

**ACER Decision on the firmness and remuneration costs sharing methodology
(FRC): Annex I**

ACER's preliminary position on the TSOs' proposal for
amendments to:

**Methodology for sharing costs incurred to
ensure firmness and remuneration of
long-term transmission rights (FRC)**

in accordance with Article 61 of Commission Regulation (EU)
2016/1719 establishing a guideline on forward capacity allocation

22 March 2023

Contents

Whereas.....	3
TITLE 1 General provisions	6
Article 1 Subject matter and scope	6
Article 2 Definitions and interpretation.....	6
TITLE 2 Sharing of remuneration costs	7
Article 3 Sharing of remuneration costs of eligible LTTRs among BZBs of a CCR applying long-term cNTC-based allocation.....	7
Article 4 Sharing of remuneration costs of eligible LTTRs among BZBs of a CCR applying long-term flow-based capacity allocation.....	8
Article 5 Sharing of remuneration costs of eligible LTTRs among TSOs on a BZB	9
TITLE 3 Sharing of compensation costs	9
Article 6 Sharing of compensation costs due to curtailment of LTTRs	9
TITLE 4 FINAL PROVISIONS.....	9
Article 7 Publication, implementation and revision of the FRC methodology	9
Article 8 Language	10
ANNEX 1.....	11

Whereas

- (1) This document sets out the methodology for sharing costs incurred to ensure firmness and remuneration of long-term transmission rights ('FRC methodology'), developed by all Transmission System Operators ('all TSOs) pursuant to Article 61 of Commission Regulation (EU) 2016/1719 establishing a guideline on forward capacity allocation ('FCA Regulation').
- (2) On 23 April 2020, all TSOs submitted to ACER their proposed methodology for sharing costs incurred to ensure firmness and remuneration of long-term transmission rights ('LTTRs') in accordance with Article 61 of the FCA Regulation. On 23 October 2020, ACER approved the TSOs' proposal with amendments.¹ Following an appeal and remittal of the decision by ACER's Board of Appeal,² ACER replaced the contested decision with Decision 12/2021.
- (3) In a letter dated 12 July 2021, ACER requested all TSOs under Article 4(12) of the FCA Regulation, to submit, as soon as possible, and no later than 1 June 2022, their proposals for amendments of the four methodologies listed in Article 4(6), points (c), (d), (e) and (g) of the FCA Regulation for ACER's approval. Amending these methodologies, including the FRC methodology, was necessary to allow for a timely implementation of the long-term flow-based auctions in the Core and Nordic capacity calculation regions. The European Network of Transmission System Operators for Electricity ('ENTSO-E') asked ACER, on behalf of all TSOs, to postpone the submission date for the relevant proposals, to which ACER agreed in a letter dated 26 January 2022. The new submission date for the proposed amendments to the FRC methodology was 1 October 2022.
- (4) On 28 September 2022, ENTSO-E, on behalf of all TSOs, submitted for ACER's approval their proposal for amendment of the FRC methodology. This document is based on all TSOs' amendment proposal of 28 September 2022, as amended and approved by ACER.
- (5) The FRC methodology applies to all TSOs, with the exception of the following categories of TSOs:
 - a) TSOs active only on bidding zone borders where regulatory authorities decided that long-term transmission rights shall not be issued by the respective TSOs or that other long-term cross-zonal hedging products shall be made available by the respective TSOs, according to Article 30(7) of FCA Regulation; and,
 - b) TSOs not commercializing their transmission capacity on the single day-ahead market or the long-term market.
- (6) The FRC methodology takes into account the objectives and principles set out in Regulation (EU) 2019/943 on the internal market for electricity ('Regulation (EU) 2019/943').
- (7) The FRC methodology takes into account and is consistent with the methodology for sharing the costs of redispatching and countertrading in single day-ahead and intraday coupling adopted under Article 74 of Commission Regulation (EU) 2015/1222 establishing a guideline on capacity allocation and congestion management ('CACM Regulation').
- (8) The FRC methodology is also consistent with the methodologies for sharing congestion income under Article 57 of the FCA Regulation and Article 73 of the ('FCA CIDM' and 'CACM CIDM',

¹ Decision 25/2020 (contested decision) of 23 October 2020.

² Decision A-009-2020 of 19 April 2021.

respectively). All three methodologies consider the distribution of day-ahead congestion income in accordance with Article 73 of the CACM Regulation.

- (9) The FRC methodology takes into account the objectives and principles set out in the FCA Regulation, and is consistent with other methodologies based on the FCA Regulation.
- (10) The FCA Regulation aims to coordinate and harmonise forward capacity calculation and allocation in the long-term capacity markets. It sets requirements for the TSOs to cooperate on a pan-European level, within capacity calculation regions ('CCRs') and across bidding zone borders. Chapter 5 of the FCA Regulation provides for establishing European harmonised allocation rules for long-term transmission rights, including regional and bidding zone border specific requirements ('HAR'). Minimum content requirements for the HAR are specified in Article 52(2) of the FCA Regulation. In addition, Article 49 and Article 59 of the FCA Regulation provide for the establishment, functioning and cost sharing of the Single Allocation Platform for long-term capacity allocation ('SAP'). The FCA Regulation also sets out rules for establishing capacity calculation methodologies based on either the flow-based approach ('FB approach') or the coordinated net transmission capacity approach ('cNTC approach'). The FRC methodology covers sharing of LTTR's firmness and remuneration costs under both approaches.
- (11) Sharing of congestion income pursuant to the CACM CIDM and the FCA CIDM applies at the CCR level. Therefore, sharing of costs incurred to ensure firmness and remuneration of LTTRs must be carried out at the same geographical level, i.e. at the level of CCR. Furthermore, in each market time unit ('MTU') as used for the day-ahead capacity calculation, the final congestion income distributed to each TSO according to the CACM CIDM may not become negative. This is to ensure revenue adequacy of each TSO, as stipulated in the CACM CIDM.
- (12) Congestion income shared pursuant to the FCA CIDM and the CACM CIDM also includes congestion income generated by the allocation of LTTRs. Most of the LTTRs is subject to remuneration (i.e. the non-nominated physical transmission rights or the financial transmission rights) and the TSOs have the obligation to remunerate the holders of those rights in accordance with Article 35 of the FCA Regulation. Thus, in a situation where LTTRs have been issued in a CCR, the costs of remuneration of those LTTRs should be borne by the same TSOs which receive the congestion income in the day-ahead timeframe that is generated by the capacity corresponding to those LTTRs.
- (13) The remuneration of LTTRs is in the scope of the FRC methodology and includes situations where the remuneration of LTTRs exceeds the total congestion income generated in a respective MTU by day-ahead and long-term capacity allocation at the level of a bidding zone border pursuant to the CACM CIDM and the FCA CIDM.
- (14) The following recitals provide a description of the expected impact of the FRC methodology on the objectives of the FCA Regulation, as required by Article 4(8) of the FCA Regulation. These objectives are listed in Article 3, points (a)-(g), of the FCA Regulation.
- (15) According to Article 3(a), the FCA Regulation aims at promoting effective long-term cross-zonal trade with long-term cross-zonal hedging opportunities for market participants. The FRC methodology serves this objective as it lays down objective criteria and solutions for the sharing of costs to be applied by all involved TSOs, thus creating a solid basis for European cost sharing principles applied at the CCR level.
- (16) According to Article 3(b), the FCA Regulation aims at optimising the allocation of long-term cross-zonal capacity. The FRC methodology is consistent with this objective because it takes into account the results of the long-term capacity calculation methodology in accordance with Article 10 of the FCA

Regulation and Article 21 of the CACM Regulation, including the provisions and limitations related to secure system operation.

- (17) According to Article 3(c) and Article 3(e), the FCA Regulation aims at providing non-discriminatory access to long-term cross-zonal capacity and respecting the need for a fair and orderly forward capacity allocation and orderly price formation. The FRC methodology also promotes these objectives because it ensures full remuneration and firmness of LTTRs as required by the FCA Regulation. Consequently, it is compliant with the HAR.
- (18) According to Article 3(d), the FCA Regulation aims at ensuring fair and non-discriminatory treatment of TSOs, ACER, regulatory authorities and market participants. The FRC methodology ensures fair and non-discriminatory treatment of all affected parties, because it sets out cost sharing keys that are based on objective and fair principles. The process of developing the FRC methodology is transparent and allows for equal involvement of the TSOs, ACER, regulatory authorities and market participants.
- (19) According to Article 3(f), the FCA Regulation aims at ensuring and enhancing the transparency and reliability of information on forward capacity allocation. The FRC methodology is in line with this objective as it provides clear rules and a solid basis for cost sharing in a transparent and reliable way. The FRC methodology will also be published by the TSOs.
- (20) According to Article 3(g), the FCA Regulation aims at contributing to the efficient long-term operation and development of the electricity transmission system and electricity sector in the Union. The FRC methodology is consistent with this objective, because it maintains and guarantees the remuneration and firmness principles established by the FCA Regulation, which facilitate efficient cross-zonal hedging that is needed for efficient market functioning and price signals.
- (21) In conclusion, the FRC methodology contributes to the objectives of forward capacity allocation listed in Article 3 of the FCA Regulation.

TITLE 1

GENERAL PROVISIONS

Article 1 Subject matter and scope

1. The FRC methodology determines sharing of the costs incurred to ensure firmness and remuneration of eligible LTTRs on all bidding zone borders ('BZBs') where LTTRs are allocated, in accordance with Article 61 of the FCA Regulation.
2. The FRC methodology shall apply to the TSOs listed in Annex 1 (hereafter referred to as 'TSOs').
3. Where cost sharing considers transmission assets owned by legal entities other than TSOs, these parties shall be treated in a transparent and non-discriminatory way. The TSOs operating these assets shall conclude the necessary agreements compliant with the FRC methodology with the relevant transmission asset owners to contribute to sharing costs incurred to ensure firmness and remuneration of LTTRs on the operated assets.
4. If costly remedial actions are used to ensure firmness of capacity allocated in the form of LTTRs, the methodology for redispatching and countertrading pursuant to Article 74(1) of the CACM Regulation shall apply.
5. Imbalance costs associated with compensating market participants do not occur when LTTRs have been curtailed before the day-ahead firmness deadline and the holders of curtailed LTTRs are compensated pursuant to Article 53(2) of the FCA Regulation. Sharing rules for the compensation of costs due to curtailment of LTTRs are described in Article 6.

Article 2 Definitions and interpretation

1. For the purpose of the FRC methodology, the definitions in Article 2 of the FCA Regulation, Article 2 of the CACM Regulation, Article 2 of the HAR, Article 2 of the SAP methodology, Article 2 of the CACM CIDM, Article 2 of Regulation (EU) 2019/943 and Article 2 of Directive (EU) 2019/944 shall apply.
2. In addition, the following definitions shall apply:
 - a) 'eligible LTTRs' means either non-nominated physical transmission rights or financial transmission rights; and
 - b) 'bidding zone border' or 'BZB' means one or several interconnectors between two bidding zones having a direct network connection (regardless of whether the interconnector is owned by a TSO or by another legal entity).
3. In this FRC methodology, unless the context clearly indicates otherwise:
 - a) the singular also includes the plural and vice versa;
 - b) the table of contents and headings are inserted for convenience only and do not affect the interpretation of the FRC methodology; and
 - c) any reference to legislation, regulation, directive, order, instrument, code or any other enactment shall include any modification, extension or re-enactment of it then in force.

TITLE 2

SHARING OF REMUNERATION COSTS

Article 3 Sharing of remuneration costs of eligible LTTRs among BZBs of a CCR applying long-term cNTC-based allocation

1. The TSOs shall pay the remuneration costs of eligible LTTRs to the LTTR holders on a given BZB and MTU, in case the price difference is positive in the direction of the LTTR, in accordance with Article 35 of the FCA Regulation and the HAR. The remuneration costs of eligible LTTRs in the CCRs which apply cNTC approach for long-term capacity allocation shall be covered in four consecutive steps determined in paragraphs (2) to (5) below.
2. In the first step, the remuneration costs of eligible LTTRs on a given BZB and MTU shall be covered by the day-ahead congestion income¹ assigned to that BZB and MTU. If the resulting day-ahead congestion income on a given BZB and MTU remains positive after this step, it constitutes the 'remaining income' for the purpose of paragraph (3).
3. In the second step, the remuneration costs of eligible LTTRs on a given BZB and MTU that were not covered by the day-ahead congestion income pursuant to paragraph (2) shall be covered as follows:
 - a) In CCRs which apply the flow-based approach for the day-ahead capacity allocation and cNTC-based approach for the long-term capacity allocation, the remuneration costs on a given BZB and MTU, which were not covered by the day-ahead congestion income pursuant to paragraph (3), shall be covered by all BZBs in the respective CCR with the use of the remaining income and in proportion to the remaining income on these BZBs. If the costs to be shared in such a way exceed the total remaining income on all BZBs in a CCR, these shared costs on a given BZB and MTU shall be decreased proportionally to match the total remaining income on all BZBs of the CCR;
 - b) In CCRs which apply cNTC approach for both day-ahead and long-term capacity allocation, the remuneration costs on an interdependent BZB and MTU, which were not covered by the day-ahead congestion income pursuant to paragraph (3), shall be covered by all interdependent BZBs in the respective CCR with the use of the remaining income and in proportion to the remaining income on these interdependent BZBs. If the costs to be shared in such a way exceed the total remaining income on all interdependent BZBs in a CCR, these shared costs on a given interdependent BZB and MTU shall be decreased proportionally to match the total remaining income on all interdependent BZBs in the CCR. The list of interdependent BZBs and the TSOs (or related parties) of those BZBs for each CCR applying the cNTC approach in the day-ahead capacity calculation shall be published in a common document by ENTSO-E on its web page for information purposes. The document shall be updated and published promptly as soon as any changes occur. Each publication shall be announced in an ENTSO-E's newsletter and on the website of the SAP.

In this step, the BZBs which do not issue LTTRs shall not be considered in sharing of the remuneration costs. Day-ahead congestion income for that MTU which remains after this step shall be distributed in accordance with Article 73 of CACM Regulation.

¹ Including the income resulting from day-ahead fallback procedures.

4. In the third step, the remuneration costs of eligible LTTRs on a given BZB and MTU that were not covered pursuant to paragraphs (2) and (3) shall be covered by the long-term congestion income generated on that BZB and MTU. The costs of LTTRs which are returned and remunerated in accordance with Article 43 of the FCA Regulation shall be considered as negative congestion income. Long-term congestion income on that BZB and MTU that remains after this step shall be distributed in accordance with Article 57 of FCA Regulation.
5. In the fourth step, the remuneration costs of eligible LTTRs on a given BZB and MTU that were not covered pursuant to paragraphs (2) to (4) shall be covered by any other congestion income (e.g. from other MTUs, intraday timeframe etc.) assigned to the TSOs on that BZB and, eventually, by any other financial resources of a TSO responsible for that BZB, in accordance with Article 5.
6. In case that the single day-ahead coupling process is unable to produce results for at least one BZB, i.e. the fallback procedures are triggered, as approved in accordance with Article 44 of the CACM Regulation, the second step described in paragraph (3) does not apply on the decoupled BZBs.

Article 4 Sharing of remuneration costs of eligible LTTRs among BZBs of a CCR applying long-term flow-based capacity allocation

1. The TSOs shall pay the remuneration costs of eligible LTTRs to the LTTR holders on a given BZB and MTU, in case the price difference is positive in the direction of the LTTR, in accordance with Article 35 of the FCA Regulation and the HAR. These remuneration costs of eligible LTTRs in the CCRs which apply flow-based approach for long-term capacity allocation shall be covered in three consecutive steps determined in paragraphs (2) to (4) below.
2. In the first step, the remuneration costs of eligible LTTRs of a given CCR and MTU shall be aggregated at the CCR level. The day-ahead congestion income generated in that CCR and MTU shall as well be aggregated at CCR level. The aggregated remuneration costs of eligible LTTRs of the given CCR and MTU shall be covered by the day-ahead congestion income generated in that CCR and MTU. Any aggregated day-ahead congestion income in that CCR and MTU that remains after this step shall be distributed in accordance with Article 73 of CACM Regulation.
3. In the second step, any aggregated remuneration costs of eligible LTTRs in a given CCR and MTU remaining after the first step shall be covered by the aggregated long-term congestion income generated in that CCR and MTU. The costs of LTTRs which are returned and remunerated in accordance with Article 43 of the FCA Regulation shall be considered as negative congestion income in the aggregated long-term congestion income generated in that CCR and MTU. Any aggregated long-term congestion income in that CCR and MTU that remains after this step shall be distributed in accordance with Article 57 of FCA Regulation.
4. In the third step, any aggregated remuneration costs of eligible LTTRs in a given CCR and MTU remaining after the second step shall be allocated to individual bidding zone borders. This allocation is proportional to the distribution of day-ahead gross congestion income to the BZBs of that CCR and MTU in accordance with Article 73 of CACM Regulation. Those remaining costs allocated to individual BZBs shall be covered by any other congestion income assigned to the TSOs on that BZB and, eventually, by any other financial resources of the TSOs responsible for that BZB.
5. In the CCRs where LTTRs are not issued at all BZBs, the aggregation of congestion income pursuant to paragraphs (2) and (3) shall not consider those BZBs which do not issue LTTRs. In CCRs where LTTRs are issued on all BZBs, the aggregation of congestion income pursuant to paragraphs (2) and (3) shall

consider all BZBs, including external borders for which external flows can re-enter the relevant CCR within the same slack hub.

6. In case that single day-ahead coupling process is unable to produce results for at least one BZB, i.e. the fallback procedures are triggered, as approved in accordance with Article 44 of the CACM Regulation, the remuneration costs of eligible LTTRs of that BZB shall be assigned to the affected BZB only, and remuneration costs shall be covered by any other congestion income assigned to the TSOs on that BZB and, eventually, by any other financial resources of the TSOs responsible for that BZB. Any aggregation step as described in paragraphs (2) to (4) is not applicable in this case.

Article 5 Sharing of remuneration costs of eligible LTTRs among TSOs on a BZB

Costs of remuneration of LTTRs resulting from Article 3 or Article 4(5) attributed to a particular BZB shall be shared among the TSOs on that BZB according to the sharing keys defined in the FCA CIDM for that BZB.

TITLE 3

SHARING OF COMPENSATION COSTS

Article 6 Sharing of compensation costs due to curtailment of LTTRs

1. In case the curtailment of LTTRs occurs to ensure that the operation remains within operational security limits prior to the day-ahead firmness deadline, the compensation costs arising from the application of that curtailment shall be shared at the BZB level by the same sharing key as defined in Article 5 unless involved parties, as referred to in Article 1(2), have made specific cost sharing arrangements.
2. In case curtailment of LTTRs occurs due to force majeure or an emergency situation after the day-ahead firmness deadline, the compensation costs arising from the application of that curtailment shall be shared according to the provisions set out in Article 72 of the CACM Regulation.
3. Compensation costs resulting from the curtailment of LTTRs can be subject to a cap applied to the compensations on a specific BZB, as specified in the relevant annexes to the HAR for LTTRs.

TITLE 4

FINAL PROVISIONS

Article 7 Publication, implementation and revision of the FRC methodology

1. The TSOs shall publish the FRC methodology without undue delay after a decision has been taken by ACER in accordance with Article 5(2)(b) of Regulation (EU) 2019/942.
2. The TSOs of each CCR shall implement the FRC methodology at the date of implementation of the long-term capacity calculation methodology within their respective CCR in accordance with Article 10 of the FCA Regulation and the FCA CIDM.
3. This FRC methodology shall be revised and amended when the FCA CIDM is changed, where this is necessary for consistency according to Article 61(3) of the FCA Regulation.

4. Notwithstanding paragraph (3), if congestion income assigned to the BZB according to the FCA CIDM is not be calculated in accordance with the CACM CIDM, the FRC methodology shall be adapted accordingly.

Article 8 Language

The reference language for this FRC methodology shall be English. For the avoidance of doubt, where TSOs need to translate the FRC methodology into their national language(s), in the event of inconsistencies between the English version published by TSOs in accordance with Article 4(13) of the FCA Regulation and any version in another language, the relevant TSOs shall, in accordance with national legislation, provide the relevant regulatory authorities with an updated translation of the FRC methodology.

ANNEX 1

List of TSOs subject to the FRC methodology:

1. 50Hertz - 50Hertz Transmission GmbH
2. Amprion - Amprion GmbH
3. APG - Austrian Power Grid AG
4. BCAB - Baltic Cable AB
5. ČEPS - ČEPS a.s.
6. EirGrid - EirGrid plc
7. Elering - Elering AS
8. ELES - ELES, d.o.o.
9. Elia - Elia Transmission Belgium S.A.
10. Energinet - Energinet
11. ESO – Electroenergien Sistemen Operator EAD
12. Fingrid - Fingrid OyJ
13. HOPS d.d. - Croatian Transmission System Operator Plc
14. IPTO - Independent Power Transmission Operator S.A.
15. MAVIR ZRt. - MAVIR Magyar Villamosenergia-ipari Átviteli Rendszerirányító Zártkörűen Működő Részvénytársaság ZRt.
16. PSE - Polskie Sieci Elektroenergetyczne S.A.
17. REE - Red Eléctrica de España S.A.
18. REN - Rede Eléctrica Nacional, S.A.
19. RTE - Réseau de Transport d'Electricité S.A.
20. SEPS - Slovenská elektrizačná prenosová sústava, a.s.
21. SONI - System Operator for Northern Ireland Ltd
22. TenneT GER - TenneT TSO GmbH
23. TenneT TSO - TenneT TSO B.V.
24. Terna - Terna S.p.A.
25. Transelectrica - Compania Nationala de Transport al Energiei Electrice S.A.
26. TransnetBW - TransnetBW GmbH