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Informative document in support of the public consultation on the proposal for Terms and Conditions for balancing service providers for Frequency Containment Reserve (FCR)



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Practical information

Elia has launched a public consultation regarding the proposal for the Terms and Conditions for balancing service providers for Frequency Containment Reserve (FCR) (hereafter referred to as “T&C BSP FCR”). The document submitted for consultation is published on the Elia website.

This note serves to support the stakeholders in their review of the proposal of T&C BSP FCR.

The purpose of this public consultation is to receive comments and suggestions from involved market parties in the context of the official approval procedure of the T&C BSP FCR pursuant to article 10 of the Regulation (EU) 2017/2195 of 23 November 2017 establishing a guideline on electricity balancing (hereafter referred to as “EBGL”). Comments concerning items outside the scope of the T&C BSP FCR will not be considered by Elia.

Following the consultation Elia will submit all stakeholders' responses to the CREG together with the T&C BSP FCR proposed for regulatory approval, the consultation report, and this supporting document. Consequently, all non-confidential responses will be made public on Elia's website, with an explanation of how Elia responded to these remarks or the reasons why they were not considered. Elia will respect the request for confidentiality and/or anonymity of respondents.

The market parties have a period of one month to submit their responses via the online form on the Elia website, from 17 March to 17 April 2020 included.

Questions relative to this consultation can be sent to the following email address: consultations@elia.be.

Introduction

Pursuant to article 18 of the EBGL, in June 2018 Elia submitted to the CREG a set of Terms & Conditions for the BSP for the delivery of FCR services (hereafter referred to as “T&C version 1”). In the meantime, Elia has proposed design changes to the FCR service related to:

- Full merge of the procurement process into the regional platform
- The procurement of symmetric 200mHz product only
- The introduction of frequency deviation bands
- Evolution of providing groups and portfolio nominations
- Optimization of the prequalification process.
- and other design changes such as the alignment of the penalties with aFRR and mFRR balancing products.

These proposed design changes have been extensively discussed with market parties in 2019 (cf. paragraph 6 below for a link towards the relevant documentation).

Considering the important changes in the design, Elia has amended the T&C version 1 to bring the T&C BSP FCR in line with the new proposed design that is planned to go live on 1 July 2020. The main changes with respect to T&C version 1 are described in Chapter 1. Some important design elements are described in more details Chapter 2, 3, 4 and 5.

The T&C BSP FCR under consultation is thus a new version, comprising all elements necessary for the new design.

1. Main changes compared to T&C version 1

1.1 Structure and terminology

One of the main changes is that the structure of the T&C BSP FCR has been brought in line with the structure of the other T&C for ancillary services. Next to the main part of the T&C, the contractual elements have been integrated in an appendix, being the BSP Contract for FCR. The latter comprises of the following parts:

- General Conditions containing the articles that are applicable for all ancillary services
- Specific Conditions for the FCR service
- Annexes

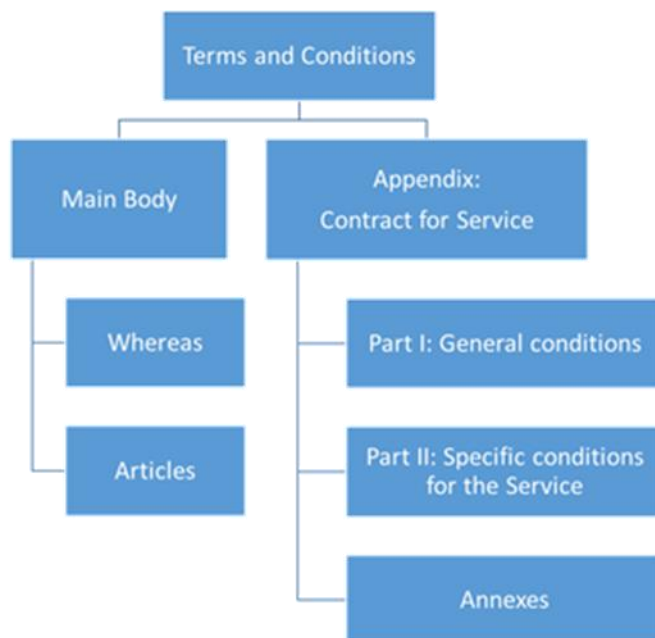


Figure 1: General structure of the Terms and Conditions for ancillary services

In comparison with the T&C BSP FCR version 1¹ that was comprised of the General Conditions, the T&C FCR CIPU (replacing the GFA FCR CIPU) and the T&C FCR Non-CIPU (replacing the GFA FCR Non-CIPU), this new structure has been applied.

The T&C have also been made technology neutral. This evolution is shown below in Figure 2.

The proposed structure allows the BSP to provide the FCR Service based on a “technology neutral approach”. The technical units providing the service are all included in a single contract.

Also the terminology has been adapted to align and avoid confusion with all applicable legislation, the new Federal Grid Code and the European guidelines.

¹ More information regarding this first version of the T&C BSP FCR can be found here: <https://www.elia.be/en/public-consultation/20180315-draft-proposals-for-the-contracts-bsp>



Figure 2: Evolution of the T&C BSP FCR

As specified in the T&C BSP FCR, the General Conditions have been subject to a separate public consultation given that these will apply for all Terms and Conditions that are and will be proposed by Elia to the competent regulatory authority(ies). **As a consequence the General Conditions are not open to comments anymore, unless the respondent believes (and upon motivation) it is necessary to deviate in Part II from one or more of the General conditions of Part I given the specific context of the contract concerned.**

1.2 Evolutions of the design

The table below details the evolution of the design with regard to the T&C version 1. These evolutions have been integrated in the new proposal for T&C BSP FCR currently published for consultation of the market parties.

Topic	Version June 2018	New proposal for the T&C
FCR Product	<ul style="list-style-type: none"> ✓ Various products allowed: symmetric 200mHz, symmetric 100mHz, asymmetric upward, asymmetric downward 	<ul style="list-style-type: none"> ✓ Technology neutral ✓ Only one product allowed: symmetric 200mHz
Pool Composition	<ul style="list-style-type: none"> ✓ Distinction between CIPU and Non-CIPU technical units ✓ Technical units allocated in providing groups per FCR product 	<ul style="list-style-type: none"> ✓ Technology neutral approach ✓ Delivery points allocated per Frequency Deviation Band of 50mHz
Prequalification test		

	<ul style="list-style-type: none"> ✓ Various prequalification tests depending on type of FCR product 	<ul style="list-style-type: none"> ✓ One prequalification test including a phase of real-time follow-up of frequency
FCR capacity auctions	<p>Combination of a weekly capacity auctions in local platform with a total cost optimisation together with aFRR and a daily procurement in regional platform</p>	<ul style="list-style-type: none"> ✓ Separate procurement of FCR ✓ Daily procurement in regional platform ✓ CCTU of 4 hours
Secondary market	<ul style="list-style-type: none"> ✓ Two different processes were applicable in day-ahead and in intraday 	<ul style="list-style-type: none"> ✓ Process is the same at any time and is simplified
Energy bid submission	<ul style="list-style-type: none"> ✓ Energy bid submission per pre-defined providing group including a separation of CIPU and Non-CIPU ✓ All delivery points of providing group taken for controls 	<ul style="list-style-type: none"> ✓ Possibility to pool in an energy bid all type of delivery points ✓ Possibility to choose which delivery points compose the energy bid
Activation control	<ul style="list-style-type: none"> ✓ Different ways to calculate requested power based on type of FCR product 	<ul style="list-style-type: none"> ✓ Simplification due to one FCR product
Remuneration	<ul style="list-style-type: none"> ✓ Capacity bids “pay as bid” principle 	<ul style="list-style-type: none"> ✓ Capacity bids paid in accordance to regional platform rules (currently “pay as clear” principle)
Penalties	<ul style="list-style-type: none"> ✓ Distinction between CIPU and Non-CIPU 	<ul style="list-style-type: none"> ✓ Technology neutral ✓ Alignment of penalties with principles established in T&C aFRR and mFRR

2. Procurement of 200mHz product on regional platform

As of the 1st of July 2020, the symmetric FCR 200mHz service will be procured on the regional platform only. The procurement will be performed on a daily basis with a product duration of 4 hours. The procurement of the FCR service will be performed according to the rules of the regional platform and the local procurement process will not be used anymore. Consequently, Up, down and symmetric FCR 100mHz products will not be procured anymore.

3. Evolution of providing groups

A BSP can combine delivery points from its portfolio (geographically spread on the BE area) that cannot individually comply with all FCR technical requirements for the symmetric FCR 200 mHz product. The prequalification of delivery points that cannot provide alone the symmetric FCR 200 mHz product can be performed by using a pool that combines different delivery points in order to provide the FCR service. An individual delivery point has to be capable of providing FCR reaction for at least a 50mHz frequency deviation, i.e. delivery point can only be prequalified if its reaction covers one or several of the following frequency deviation bands. Delivery points DP_{PG} and Delivery Points DP_{SU} can be pooled together.

Frequency deviation band [mHz]
-200 to -150
-150 to -100
-100 to -50
-50 to 0
0 to 50
50 to 100
100 to 150
150 to 200

4. Penalties

In the framework of the harmonization of the balancing products (FCR, aFRR & mFRR), the penalties for non-compliance with FCR made available (FCR obligation) and for FCR missing MW (capacity availability test) are aligned with the corresponding penalties for aFRR and mFRR. For the penalty for FCR missing time (i.e. the energy availability test), the same approach is applied as for FCR missing MW, as explained below.

4.1 Penalties for FCR missing MW

$$P_{FCR\ Missing\ MW} = \sum_{month\ M} \alpha * FCR\ Missing\ MW * CP_{WA} * \#CCTU * hours_{CCTU}$$

Where:

- α : penalty factor equals to 0,75 by default;
In case the penalty concerns a second consecutive failed availability test, α is equal to 1,5.

- CP_{WA} : the weighted average of capacity prices corresponding to all FCR Capacity Bids awarded to the BSP for the period comprised between Day D-29 until Day D (i.e. 30 Days), where Day D is the date of performance of the concerned availability test. The weight is the FCR Awarded for the concerned FCR Capacity Bid;
- $\#CCTU$: the number of CCTU for which at least one FCR Capacity Bid has been awarded to the BSP for the period comprised between Day D-29 until Day D (i.e. 30 Days), where Day D is the date of performance of the concerned availability test;
- $hours_{CCTU}$: number of hours of a CCTU.

The same reasoning has been applied for the FCR missing time where FCR missing MW, expressed in MW, is replaced by the Failed obligation multiplied by the average volume of all FCR capacity bids awarded to the BSP for the concerning period, also expressed in MW. With this term, a missing capacity is determined based on the FCR missing time. The formulas are presented below.

4.2 Penalties for FCR missing time

$$P_{FCR\ Missing\ Time} = \sum_{month\ M} \alpha * \text{Failed Obligation \%} * CP_{WA} * CV_A * \#CCTU * hours_{CCTU}$$

$$\text{Failed Obligation \%} = \frac{\text{FCR Missing Time}}{\text{Test_duration}}$$

Where:

- α : penalty factor equals to 0,75 by default;
In case the penalty concerns a second consecutive failed availability test, α is equal to 1,5.
- CP_{WA} : the weighted average of capacity prices corresponding to all FCR Capacity Bids awarded to the BSP for the period comprised between Day D-29 until Day D (i.e. 30 Days), where Day D is the date of performance of the concerned availability test. The weight is the FCR Awarded for the concerned FCR Capacity Bid;
- CV_A : the average volume corresponding to all FCR Capacity Bids awarded to the BSP for the period comprised between Day D-29 until Day D (i.e. 30 Days), where Day D is the date of performance of the concerned availability test.
- $\#CCTU$: the number of CCTU for which at least one FCR Capacity Bid has been awarded to the BSP for the period comprised between Day D-29 until Day D (i.e. 30 Days), where Day D is the date of performance of the concerned availability test;
- $hours_{CCTU}$: number of hours of a CCTU.

5. Concept of FCR energy bids

Elia aims of maximizing the harmonization of the terminology used in the T&C BSP for the balancing products FCR, aFRR and mFRR. In that sense, the approach for “Energy bids” in the T&C BSP FCR, is aligned with the terminology in the T&C BSP aFRR and mFRR. It should be emphasized, that the concept of “FCR energy bid” is different from the “aFRR energy bid” and the “mFRR energy bid”. FCR energy bids correspond to a volume declared by the BSP as being available for activation over a set of delivery points without a FCR energy price. This is in contrast with the aFRR energy bids and the mFRR energy bids where the BSP is obliged to nominate both an energy price and a volume per delivery point or per pool of delivery points.

6. Additional information

- FCR design note
- Working Group Balancing of 18 February 2019



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