

#### **4 OCTOBER 2019**

Informative document in support of the public consultation of the proposal for Terms and Conditions for balancing service providers for manual Frequency Restoration Reserve (mFRR).



# **Content**

Intro	Introduction					
Pract	Practical information					
1.	Main changes compared to version 1 of June 2018	. 5				
2.	Section on link with congestion	. 8				
3	Design change for penalty "MW not made available"	o				



## Introduction

Pursuant to the EBGL, in June 2018 Elia submitted to the CREG a set of Terms & Conditions for the BSP for the delivery of mFRR services ("T&C version 1"). In the meantime, Elia proposed new design changes to the mFRR service related to:

- an evolution towards daily procurement of mFRR balancing capacity;
- the introduction of the paid-as-cleared mechanism for the remuneration of activated mFRR balancing energy bids:
- an evolution of the characteristics of the mFRR Flex product;
- a simplification of the ToE mechanism in case of pass-through contracts;
- and other design changes such as those relating to availability control.

On 3 October 2019 Elia received a Request for Amendment of the CREG regarding the proposal of the T&C BSP mFRR version 1<sup>1</sup>.

In response to the Request for Amendment of CREG and in preparation of the implementation of the new design proposal Elia has amended the proposal of the T&C BSP mFRR and adapted the market functioning rules for the compensation of quarter-hour imbalances ("Balancing Rules") accordingly.

## **Practical information**

Elia has launched a public consultation regarding the proposal for the Terms and Conditions for balancing service providers for manual Frequency Restoration Reserve (mFRR) (hereafter referred to as "T&C BSP mFRR").

This note serves to support the stakeholders in their review of both proposals.

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 documents pursuant to article 10 of the Regulation (EU) 2017/2195 of 23 November 2017 establishing a guideline on electricity balancing ("EBGL").

Following the consultation Elia will submit all stakeholders' responses to the CREG together with the documents proposed<sup>2</sup> for regulatory approval, the consultation report, and this supporting document. Pursuant to article 6(1) of the EBGL Elia will submit the proposals and the supporting documents to the CREG within 2 months after receiving the Request for Amendment, i.e. by 3 December 2019.



<sup>&</sup>lt;sup>1</sup> CREG Decision (B)2000 of 3 October 2019

<sup>&</sup>lt;sup>2</sup> Possibly adapted if needed

Elia will publish all these documents on the Elia website except for the responses of stakeholders that requested to treat their feedback as confidential.

The market parties have a period of one month to submit their responses via the online form on the Elia website, from Friday 4 October to Monday 4 November 2019.



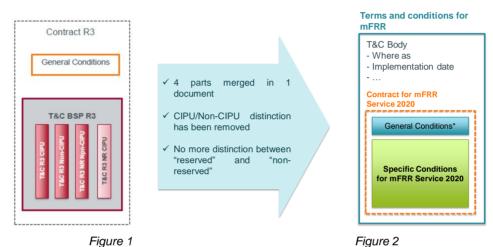
## 1. Main changes compared to version 1 of June 2018

#### Structure and terminology

The first version of the T&C BSP mFRR (submitted in June 2018) is comprised of the general conditions and four parts as shown on figure 1.

The new version, presented on figure 2 and proposed to the present consultation, is comprised of:

- 1. The T&C body
- 2. The BSP Contract for mFRR (in annex of the T&C body) and composed of the general conditions<sup>3</sup> and the specific conditions



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

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

#### **Evolutions of the design**

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<sup>&</sup>lt;sup>3</sup> Applicable to all ancillary services and currently under a separate public consultation until 16 October 2019.

The table hereunder details the evolution of the design with regard to the first version of the T&C BSP mFRR (June 2018). These evolutions have been integrated in the new proposal for T&C BSP mFRR currently published for consultation by the market parties.

Topic	Version June 2018	New proposal for the T&C
Pool Composition	Not "technology neutral": Two different pools falling under two different regimes (CIPU and non-CIPU)	"Technology neutral approach": The BSP has a single pool with all technical units included in the same contract
Application of ToE	Transfer of Energy is only applicable for the Tertiary Control Non-reserved by non-CIPU Technical Units	<ul> <li>✓ Transfer of Energy applies</li> <li>✓ A simplification for delivery points under pass-through contract is added<sup>4</sup></li> </ul>
Prequalifica- tion test	Different prequalification tests depending on the nature of the technical unit (CIPU and non-CIPU)	Harmonization of the prequalification test per mFRR capacity product
mFRR capacity auctions	<ul> <li>✓ Monthly capacity auctions with a total cost optimisation</li> <li>✓ Volume to be procured by ELIA determined on a yearly basis</li> </ul>	<ul> <li>✓ Daily capacity procurement (6 auctions corresponding to 6 blocks of 4 hours) with a merit order selection</li> <li>✓ Dynamic dimensioning of the mFRR capacity to be procured by Elia<sup>5</sup></li> </ul>

<sup>&</sup>lt;sup>4</sup> ToE Rules have been adapted and proposed to a public consultation. Elia has submitted the new proposal to CREG for approval.

<sup>&</sup>lt;sup>5</sup> Refer to LFC BOA and LFC Means, currently under consultation for the same period of the RR.

Secondary market	✓ Two different processes were applicable in day-ahead and in intraday	✓ Process is the same at any time and is simplified
Energy Bid submission	As ToE did not apply for R3 non-CIPU- version 1, no activation price could be submitted for energy bid related to this product	<ul> <li>✓ All Energy Bids (independently from the product) include an activation price</li> <li>✓ New possibility for the BSP to identify a part of the energy bid as indivisible</li> </ul>
Activation	<ul> <li>✓ The maximal duration of a R3 Flex activation was 2 hours</li> <li>✓ A counter applied for the number of R3 Flex activations over the month</li> </ul>	<ul> <li>✓ The maximal duration of a mFRR         Flex activation evolves to 4 hours</li> <li>✓ Counter of mFRR Flex activations         is not needed anymore as procurement of capacity is on a daily basis</li> </ul>
Availability control	<ul> <li>✓ The availability control differed depending on the nature (CIPU/non-CIPU) of the technical unit</li> <li>✓ Based on a continuous monitoring linked to data provided by the BSP (nominations, unsheddable margin)</li> </ul>	✓ Improvement of the availability control which is based on availability test for all technical units
Activation control	✓ The activation control was only performed at the level of non-CIPU technical units	✓ Activation control applies for all activation of the mFRR Service
Remuneration		



	✓ Remuneration for energy bids acti- vated by Elia based on a "paid as bid" principle	✓ Remuneration for all energy bids activated by Elia evolves to a "paid as cleared" principle
Penalties	<ul> <li>✓ Penalties for availability control were not aligned</li> <li>✓ Penalties for activation control were not aligned</li> </ul>	<ul> <li>✓ Penalties for availability control are aligned (also refer to section 1.3 for detailed explanation)</li> <li>✓ BSP is, in all cases, incentivized to supply the requested volume. Otherwise BRP<sub>BSP</sub> is in imbalance.</li> <li>✓ Penalties for activation control are aligned and result in a temporary exclusion of some delivery points</li> </ul>

# 2. Section on link with congestion

Elia also foresees in the proposal for T&C BSP mFRR, in accordance with the EBGL, the possibility to activate the mFRR Service in extreme cases for internal congestion management purposes. Specific dispositions apply in this case such as the fact that the activation can be requested by Elia before balancing energy gate closure time or, the fact that the remuneration for the requested energy bid is based on a "paid as bid" principle.



## 3. Design change for penalty "MW not made available"

Elia proposes a new design for the penalty in case a BSP does not submit energy bids for mFRR Standard or mFRR Flex equal to the mFRR Obligation for day D (see annex 14 of the BSP Contract mFRR).

Elia strongly values being able to rely on the capacity bought from BSP's as this is a result of the dimensioning of balancing services and an important part in operating the grid securely. The design of the mFRR product should therefore stimulate the BSP in offering reliable capacity and managing its portfolio in a way that considers the risks of unavailability of flexibility. However, Elia also understands that unexpected problems may occur that are not to be interpreted as a sign of risky portfolio management from the BSP. Therefore, the penalty proposed aims to make the distinction between one-time events and repeated behavior.

The penalty would be constructed as follows:

- The penalty would be calculated for each CCTU (meaning the 'Capacity Contracting Time Units' or 1 block of 4 hours) with minimum 1 quarter-hour for which the energy bids submitted offer a volume that is lower than the mFRR Obligation for the concerned BSP.
- The penalized volume of "MW not made available" reflects the sum of the "MW not made available" during all quarter-hours of the concerned CCTU, expressed in MW/h.
- The financial value of the penalty is based on the concerned BSP's average balancing capacity price for awarded mFRR Capacity the concerned mFRR Capacity Product (mFRR Standard or mFRR Flex) during the last 30 days. The average is a weighted average: the volume of awarded capacity for CCTU(x) serves as a weight for the price of awarded capacity for CCTU(x) in order to determine the average price for the CCTU's of the entire period.
- The penalty increases with an 'aggravating factor'. The factor takes into consideration the number of CCTU with "MW not made available" on day D and during the previous 29 days compared to the overall number of CCTU with mFRR Capacity for the concerns mFRR Capacity Product awarded to the concerned BSP during the same period. This factor therefore allows that the penalty makes the distinction between BSP's with few problems to respect their mFRR Obligations and BSP's with structural problems.

The result is the following penalty for the concerned CCTU:

 $P_{mFRR\ Made\ Available}(CCTU) = \#CCTU_{non-compliant} * MW_{not\ made\ available} * CP_{WA}$ 



#### **EXAMPLE**

#### Situation day D:

- On day D-1 for CCTU 1, 2, 3 Elia awarded a BSP with 100 MW mFRR Capacity (mFRR Standard).
- During CCTU 2 (i.e., 04:00-08:00) the BSP submits mFRR Energy bids = 100MW for all quarter-hours except the first (i.e., quarter-hour 17 of the day) in which the BSP offers 0MW.
- During CCTU 3 (i.e., 08:00-12:00) the BSP isn't able to submits any mFRR Energy bids: therefore 0 MW for all quarter-hours.
- Therefore on day D the BSP has 2 CCTU with "MW not made available" for mFRR Standard

#### Situation for the preceding 29 days:

- The BSP had 25 CCTU with awarded mFRR Capacity for mFRR Standard
- The weighted average capacity price for that BSP for the mFRR Standard Product = €5/MW/h
- CASE 1: The BSP has no CCTU with "MW not made available"
- CASE 2: the BSP has 10 CCTU with "MW not made available"

#### BASE CALCULATION: determination of "MW not made available" for day D

CCTU 1: no "MW not made available"

#### CCTU 2:

As the BSP only has one quarter-hour with "MW not made available" of 100MW for that quarter-hour, the penalized volume equals 25MW for the CCTU (i.e., 100 MW / 4)

#### CCTU 3:

As the BSP has "MW not made available" of 100MW for all 16 quarter-hours of the CCTU, the penalized volume equals **400MW** for the CCTU (i.e., 16 \* 100 MW / 4)

# <u>PENALTY CALCULATION</u>: CASE 1 – total number of CCTU with "MW not made available" = 2 (only on day D)

 $P_{mFRR\ Made\ Available}(CCTU) = \#CCTU_{non-compliant} * MW_{not\ made\ available} * CP_{WA}$ 

CCTU 1: no "MW not made available" => no penalty



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CCTU 2:

 $P_{mFRR\;Made\;Available}(CCTU) = 2*25\;MW*5\; {\in}/{MW/h} \;\; = 250\; {\in}$ 

CCTU 3:

 $P_{mFRR\;Made\;Available}(CCTU) = 2*400\;MW*5 \; {\in}/{MW/h} \; = 4000 \; {\in}$ 

# PENALTY CALCULATION: CASE 2 – total number of CCTU with "MW not made available" = 12 (2 on day D + 10 in the preceding 29 days)

 $P_{mFRR\ Made\ Available}(CCTU) = \#CCTU_{non-compliant} * MW_{not\ made\ available} * CP_{WA}$ 

CCTU 1: no "MW not made available" => no penalty

CCTU 2:

 $P_{mFRR\ Made\ Available}(CCTU) = 12 * 25\ MW * 5 \ \epsilon/MW/h = 1500 \ \epsilon$ 

CCTU 3:

 $P_{mFRR\;Made\;Available}(CCTU) = 12*400\;MW*5\; {\it €/MW/h} \;\; = 24000\; {\it €}$ 

