
All CE 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

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Contents

1	Whereas.....	3
2	Article 1 Subject matter and scope	4
3	Article 2 Definitions and interpretation.....	4
4	Article 3 Limits on the amount of exchange and sharing of FRR between synchronous	5
5	Article 4 Publication and implementation of the FRR limits on exchange and sharing between	
6	synchronous areas proposal.....	5
7	Article 5 Language	5

All Transmission System Operators of synchronous area Continental Europe are taking into account the following;

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Whereas

- 9 (1) This document is a common proposal developed by all Transmission System Operators of
10 synchronous area CE (hereafter referred to as “TSOs”) regarding the development of the limits on
11 the amount of exchange and sharing of FRR between synchronous areas involving Continental
12 Europe (hereafter referred to as “FRR exchange and sharing limits between synchronous areas”) in
13 accordance with Articles 176(1) and 177(1) of Commission Regulation (EU) 2017/1485
14 establishing a guideline on electricity transmission system operation (hereafter referred to as “SO
15 GL”). This proposal is hereafter referred to as “FRR limits on exchange and sharing between SA
16 proposal”.
- 17
- 18 (2) The FRR exchange and sharing limits between synchronous areas proposal takes into account the
19 general principles and goals set in the SO GL, as well as Regulation (EC) No 714/2009 of the
20 European Parliament and of the Council of 13 July 2009 on conditions for access to the network for
21 cross-border exchanges in electricity (hereafter referred to as “Regulation (EC) No 714/2009”). The
22 goal of the SO GL is the safeguarding of operational security, frequency quality and the efficient
23 use of the interconnected system and resources. For this purpose, it sets requirements for limits on
24 the amount of exchange as well as sharing of aFRR and mFRR between synchronous areas.
- 25
- 26 (3) The FRR limits on exchange and sharing between synchronous areas proposal takes into account
27 the load-frequency control structure of each synchronous area in accordance with Article 139 of SO
28 GL. The operation of load-frequency control processes is based on operational areas, where every
29 area has their individual responsibilities with respect to the LFC structure. The superior structure is
30 the synchronous area in which frequency is the same for the whole area.
- 31
- 32 (4) Article 176(1) and 177(1) of SO GL require all TSOs of each synchronous area to define a method
33 to determine limits for the exchange and sharing of FRR with other synchronous areas in the
34 synchronous area operational agreement. In particular:
- 35 • In accordance with Article 176(1), the method to determine limits for the exchange of FRR
36 shall take into account the operational impact between the synchronous areas; the stability of
37 the FRP of the synchronous area; the ability of the synchronous area to comply with the
38 frequency quality target parameters defined in accordance with Article 127 and the FRCE
39 target parameters defined in accordance with Article 128 of SO GL; and the operational
40 security.
 - 41 • In accordance with Article 177(1), the method for determining the limits for sharing of FRR
42 shall take into account: the operational impact between the synchronous areas; the stability of
43 the FRP of the synchronous area; the maximum reduction of FRR that can be taken into
44 account in the FRR dimensioning rules in accordance with Article 157 as a result of the FRR
45 sharing; the ability of the TSOs of the synchronous area to comply with the frequency quality
46 target parameters defined in accordance with Article 127 and the ability of the LFC blocks to
47 comply with the FRCE target parameters defined in accordance with Article 128; and the
48 operational security.
- 49
- 50 (5) The scope of the FRR limits on exchange and sharing between synchronous areas proposal is to
51 establish the limits on the amount of exchange and sharing of FRR between synchronous areas in

52 order to respect operational security. This proposal does not apply to exchange or sharing of FRR
53 within a synchronous area.

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55 (6) According to Article 6(2)(d)(ix) of the SO GL, it requires all TSOs to develop methodologies,
56 conditions and values included in the synchronous area operational agreements in Article 118
57 concerning the definition of limits on the amount of exchange of FRR between synchronous areas
58 in accordance with Article 176(1) SO GL and limits on the amount of sharing FRR between
59 synchronous areas in accordance with Article 177(1) SO GL. The hereafter presented exchange
60 and sharing between synchronous areas proposal shall define the requested methodologies,
61 conditions and values.

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63 (7) The FRR limits on exchange and sharing between synchronous areas proposal is to respond to the
64 objective of SO GL pursuant to Article 4(1) to ensure the conditions for maintaining a frequency
65 quality level of all synchronous areas throughout the Union, by permitting exchange and sharing
66 between synchronous areas under certain limits in order to avoid detrimental effect on each
67 synchronous area.

68
69 (8) In conclusion, the FRR limits on exchange and sharing between synchronous areas proposal
70 contributes to the general objectives of the SO GL to the benefit of all market participants and
71 electricity end consumers.

72
73 **SUBMIT THE FOLLOWING FRR LIMITS ON EXCHANGE AND SHARING BETWEEN**
74 **SYNCHRONOUS AREAS PROPOSAL TO ALL REGULATORY AUTHORITIES:**

75 **Article 1**
76 **Subject matter and scope**

77 The FRR limits on exchange and sharing between synchronous areas as determined in this proposal shall be
78 considered as the common proposal of all TSOs of CE in accordance with Article 176 and 177 of the SO
79 GL. This proposal does not apply to exchange and sharing of FRR within the synchronous area CE.

80 **Article 2**
81 **Definitions and interpretation**

82 1. For the purposes of the FRR limits on exchange and sharing between synchronous areas proposal,
83 terms used in this document shall have the meaning of the definitions included in Article 3 of the SO
84 GL, Article 2 of Regulation (EC) 714/2009, Article 2 of Directive 2009/72/EC and Article 2 of
85 Commission Regulation (EU) 543/2013.

86
87 2. In this FRR limits on exchange and sharing between synchronous areas proposal, unless the context
88 requires otherwise:

- 89 a) the singular indicates the plural and vice versa;
90 b) the table of contents and headings are inserted for convenience only and do not affect the
91 interpretation of this FRR limits on exchange and sharing between synchronous areas proposal; and
92 c) any reference to legislation, regulations, directive, order, instrument, code or any other enactment
93 shall include any modification, extension or re-enactment of it then in force.

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Article 3

Limits on the amount of exchange and sharing of FRR between synchronous

- 96 1. A reserve receiving TSO of a LFC block involved in the exchange of aFRR and mFRR between
97 synchronous areas, where synchronous area of Continental Europe is the reserve receiving synchronous
98 area, shall ensure that at least 50 % of its total combined FRR capacity resulting from the aFRR and
99 mFRR dimensioning rules according to the Article 157 of the SO GL and before any reduction due to
100 the sharing of aFRR and mFRR according to Article 157(2) of the SO GL remains located within its
101 LFC block.
- 102
- 103 2. Each TSO of a LFC block shall have the right to perform sharing of aFRR and mFRR with a LFC block
104 in an adjacent synchronous area. In particular:
- 105 a) where the synchronous area CE is the reserve receiving synchronous area, the sharing of aFRR and
106 mFRR is possible within the limits set by the aFRR and mFRR dimensioning rules in Article
107 157(1), Article 157(2)(j, k) and Article 158 of the SO GL.
- 108 i. In case of sharing and pursuant to Article 157(2)(j, k) of the SO GL, the reduction of the
109 positive (resp. negative) reserve capacity on FRR of a LFC block shall be limited to the
110 difference, if positive, between the size of the positive (resp. negative) dimensioning incident
111 and the reserve capacity on FRR required to cover the positive (resp. negative) LFC block
112 imbalances during 99 % of the time, based on the historical records referred to Article
113 157(2)(a). Additionally, the reduction of the positive reserve capacity shall not exceed 30 % of
114 the size of the positive dimensioning incident;
- 115 b) where synchronous area CE is the reserve connecting synchronous area, no limits shall apply.

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Article 4

Publication and implementation of the FRR limits on exchange and sharing between synchronous areas proposal

- 119 1. The TSOs shall publish the FRR limits on exchange and sharing between synchronous areas proposal
120 without undue delay after all NRAs have approved the proposal or a decision has been taken by the
121 Agency for the Cooperation of Energy Regulators in accordance with Article 6(8) of the SO GL.
122
- 123 2. The TSOs shall implement the FRR limits on exchange and sharing between synchronous areas
124 proposal provided one month after the regulatory authorities have approved the proposal in accordance
125 with Article 6(3) SO GL or a decision has been taken by the Agency in accordance with Article 6(8)
126 SO GL.

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Article 5 Language

129 The reference language for this FRR limits on exchange and sharing between synchronous areas proposal
130 shall be English. For the avoidance of doubt, where TSOs need to translate this FRR limits on exchange and
131 sharing between synchronous areas proposal into their national language(s), in the event of inconsistencies
132 between the English version published by TSOs in accordance with Article 8 of the SO GL Regulation and
133 any version in another language, the relevant TSOs shall, in accordance with national legislation, provide
134 the relevant national regulatory authorities with an updated translation of the FRR limits on exchange and
135 sharing between synchronous areas proposal.
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Explanatory note for the limits on the amount of exchange and sharing of FRR between synchronous areas

08.08.2018

Explanatory note

1 **Regarding Article 3:**

2 The exchange and sharing of aFRR and mFRR between synchronous areas is a process TSOs do not foresee
3 to be implemented, at least before the implementation of the corresponding balancing platform performing
4 cross-border activation of aFRR and mFRR, according to EB GL. In this sense, TSOs at a first stage are not
5 able to perform security assessment of such exchange or sharing. TSOs' intention is not to block any kind
6 of initiative in future, this is why the only rules considered for exchange or sharing of aFRR or mFRR,
7 where receiving synchronous area is synchronous area CE, are the same rules applied to LFC Blocks within
8 the synchronous area CE itself: i.e. at least 50% of the FRR capacity resulting from the FRR dimensioning
9 rules shall remain located in the LFC block in case of exchange. For the avoidance of doubt this limit is
10 applicable to the sum of sharing and exchange with TSOs from within and outside the synchronous area.
11 When synchronous area CE is the reserve connecting synchronous area, no limits are foreseen at this stage.

12 This proposal relies on the fact that if such an exchange or sharing of aFRR and mFRR is going to be
13 implemented in the future, specific security analysis studies will be needed in any case. Respective
14 requirements and a corresponding notification process among TSOs as well as procedures for reservation of
15 cross-border transmission capacities will have to be elaborated. Particularly, the ability of the synchronous
16 area to comply with the frequency quality target parameters defined and the FRCE target parameters
17 defined in accordance to Articles 176 and 177 of SO GL shall be considered. In this context additional
18 requirements in terms of limited amount of mFRR might be necessary, leading to amendments of this
19 proposal. In such a case, TSOs' concerns would be as anticipated as possible with national regulatory
20 authorities.