i}$ – value of the consequence of failure to submit bids for positive mFRR balancing energy in the balancing interval i [EUR, rounded to two decimal places];

$PEN_{mFRR-,zak,i}$ – value of the consequence of failure to submit bids for negative mFRR balancing energy in the balancing interval i [EUR, rounded to two decimal places];

$R_{mFRR+,zak,i}$ – missing volume of submitted bids for positive mFRR balancing energy in the balancing interval i [MW];

$R_{mFRR-,zak,i}$ – missing volume of submitted bids for negative mFRR balancing energy in the balancing interval i [MW];

$C_{mFRR+,zak,i}$ – price for positive mFRR balancing capacity in the balancing interval i , determined as the highest price of the accepted bid for mFRR balancing capacity applicable to that interval in the given direction, irrespective of the method of procurement of balancing capacity (auction, replacement procedure, etc.), divided by the number of balancing intervals covered by the price of mFRR balancing capacity [EUR/MW, rounded to ten decimal places];

$C_{mFRR-,zak,i}$ – price for negative mFRR balancing capacity in the balancing interval i , determined as the highest price of the accepted bid for mFRR balancing capacity applicable to that interval in the given direction, irrespective of the method of procurement of balancing capacity (auction, replacement procedure, etc.), divided by the number of balancing intervals covered by the price of mFRR balancing capacity [EUR/MW, rounded to ten decimal places];

$F_{mFRR,zak}$ – contractual penalty factor for failure to submit bids for mFRR balancing energy, where $F_{mFRR,zak} = 2$.

- (4) By way of exception, in the case of implementation of the procedure pursuant to Article 13, paragraphs 3 or 7, the consequence of failure to submit sufficient quantities of bids for mFRR balancing energy in the balancing settlement interval i shall be calculated in accordance with Annex 1.
- (5) The total value of the consequences of failure to submit bids for mFRR balancing energy in the settlement period M ($PEN_{mFRR,zak,M}$) shall be calculated as the sum of the values of the consequences of failure to submit bids for mFRR balancing energy in all intervals i belonging to the settlement period M , by applying the following formula:

$$PEN_{mFRR,zak,M} = \sum_{i \in M} (PEN_{mFRR+,zak,i} + PEN_{mFRR-,zak,i})$$

Where:

$PEN_{mFRR,zak,M}$ – value of the consequences of failure to submit bids for mFRR balancing energy in the settlement period M [EUR, rounded to two decimal places];

$PEN_{mFRR+,zak,i}$ – value of the consequences of failure to submit bids for positive mFRR balancing energy in the balancing settlement interval i [EUR];

$PEN_{mFRR-,zak,i}$ – value of the consequences of failure to submit bids for negative mFRR balancing energy in the balancing settlement interval i [EUR];

M – settlement period, as defined in Article 108, paragraph 2 of these Terms and Conditions for BSPs.

Assessment and calculation of consequences of inadequate mFRR response

Article 105

- (1) Activation of mFRR balancing capacity shall be considered inadequate when the BSP does not reach the requested activation power $P_{Z,a}$ no later than five minutes after the requested activation start time $t_{Z,a}$. This means that the value of the realised balancing capacity of the BSP in the time interval $[t_{Z+5,a}, t_{Z+6,a}]$ is lower than the requested activation power $P_{Z,a}$ in the case of positive mFRR activation, or higher than the requested activation power in the case of negative mFRR activation.
- (2) The recognised schedule for determining the realised mFRR balancing capacity shall be the last accepted schedule prior to the notification of mFRR activation. In the event that there are multiple mFRR activations within one time interval, the schedule shall be determined by the first of the announced activations. If, within a given balancing settlement interval i , one or more direct activations are carried out that continue into the following balancing settlement interval $i+1$,

the first of these shall determine the schedule for the following balancing settlement interval $i+1$.

- (3) For the determination of the realised mFRR balancing capacity for the purposes of quality control of mFRR power activation, minute data of the recognised schedules of control groups, measurements of realised (measured) power of control groups, as well as other data necessary for determining the operation of an individual control group during the activation period shall be used, for example, the base power of control groups that simultaneously participate in the provision of aFRR.
- (4) The realised mFRR balancing capacity shall be determined at the level of control groups, taking into account only those control groups that actually participated in the provision of the mFRR service.
- (5) Participation in the provision of mFRR shall be determined on the basis of the participation status signal of the control group in mFRP, whereby it shall be considered that the group participated in minute t if the participation signal was active throughout the entire minute t .
- (6) Measurements of realised power of mFRR control groups, the participation status of control groups in the provision of mFRR and the participation of control groups in other balancing services shall be obtained by the TSO from the TSO control system (SCADA).
- (7) The realised mFRR balancing capacity of a control group shall be determined in two different ways, depending on whether the same control group simultaneously participates in the provision of aFRR or not. The realised mFRR balancing capacity of control group j in minute t shall be determined as follows:

$$P_{mFRR,j,t} = \begin{cases} (P_{aFRR,base,j,t} - P_{VR,j,t}) * State_{mFRR,j,t} & \text{for } State_{aFRR,j,t} = 1 \\ \left(P_{real,j,t} - \frac{W_{FCR,j,t}}{\Delta t} - P_{VR,j,t} \right) * State_{mFRR,j,t} & \text{for } State_{aFRR,j,t} = 0 \text{ ili } j \notin J_{mFRR+aFRR} \end{cases}$$

Where:

$P_{mFRR,j,t}$ - realised mFRR balancing capacity of control group j in minute t [MW, rounded to ten decimal places];

$P_{aFRR,base,j,t}$ - average base power of control group j in minute t [MW, rounded to ten decimal places];

$P_{real,j,t}$ - realised (measured) power of control group j in minute t [MW, rounded to ten decimal places];

$P_{VR,j,t}$ - power from the recognised schedule of control group j in minute t [MW, rounded to ten decimal places];

$W_{FCR,j,t}$ - activated FCR balancing energy of control group j that participated in the provision of FCR in minute t , calculated in accordance with Article 33, paragraph 6 of these Terms and Conditions for BSPs [MWh];

$State_{mFRR,j,t}$ - mFRR provision status of control group j in minute t [$State_{mFRR,j,t}$ equals 1 when control group j provides mFRR, otherwise 0]

$State_{aFRR,j,t}$ - aFRR provision status of control group j in minute t [$State_{aFRR,j,t}$ equals 1 when control group j provides aFRR, otherwise 0];

j - control group j ;

J - set of control groups providing mFRR within the BSP portfolio;

$J_{mFRR+aFRR}$ - set of control groups providing mFRR that are simultaneously qualified to provide aFRR;

Δt - duration of the interval for which energy is calculated (one minute, i.e. 1/60 h).

- (8) The total realised mFRR balancing capacity in minute t shall be determined as the sum of mFRR balancing capacities of all control groups of the BSP as follows:

$$P_{mFRR,t} = \sum_j P_{mFRR,j,t}$$

Where:

$P_{mFRR,t}$ - realised mFRR balancing capacity of the entire BSP portfolio in minute t [MW, rounded to ten decimal places];

$P_{mFRR,j,t}$ - realised mFRR balancing capacity of control group j in minute t [MW];

j - control group j ;

J - set of all control groups providing mFRR within the BSP portfolio.

- (9) The requested balancing capacity of the a -th activation of mFRR balancing capacity in minute t ($P_{Z,a,t}$) shall be determined as follows:

$$P_{Z,a,t} = \begin{cases} P_{Z,a} & \text{za } t_{Z+5,a} \leq t \leq t_{K-5,a} \\ 0 & \text{the rest} \end{cases}$$

Where:

$P_{Z,a,t}$ - requested balancing capacity of the a -th activation of positive or negative mFRR balancing energy in minute t [MW, rounded to ten decimal places];

$P_{Z,a}$ - requested capacity of the a -th activation of positive or negative mFRR balancing energy [MW; positive value in the case of positive mFRR activation, negative value in the case of negative mFRR activation, rounded to ten decimal places];

$t_{Z+5,a}$ - activation start time increased by 5 minutes [hh:mm];

$t_{K-5,a}$ - activation end time decreased by 5 minutes [hh:mm];

a - a -th activation of positive or negative mFRR balancing energy.

- (10) The total requested balancing capacity in minute t ($P_{SZ,t}$) shall be the sum of the requested balancing capacities of all activations a that are at full power in that minute, i.e. for which $t_{Z+5,a} \leq t \leq t_{K-5,a}$.

$$P_{SZ,t} = \sum_{a \in A} P_{Z,a,t}$$

Where:

$P_{SZ,t}$ - total requested balancing capacity of activation of positive or negative mFRR balancing energy in minute t [MW, rounded to ten decimal places];

$P_{Z,a,t}$ - requested balancing capacity of the a -th activation in minute t [MW];

a – a -th activation of mFRR balancing energy;
 A – set of all direct and scheduled activations a .

(11) The missing balancing capacity for an individual activation a shall be calculated as follows:

$$R_{mFRR,akt,a} = \begin{cases} \max(P_{SZ,tZ+5,a} - P_{mFRR,tZ+5,a}; 0); & \text{za } P_{Z,a} > 0 \text{ i } INA_{tZ+5} = 0 \\ |\min(P_{SZ,tZ+5,a} - P_{mFRR,tZ+5,a}; 0)|; & \text{za } P_{Z,a} < 0 \text{ i } INA_{tZ+5} = 0 \\ 0; & INA_{tZ+5} = 1 \end{cases}$$

Where:

$R_{mFRR,akt,a}$ – missing mFRR balancing capacity of the a -th activation in the activation phase [MW, rounded to ten decimal places];

$P_{SZ,tZ+5}$ – total requested capacity of positive or negative mFRR activation at $tZ+5$ [MW; positive value for positive mFRR activation, negative value for negative mFRR activation, rounded to three decimal places];

INA_{tZ+5} – indicator of opposite mFRR activation (simultaneous activation of positive and negative mFRR) at $tZ+5$. The indicator INA_{tZ+5} has the value 1 when, in minute $tZ+5,a$ during activation a , there is also an activation b in the opposite balancing direction, whereby activation b is considered to exist in minutes in which it has activated power according to the diagram (i.e., during the time from $tZ-5,b$ to $tK+5,b$);

tZ – activation start time [hh:mm];

$tZ+5$ – activation start time increased by 5 minutes [hh:mm];

$P_{mFRR,tZ+5}$ – value of the realised balancing capacity of the BSP in the time interval $[tZ+5, tZ+6]$ [MW, rounded to ten decimal places];

$P_{Z,a}$ – requested capacity of the a -th activation of positive or negative mFRR [MW; positive value in the case of positive mFRR activation, negative value in the case of negative mFRR activation, rounded to ten decimal places].

(12) The value of the consequence of inadequate activation of mFRR balancing energy ($PEN_{mFRR,akt,a}$) for the a -th activation shall be calculated by applying the following formula:

$$PEN_{mFRR,akt,a} = R_{mFRR,akt,a} * F_{mFRR,akt}$$

Where:

$PEN_{mFRR,akt,a}$ – value of the consequence of inadequate activation of mFRR balancing energy for the a -th activation [EUR, rounded to two decimal places];

$R_{mFRR,akt,a}$ – missing mFRR balancing capacity of the a -th activation in the activation phase [MW];
 a – a -th activation of positive or negative mFRR balancing energy (scheduled or direct activation);

$F_{mFRR,akt}$ – consequence factor for inadequate activation of mFRR balancing capacity, where $F_{mFRR,akt} = 100$ EUR.

(13) The total value of the consequences of inadequate activation of mFRR balancing energy in the settlement period M ($PEN_{mFRR,akt,M}$) shall be calculated as the sum of the values of the consequences of unsuccessful activations of mFRR balancing

energy for all activations in the settlement period M , by applying the following formula:

$$PEN_{mFRR,akt,M} = \sum_{a \in A} PEN_{mFRR,akt,a}$$

Where:

$PEN_{mFRR,akt,M}$ - value of the consequences of all inadequate activations of mFRR balancing energy in the settlement period M [EUR, rounded to two decimal places];

$PEN_{mFRR,akt,a}$ - value of the consequence of inadequate activation of mFRR balancing capacity for the a -th activation [EUR];

a - a -th activation of positive or negative mFRR balancing energy (scheduled or direct activation) activated in the settlement period M ;

A - set of activations of positive or negative mFRR balancing energy in the settlement period M ;

M - settlement period, as defined in Article 108, paragraph 1 of these Terms and Conditions for BSPs.

- (14) If the BSP communication system is unavailable for reasons attributable to the BSP, due to which the TSO cannot obtain the relevant data, the mFRR activation shall be considered fully unsuccessful, which the TSO shall take into account when calculating the consequences of unsuccessful activation of mFRR balancing capacity.

Determination of the total value of consequences for non-compliance with the Terms and Conditions for mFRR

Article 106

The total value of consequences of non-compliance with the Terms and Conditions for mFRR in settlement period M ($PEN_{mFRR,M}$) shall be equal to the sum of the values $PEN_{mFRR,zak,M}$ and $PEN_{mFRR,akt,M}$ of that settlement period.

Failure to provide the contracted volume of mFRR balancing capacity

Article 107

- (1) If the BSP does not provide the contracted volume of mFRR balancing capacity continuously for the entire period for which it offers mFRR balancing capacity in accordance with Article 73 paragraph 6 of these Terms and Conditions for BSPs, the TSO may reduce the volume of technical capability or even revoke the validity of the Certificate of fulfilment of technical requirements of the BSP for the provision of mFRR.

- (2) As of the date of revocation of the Certificate of recognition of technical capability of the BSP for the provision of mFRR, the obligation of the BSP to provide mFRR shall cease to be valid or shall be revoked.
- (3) The TSO shall offer the revoked quantity referred to in paragraph 2 of this Article at the next auction for mFRR balancing capacity.
- (4) In the cases referred to in paragraph 1 of this Article, the TSO shall calculate the higher amount of the following options:
 1. the difference between the value of the cheapest mFRR balancing capacity procured through auctions by which the TSO compensates for the amended obligation of the BSP and the value of the procured mFRR balancing capacity of the amended obligation for the period from the change of obligation until the term for which the obligation was contracted;
 2. 20% of the value of mFRR balancing capacity procured through auctions from the change of obligation for the period from revocation or change of obligation until the term for which the obligation was contracted.

6.9. Invoicing and financial settlement for mFRR

Determination of the settlement period, invoicing and payment procedures Article 108

- (1) The settlement period for mFRR balancing capacity and consequences of non-compliance with the Terms and Conditions for BSPs shall be one month and shall run from 00:00 hours on the first day of the month until 24:00 hours on the last day of the month.
- (2) The settlement period for mFRR balancing energy shall be one month and shall run from 00:00 hours on the first day of the month until 24:00 hours on the last day of the month.
- (3) The TSO shall submit the calculation for procured mFRR balancing capacity to the BSP no later than the seventh working day after the end of the settlement period.
- (4) On the basis of the calculation referred to in paragraph 3 of this Article, the BSP shall issue an invoice to the TSO no later than the tenth working day after the end of the settlement period.

- (5) The TSO shall submit to the BSP the calculation of consequences of non-compliance with the provisions of these Terms and Conditions for BSPs no later than the seventh working day after the end of the settlement period.
- (6) The TSO shall submit to the BSP the calculation for activated mFRR balancing energy no later than five working days after the expiry of the settlement period.
- (7) Depending on the direction and price of the activated mFRR balancing energy bid, the TSO and/or the BSP shall issue an invoice for activated mFRR balancing energy, determined in accordance with the Terms and Conditions for BSPs, no later than two working days after receiving the calculation data from the TSO.
- (8) Invoices shall be delivered by electronic mail to the addresses specified in accordance with the Auction Rules.
- (9) The payment deadline shall be 10 days from the issuance of the invoice. If the due date falls on a non-working day (Saturday, Sunday, a public holiday in Montenegro or a day when the European payment and settlement system in EUR is not operational), the due date shall be postponed to the first following working day.
- (10) Before payment is made, the TSO and the BSP may carry out financial netting (set-off of claims), if there are receivables and liabilities for the same type of service.

7. REPLACEMENT RESERVE (RR)

General principles

Article 109

- (1) Replacement reserve (RR) represents active power reserve available for the restoration or maintenance of the required FRR level in order to ensure readiness for additional system imbalance of the power system.
- (2) The TSO performs the purchase and sale of RR balancing energy for the purpose of releasing aFRR and mFRR regulating ranges.
- (3) The TSO does not procure RR balancing capacity.

Procurement of RR balancing energy

Article 110

- (1) The TSO procures RR balancing energy on the basis of concluding individual purchase agreements with RR service providers.
- (2) RR service providers may be all interested balance responsible parties in Montenegro that conclude a framework agreement on the provision of RR service with the TSO.
- (3) RR service providers submit bids for RR balancing energy with activation prices to the TSO via the Platform.
- (4) Bids for RR balancing energy shall be submitted for a period of one hour, no later than 55 minutes before the start of the balancing settlement interval in which the delivery period begins.
- (5) The offered quantity of RR balancing energy shall not be less than 1 MW for the entire delivery period.
- (6) Bids may be submitted independently by direction of delivery, i.e. for delivery of balancing energy to the TSO and for reception of RR balancing energy from the TSO.
- (7) In the event that an RR service provider is simultaneously a qualified BSP, the provision of RR service shall not jeopardise the provision of FCR, aFRR and mFRR balancing services.

Activation procedure

Article 111

- (1) After the TSO collects bids for RR balancing energy via the Platform (H-55 min), in the event of a need for activation, the TSO activates the most economically favourable bid.
- (2) The deadline for activation of RR balancing energy by the TSO is 40 minutes before the balancing settlement interval in which the delivery period begins, whereby this deadline may be shorter subject to prior agreement with the RR service provider.
- (3) The activated energy referred to in paragraph (2) shall be reported as a correction of the schedule between the TSO and the RR service provider to the market operator.

Settlement of RR balancing energy, invoicing and payment procedures

Article 112

- (1) The settlement period for RR balancing energy shall be one month and shall run from 00:00 hours on the first day of the month until 24:00 hours on the last day of the month.
- (2) The TSO shall submit to the RR service provider a report on activated RR balancing energy as the sum of all activated bids with the corresponding prices from Article 110 paragraph 3, no later than five working days after the end of the settlement period.
- (3) Depending on the direction and price of the activated RR balancing energy bid, the TSO and/or the RR service provider shall issue an invoice for activated RR balancing energy no later than two working days after receipt of the settlement data from the TSO.
- (4) Invoices shall be delivered by electronic mail to the addresses specified in the framework agreement referred to in Article 110 paragraph 2.
- (5) The payment deadline shall be 10 days from the issuance of the invoice. If the due date falls on a non-working day (Saturday, Sunday, a public holiday in Montenegro or a day when the European payment and settlement system in EUR is not operational), the due date shall be postponed to the first following working day.

8. TRANSITIONAL AND FINAL PROVISIONS

Transitional and final provisions

Article 113

- (1) These Terms and Conditions for BSPs shall enter into force on the eighth day following their publication in the Official Gazette of Montenegro, and shall apply upon expiry of a period of thirty days from the date of publication on the official website of the TSO.
- (2) The procedures set out in these Terms and Conditions for BSPs shall apply to balancing settlement periods starting from 1 January 2027.
- (3) By way of derogation from paragraph (1) of this Article, for balancing settlement periods up to 31 December 2026, the provisions of the Methodology for determining prices, deadlines and conditions for the provision of ancillary services and balancing services of the electricity transmission system (Official Gazette of Montenegro, No. 71/22 and 37/23) shall apply.
- (4) The provisions of contracts on ancillary services and procurement of balancing energy concluded prior to the entry into force of these Terms and Conditions for BSPs, which relate to balancing of the power system, shall remain in force until 31 December 2026.
- (5) As of the date of adoption of these Terms and Conditions for BSPs, the Methodologies for determining prices, deadlines and conditions for the provision of ancillary services and balancing services of the electricity transmission system (Official Gazette of Montenegro, No. 71/22 and 37/23) shall cease to be valid.

**ANNEX 1: Procurement of balancing services in the event of
the absence of competition or unsuccessful market
procurement**

General principles

Article 1

- (1) Balancing Service Providers (hereinafter referred to as: BSPs), at the request of the Transmission System Operator (hereinafter referred to as: TSO), in accordance with Article 13 paragraph 3 or 7 of the Terms and Conditions for Balancing Service Providers on the balancing services market of Montenegro (hereinafter referred to as: Terms and Conditions for BSPs), shall be obliged to conclude a contract on the provision of balancing services under the conditions set out in this Annex 1.
- (2) The TSO shall define the required FCR, aFRR and mFRR balancing capacity in accordance with Article 13 paragraph 1 of the Terms and Conditions for BSPs.
- (3) The duration of the balancing settlement interval shall be 15 min.

Price of balancing capacity for FCR

Article 2

- (1) The price of the allocated FCR balancing capacity in a given settlement interval shall be calculated by applying the following formula:

$$C_{FCR,zak,i} = k_{FCR} * HUPX_i \quad za \quad C_{FCR,max} \geq k_{FCR} * HUPX_i \geq C_{FCR,min}$$

$$C_{FCR,zak,i} = C_{FCR,min} \quad za \quad k_{FCR} * HUPX_i < C_{FCR,min}$$

$$C_{FCR,zak,i} = C_{FCR,max} \quad za \quad k_{FCR} * HUPX_i > C_{FCR,max}$$

Where:

$C_{FCR,zak,i}$ - price of the allocated FCR balancing capacity for the range in balancing settlement interval i , [(€/MW)/h];

k_{FCR} - opportunity cost factor of the BSP due to providing FCR balancing capacity;

$HUPX_i$ - day-ahead market price on the Hungarian Power Exchange (HUPX) for the relevant balancing settlement interval [€/MWh];

$C_{FCR,min}$ - minimum price of the allocated FCR balancing capacity, [€/MWh];

$C_{FCR,max}$ - maximum price of the allocated FCR balancing capacity.

- (2) The settlement of balancing capacity shall be carried out in accordance with Article 34 of the Terms and Conditions for BSPs.
- (3) The assessment and calculation of consequences due to missing FCR balancing capacity (unavailability of FCR balancing capacity) shall be carried out in accordance with Article 37 of the Terms and Conditions for BSPs.
- (4) The opportunity cost factor and the minimum and maximum price of balancing capacity for FCR shall be determined by the Regulatory Agency for Energy and Regulated Utilities (hereinafter referred to as: the Agency), at the request of the TSO. Together with the request for determination of the opportunity cost factor

and the minimum and maximum price of FCR balancing capacity, the TSO shall submit the “Mechanism for the formation of balancing reserve capacity prices based on the forecast of opportunity costs”, which has been reviewed by an independent expert institution in the field of energy.

- (5) The elements referred to in paragraph 4 of this Article shall be determined on an annual basis, on the basis of data for the three consecutive calendar years preceding the year of submission of the request for determination of the opportunity cost factor and the minimum and maximum price of FCR balancing capacity.
- (6) The request for determination of the opportunity cost factor and the minimum and maximum price of FCR balancing capacity shall be submitted by the TSO once a year, no later than 60 days before the beginning of the calendar year for which those elements are determined.
- (7) By way of exception, the procedure for determining the elements referred to in paragraph 4 of this Article, upon the proposal of the TSO, may also be carried out within the period to which those elements relate, i.e. during the year in which the already determined opportunity cost factor and the minimum and maximum price of FCR balancing capacity are applied.

Price of balancing capacity (aFRR)

Article 3

- (1) The price of the allocated aFRR balancing capacity for upward regulation in a given balancing settlement interval shall be the same for all BSPs in Montenegro and shall be calculated by applying the following formula:

$$C_{aFRR+,zak,i} = k_{aFRR+} * HUPX_i \quad za \quad C_{aFRR+,max} \geq k_{aFRR+} * HUPX_i \geq C_{aFRR+,min}$$

$$C_{aFRR+,zak,i} = C_{aFRR+,min} \quad za \quad k_{aFRR+} * HUPX_i < C_{aFRR+,min}$$

$$C_{aFRR+,zak,i} = C_{aFRR+,max} \quad za \quad k_{aFRR+} * HUPX_i > C_{aFRR+,max}$$

Where:

$C_{aFRR+,zak,i}$ - price of the allocated aFRR+ balancing capacity for upward regulation in balancing settlement interval i , [(€/MW)/h];

k_{aFRR+} – opportunity cost factor of the BSP due to providing aFRR+ balancing capacity;

$HUPX_i$ – day-ahead market price on the Hungarian Power Exchange (HUPX) for the relevant balancing settlement interval [€/MWh];

$C_{aFRR+,min}$ – minimum price of the allocated aFRR+ balancing capacity, [€/MWh];

$C_{aFRR+,max}$ – maximum price of the allocated aFRR+ balancing capacity.

- (2) The price of the allocated aFRR- balancing capacity for downward regulation in a given balancing settlement interval i shall be the same for all BSPs in Montenegro and shall be calculated by applying the following formula:

$$C_{aFRR-,zak,i} = (2 * C_{aFRR-,min} - k_{aFRR-} * HUPX_i) \text{ za } C_{aFRR-,max} \geq (2 * C_{aFRR-,min} - k_{aFRR-} * HUPX_i) \\ \geq C_{aFRR-,min}$$

$$C_{aFRR-,zak,i} = C_{aFRR-,min} \text{ za } (2 * C_{aFRR-,min} - k_{aFRR-} * HUPX_i) < C_{aFRR-,min}$$

$$C_{aFRR-,zak,i} = C_{aFRR-,max} \text{ za } (2 * C_{aFRR-,min} - k_{aFRR-} * HUPX_i) > C_{aFRR-,max}$$

Where:

$C_{aFRR-,zak,i}$ - price of the allocated aFRR- balancing capacity for downward regulation in balancing settlement interval i , [(€/MW)/h];

k_{aFRR-} - opportunity cost factor of the BSP due to providing aFRR- balancing capacity;

$HUPX_i$ - price of electricity on the day-ahead market – Hungarian Power Exchange (HUPX), for the relevant balancing settlement interval [€/MWh];

$C_{aFRR-,min}$ – minimum price of the allocated aFRR- balancing capacity, [€/MWh];

$C_{aFRR-,max}$ – maximum price of the allocated aFRR- balancing capacity, [€/MWh];

- (3) The opportunity cost factor and the minimum and maximum price of balancing capacity for aFRR shall be determined by the Agency at the request of the TSO. Together with the request for determination of the opportunity cost factor and the minimum and maximum price of aFRR balancing capacity, the TSO shall submit the “Mechanism for the formation of balancing reserve capacity prices based on the forecast of opportunity costs”, which has been reviewed by an independent expert institution in the field of energy.
- (4) The elements referred to in paragraph 3 of this Article shall be determined on an annual basis, on the basis of data for the three consecutive calendar years preceding the year of submission of the request for determination of the opportunity cost factor and the minimum and maximum price of aFRR balancing capacity.
- (5) The request for determination of the opportunity cost factor and the minimum and maximum price of aFRR balancing capacity shall be submitted by the TSO once a year, no later than 60 days before the beginning of the calendar year for which those elements are determined.
- (6) By way of exception, the procedure for determining the elements referred to in paragraph 4 of this Article, upon the proposal of the TSO, may also be carried out within the period to which those elements relate, i.e. during the year in which the already determined opportunity cost factor and the minimum and maximum price of aFRR balancing capacity are applied.

Submission of bids for aFRR balancing energy

Article 4

- (1) The BSP shall submit bids for aFRR balancing energy to the Platform, which is operated and supervised by the TSO.
- (2) The price of activated aFRR balancing energy for upward regulation in a given balancing settlement interval i shall be limited and may not exceed the price determined on the basis of the following formula:

$$C_{aFRR+,akt,i} = 1,4 * HUPX_i \text{ za } HUPX_i \geq EEX_{HU,AVG,m}$$

$$C_{aFRR+,akt,i} = 1,4 * EEX_{HU,AVG,m} \text{ za } HUPX_i < EEX_{HU,AVG,m}$$

$$EEX_{HU,AVG,m} = \frac{EEX_{HU,m} + EEX_{HU,m+1} + EEX_{HU,m+2}}{3}$$

Where:

$C_{aFRR+,akt,i}$ – maximum permitted price of aFRR+ balancing energy for upward regulation in balancing settlement interval i , [(€/MW)/h];

$HUPX_i$ – day-ahead market price on the Hungarian Power Exchange (HUPX) for the relevant balancing settlement interval [€/MWh];

$EEX_{HU,AVG,m}$ - opportunity price for month m ;

$EEX_{HU,m}$ – price of baseload electricity futures (Settlement price) on the derivatives market (European Energy Exchange) for the Hungarian bidding zone (Hungarian Power Future), on day D , for month m [€/MWh];

$EEX_{HU,m+1}$ – price of baseload electricity futures (Settlement price) on the derivatives market (European Energy Exchange) for the Hungarian bidding zone (Hungarian Power Future), on day D , for month $m + 1$ [€/MWh];

$EEX_{HU,m+2}$ – price of baseload electricity futures (Settlement price) on the derivatives market (European Energy Exchange) for the Hungarian bidding zone (Hungarian Power Future), on day D , for month $m + 2$ [€/MWh];

D – penultimate day of trading in monthly baseload energy futures in the month preceding the month in which interval i is located;

m - month in which balancing settlement interval i is located (Jan, Feb... - Dec).

- (3) The price of activated aFRR balancing energy for downward regulation in a given balancing settlement interval i shall be limited and may not be lower than the price determined on the basis of the following formula:

$$C_{aFRR-,akt,i} = 0,6 * HUPX_i \text{ za } (0,6 * HUPX_i) \leq EEX_{HU,AVG,m} \text{ \& } HUPX_i \neq 0$$

$$C_{aFRR+,akt,i} = EEX_{HU,AVG,m} \text{ za } 0,6 * HUPX_i > EEX_{HU,AVG,m}$$

$$EEX_{HU,AVG,m} = \frac{EEX_{HU,m} + EEX_{HU,m+1} + EEX_{HU,m+2}}{3}$$

$$C_{aFRR-,akt,i} = 0,01 \text{ €/MWh za } HUPX_{hi} = 0$$

Where:

$C_{aFRR-,akt,i}$ – minimum permitted price of aFRR- balancing energy for downward regulation in balancing settlement interval i [(€/MW)/h];

$HUPX_i$ – price of electricity on the day-ahead market of the Hungarian Power Exchange (HUPX) for the relevant balancing settlement interval [(€/MWh)];

$EEX_{HU,AVG,m}$ - opportunity price for month m ;

$EEX_{HU,m}$ – price of baseload electricity futures (Settlement price) on the derivatives market (European Energy Exchange) for the Hungarian bidding zone (Hungarian Power Future), on day D , for month m [(€/MWh)];

$EEX_{HU,m+1}$ – price of baseload electricity futures (Settlement price) on the derivatives market (European Energy Exchange) for the Hungarian bidding zone (Hungarian Power Future), on day D , for month $m + 1$ [(€/MWh)];

$EEX_{HU,m+2}$ – price of baseload electricity futures (Settlement price) on the derivatives market (European Energy Exchange) for the Hungarian bidding zone (Hungarian Power Future), on day D , for month $m + 2$ [(€/MWh)];

D – penultimate day of trading in monthly baseload energy futures in the month preceding the month in which interval i is located;

m - month in which balancing settlement interval i is located (Jan, Feb... - Dec).

- (4) By way of exception, if the service is provided by a run-of-river hydropower plant, at inflows exceeding the installed capacity of the plant, the price of activated aFRR balancing energy for downward regulation in a given balancing settlement interval i ($C_{aFRR-,akt,i}$) may be lower than the price referred to in paragraph (3) of this Article, but not lower than 0.01 €/MWh.
- (5) Upon activation of aFRR balancing energy for upward regulation in a given balancing settlement interval i , the TSO shall pay the BSP, while for activation of aFRR balancing energy for downward regulation in a given balancing settlement interval i , the BSP shall pay the TSO.
- (6) By way of exception to paragraph 5 of this Article, where the price $C_{aFRR+,akt,i}$ is lower than 0 €/MWh upon activation of aFRR balancing energy for upward regulation, the BSP shall pay the TSO, and where the price $C_{aFRR-,akt,i}$ is lower than 0 €/MWh upon activation of aFRR balancing energy for downward regulation, the TSO shall pay the BSP.

Failure to submit bids for aFRR balancing energy

Article 5

- (1) Where aFRR balancing capacity has been procured in accordance with Article 13 paragraph 3 or 7 of the Terms and Conditions for BSPs (allocated procurement), the quantity of the non-submitted bid for aFRR balancing energy for balancing settlement interval i (unavailability of aFRR balancing

capacity - $R_{aFRR,zak,i}$) which the BSP is obliged to submit shall be calculated as the difference between the quantity of aFRR balancing capacity allocated in accordance with Article 13 of the Terms and Conditions for BSPs and the quantity of submitted bids for aFRR balancing energy which the BSP submitted to the Platform within the given deadline in accordance with Article 4 of this Annex, by applying the following formula:

$$R_{aFRR+,i} = \max(P_{aFRR+,dod,i} - P_{aFRR+,bid,i}; 0)$$

$$R_{aFRR-,i} = \max(P_{aFRR-,dod,i} - P_{aFRR-,bid,i}; 0)$$

Where:

$R_{aFRR+,i}$ - missing volume of submitted bids for positive aFRR balancing energy in balancing settlement interval "i" [MW];

$R_{aFRR-,i}$ - missing volume of submitted bids for negative aFRR balancing energy in balancing settlement interval "i" [MW];

$P_{aFRR+,bid,i}$ - quantity of submitted bids in accordance with Article 4, for positive aFRR balancing energy in balancing settlement interval "i";

$P_{aFRR-,bid,i}$ - quantity of submitted bids in accordance with Article 4, for negative aFRR balancing energy in balancing settlement interval "i";

$P_{aFRR+,dod,k,i}$ - quantity of allocated balancing capacity for the aFRR+ regulation service in accordance with Article 13 of the Terms and Conditions for BSPs;

$P_{aFRR-,dod,k,i}$ - quantity of allocated balancing capacity for the aFRR- regulation service in accordance with Article 13 of the Terms and Conditions for BSPs.

(2) In the event of failure to submit bids for balancing energy in an amount equal to or greater than the amount of allocated balancing capacity, the TSO shall not pay the supplier the compensation for the allocated balancing capacity, for each MW not submitted.

(3) Where aFRR balancing capacity has been procured in accordance with Article 13 paragraph 3 or 7 of the Terms and Conditions for BSPs, the quantity of the non-submitted bid for aFRR balancing energy for balancing settlement interval i (unavailability of aFRR balancing capacity - $R_{aFRR,zak,i}$), determined in accordance with paragraph 1 of this Article, shall be subject to financial penalisation by applying the following formula:

$$PEN_{aFRR+,zak,i} = R_{aFRR+,i} * C_{aFRR+,zak,i} * F_{aFRR+,zak}$$

$$PEN_{aFRR-,zak,i} = R_{aFRR-,i} * C_{aFRR-,zak,i} * F_{aFRR-,zak}$$

Where:

$PEN_{aFRR+,zak,i}$ - value of the consequence of failure to submit bids for positive aFRR balancing energy in balancing interval i [EUR, rounded to two decimal places];

$PEN_{aFRR-,zak,i}$ - value of the consequence of failure to submit bids for negative aFRR balancing energy in balancing interval i [EUR, rounded to two decimal places];

$R_{aFRR+,i}$ – missing volume of submitted bids for positive aFRR balancing energy in balancing interval i [MW];

$R_{aFRR-,i}$ – missing volume of submitted bids for negative aFRR balancing energy in balancing interval i [MW];

$C_{aFRR+,zak,i}$ – price of the allocated aFRR+ balancing capacity for upward regulation in balancing settlement interval i , [(€/MW)/h];

$C_{aFRR-,zak,i}$ – price of the allocated aFRR- balancing capacity for downward regulation in balancing settlement interval i , [(€/MW)/h];

$F_{aFRR+,zak}$ – contractual penalty factor due to failure to submit bids for aFRR balancing energy, where:

$$F_{aFRR+,zak} = \begin{cases} 0 & \text{za } 75\% \leq \frac{P_{aFRR+,bid,M}}{P_{aFRR+,dod,M}} \\ 0,5 & \text{za } 50\% \leq \frac{P_{aFRR+,bid,M}}{P_{aFRR+,dod,M}} < 75\% \\ 0,75 & \text{za } 25\% \leq \frac{P_{aFRR+,bid,M}}{P_{aFRR+,dod,M}} < 50\% \\ 1 & \text{za } \frac{P_{aFRR+,bid,M}}{P_{aFRR+,dod,M}} < 25\% \end{cases} \quad F_{aFRR-,zak}$$

$$= \begin{cases} 0 & \text{za } 75\% \leq \frac{P_{aFRR-,bid,M}}{P_{aFRR-,dod,M}} \\ 0,5 & \text{za } 50\% \leq \frac{P_{aFRR-,bid,M}}{P_{aFRR-,dod,M}} < 75\% \\ 0,75 & \text{za } 25\% \leq \frac{P_{aFRR-,bid,M}}{P_{aFRR-,dod,M}} < 50\% \\ 1 & \text{za } \frac{P_{aFRR-,bid,M}}{P_{aFRR-,dod,M}} < 25\% \end{cases}$$

$P_{aFRR+,bid,M}$ – sum of the quantities of bids submitted in accordance with Article 4, in the auction for positive aFRR balancing energy in each balancing settlement interval for settlement period M ;

$P_{aFRR-,bid,i}$ – sum of the quantities of bids submitted in accordance with Article 4, in the auction for negative aFRR balancing energy in each balancing settlement interval for settlement period M ;

$P_{aFRR+,dod,k,i}$ – sum of the quantities of allocated balancing capacity for the aFRR+ regulation service in accordance with Article 13 of the Terms and Conditions for BSPs in each balancing settlement interval for settlement period M ;

$P_{aFRR-,dod,k,i}$ – sum of the quantities of allocated balancing capacity for the aFRR- regulation service in accordance with Article 13 of the Terms and Conditions for BSPs in each balancing settlement interval for settlement period M .

Price of mFRR balancing capacity

Article 6

- (1) The price of the allocated mFRR balancing capacity for upward regulation in a given balancing settlement interval shall be the same for all BSPs in Montenegro and shall be calculated by applying the following formula:

$$C_{mFRR+,zak,i} = k_{mFRR+} * HUPX_i \text{ za } C_{mFRR+,max} \geq k_{mFRR+} * HUPX_i \geq C_{mFRR+,min}$$

$$C_{mFRR+,zak,i} = C_{mFRR+,min} \text{ za } k_{mFRR+} * HUPX_i < C_{mFRR+,min}$$

$$C_{mFRR+,zak,i} = C_{mFRR+,max} \text{ za } k_{mFRR+} * HUPX_i > C_{mFRR+,max}$$

Where:

$C_{mFRR+,zak,i}$ - price of the allocated mFRR+ balancing capacity for upward regulation in balancing settlement interval i , [(€/MW)/h];

k_{mFRR+} - opportunity cost factor of the BSP due to providing mFRR+ balancing capacity;

$HUPX_i$ - day-ahead market price on the Hungarian Power Exchange (HUPX) for the relevant balancing settlement interval [€/MWh].

$C_{mFRR+,min}$ - minimum price of the allocated mFRR+ balancing capacity, [€/MWh];

$C_{mFRR+,max}$ - maximum price of the allocated mFRR+ balancing capacity.

- (2) The price of the allocated mFRR- balancing capacity for downward regulation in a given balancing settlement interval i shall be the same for all BSPs in Montenegro and shall be calculated by applying the following formula:

$$C_{mFRR-,zak,i} = (2 * C_{mFRR-,min} - k_{mFRR-} * HUPX_i) \text{ za } C_{mFRR-,max} \geq (2 * C_{mFRR-,min} - k_{mFRR-} * HUPX_i) \geq C_{mFRR-,min}$$

$$C_{mFRR-,zak,i} = C_{mFRR-,min} \text{ za } (2 * C_{mFRR-,min} - k_{mFRR-} * HUPX_i) < C_{mFRR-,min}$$

$$C_{mFRR-,zak,i} = C_{mFRR-,max} \text{ za } (2 * C_{mFRR-,min} - k_{mFRR-} * HUPX_i) > C_{mFRR-,max}$$

Where:

$C_{mFRR-,zak,i}$ - price of the allocated mFRR- balancing capacity for downward regulation in balancing settlement interval i , [(€/MW)/h];

k_{mFRR-} - opportunity cost factor of the BSP due to providing mFRR- balancing capacity;

$HUPX_i$ - price of electricity on the day-ahead market – Hungarian Power Exchange (HUPX), for the relevant hour [€/MWh], where $i=1,2,...,24$;

C_{min} - minimum price of mFRR- balancing capacity, [€/MWh];

C_{max} - maximum price of mFRR- balancing capacity, [€/MWh];

- (3) The opportunity cost factor and the minimum and maximum price of balancing capacity for mFRR shall be determined by the Agency at the request of the TSO. Together with the request for determination of the opportunity cost factor and the minimum and maximum price of mFRR balancing capacity, the TSO shall submit the “Mechanism for the formation of balancing reserve capacity prices based on the forecast of opportunity costs”, which has been reviewed by an independent expert institution in the field of energy.
- (4) The elements referred to in paragraph 3 of this Article shall be determined on an annual basis, on the basis of data for the three consecutive calendar years

preceding the year of submission of the request for determination of the opportunity cost factor and the minimum and maximum price of mFRR balancing capacity.

- (5) The request for determination of the opportunity cost factor and the minimum and maximum price of mFRR balancing capacity shall be submitted by the TSO once a year, no later than 60 days before the beginning of the calendar year for which those elements are determined.
- (6) By way of exception, the procedure for determining the elements referred to in paragraph 4 of this Article, upon the proposal of the TSO, may also be carried out within the period to which those elements relate, i.e. during the year in which the already determined opportunity cost factor and the minimum and maximum price of mFRR balancing capacity are applied.

Submission of bids for mFRR balancing energy

Article 7

- (1) The BSP shall submit bids for mFRR balancing energy to the Platform, which is operated and supervised by the TSO.
- (2) The price of activated mFRR balancing energy for upward regulation in a given balancing settlement interval i shall be limited and may not exceed the price determined on the basis of the following formula:

$$C_{mFRR+,akt,i} = 1,3 * HUPX_i \text{ za } HUPX_i \geq EEX_{HU,AVG,m}$$

$$C_{mFRR+,akt,i} = 1,3 * EEX_{HU,AVG,m} \text{ za } HUPX_i < EEX_{HU,AVG,m}$$

$$EEX_{HU,AVG,m} = \frac{EEX_{HU,m} + EEX_{HU,m+1} + EEX_{HU,m+2}}{3}$$

Where:

$C_{mFRR+,akt,i}$ – maximum permitted price of mFRR+ balancing energy for upward regulation in balancing settlement interval i , [(€/MW)/h];

$HUPX_i$ – day-ahead market price on the Hungarian Power Exchange (HUPX) for the relevant balancing settlement interval [€/MWh];

$EEX_{HU,AVG,m}$ – opportunity price for month m ;

$EEX_{HU,m}$ – price of baseload electricity futures (Settlement price) on the derivatives market (European Energy Exchange) for the Hungarian bidding zone (Hungarian Power Future), on day D , for month m [€/MWh];

$EEX_{HU,m+1}$ – price of baseload electricity futures (Settlement price) on the derivatives market (European Energy Exchange) for the Hungarian bidding zone (Hungarian Power Future), on day D , for month $m + 1$ [€/MWh];

$EEX_{HU,m+2}$ – price of baseload electricity futures (Settlement price) on the derivatives market (European Energy Exchange) for the Hungarian bidding zone (Hungarian Power Future), on day D , for month $m+2$ [€/MWh];

D – penultimate day of trading in monthly baseload energy futures in the month preceding the month in which interval i is located;

m – month in which balancing settlement interval i is located (Jan, Feb... - Dec).

- (3) The price of activated mFRR balancing energy for downward regulation in a given balancing settlement interval i shall be limited and may not be lower than the price determined on the basis of the following formula:

$$C_{mFRR-,akt,i} = 0,7 * HUPX_i \text{ za } 0,7 * HUPX_i \leq EEX_{HU,AVG,m} \ \& \ HUPX_i \neq 0$$

$$C_{mFRR+,akt,i} = EEX_{HU,AVG,m} \text{ za } (0,7 * HUPX_i) > EEX_{HU,AVG,m}$$

$$EEX_{HU,AVG,m} = \frac{EEX_{HU,m} + EEX_{HU,m+1} + EEX_{HU,m+2}}{3}$$

$$C_{mFRR-,akt,i} = 0,01 \text{ €/MWh za } HUPX_{hi} = 0$$

Where:

$C_{mFRR-,akt,i}$ – minimum permitted price of mFRR- balancing energy for downward regulation in balancing settlement interval i [(€/MW)/h];

$HUPX_i$ – day-ahead market price on the Hungarian Power Exchange (HUPX) for the relevant balancing settlement interval [€/MWh];

$EEX_{HU,AVG,m}$ – opportunity price for month m ;

$EEX_{HU,m}$ – price of baseload electricity futures (Settlement price) on the derivatives market (European Energy Exchange) for the Hungarian bidding zone (Hungarian Power Future), on day D , for month m [€/MWh];

$EEX_{HU,m+1}$ – price of baseload electricity futures (Settlement price) on the derivatives market (European Energy Exchange) for the Hungarian bidding zone (Hungarian Power Future), on day D , for month $m+1$ [€/MWh];

$EEX_{HU,m+2}$ – price of baseload electricity futures (Settlement price) on the derivatives market (European Energy Exchange) for the Hungarian bidding zone (Hungarian Power Future), on day D , for month $m+2$ [€/MWh];

D – penultimate day of trading in monthly baseload energy futures in the month preceding the month in which interval i is located;

m – month in which balancing settlement interval i is located (Jan, Feb... - Dec).

- (4) By way of exception, if the service is provided by a run-of-river hydropower plant, at inflows exceeding the installed capacity of the plant, the price of activated mFRR balancing energy for downward regulation in a given balancing settlement interval i ($C_{mFRR-,akt,i}$) may be lower than the price determined in accordance with paragraph (3) of this Article, but not lower than 0.01 €/MWh.
- (5) Upon activation of mFRR balancing energy for upward regulation in a given balancing settlement interval i , the TSO shall pay the BSP, while for activation of

mFRR balancing energy for downward regulation in a given balancing settlement interval i , the BSP shall pay the TSO.

- (6) By way of exception to paragraph 5 of this Article, where the price $C_{mFRR+,akt,i}$ is lower than 0 €/MWh upon activation of mFRR balancing energy for upward regulation, the BSP shall pay the TSO, and where the price $C_{mFRR-,akt,i}$ is lower than 0 €/MWh upon activation of mFRR balancing energy for downward regulation, the TSO shall pay the BSP.

Failure to submit bids for mFRR balancing energy

Article 8

- (1) Where mFRR balancing capacity has been procured in accordance with Article 13 paragraph 3 or 7 of the Terms and Conditions for BSPs (allocated procurement), the quantity of the non-submitted bid for mFRR balancing energy for balancing settlement interval i (unavailability of mFRR balancing capacity - $R_{mFRR,zak,i}$) which the BSP is obliged to submit shall be calculated as the difference between the quantity of mFRR balancing capacity allocated in accordance with Article 13 of the Terms and Conditions for BSPs and the quantity of submitted bids for mFRR balancing energy which the BSP submitted to the Platform within the given deadline in accordance with Article 7 of this Annex, by applying the following formula:

$$R_{mFRR+,i} = \max(P_{mFRR+,dod,i} - P_{mFRR+,bid,i}; 0)$$

$$R_{mFRR-,i} = \max(P_{mFRR-,dod,i} - P_{mFRR-,bid,i}; 0)$$

Where:

$R_{mFRR+,i}$ - missing volume of submitted bids for positive mFRR balancing energy in balancing settlement interval "i" [MW];

$R_{mFRR-,i}$ - missing volume of submitted bids for negative mFRR balancing energy in balancing settlement interval "i" [MW];

$P_{mFRR+,bid,i}$ - quantity of submitted bids in accordance with Article 7 of this Annex, for positive mFRR balancing energy in balancing settlement interval "i";

$P_{mFRR-,bid,i}$ - quantity of submitted bids in accordance with Article 7 of this Annex, for negative mFRR balancing energy in balancing settlement interval "i";

$P_{mFRR+,dod,k,i}$ - quantity of allocated balancing capacity for the mFRR+ regulation service in accordance with Article 13 of the Terms and Conditions for BSPs;

$P_{mFRR-,dod,k,i}$ – quantity of allocated balancing capacity for the mFRR- regulation service in accordance with Article 13 of the Terms and Conditions for BSPs.

- (2) In the event of failure to submit bids for balancing energy in an amount equal to or greater than the amount of allocated balancing capacity, the TSO shall not pay the BSP the compensation for the allocated balancing capacity, for each MW not submitted.
- (3) (1) Where mFRR balancing capacity has been procured in accordance with Article 13 paragraph 3 or 7 of the Terms and Conditions for BSPs, the quantity of the non-submitted bid for mFRR balancing energy for balancing settlement interval i (unavailability of mFRR balancing capacity - $R_{mFRR,zak,i}$), determined in accordance with paragraph 1 of this Article, shall be subject to financial penalisation by applying the following formula:

$$PEN_{mFRR+,zak,i} = R_{mFRR+,i} * C_{mFRR+,zak,i} * F_{mFRR+,zak}$$

$$PEN_{mFRR-,zak,i} = R_{mFRR-,i} * C_{mFRR-,zak,i} * F_{mFRR-,zak}$$

Where:

$PEN_{mFRR+,zak,i}$ – value of the consequence of failure to submit bids for positive mFRR balancing energy in balancing interval i [EUR, rounded to two decimal places];

$PEN_{mFRR-,zak,i}$ – value of the consequence of failure to submit bids for negative mFRR balancing energy in balancing interval i [EUR, rounded to two decimal places];

$R_{mFRR+,i}$ – missing volume of submitted bids for positive mFRR balancing energy in balancing interval i [MW];

$R_{mFRR-,i}$ – missing volume of submitted bids for negative mFRR balancing energy in balancing interval i [MW];

$C_{mFRR+,zak,i}$ – price of the allocated mFRR+ balancing capacity for upward regulation in balancing settlement interval i , [(€/MW)/h];

$C_{mFRR-,zak,i}$ – price of the allocated mFRR- balancing capacity for downward regulation in balancing settlement interval i , [(€/MW)/h];

$F_{mFRR+,zak}$ – contractual penalty factor due to failure to submit bids for mFRR balancing energy, where:

$$F_{mFRR+,zak} = \begin{cases} 0 & \text{za } 75\% \leq \frac{P_{mFRR+,bid,M}}{P_{mFRR+,dod,M}} \\ 0,5 & \text{za } 50\% \leq \frac{P_{mFRR+,bid,M}}{P_{mFRR+,dod,M}} < 75\% \\ 0,75 & \text{za } 25\% \leq \frac{P_{mFRR+,bid,M}}{P_{mFRR+,dod,M}} < 50\% \\ 1 & \text{za } \frac{P_{mFRR+,bid,M}}{P_{mFRR+,dod,M}} < 25\% \end{cases} \quad F_{mFRR-,zak} = \begin{cases} 0 & \text{za } 75\% \leq \frac{P_{mFRR+,bid,M}}{P_{mFRR+,dod,M}} \\ 0,5 & \text{za } 50\% \leq \frac{P_{mFRR+,bid,M}}{P_{mFRR+,dod,M}} < 75\% \\ 0,75 & \text{za } 25\% \leq \frac{P_{mFRR+,bid,M}}{P_{mFRR+,dod,M}} < 50\% \\ 1 & \text{za } \frac{P_{mFRR+,bid,M}}{P_{mFRR+,dod,M}} < 25\% \end{cases}$$

$P_{mFRR+,bid,M}$ – sum of the quantities of bids submitted in accordance with Article 7, in the auction for positive mFRR balancing energy in each balancing settlement interval for settlement period M ;

$P_{mFRR-,bid,i}$ – sum of the quantities of bids submitted in accordance with Article 7, in the auction for negative mFRR balancing energy in each balancing settlement interval for settlement period M ;

$P_{mFRR+,dod,k,i}$ – sum of the quantities of allocated balancing capacity for the mFRR+ regulation service in accordance with Article 13 of the Terms and Conditions for BSPs in each balancing settlement interval for settlement period M ;

$P_{mFRR-,dod,k,i}$ – sum of the quantities of allocated balancing capacity for the mFRR- regulation service in accordance with Article 13 of the Terms and Conditions for BSPs in each balancing settlement interval for settlement period M .