

**APPROVAL BY REGULATORY AUTHORITIES**

**OF**

**ALL CONTINENTAL EUROPE TSOs' PROPOSAL FOR  
THE LIMITS ON THE AMOUNT OF EXCHANGE AND  
SHARING OF FRR BETWEEN SYNCHRONOUS AREAS  
IN ACCORDANCE WITH ARTICLE 176(1) AND ARTICLE  
177(1) OF THE COMMISSION REGULATION (EU)  
2017/1485 OF 2 AUGUST 2017 ESTABLISHING A  
GUIDELINE ON ELECTRICITY TRANSMISSION SYSTEM  
OPERATION**

**31 March 2019**

## I. Introduction and legal context

This document elaborates an agreement of the Regulatory Authorities of Continental Europe synchronous area (hereinafter: Regulatory Authorities), agreed on 31 March 2019 on the Continental Europe TSOs' (hereinafter: TSOs) proposal for the Limits on the Amount of Exchange and Sharing of FRR between Synchronous Areas (hereinafter: FRR exchange & sharing proposal) in accordance with Article 176(1) and Article 177(1) of the Commission Regulation (EU) 2017/1485 of 2 August 2017 establishing a guideline on Electricity Transmission System Operation (hereinafter: SO GL).

This agreement of the Regulatory Authorities shall provide evidence that a decision on the FRR exchange & sharing proposal does not, at this stage, need to be adopted by ACER pursuant to Article 6(8) of SO GL. It is intended to constitute the basis on which the Regulatory Authorities will each subsequently approve the above-mentioned methodology pursuant to Article 6 of SO GL.

The legal provisions building the basis of the FRR exchange & sharing proposal and this Regulatory Authorities agreement on the above-mentioned methodology can be found in Articles 4, 118, 157, 176 and 177 of SO GL. They are set out here for reference.

### Article 4 – Objectives and regulatory aspects

- 1 *This Regulation aims at:*
  - (a) *determining common operational security requirements and principles;*
  - (b) *determining common interconnected system operational planning principles;*
  - (c) *determining common load-frequency control processes and control structures;*
  - (d) *ensuring the conditions for maintaining operational security throughout the Union;*
  - (e) *ensuring the conditions for maintaining a frequency quality level of all synchronous areas throughout the Union;*
  - (f) *promoting the coordination of system operation and operational planning;*
  - (g) *ensuring and enhancing the transparency and reliability of information on transmission system operation;*
  - (h) *contributing to the efficient operation and development of the electricity transmission system and electricity sector in the Union.*
- 2 *When applying this Regulation, Member States, competent authorities, and system operators shall:*
  - (a) *apply the principles of proportionality and non-discrimination;*
  - (b) *ensure transparency;*
  - (c) *[...]*
  - (d) *[...]*
  - (e) *respect the responsibility assigned to the relevant TSO in order to ensure system security, including as required by national legislation;*

[...]

### Article 118 – Synchronous area operational agreements

1. *By 12 months after entry into force of this Regulation, all TSOs of each synchronous area shall jointly develop common proposals for:*
  - [...]*
  - (z) *the methodology to determine limits on the amount of exchange of FRR between synchronous areas defined in accordance with Article 176(1) and the methodology to determine limits on the amount of sharing of FRR between synchronous areas defined in accordance with Article 177(1);**[...]*
2. *All TSOs of each synchronous area shall submit the methodologies and conditions listed in Article 6(3)(d) for approval by all the regulatory authorities of the concerned synchronous area.*

*Within 1 month after the approval of these methodologies and conditions, all TSOs of each synchronous area shall conclude a synchronous area operational agreement which shall enter into force within 3 months after the approval of the methodologies and conditions.*

#### **Article 157 – FRR dimensioning**

1. *All TSOs of a LFC Block shall set out FRR dimensioning rules in the LFC Block operational agreement.*
2. *The FRR dimensioning rules shall include at least the following:*  
[...]
  - (j) *all TSOs of a LFC block may reduce the positive reserve capacity on FRR of the LFC block resulting from the FRR dimensioning process by concluding a FRR sharing agreement with other LFC blocks in accordance with provisions in Title 8. The following requirements shall apply to that sharing agreement:*
    - (i) *for the CE and Nordic synchronous areas, the reduction of the positive reserve capacity on FRR of a LFC block shall be limited to the difference, if positive, between the size of the positive dimensioning incident and the reserve capacity on FRR required to cover the positive LFC block imbalances during 99 % of the time, based on the historical records referred to in point (a). The reduction of the positive reserve capacity shall not exceed 30% of the size of the positive dimensioning incident;*  
[...]
  - (k) *all TSOs of a LFC block may reduce the negative reserve capacity on FRR of the LFC block, resulting from the FRR dimensioning process by concluding a FRR sharing agreement with other LFC blocks in accordance with the provisions of Title 8. The following requirements shall apply to that sharing agreement:*
    - (i) *for the CE and Nordic synchronous areas, the reduction of the negative reserve capacity on FRR of a LFC block shall be limited to the difference, if positive, between the size of the negative dimensioning incident and the reserve capacity on FRR required to cover the negative LFC block imbalances during 99 % of the time, based on the historical records referred to in point (a);*  
[...]

#### **Article 176 – Exchange of FRR between synchronous areas**

1. *All TSOs of each synchronous area shall specify in the synchronous area operational agreement a method to determine the limits for the exchange of FRR with other synchronous areas. That method shall take into account:*
  - (a) *the operational impact between the synchronous areas;*
  - (b) *the stability of the FRP of the synchronous area;*
  - (c) *the ability of TSOs of the synchronous area to comply with the frequency quality target parameters defined in accordance with Article 127 and the FRCE target parameters defined in accordance with Article 128; and*
  - (d) *the operational security.*
2. *All TSOs of the LFC blocks involved in the exchange of FRR between synchronous areas shall organise that exchange so that the TSOs of a LFC block in the first synchronous area may receive a share of the total reserve capacity on FRR required for their LFC block as determined in accordance with the Article 157(1) from a LFC block in the second synchronous area.*
3. *The share of the total reserve capacity on FRR required for the LFC block in the synchronous area where it is exchanged shall be provided from the LFC block in the second synchronous area in addition to the total reserve capacity on FRR required for that second LFC block in accordance with Article 157(1).*

[...]

#### **Article 177 – Sharing of FRR between synchronous areas**

1. *All TSOs of each synchronous area shall specify in the synchronous area operational agreement a methodology to determine limits for the sharing of FRR with other synchronous areas. That methodology shall take into account:*
  - (a) *the operational impact between the synchronous areas;*
  - (b) *the stability of the FRP of the synchronous area;*
  - (c) *the maximum reduction of FRR that can be taken into account in the FRR dimensioning in accordance with Article 157 as a result of the FRR sharing;*
  - (d) *the ability of the synchronous area to comply with the frequency quality target parameters defined in accordance with Article 127 and the FRCE target parameters defined in accordance with Article 128; and*
  - (e) *the operational security.*
2. *All TSOs of the LFC blocks involved in the sharing of FRR between synchronous areas shall organise that sharing so that the TSOs of a LFC block in the first synchronous area may receive a share of the total reserve capacity on FRR required for their LFC block as defined in accordance with the Article 157(1) from a LFC block in the second synchronous area.*

[...]

## **II. The Continental Europe TSOs' proposal**

The FRR exchange & sharing proposal was consulted by the Continental Europe TSOs through ENTSO-E for one month from 30 March 2018 to 3 May 2018, in line with Article 11 of SO GL<sup>1</sup>. The proposal was received by the last Regulatory Authority of the Continental Europe synchronous area on 2 October 2018, thus a decision is required by 2 April 2018, according to Article 6(7) of SO GL.

The FRR exchange & sharing proposal aims to set the limits on the amount for the exchange and sharing of FRR between the Continental Europe synchronous area and other adjacent synchronous areas.

For FRR exchange, a reserve receiving TSO of a LFC block involved in the exchange of aFRR and mFRR between synchronous areas, where the synchronous area of Continental Europe is the reserve receiving synchronous area, shall ensure that at least 50% of its total combined FRR capacity resulting from the FRR dimensioning rules according to the Article 157 of the SO GL and before any reduction due to the sharing of aFRR and mFRR according to Article 157(2) of the SO GL remains located within its LFC block. This limit is the same as the one applicable for FRR exchange between LFC blocks within the Continental Europe synchronous area.

For FRR sharing, the provisions of Article 157(2)(j,k) of SO GL apply: in particular, when Continental Europe is the reserve receiving synchronous area, the reduction of FRR capacity of a LFC block due to sharing shall not be higher than the difference between the reference FRR dimensioning incident and the FRR capacity needed to cover the LFC block imbalances in 99% of the time. Moreover, the reduction of the positive FRR capacity shall not exceed 30% of the size of the positive reference dimensioning incident. No limits are set when Continental Europe is the reserve connecting synchronous area.

The proposal includes proposed timescales for its implementation and a description of its expected impact on the objectives of SO GL, in line with Article 6(6) of SO GL.

The proposal will be implemented within one month after the Regulatory Authorities' approvals and it will become part of the wider synchronous area operational agreement to be signed by the TSOs in accordance with Article 118(2) of SO GL.

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<sup>1</sup> The public consultation is available on the ENTSO-e website: [https://consultations.entsoe.eu/system-operations/synchronous-area-operational-agreement-policy-1-lo/consult\\_view/](https://consultations.entsoe.eu/system-operations/synchronous-area-operational-agreement-policy-1-lo/consult_view/)

### III. The Regulatory Authorities' position

According to Articles 176(1) and 177(1) of SO GL, the TSOs are required to develop proper methodologies to determine the limits for FRR exchange and sharing. The TSOs' proposal does not include proper methodologies, but it simply sets the limits for exchange and sharing, making reference to the specific provisions already included in the SO GL (for FRR sharing) and the limits already applicable for LFC blocks within Continental Europe (for FRR exchange).

From a legal point of view, the development of proper methodologies for the determination of FRR exchange and sharing limits is required for a full compliance with the SO GL provisions. Nonetheless, the Regulatory Authorities consider that:

- a) the TSOs clarify in their explanatory note that they do not intend nor see the need to implement a FFR exchange or sharing process before the implementation of balancing platforms performing cross-border activation of aFRR and mFRR, in accordance with Articles 20 and 21 of Commission Regulation (EU) 2017/2195 of 23 November 2017 establishing a guideline on Electricity Balancing (hereinafter EB GL), is concluded;
- b) limits for exchange and sharing of FRR should be based on a proper security assessment of the system performances in terms of frequency regulation and ability to cope with the different imbalances; the TSOs explain that, for such assessment to be performed, respective requirements and a corresponding notification process among TSOs as well as procedures for reservation of cross-border capacities will have to be developed; moreover considering the target frequency quality parameters, additional requirements in terms of limited amounts of mFRR might be necessary, for this reason the TSOs clarify that they can perform such security assessment neither at this stage nor in two months (in case a request for amendment in accordance with Article 7(1) of SO GL is issued), since the above mentioned activities have not been concluded or even started yet.;
- c) the limits set by the current proposal (and referencing the SOGL) are considered acceptable for the interim period until the proper methodologies are finalized.

For these reasons, the Regulatory Authorities can approve the FRR exchange & sharing proposal as submitted by the TSOs, without issuing a request for amendment in accordance with Article 7(1) of SO GL at this stage.

Nonetheless, the Regulatory Authorities clarify that the TSOs shall develop the proper methodologies to set the limits for FRR exchange & sharing between Continental Europe and the adjacent synchronous areas. In particular, these methodologies shall take into account not only the results of the security assessment but also the provisions included in the implementation frameworks related to the establishment of the platforms performing cross-border activation of aFRR (Picasso project) and mFRR (Mari project), which are currently under evaluation by the concerned Regulatory Authorities. For this reason, the Regulatory Authorities expect the TSOs to submit the methodologies to set the limits for FRR exchange & sharing within four months after the approval of the abovementioned frameworks

### IV. Conclusions

The Regulatory Authorities have consulted and closely cooperated and coordinated to reach the agreement that **they approve the FRR exchange & sharing proposals submitted by Continental Europe TSOs pursuant to Article 176(1) and Article 177(1) of SO GL**. The Regulatory Authorities must take their national decisions, on the basis of this agreement, by 2 April 2019.

The TSOs are nevertheless required to develop proper methodologies to set the limits for FRR exchange & sharing between synchronous areas based on the results of proper security assessments and the elaboration of related requirements. The amended methodologies shall be submitted to the Regulatory Authorities within 4 months after the approval of the implementation of the platforms for cross-border activation of aFRR and mFRR pursuant to Articles 20 and 21 of EB

GL. If the deadline mentioned above is not met by the TSOs, the Regulatory Authorities will re-evaluate the issue and consider to formally request an amendment to the TSOs' proposal."

Finally the Regulatory Authorities auspicate a frequent and fruitful interaction with the TSOs about the development of the methodologies to set the limits for FRR exchange & sharing: for this reason they recommend the TSOs to define, develop and share with them (as soon as possible, hopefully by 30 June 2019) a detailed timetable listing all the activities and associated timings & milestones planned in order to get to those methodologies (also in coherence with the development and the approval process of the implementation framework for the platforms for cross-border activation of aFRR and mFRR)