



EXPLANATORY NOTE ON THE PUBLIC CONSULTATION OF THE PROPOSAL OF AMENDMENTS OF THE T&C BSP AFRR

ELIA

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PRACTICAL INFORMATION

This note serves as an explanation for the current consultation on the **proposal for amendments to the Terms and Conditions for balancing service providers for the Frequency Restoration Reserve Service with automatic activation** (hereafter referred to as “T&C BSP aFRR”). The purpose of this consultation is to obtain comments from the market parties. At the end of the public consultation, Elia will send a consultation report to the CREG and will publish a non-confidential version on its website.

All responses to this public consultation will be made public on Elia’s website, except those comments for which market parties ask to treat their contribution as confidential. However, all responses to this public consultation will be submitted to the relevant regulatory authorities in the context of the official approval procedure¹ for the T&C BSP aFRR.

Elia invites all stakeholders to submit any comments and suggestions they may have on the documents submitted for consultation. The consultation period runs from 27 February 2024 to 29 March 2024. All responses must be submitted via the online form on the Elia website. The proposal for amendments to the T&C BSP aFRR is available for consultation on the Elia website.

¹ Article 6(3) of Regulation 2017/2195 of 23 November 2017 establishing a guideline on electricity balancing

1. Introduction

This proposal for amendments to the Terms and Conditions for balancing service providers for the Frequency Restoration Reserve Service with automatic activation (T&C BSP aFRR) consists of:

- Amendments relative to the connection to the aFRR Platform;
- Amendments relative to the reduction of the full activation time to 5 minutes;
- Amendments relative to moving the capacity auction from D-2 to D-1;
- Amendments relative to the method for activating aFRR energy bids;
- Amendments relative to the possibility to use a real-time baseline;
- Amendments relative to the participation of low-voltage Delivery Points;
- Amendments relative to enabling a future application of Transfer of Energy for the aFRR market segment;
- A number of other smaller amendments.

The proposed amendments have been discussed with stakeholders during two dedicated workshops:

- the workshop that took place on 19th of September 2023²; and
- the workshop that took place on 12th of October 2023³.

To increase readability of the proposal for amendment and in order to specify the implementation planning of the different amendments:

- the amendments relative to the connection to the aFRR Platform are highlighted in turquoise;
- the amendments relative to the change of the (default) full activation time from 7,5 minutes to 5 minutes are highlighted in yellow;
- the amendments relative to moving the capacity auction from D-2 to D-1 are highlighted in grey;
- the amendments relative to the aFRR activation method, the possibility to use a real-time baseline, the participation of low-voltage Delivery Points and the possible future application of Transfer of Energy are highlighted in green;
- all other amendments are not highlighted.

Section 2 of this explanatory note provides more information related to the different amendments contained in the proposal for amendment of the T&C BSP aFRR.

Section 3 provides more information related to the implementation planning of the different amendments proposed.

² The slides presented during the workshop of 19/9/2023 are available on the [Elia website](#)

³ The slides presented during the workshop of 12/10/2023 are available on the [Elia website](#).

2. Proposed amendments

2.1. Proposed amendments relative to the connection to the aFRR Platform

Currently, the aFRR service is organized locally. In accordance with Article 21 of the Regulation 2017/2195 establishing a guideline on electricity balancing (EBGL), all European TSOs must develop a European platform for the exchange of aFRR balancing energy.

First, the connection of Elia to the aFRR Platform requires an **amendment to the remuneration of balancing energy as described in Art. II.16** of the T&C BSP aFRR. Specifically, the remuneration of balancing energy needs to evolve **from paid-as-bid to paid-as-cleared** in line with European regulation⁴. In addition, an **Annex 14** that describes the **remuneration of balancing energy in case of fallback**, i.e., in case Elia is disconnected from the aFRR Platform or in case Elia cannot perform the merit order activation due to technical constraints, **is added to the T&C BSP aFRR**.

Second, in **Annex 9**, the **general bid price limits of +1000€/MWh and -1000€/MWh currently applicable for all upward/downward balancing energy bids have been released**. Instead, **temporary bid price limits of +1000€/MWh and -1000€/MWh that are applicable solely for contracted aFRR energy bids are introduced locally**. **These temporary bid price limits for contracted energy bids are needed** (at least in the short term) **to limit the risk of drastic cost increases for Balance Responsible Parties (BRPs) and consumers following the connection to the aFRR Platform**. Indeed, in 2022, an analysis performed by Elia revealed a significant risk for drastic cost increases following the adoption of marginal pricing and the relaxation of the general bid price limit for aFRR energy bids as needed for the connection to the aFRR Platform. This risk, which was confirmed in 2023, is particularly strong in Belgium given the fact that Belgium has a limited aFRR merit order that is largely/fully activated on a regular basis (in particular in moments where there is no or limited cross-zonal transmission capacity available in the required direction). As presented in the workshops that took place on 19th of September 2023 and the 12th of October 2023, Elia proposed a solution in which the identified risk is effectively mitigated via a combination of the introduction of temporary bid price limits for contracted aFRR energy bids and the application of an elastic demand for aFRR balancing energy.

It must further be noted that:

- The **bid price limits for contracted energy bids do not prevent the application of marginal pricing**, i.e., all aFRR energy bids (contracted and non-contracted) are remunerated at the cross-border marginal price, which could exceed the level of the bid price limits;
- The **application of bid price limits for contracted energy bids is considered a temporary measure** required as long as there might not be sufficient competition to maintain bid prices

⁴ In accordance with Article 30(1)(a) of EBGL, all TSOs established a methodology for pricing balancing energy and cross-zonal capacity used for the exchange of balancing energy or operating the imbalance netting process that is based on marginal pricing (paid-as-cleared principle).

to acceptable and cost-reflective levels, at least up to volumes that are frequently activated to cover relatively limited system imbalances. In this regard, the proposal for amendment specifies that Elia shall evaluate the application of the bid price limits on contracted balancing energy bids based on objective criteria such as the degree of competition in the Belgian and/or European market for aFRR balancing energy on a regular basis and elaborate a process to discuss the results of said evaluations with the CREG and the market participants. If appropriate on the basis of the results of these evaluations, Elia shall propose a relaxation or removal of the bid price limits on contracted balancing energy bids in a subsequent proposal for amendment of the T&C BSP aFRR;

- The application of an elastic demand for aFRR balancing energy is not part of the proposal for amendments to the T&C BSP aFRR, but will be part of a proposal for amendment to the Balancing Rules.

2.2. Proposed amendments relative to the reduction of the full activation time to 5 minutes

Currently, the full activation time (FAT) for aFRR Balancing Energy bids in Belgium equals 7,5 minutes. However, Article 7(3) of the Implementation Framework for aFRR specifies that, starting from 18th of December, the FAT of the standard aFRR balancing energy product shall be 5 minutes.

In this regard, the **proposal for amendment entails a change of the FAT from 7,5 minutes to 5 minutes**. This leads to **changes in Article II.1, Article II.19, Annex 6, Annex 9, Annex 12 and Annex 13**.

It must be noted that the change of the FAT from 7,5 minutes to 5 minutes impacts the default ramping rate that will be applied for determining the aFRR Requested signal sent to the BSP. In this regard, BSPs are expected to take into account the change in the FAT and the possible impact this change has on the volumes that can be offered.

The 5-minute FAT will also be applied in prequalification and availability tests. However, it must be noted that Delivery Points that are currently already prequalified do not need to be re-prequalified following the change of the FAT.

2.3. Proposed amendments relative to moving the capacity auction to D-1

In 2021, the all-CCTU and Single-CCTU aFRR capacity auctions were merged into a single auction that took place at 16h00 on D-2. At that moment, a choice was made to have the aFRR capacity auction before the FCR auction to avoid that certain assets might have to cover their fixed costs in the FCR auction. In parallel, Elia committed to monitoring market conditions in the FCR market with the ambition to move the aFRR capacity auction to 9h00 on D-1 when the risks for the FCR auction is considered to be sufficiently mitigated.

Given the developments in the FCR markets, Elia considers it is now suitable to move the aFRR capacity auction to 9h00 on D-1. Having an aFRR capacity auction in D-1 allows BSPs to better forecast their

available volume (and/or corresponding costs) and is a prerequisite to enable the dynamic dimensioning of aFRR as described in the LFC Block Operational Agreement.

The proposal for amendment of the T&C BSP aFRR contains an amendment of **Annex 7** in order to describe the **move of the aFRR capacity auctions to 9h00 on D-1** and the corresponding adaptations of the related publications.

2.4. Proposed amendments relative to the aFRR activation method

In the [study on the aFRR activation method carried out by Elia in 2022](#), different methods for the activation of aFRR energy bids have been analyzed (notably the so-called control request and control target approaches). The study finally recommended maintaining a control request approach while at the same time giving the option to BSPs to specify a ramping period shorter than the default full activation time (FAT), and this on the level of an individual aFRR Energy Bid.

In this regard, the proposal for amendment of the T&C BSP aFRR:

- **introduces the new optional bid characteristics representing the ramping period during the activation and the deactivation phase of the bid (Section II.1)**
- **describes how the new bid characteristics are used for calculating the aFRR Requested signal sent to the BSP** and describes **the rules related to this new bid characteristic**, i.e., that the ramping period specified by the BSP needs to be smaller than the applicable default FAT, and that the ramping period specified by the BSP for deactivation shall be smaller than or equal to the ramping period specified by the BSP for the activation phase (**Annex 9.A**).
- describes the **required amendment in the method for identifying jumps in the aFRR Requested signal** that leads to the exclusion of certain Time Steps from the calculation of the aFRR Energy Discrepancy (**Annex 13.A**). Indeed, a change in this process is needed as the current process could lead to identifying fast ramps as jumps, leading to unjustified exclusions from the activation control.

2.5. Proposed amendments relative to the possibility to use a real-time baseline

BSPs that submit aFRR balancing energy bids need to submit a baseline for each Delivery Point and for each 4-second timestep. Currently, this baseline needs to be sent one minute before real-time (i.e., the baseline sent in time step ts-15 will apply for time step ts). In the [study on baseline methodologies carried out by Elia in 2021](#), it was concluded that for certain assets (e.g., certain wind parks), it might not be feasible to submit a sufficiently accurate baseline one minute in advance. To overcome this potential barrier for participation, the study recommended to give the possibility to BSPs, under certain conditions and for specific Delivery Points, to calculate and submit the baseline in real-time instead of one minute in advance.

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In this context, the **proposal for amendment of the T&C BSP aFRR introduces the possibility for BSPs to make use of a real-time baseline in line with the recommendation of the earlier study**. More specifically, the proposed amendments:

- Describe the process for requesting the possibility to use a real-time baseline for one or more Delivery Points and the conditions under which Elia can accept the use of a real-time baseline; and
- Describe the process of choosing the application of a real-time baseline for one or more Delivery Points (once the possibility to use a real-time baseline has been accepted).

This leads to amendments in **Article II.3** and **Annex 4, Annex 9.G**, as well as the introduction of a **new Annex 2.E**.

2.6. Proposed amendments relative to the participation of low-voltage Delivery Points

The T&C BSP aFRR is currently already open to all technologies and voltage levels. However, in practice, the FSP-DSO contract currently prevents low-voltage Delivery Points (i.e., Delivery Points connected to a voltage level of 1kV or below) to participate to aFRR. A proposal to relieve this constraint in the FSP-DSO contract has recently been publicly consulted⁵. In addition, a proposal to amend among others the technical requirements for the measurement system for Delivery Points connected to the distribution grid (and in particular for small assets that are typically found at low-voltage level) and to amend the procedure for the Network Flex Study (NFS study) has been publicly consulted⁶.

Following these evolutions, the number of individual Delivery Points participating to the aFRR service could potentially drastically increase. In this context, the proposed amendments to the T&C BSP aFRR aim to remove certain barriers for participation as well as mitigating the impact related to the potential drastic increase of the amount of Delivery Points and corresponding data flows on all IT-tools involved. Specifically, the proposed amendments to the T&C BSP aFRR could facilitate the operational bidding process for BSPs and could strongly reduce the impact on the involved IT tools. To do so, the proposed amendments foresee a framework to group Delivery Points DP_{PG} connected at low-voltage level below 1 kilovolt into a so-called aFRR Low-Voltage Delivery Point Group. As such, BSPs could simply list the

⁵ The information related to the proposed amendments can be found on the [Synergrid website](#).

⁶ The information related to the proposed amendments can be found on the [Synergrid website](#).

aFRR Low-Voltage Delivery Point Group(s) instead of listing a large amount of individual Delivery Points when submitting an aFRR Energy Bid using Delivery Points connected at the low-voltage level.

To this end, the proposal for amendment of the T&C BSP aFRR:

- defines the concept of the aFRR Low-Voltage Delivery Point Group (**Art. II.1**);
- specifies the process of creating one or more aFRR Low-Voltage Delivery Point Groups and specifies that Delivery Points DP_{PG} connected to a Distribution Grid at a voltage level of 1 kilovolt or below need to be grouped in an aFRR Low-Voltage Delivery Point Group (**Art. II.3** and **Annex 4**);
- specifies that the aFRR Low-Voltage Delivery Point Group needs to have a minimum size of 100 kW when used for:
 - a) the prequalification test (**Art. II.8**);
 - b) the submission of aFRR Energy Bids⁷ (**Art. II.11** and **Annex 9**);
- specifies that for the processes of the baseline test and the prequalification test, all Delivery Points DP_{PG} included in the aFRR Low-Voltage Delivery Point Group must participate together (**Art. II.7** and **Art. II.8**);
- specifies that the BSP needs to include the aFRR Low-Voltage Delivery Point Group (instead of all underlying Delivery Points) when submitting an aFRR Energy Bid (**Annex 9**).

It is important to highlight that:

- The BSP has the choice to create one or multiple aFRR Low-Voltage Delivery Point Groups;
- The BSP can combine a given aFRR Low-Voltage Delivery Point Group with another aFRR Low-Voltage Delivery Point Group and/or one or more Delivery Points of the type DP_{PG} connected at medium or high voltage level in his portfolio when participating to a baseline test, prequalification test or in aFRR Energy Bids (i.e., the general notion of Providing Group remains the same).

⁷ The minimum size of 100 kW for an aFRR Low-Voltage Delivery Point Group participating in an aFRR Energy Bid does not change the minimum offered volume of an aFRR Energy Bid that remains to be 1 MW. However, one or more aFRR Low-Voltage Delivery Point Groups, together with DP_{PG} connected at higher voltage levels can be used to offer aFRR Energy Bids.

- The communication requirements are not impacted and hence the BSP needs to maintain sending information related to the individual Delivery Points DP_{PG} included in an aFRR Low-Voltage Delivery Point Group per 4-second timestep (e.g., the DP_{aFRR} , $DP_{measured}$ and $DP_{baseline}$).⁸
- The activation control remains unchanged and based on the individual Delivery Points DP_{PG} included in the aFRR Energy Bid (explicitly or implicitly via the Low-Voltage Delivery Point Group) for which the DP_{aFRR} is set to one for the concerned time step.

2.7. Proposed amendments relative to enabling a future application of Transfer of Energy for the aFRR market segment

Currently, Delivery Points DP_{PG} can only be part of the aFRR pool of the BSP in case:

- the BSP also takes up the roles of BRP_{source} , Supplier and BRP_{BSP} for the Delivery Point (i.e., in case of an implicit opt out);
- the BSP provides a proof of an Opt-out agreement obtained between the BSP, the BRP_{source} , the Supplier and the BRP_{BSP} (i.e., in case of an explicit opt out);
- the Delivery Point is linked to an Access Point included in a Pass Through Contract.

No Transfer of Energy framework, enabling a general access to the market independent of the Supplier and the BRP_{source} of the Delivery Point, is currently implemented for aFRR.

With the proposed amendments to **Art. II.4** of the T&C BSP aFRR, **Elia opens the door to a future application of Transfer of Energy (with financial compensation based on correction of the metering or with financial compensation between the Supplier and the BSP) for the aFRR market segment from the moment the ToE Rules would be adapted in this sense** (as presented by Elia in the [Working Group CCMD of November 14th 2023](#)).

⁸ From an IT perspective, the aFRR Low-Voltage Delivery Point Group concept enables the calculation of aggregated information on the level of the aFRR Low-Voltage Delivery Point Group. As such, the handling of large amounts of data can be limited to a limited number of applications, thereby preventing an impact on other applications.

2.8. Other amendments

Next to the amendments described above, several smaller amendments to the T&C BSP aFRR have been included in this proposal for amendment.

First, **certain amendments are proposed as a follow-up of the conclusions of the [2023 study on prequalification, control and penalties for the aFRR and mFRR Services](#)**. Specifically, the following 3 amendments are proposed⁹:

- In **Annex 6**, Elia proposes to reduce the time window during which the prequalification test can be triggered from 24h to 4h. In this way, Elia aims to facilitate the prequalification process, among others for industrial processes and intermittent renewable generation that struggle at being available for 24 hours on end. It must be noted that the newly prequalified volumes remain valid for all CCTUs as BSPs are expected to consider the actual availability of the volume in their bidding strategies.
- In **Annex 6**, Elia proposes to enable performing two independent prequalification tests with the same Delivery Point or Providing Group in opposite directions. Indeed, a strict reading of the current T&C BSP aFRR is that the same unit/providing group can only perform either a prequalification test in the upward direction, a prequalification test in the downward direction or a symmetric prequalification in both directions (i.e., with the same volumes in both directions). In this amendment, Elia clarifies that BSPs are allowed to use the same Delivery Point or Providing group to perform a separate upward and downward prequalification test with different volumes in both directions. These separate upward and downward prequalification test can be scheduled in consecutive 4-hour time windows or can be scheduled in different moments. As such, the possibility to schedule separate prequalification tests provides maximal flexibility for BSPs. For example, BSPs are enabled to schedule the prequalification test in a given direction in a moment where the availability in this direction is guaranteed and the operating point (baseline) and/or energy reservoir level is most suitable for performing the prequalification test in this direction. It must further be noted that the existing combined upward and downward prequalification test with symmetric volumes is maintained as an option for BSPs for which it would be more convenient to perform a single symmetric prequalification test.

⁹ It must be noted that the 2023 study on prequalification, control and penalties for the aFRR and mFRR Services contained additional recommendations. In line with the implementation plan of the study, the amendments related to these recommendations are not part of this proposal of amendment but are foreseen to be included in the next revision of the T&C BSP aFRR.

- In **Annex 12**, Elia proposes to authorize a baseline modification during the occurrence of an aFRR availability test under the condition that the BSPs provides a sound ex-post justification to Elia.

Second, in **Annex 9.A**, the rule stipulating that a Delivery Point DP_{PG} included in an aFRR Energy Bid for a certain quarter hour cannot be included in an mFRR energy bid or supporting mFRR Providing Group for the same quarter hour has been removed. With this amendment, **Elia aims to enable an activation-combo of mFRR and aFRR in the future**. It must be noted that such an activation combo is not yet allowed as amendments are needed in the T&C BSP mFRR (and corresponding implementations would need to be performed). However, by removing this rule in the T&C BSP aFRR, Elia aims to avoid that the need for an amendment of the T&C BSP aFRR (in addition to the required amendments to the T&C BSP mFRR) would result in a delayed implementation of the combo in the future.

Third, a number of amendments have been performed in order to be coherent with the recent amendments of the T&C SA, the T&C BSP mFRR, the Balancing Rules and the Rules for Coordination and Congestion Management. For instance, this proposal for amendment describes the impacts of the congestion risk indicator (CRI) on the BSP¹⁰.

3. Implementation planning

As presented in the Working Group Balancing meeting of 14th of November 2023 and 7th of February 2024, Elia foresees three go-lives related to the different amendments proposed:

- The connection to the aFRR Platform and the related amendments are planned to go-live by the beginning of October 2024. The entry into force of these amendments is conditional to among others the absence of a blocking point for the efficient functioning of the Belgian balancing market, i.e., the presence of measures to mitigate the risk of a significant cost increase for BRPs and consumers in Belgium;
- The evolution towards the full activation time of 5 minutes is planned to go-live early December. This moment is chosen as late as possible while respecting the deadline specified in the aFRR Implementation Framework and internal constraints related to changes in IT systems towards the end of the year. It must further be noted that this go-live is conditional to the earlier connection to the aFRR Platform. This because i) the decrease of the full activation time could have a negative impact on the aFRR reservation costs, and ii) as long as Elia is not connected to the aFRR Platform, Elia only uses aFRR local products and there is no need to harmonize the full activation time;

¹⁰ More information related to the congestion risk indicator can be found in the Balancing Rules as well as the slides from the [2023 workshop on CRI and the filtering process](#).

- All other evolutions are foreseen to go-live at the same moment in the beginning of October.

This planning is translated in the implementation plan described in Article 2 of the proposal for amendment. It must however be noted that the implementation plan described in the proposal for amendment foresees 4 packages of amendments:

- 1) A first package of amendments relates to the amendments relative to the connection to the aFRR Platform as described in Section 2.1 (and highlighted in turquoise);
- 2) A second package of amendments relates to the change of the default full activation time from 7,5 minutes to 5 minutes as described in Section 2.2 (and highlighted in yellow);
- 3) A third package relates to moving the capacity auctions to D-1 as described in Section 2.3 (and highlighted in grey);
- 4) A fourth package consisting of all other amendments (as described in Sections 2.4 to 2.8 and either highlighted in green or not highlighted).

While it is the intention to group the actual go-lives (in particular the go-live of the 3rd and 4th package), Elia opted to split the amendments into 4 different packages of amendments to have more flexibility in case there would be unforeseen circumstances: