

**ACER Decision on the Implementation Framework for IN Platform: Annex I**

# **Implementation Framework for a European platform for the imbalance netting process**

in accordance with Article 22 of Commission Regulation (EU) 2017/2195 of 23 November 2017 establishing a guideline on electricity balancing

**24 June 2020**

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## Whereas

- (1) This document describes the implementation framework for a European platform for the imbalance netting process (European platform for the imbalance netting process hereafter referred to as “IN-Platform”) in accordance with Article 22 of Commission Regulation (EU) 2017/2195 of 23 November 2017 establishing a guideline on electricity balancing (hereafter referred to as the “EB Regulation”). This methodology is hereafter referred to as the “INIF”.
- (2) This INIF takes into account the general principles, goals and other methodologies set in the EB Regulation, the Regulation (EU) 2017/1485 establishing a guideline on electricity transmission system operation (hereafter referred to as the “SO Regulation”), the Regulation (EU) 2019/943 of the European Parliament and of the Council of 5 June 2019 on the internal market for electricity (hereafter referred to as the “Electricity Regulation”) as well as the Regulation (EC) No 543/2013 of 14 June 2013 on submission and publication of data in electricity markets and amending Annex I to Regulation (EC) No 714/2009 of the European Parliament and of the Council (hereafter referred to as the “Transparency Regulation”).
- (3) The goal of the EB Regulation is the integration of balancing energy markets. The integration of balancing energy markets should be facilitated with the establishment of common European platforms for operating the imbalance netting process and enabling the exchange of balancing energy from frequency restoration reserves and replacement reserves. To facilitate this goal, it is necessary to develop implementation frameworks for European platforms for balancing energy exchange from frequency restoration reserves with manual (“mFRR”) and automatic (“aFRR”) activation, replacement reserves (“RR”) and the imbalance netting process (hereafter referred to as “INP”).
- (4) This INIF lays down the design, functional requirements, governance and cost sharing for the IN-Platform. In addition, the INIF contains the proposal for the entity to perform the functions of the IN-Platform. The IN-Platform shall be able to perform the imbalance netting process function as well as the TSO-TSO settlement function as described in the Article 22 of the EB Regulation.
- (5) Article 3(128) of the SO Regulation defines the imbalance netting process as “*a process agreed between TSOs that allows avoiding the simultaneous activation of FRR in opposite directions, taking into account the respective FRCEs as well as the activated FRR and by correcting the input of the involved FRPs accordingly.*”
- (6) Article 146(9) of the SO Regulation specifies further, “*where an LFC block consists of more than one LFC area and the reserve capacity on FRR as well as the reserve capacity on RR is calculated based on the LFC block imbalances, all TSOs of the same LFC block shall implement an imbalance netting process and interchange the maximum amount of imbalance netting power defined in Article 146(6) of the SO Regulation with other LFC areas of the same LFC block.*”
- (7) Article 146(10) of the SO Regulation details that, “*where an imbalance netting process is implemented for LFC areas of different synchronous areas, all TSOs shall interchange the maximum amount of imbalance netting power defined in Article 146(6) of the SO Regulation with other TSOs of the same synchronous area participating in that imbalance netting process.*”
- (8) This INIF contains the deliverables pursuant to Articles 22(1) and 22(3) of the EB Regulation and it is developed pursuant to principles of Articles 18(3)(b), 23, 37(1), 58(2) and 58(4) of the EB Regulation.

- (9) Article 22(2) of the EB regulation requires that the IN-Platform “[s]hall be based on common governance principles and business processes and shall consist of at least the imbalance netting process function and the TSO-TSO settlement function.” This INIF fulfils these requirements by defining the common business processes of the imbalance netting process and the TSO-TSO settlement function. The common governance principles are also set forth in this INIF.
- (10) This INIF defines the application of the TSO-TSO model and the high-level design of the IN-Platform required by Article 22(3)(a) of the EB Regulation. The high-level design includes basic principles of the imbalance netting process function including the constraints.
- (11) This INIF defines specific requirements for the calculation of the capacity limits on IN balancing borders. Where an IN balancing border does not correspond to a bidding zone border the capacity limits should be infinite and where it does correspond to a bidding zone border the capacity limits should be the cross-zonal capacities. In the first step, the cross-zonal capacities should be based on the cross-zonal capacities remaining after the end of the single intraday coupling and updated, where relevant, for emerging operational security issues during the balancing timeframe and to take into account electricity exchanges within the balancing timeframe, inter alia, the replacement power interchange, the manual and automatic frequency restoration power interchange. In the second step, once the methodology for cross-zonal capacity calculation within the balancing timeframe in accordance with Article 37(3) of the EB Regulation will be adopted and implemented, the cross-zonal capacities resulting from such methodology should be used instead of the cross-zonal capacity remaining after the end of the single intraday coupling. Moreover, this INIF may require an amendment if the methodology in accordance with Article 37(3) of the EB Regulation would also have an impact on the updating process or introduces other changes to the approach defined in this INIF.
- (12) Article 22(3)(b) of the EB Regulation requires that the INIF determines the roadmap and timeline for the implementation of the IN-Platform which should be consistent with the deadline for making the IN-Platform operational as defined in Article 22(5) of the EB Regulation. Implementation of the IN-Platform means implementing all necessary IT systems in order to operate the imbalance netting process. This INIF adopts the establishment of the IN-Platform with the implementation project, which will draw experience and achievements from existing implementation projects and initiatives.
- (13) Article 22(3)(c) of the EB Regulation requires the determination of functions required to operate the IN-Platform. This INIF fulfils this requirement by defining the imbalance netting process function, the TSO-TSO settlement function and the capacity management function (“CMF”). The imbalance netting process function takes, among others, aFRR demands and IN balancing border capacities as input and determines the amount of imbalance netting power interchange between LFC areas. The TSO-TSO settlement function implements the settlement of intended energy exchanges as a result of the cross-border imbalance netting process between the TSOs. The CMF implements the continuous updating of cross-zonal capacities that are available for the imbalance netting power interchanges on bidding zone borders and can be implemented as a common function for all balancing platforms established pursuant to the EB Regulation.
- (14) Under the current assumption, it should be understood that the IN algorithm and the aFRR algorithm will be executed within the same optimisation cycle in the same IT system, i.e. each optimisation result will be forwarded to the next optimisation run. In other words, the IN-AOF

and the aFRR-AOF will share the IT interface to the CMF. Therefore, the capacities after aFRR might not need to be sent to the CMF and back to IN as both algorithms will be implemented in the same IT system, unless TSOs choose differently during the implementation phase.

- (15) This INIF defines the governance and the decision-making process for the implementation and operation of the IN-Platform as required by Article 22(3)(d) of the EB Regulation. A steering committee should be established to make the decisions regarding the IN-Platform in accordance with the principles of the decision-making process defined in Article 4 of the EB Regulation.
- (16) Article 22(3)(e) of the EB Regulation requires to determine the designation of the entity or entities that will operate the functions of the IN-Platform. This INIF determines the designation of a single entity established by TSOs to operate the imbalance netting process function and the TSO-TSO settlement function, whereas the designation of the entity to operate the CMF is postponed, as this function is not required to be implemented at the beginning of the operation of the IN-Platform. This designation ensures that the governance and operation of the European platform is based on the principle of non-discrimination and ensures equitable treatment of all member TSOs, and that no TSO benefits from unjustified economic advantages through the participation in the functions of the European platform as required by Article 22(3)(d) of the EB Regulation. It also facilitates the objectives of the EB Regulation as referred to in Article 3(b) and (d) therein.
- (17) Article 22(3)(f) of the EB Regulation requires that the INIF includes a framework for harmonisation of terms and conditions related to balancing. This INIF sets out that no further harmonisation is necessary to operate the IN-Platform.
- (18) Article 22(3)(h) of the EB Regulation requires a description of the algorithm for the operation of the imbalance netting process function in accordance with Article 58 of the EB Regulation. This INIF provides this description including the objective functions and the constraints of the algorithm. This INIF adopts an integrated algorithm that optimises the imbalance netting process.
- (19) This INIF shall aim at explicitly taking into account the cross-zonal capacity that has been allocated for the exchange of balancing capacity or sharing of reserves according to Article 38(1) of the EB Regulation into the imbalance netting process function, in order to give a priority access to the allocated cross-zonal capacity to the TSOs that have allocated this cross-zonal capacity.
- (20) This INIF fulfils the objectives stated in Article 3 of the EB Regulation as follows:
  - (a) This INIF contributes to the objective of non-discrimination in balancing markets pursuant to Article 3(1)(a) of the EB Regulation, since the same rules and methodologies will apply to all TSOs and LFC areas and, by this, minimise the counter-activation of balancing resources for all market participants in a non-discriminatory way. All TSOs have the same right to form one optimisation region, ensuring non-discrimination. In the last layer of the imbalance netting process, the netting volume will be distributed proportionally to the individual aFRR demands of the LFC areas and, by this, the proportionality is ensured as stated in Article 13 of this methodology. Moreover, the operation of the IN-Platform by a single entity, being a single TSO or a company owned by TSOs, and the rules set out in this INIF for the governance and the decision-making process of the IN-Platform ensure non-discrimination among TSOs.
  - (b) This INIF contributes to the transparency in balancing markets, as required by Article 3(1)(a) of the EB Regulation, by specifying requirements on publication and monitoring with respect to: access to the same reliable information on netted volumes at the same time and in a transparent way for all TSOs and all market participants.

- (c) This INIF contributes to the objective of enhancing efficiency of balancing as well as efficiency of European and national balancing markets pursuant to Article 3(1)(b) of the EB Regulation by implementing the imbalance netting process with a function for the consistent and transparent update of the available cross-zonal capacities. The proposed imbalance netting process reduces the overall volume of activated balancing reserves in Europe and the national balancing markets. The maximum potential netting volume and, by this, the efficiency of the European and national balancing markets, is ensured by usage of an optimisation algorithm which considers all available cross-zonal capacity, making optimal usage of the available cross-zonal capacities.
- (d) This INIF contributes to the objective of integrating balancing markets pursuant to Article 3(1)(c) of the EB Regulation by implementation of the European platform for the imbalance netting process to be used by all TSOs performing the automatic frequency restoration process, at least for the Continental Europe synchronous area. The rules described in this INIF for the operation of the platform, with respect to the cross-border imbalance netting process, and to the TSOs flexibility to request adjustments to the available cross-zonal capacities take into account the requirements of the SO Regulation, contributing to operational security.
- (e) This INIF contributes to the objective of contributing to operational security pursuant to Article 3(1)(c) of the EB Regulation, since using the available cross-zonal capacity enables, according to the proposed principles of the algorithm, to minimise the counter-activation of balancing resources and, in consequence, to increase the availability of balancing resources for activation in real-time.
- (f) This INIF, as required by Article 3(1)(d) of the EB Regulation, contributes to the efficient long-term operation and development of the electricity transmission system by promoting the efficient use of the available cross-zonal capacities through the optimisation of the balancing energy exchanges as a result of the INP, achieved by the IN-Platform, as described in paragraph (c) above. Additionally, as required also by Article 3(1)(d) of the EB Regulation, the INIF facilitates the efficient and consistent functioning of day-ahead, intraday and balancing markets, by clearly separating the timeframes.
- (g) This INIF, as required by Article 3(1)(e) of the EB Regulation, avoids undue barriers to entry for new entrants and fosters the liquidity of balancing markets based on the TSOs' needs and not on the BSPs' characteristics, and by establishing a framework for further harmonisation.
- (h) This INIF, as required by Articles 3(1)(f) and (g) of the EB Regulation, facilitates the participation of demand response including aggregation facilities, energy storage and renewable energy sources, by establishing a level-playing field for all BSPs, through the non-discriminatory and transparent rules for the operation of the IN-Platform.

## **Article 1**

### **Subject matter and scope**

1. This INIF is the methodology developed in accordance with Article 22(1) of the EB Regulation and establishes a conceptual and legal framework for the implementation of the European platform for the imbalance netting process.
2. All TSOs performing the automatic frequency restoration process according to Article 145(4) of the SO Regulation shall implement and make operational the IN-Platform. For the avoidance of doubt, where an LFC area consists of more than one monitoring area, only the TSO appointed in the LFC area operational agreement as responsible for the implementation and operation of the automatic frequency restoration process according to Article 143(4) of the SO Regulation shall use the IN-Platform.
3. All the TSOs of the CE synchronous area performing the automatic frequency restoration process shall use the platform to perform the imbalance netting process of this INIF, according to Article 22(5) of the EB Regulation.
4. All TSOs outside the CE synchronous area performing the automatic frequency restoration process may become member TSOs of the IN-Platform and use the IN-Platform to perform the INP.
5. This methodology applies solely to the European platform for the imbalance netting process in accordance with Article 146 of the SO Regulation. The European platforms for frequency restoration reserves processes and replacement reserves process are out of the scope of this INIF.
6. The pricing of balancing energy that results from the activation of balancing energy bids and cross-zonal capacity used for the exchange of balancing energy or for operating the INP is out of the scope of this INIF and shall be treated in a methodology pursuant to Article 30 of the EB Regulation.
7. The common TSO-TSO settlement rules applicable to the IN-Platform is out of the scope of this INIF and shall be treated in a methodology pursuant to Article 50 of the EB Regulation.

## **Article 2**

### **Definitions and interpretation**

1. For the purposes of this INIF, the terms used shall have the definition given to them in Article 2 of the EB Regulation, Article 3 of the SO Regulation, Article 2 of Commission Regulation (EU) 2015/1222 and Article 2 of the Transparency Regulation 543/2013. In addition, in this INIF the following terms shall apply:
  - (a) 'aFRR area' is defined as an area where two or more TSOs exchange aFRR between their LFC areas;
  - (b) 'aFRR demand' means an individual TSO demand, as a volume representing the activation request for standard aFRR balancing energy product bids from the common merit order list, being equal to the combined effect of the already activated aFRR and the ACE excluding the intended exchange of balancing energy resulting from the cross border aFRP or INP. For avoidance of doubt, all aFRR demands are aFRR inelastic demands, i.e. demand that needs to be satisfied irrespective of the price of the activation of standard aFRR balancing energy product;

- (c) ‘balancing market time unit’ means a period of 15 minutes length. The first balancing market time unit starting right at 00:00 market time. The balancing market time units shall be consecutive and not overlapping;
- (d) ‘correction’ or ‘Pcorr’ means the amount of power exchange of the participating TSO with other participating TSOs in MW. The correction value is treated as “an agreed upon active power flow” in the sense of the virtual tie-line defined in the SO Regulation between participating TSOs;
- (e) ‘expert group’ means the body composed of nominated experts of all member TSOs of the IN-Platform;
- (f) ‘IGCC’ means ‘International Grid Control Cooperation’ and is the implementation project that shall evolve into the IN-Platform;
- (g) ‘imbalance netting balancing border’ means a set of physical transmission lines linking adjacent LFC areas of participating TSOs;
- (h) ‘imbalance netting balancing border capacity limits’ means the limits for the imbalance netting power interchange in import or positive direction and export or negative direction for an imbalance netting balancing border or a set of imbalance netting balancing borders and serving as constraints for the optimisation algorithm;
- (i) ‘IT-limitation’ means the maximum value the imbalance netting process function can process as input to an imbalance netting cross-border capacity limit, given by the limitations of the technical IT system, e.g. number of digits;
- (j) ‘member TSO’ means any TSO who has joined the IN-Platform, including TSOs from multi-TSO LFC areas from different member states or third countries that are not appointed via their LFC area operational agreement to be responsible for implementing and operating the automatic frequency restoration process pursuant to Part IV of the SO Regulation, and in particular Articles 141 and 143 thereof;
- (k) ‘optimisation region’ means a geographical area of several participating TSOs smaller than the geographical area of all participating TSOs for the purpose of imbalance netting or the exchange of balancing energy from aFRR and, by this, imbalance netting between two or more LFC areas participating in the IN-Platform;
- (l) ‘participating TSO’ means any member TSO using the IN-Platform in order to operate the imbalance netting process for intended exchange of balancing energy. By twelve months after the approval of INIF, all member TSOs shall be participating TSOs, except TSOs from multi-TSO LFC areas from different member states or third countries that are not appointed via their LFC area operational agreement to be responsible for implementing and operating the automatic frequency restoration process pursuant to Part IV of the SO Regulation, and in particular Articles 141 and 143 thereof. This is without prejudice to derogation in accordance with Article 62(2)(a) of the EB Regulation;
- (m) ‘real-time optimisation cycle’ means the time in which the imbalance netting process function calculates a new correction as a result;
- (n) ‘steering committee’ means the decision-making body of the IN-Platform consisting of nominated representatives of all member TSOs and is the superior body to the expert group;



- (o) ‘TSOs exchanging balancing energy from aFRR’ means two or more LFC areas or LFC blocks with a common activation of balancing energy from aFRR where the activation of balancing energy from aFRR follows the principle of a common merit order;
  - (p) ‘usage of the platform’ means exchanging imbalance netting energy between two or more LFC areas via the IN-Platform in order to operate the imbalance netting process, meaning when the IN-Platform receives aFRR demand values and sends out correction values that will be used in the load-frequency control of each LFC area.
2. ‘ENTSO-E’ stands for ‘ENTSO for electricity’, ‘CE’ stands for ‘Continental Europe’, ‘FRCE’ stands for ‘frequency restoration control error’, ‘MW’ stands for ‘megawatt’ and ‘HVDC’ stands for ‘high voltage direct current’.
  3. In this INIF, unless the context requires otherwise:
    - (a) the singular indicates the plural and vice versa;
    - (b) the table of contents and headings are inserted for convenience only and do not affect the interpretation of this INIF;
    - (c) any reference to cross-zonal capacities shall include also the reference to allocation constraints as defined in the Commission Regulation (EU) 2015/1222 of 24 July 2015 establishing a guideline on capacity allocation and congestion management (‘CACM Regulation’);
    - (d) any reference to legislation, regulations, directives, orders, instruments, codes or any other enactment shall include any modification, extension or re-enactment of it when in force;
    - (e) any reference to an Article without an indication of the document shall mean a reference to this INIF.

### **Article 3**

#### **High-level design of the IN-Platform**

1. This INIF introduces the European platform for the imbalance netting process agreed and proposed by all TSOs to be made operational by all TSOs performing the automatic frequency restoration process pursuant to Part IV of the SO Regulation that will minimise the simultaneous counter-activation of aFRR.
2. The IN-Platform includes all LFC areas of the participating TSOs according to Article 146 of the SO Regulation and the imbalance netting balancing borders.
3. The IN-Platform shall consist of the imbalance netting process function, the TSO-TSO settlement function and the CMF in accordance with Article 4(6).
4. The inputs to the imbalance netting process function are:
  - (a) the aFRR demand of every LFC area of each participating TSO being continuously reported to the IN-Platform by each participating TSO;
  - (b) the imbalance netting cross-border capacity limits for concerned imbalance netting balancing borders being continuously reported to the IN-Platform;
  - (c) the operational security constraints provided by the participating TSOs or affected TSOs in accordance with Article 150 of the SO Regulation, where applicable;

- (d) other inputs of the imbalance netting process function can be information that ensures safe and correct communication, the stability of the IT system or monitoring of the working of the system and publication.
5. The imbalance netting cross-border capacity limits shall be determined in accordance with Article 4 of this INIF.
6. The imbalance netting process function calculates as output, in each real-time optimisation cycle, the following values which are continuously reported to each participating TSO by the IN-Platform:
  - (a) the imbalance netting power interchange on the imbalance netting balancing borders as defined in Article 146 of the SO Regulation to be used in the load-frequency control of each LFC area of each participating TSO. The imbalance netting power interchange shall be calculated by the algorithm applied for operating the imbalance netting process. The imbalance netting power interchange is the intended exchange of energy for the respective real-time optimisation cycle;
  - (b) the updated imbalance netting cross-border capacity limits;
  - (c) other outputs of the imbalance netting process function can be information that ensures safe and correct communication, the stability of the IT system or monitoring of the working of the system.
7. The implementation of the process shall be based on the communication of the load-frequency control of each participating TSO with the imbalance netting process function which enables real-time balancing of the instantaneously occurring active power imbalances.
8. The inputs to the TSO-TSO settlement function are:
  - (a) the imbalance netting power interchange on the imbalance netting balancing borders in accordance with Article 3(6)(a) of this INIF;
  - (b) the prices required by the common settlement rules defined by the proposal for common settlement rules according to Article 50(1) of the EB Regulation;
  - (c) other inputs of the TSO-TSO settlement function can be information that ensures safe and correct communication, the stability of the IT system or monitoring of the working of the system.
9. The TSO-TSO settlement function shall determine the outputs using the methodology in accordance with Article 50(1) of the EB Regulation. The outputs of the TSO-TSO settlement function shall be:
  - (a) the settlement volume of energy;
  - (b) the settlement prices;
  - (c) the settlement amounts;
  - (d) other outputs of the TSO-TSO settlement function can be information that ensures safe and correct communication, the stability of the IT system or monitoring of the working of the system.
10. The netted volumes will be published as soon as possible and not later than 30 min after the relevant market time unit.

## **Article 4**

### **Determination of the imbalance netting balancing border capacity limits as input to the optimisation algorithm**

1. All participating TSOs shall determine for each imbalance netting balancing border the imbalance netting balancing border capacity limits. When the imbalance netting balancing border corresponds to a bidding zone border these limits shall be determined in accordance with paragraphs 2 to 4. When the imbalance netting balancing border does not correspond to a bidding zone border, the imbalance netting balancing border capacity limit shall be set to the technical exchange limit, which shall be equal to 99,999 MW in both directions.
2. All TSOs and the IN-Platform shall continuously update the imbalance netting cross-zonal capacities for each of the relevant bidding zone borders or set of bidding zone borders such that at any time the cross-zonal capacities available for the imbalance netting process represent:
  - (a) the initial cross-zonal capacities which shall be either the cross-zonal capacities remaining after the single intraday coupling or cross-zonal capacities calculated in accordance with the methodologies pursuant to Article 37(3) of the EB Regulation;
  - (b) the additional cross-zonal capacities allocated to the RR, mFRR and aFRR process pursuant to Article 38(1) of the EB Regulation;
  - (c) the already allocated cross-zonal capacities in the balancing timeframe:
    - (i) the already confirmed cross-zonal replacement, automatic and manual frequency restoration power interchanges;
    - (ii) cross-zonal exchanges resulting from other non-balancing processes notified by TSOs to the IN-Platform;
  - (d) the adjustments of cross-zonal capacities pursuant to the SO Regulation:
    - (i) adjustments requested for operational security reasons by participating or affected TSOs in accordance with Articles 146(3)(c), 147(3)(c), 148(3)(c), 149(3) and 150(3)(b) of the SO Regulation;
    - (ii) limitations imposed due to technical inability to facilitate the cross-zonal imbalance netting process on HVDC interconnectors, in accordance with Articles 146(3)(a), 146(3)(b), 147(3)(a), 147(3)(b) and 171(1) of the SO Regulation.
3. The adjustments pursuant to paragraph 2(d) may also be applied to imbalance netting balancing borders that do not correspond to a bidding zone border. The adjustment pursuant to 2(d)(i) may only apply to operational security reasons which could not be addressed with the latest cross-zonal capacity calculation and coordinated regional operational security analysis and such adjustment shall be made and published as soon as the need is identified.
4. The participating or affected TSOs imposing adjustments pursuant to paragraph 2(d)(i) shall publish the request for these limitations, together with a justification for the request, no later than 30 minutes after the end of the relevant balancing market time unit in which the additional limitations have been requested.
5. The limitations pursuant to paragraph 2(d)(ii) may disable any exchange on an imbalance netting balancing border that is constituted only of HVDC interconnector(s). The limitation of a given imbalance netting balancing border is allowed when duly justified by the relevant TSOs concerned by

the imbalance netting balancing border. The concerned regulatory authorities shall be notified of this limitation. The technical justification shall be published by the concerned TSOs.

6. No later than two years after the deadline for the implementation of the aFRR-Platform in accordance with Article 5(3)(b) of the implementation framework adopted pursuant to ACER Decision 02-2020<sup>1</sup>, all TSOs shall establish a CMF, which shall implement the continuous process described in paragraph 2. In case other balancing platforms have such function, the CMF shall be the same across these platforms, if the same obligation is imposed in the relevant implementation framework for these platforms.

## **Article 5**

### **The timeline and roadmap for the implementation of the IN-Platform**

1. By twelve months after the approval of this INIF, all member TSOs shall implement and make operational the IN-Platform that shall fulfil every requirement defined in this INIF and further requirements according to Articles 30 and 50 of the EB Regulation.
2. All member TSOs agree that they shall implement all necessary adaptations to the functionalities of IGCC in accordance with the INIF no later than eleven months after the approval of the INIF.
3. To fulfil the requirement pursuant to paragraph 1, all member TSOs shall establish the IN-Platform, which shall be based on the implementation project IGCC that shall be transformed into the IN-Platform after the approval of this INIF.
4. All member TSOs shall ensure that the IN-Platform fulfils the deadlines pursuant to Articles 22(4) and (5) of the EB Regulation as follows:
  - (a) all member TSOs shall designate the entity responsible for performing the imbalance netting process function and the TSO-TSO settlement function of the IN-Platform within six months after approval of the INIF;
  - (b) by twelve months after the approval of this INIF, the IN-Platform shall be implemented and operational;
  - (c) before the deadline pursuant to point (b), all member TSOs shall develop new processes and adapt existing ones related to the imbalance netting process, adaptation of national terms and conditions in accordance with Article 18 of the EB Regulation, pricing and settlement in accordance with this INIF.
5. The IN-Platform may allow for gradual implementation of the INIF requirements and gradual accession of TSOs. All member TSOs shall agree on an IN-Platform accession roadmap at the latest one month after the approval of this INIF. The accession roadmap shall foresee timelines, for all member TSOs that will become participating ones, related to:
  - (a) interoperability tests between each TSO and the IN-Platform;
  - (b) operational tests;

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[https://www.acer.europa.eu/Official\\_documents/Acts\\_of\\_the\\_Agency/Individual%20decisions/ACER%20Decision%2002-2020%20on%20the%20Implementation%20framework%20for%20aFRR%20Platform.pdf](https://www.acer.europa.eu/Official_documents/Acts_of_the_Agency/Individual%20decisions/ACER%20Decision%2002-2020%20on%20the%20Implementation%20framework%20for%20aFRR%20Platform.pdf)

- (c) connection of each TSO to the IN-Platform;
  - (d) the connection of all TSOs that have been granted a derogation by their respective regulatory authorities in accordance with Article 62 of the EB Regulation;
  - (e) the accession roadmap shall start after its finalisation by all member TSOs and end not later than the IN-Platform is used by all TSOs performing the automatic frequency restoration process of at least the CE synchronous area.
6. TSOs of synchronous areas other than CE performing the automatic frequency restoration process may decide to become member TSOs of the IN-Platform at a later point in time, after fulfilling the relevant requirements defined in this INIF and the IN-Platform accession roadmap.

## **Article 6**

### **Functions of the IN-Platform**

1. The IN-Platform shall consist of the imbalance netting process function, the TSO-TSO settlement function and the CMF in accordance with Article 4(5). If deemed efficient when implementing the methodology for CZC calculation within the balancing timeframe in accordance with Article 37(3) of the EB Regulation, a cross-zonal capacity calculation function may be added.
2. The operation of the IN-Platform by using the multilateral TSO-TSO model as described in this INIF among the participating TSOs shall in principle result in:
  - (a) lowering the amount of activated balancing resources from automatic frequency restoration process;
  - (b) strengthening security of supply;
  - (c) reduction of TSO costs due to enhancing efficiency of balancing by lowering the amount of activated balancing energy resources.
3. The purpose of the imbalance netting process function shall be to coordinate the INP of the participating TSOs in accordance with the high-level design of the IN-Platform in Article 3 and the principles of the optimisation algorithm in Article 13.
4. The purpose of the TSO-TSO settlement function shall be the calculation of the settlement amount that each participating TSO has to bear for the intended exchange of energy from the imbalance netting process.
5. The purpose of the CMF shall be to update continuously the imbalance netting cross-zonal capacities for each of the relevant bidding zone borders or set of bidding zone borders such that at any time the cross-zonal capacities reflect the actually available cross-zonal capacities for imbalance netting power interchanges. The CMF shall be considered as a function required to operate the IN-Platform from the deadline referred to in Article 4(6).
6. If and when relevant, the purpose of the CZC calculation function shall be to implement the methodology for CZC calculation within the balancing timeframe in accordance with Article 37(3) of the EB Regulation. In case other balancing platforms have such function, the CZC calculation function shall be the same across these platforms, if the same obligation is imposed in the relevant implementation framework for these platforms.

## **Article 7**

### **Fall-back procedures**

1. Pursuant to Article 28 of the EB Regulation, where the IN-Platform fails to perform the imbalance netting process, or where a TSO(s) fails to provide input to or to receive or process output from the imbalance netting process function in accordance with Articles 3(4), 3(6) and 4 of this INIF, each concerned TSO(s) shall use fall-back procedures as soon as possible. The fall-back procedures shall be decided by each participating TSO in accordance with Article 146(8) of the SO Regulation.
2. The concerned TSO(s) as described in paragraph 1 shall publish that its participation in the imbalance netting process has been temporarily suspended or restored. In cases of temporary incidents linked to the complexity of the real-time processes and the limitations of the IT systems, with an expected duration longer than 5 minutes and shorter than 30 minutes, the concerned TSO(s) shall publish that its(their) participation in the IN-Platform has been temporarily suspended or restored. Each TSO shall publish this information as early as possible but no later than 30 minutes after the end of the first validity period of the suspension or restoration of the participation.

## **Article 8**

### **Governance**

1. The rules concerning the governance and operation of the IN-Platform shall ensure that no participating TSO benefits from unjustified economic advantages through the participation in the IN-Platform. Each member TSO has a representative in the steering committee and in the expert group. The member TSOs aim to make unanimous decisions. Where unanimity cannot be reached, qualified majority voting according to Article 9 shall apply. The steering committee makes decisions according to Articles 9(1)(a), 9(2) and 9(3).
2. Each member TSO shall carry out the common governance principles of the IN-Platform by means of:
  - (a) the steering committee of the IN-Platform, which is the decision-making body of the IN-Platform with the right to make any binding decision on any matter or question related to the IN-Platform and not covered by the Article 9(1)(b). Thereto, each member TSO shall appoint at least one regular representative to the steering committee. It is a superior body to the expert group;
  - (b) the expert group of the IN-Platform, which is the expert body of the IN-Platform and prepares background materials for the steering committee (including, for example, analyses, impact assessments, summaries) and evaluates and proposes concepts in relation to the development, governance and operation of the IN-Platform. Thereto, each member TSO shall appoint at least one regular representative to the expert group.
3. Each member TSO shall actively cooperate with all other member TSOs in order to:
  - (a) create and revise concepts related to the settlement of intended exchange of energy from the imbalance netting process;
  - (b) monitor the correct implementation and execution of the settlement of intended exchange of energy from the imbalance netting process.
4. Each participating TSO shall implement and carry out the necessary procedures for the usage of the

IN-Platform in a proper and timely manner.

## **Article 9**

### **Decision-making**

1. Decisions leading to a proposal for an amendment of this INIF or the amendment of the methodologies submitted by all TSOs in accordance with Articles 30 or 50 of the EB Regulation shall be made according to the following process:
  - (a) member TSOs' decision: all member TSOs shall approve in advance a proposal to be sent to all TSOs for decision;
  - (b) all TSOs' decision: shall be subject to the approval of all TSOs pursuant to the voting principles of Article 4(3) of the EB Regulation, where 'all TSOs' includes both all member TSOs in the framework of the steering committee of the IN-Platform and non-member TSOs and this decision-making process is independent from the member TSO's decision process.
2. Decisions concerning the IN-Platform not leading to a proposal for an amendment of this INIF or the amendment of the methodologies pursuant to Articles 30 or 50 of the EB Regulation relative to imbalance netting but affecting all member TSOs shall be subject to approval of all member TSOs.
3. Decisions concerning the IN-Platform not leading to a proposal for an amendment of this INIF and only affecting a geographical area of several member TSOs smaller than the geographical area of all member TSOs shall be subject to approval of the member TSOs of the concerned geographical area.
4. In case of decisions according to paragraphs 1(a), 2 and 3, each member TSO of the concerned region is expected to take part in the decision-making process. The quorum for initiating a decision-making process is a majority (50 % + 1) of the member TSOs that are present or represented through another member TSO participating in the decision-making process.
5. The member TSOs shall implement a decision-making process, which ensures effective decision-making with the aim to make decisions unanimously. Where unanimity cannot be reached, qualified majority voting shall apply.
6. Decisions according to paragraphs 1(a) and 2 where no consensus is reached shall, pursuant to the voting principles of Article 4(3) of the EB Regulation, require a majority of:
  - (a) member TSOs representing at least 55 % of the TSOs' countries concerned and present or represented in accordance with paragraph 4; and
  - (b) member TSOs representing countries comprising at least 65 % of the population of countries concerned and present or represented in accordance with paragraph 4.
7. Decisions according to paragraph 3 where no consensus is reached shall, pursuant to the voting principles of Article 4(4) of the EB Regulation, require a majority of:
  - (a) member TSOs representing at least 72 % of the member TSOs' countries of the concerned region and present or represented according to paragraph 4; and
  - (b) member TSOs representing countries comprising at least 65 % of the population of member TSOs' countries of the concerned region and present or represented according to paragraph 4.

8. Decisions in accordance with paragraph 3 in relation to regions concerned composed of five member states and third countries or less shall be decided based on consensus.
9. Voting on steering committee decisions can be made in physical meetings, conference calls or by circular resolution via e-mail.

## **Article 10**

### **Designation of entity**

1. Each member TSO of the IN-Platform is accountable towards its national regulatory authority and its market participants for the execution of the imbalance netting process in accordance with this INIF.
2. All TSOs shall appoint one entity being a single TSO or a company owned by TSOs that shall be entrusted to operate the imbalance netting process function and the TSO-TSO settlement function of the IN-Platform. No later than eighteen months before the deadline when the capacity management function shall be considered as a function required to operate the aFRR-Platform in accordance with Article 6(4) of the implementation framework adopted pursuant to the ACER Decision 02-2020<sup>2</sup>, all TSOs shall develop a proposal for amendment of this INIF, which shall designate the entity performing the capacity management function in accordance with Article 21(3)(e) of the EB Regulation and clarify whether the IN-Platform will be operated by a single entity or multiple entities.
3. The designation of the entity will be done in accordance with Article 22(4) of the EB Regulation.
4. The designated entity shall be acting on behalf of all member TSOs under the supervision of the steering committee of the IN-Platform, in accordance with Article 8(2)(a) and in accordance with the operational rules approved by the steering committee.
5. For the avoidance of doubt, the designated entity may contract third parties for executing supporting tasks, subject to the agreement of the steering committee.

## **Article 11**

### **Framework for harmonisation of the terms and conditions related to the IN-Platform**

All TSOs agree that there is no need for harmonisation of terms and conditions related to balancing for the establishment of the IN-Platform.

## **Article 12**

### **Categorisation of costs and detailed principles for sharing the common and regional costs**

1. The costs of establishing, amending and operating the IN-Platform shall be broken down into:
  - (a) common costs resulting from coordinated activities of all member TSOs in the IN-Platform;
  - (b) regional costs resulting from activities of several but not all member TSOs in the IN-

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[https://www.acer.europa.eu/Official\\_documents/Acts\\_of\\_the\\_Agency/Individual%20decisions/ACER%20Decision%2002-2020%20on%20the%20Implementation%20framework%20for%20aFRR%20Platform.pdf](https://www.acer.europa.eu/Official_documents/Acts_of_the_Agency/Individual%20decisions/ACER%20Decision%2002-2020%20on%20the%20Implementation%20framework%20for%20aFRR%20Platform.pdf)



Platform;

- (c) national costs resulting from activities of the participating TSOs of the IN-Platform.
- 2. Common costs shall include costs resulting from the steering committee decisions on proposals related to:
  - (a) common costs for establishing or amending the IN-Platform:
    - (i) implementation of new functionalities in the imbalance netting process function which have an impact on the intended or unintended exchange of energy and which is for the benefit of all member TSOs;
    - (ii) implementation of new functionalities in the TSO-TSO settlement function which have an impact on the TSO-TSO settlement;
    - (iii) commissioning of joint studies for the benefit of all member TSOs;
  - (b) common costs of operating the IN-Platform:
    - (i) operational costs related to the operation of the imbalance netting process function which are agreed as common costs by member TSOs in accordance with the decision-making process according to Article 9;
    - (ii) operational costs related to the operation of the TSO-TSO settlement function which are agreed as common costs by member TSOs in accordance with the decision-making process according to Article 9.
- 3. The common costs for establishing or amending the IN-Platform in accordance with Article 12(2)(a) shall be shared among the member TSOs in accordance with Article 12(15) and in accordance with the following principles set out by Article 23 of the EB Regulation:
  - (a) one eighth of common costs shall be divided equally between member states and third countries whose TSOs are member TSOs;
  - (b) five eighths of common costs shall be divided proportionally to the consumption of member states and third countries whose TSOs are member TSOs;
  - (c) two eighths of common costs shall be divided equally between member TSOs.
- 4. The common costs of operating the IN-Platform in accordance with Articles 12(2)(b) and 12(5) shall not be borne by member TSOs that are not participating TSOs in the IN-Platform.
- 5. The common costs for operating the IN-Platform in accordance with Article 12(2)(b) shall be shared among the participating TSOs in accordance with Article 12(17) and in accordance with the following principles set out by Article 23 of the EB Regulation:
  - (a) one eighth of common costs shall be divided equally between member states and third countries whose TSOs are participating TSOs;
  - (b) five eighths of common costs shall be divided proportionally to the consumption of member states and third countries whose TSOs are participating TSOs;
  - (c) two eighths of common costs shall be divided equally between participating TSOs.
- 6. Regional costs shall be borne by member TSOs of the concerned region and consist of:
  - (a) regional costs for establishing or amending the IN-Platform:
    - (i) implementation of new functionalities in the imbalance netting process function which have an impact on the intended or unintended exchange of energy and

- which are applicable only by the member TSOs of the concerned region;
- (ii) implementation of new functionalities in the TSO-TSO settlement function which have an impact on the TSO-TSO settlement of the member TSOs of the concerned region;
  - (iii) commissioning of joint studies performed for the member TSOs of the concerned region.
- (b) regional costs of operating the IN-Platform:
- (i) operational costs related to the operation of the imbalance netting process function which are agreed as regional costs by member TSOs in accordance with the member TSOs' decision-making process according to Article 9;
  - (ii) operational costs related to the operation of the TSO-TSO settlement function which are agreed as regional costs by member TSOs in accordance with the decision-making process according to Article 9.
7. The regional costs for establishing or amending the IN-Platform in accordance with Article 12(6)(a) shall be shared among the member TSOs of the concerned region in accordance with Article 12(15) and in accordance with the following principles set out by Article 23 of the EB Regulation:
- (a) one eighth of regional costs shall be divided equally between member states and third countries whose TSOs are member TSOs of the concerned region;
  - (b) five eighths of regional costs shall be divided proportionally to the consumption of member states and third countries whose TSOs are member TSOs of the concerned region;
  - (c) two eighths of regional costs shall be divided equally between member TSOs of the concerned region.
8. The regional costs for operating the IN-Platform in accordance with paragraph 9 shall not be borne by member TSOs that are not participating TSOs in the IN-Platform.
9. The regional costs for operating the IN-Platform in accordance with Article 12(6)(b) shall be shared among the participating TSOs of the concerned region in accordance with Article 12(17) and in accordance with the following principles set out by Article 23 of the EB Regulation:
- (a) one eighth of regional costs shall be divided equally between member states and third countries whose TSOs are participating TSOs of the concerned region;
  - (b) five eighths of regional costs shall be divided proportionally to the consumption of member states and third countries whose TSOs are participating TSOs of the concerned region;
  - (c) two eighths of regional costs shall be divided equally between participating TSOs of the concerned region.
10. National costs shall be the costs for using the IN-Platform, which consist of the costs of development, implementation, operation and maintenance of technical infrastructure and procedures as well as for the settlement process.
11. Each member TSO shall bear its own national costs and is solely responsible (i.e.: no joint and several liability) for the due payment of all the costs related to the technical infrastructure necessary for the successful usage of the IN-Platform.
12. The cost sharing principle shall apply to costs incurred after the approval of this INIF.
13. For the avoidance of doubt, all TSOs agree not to share any costs incurred before the approval of this

INIF.

14. Each member TSO shall pay its share of costs pursuant to Articles 12(2)(a)(i) and (ii) also retrospectively in accordance with Article 12(12).
15. When sharing the common and regional costs for establishing and amending the IN-Platform according to Articles 12(3) and 12(7), the TSO's share of the costs of the member TSOs shall consider only the member TSOs appointed in the LFC area operational agreement as responsible for implementing and operating the automatic frequency restoration process in this LFC area according to Article 143(4) of the SO Regulation. For the avoidance of doubt, the member TSOs that are not appointed as responsible for implementing and operating the automatic frequency restoration process shall not have to bear costs related to Articles 12(3)(c) and 12(7)(c).
16. In case several member TSOs are active in a Member State, the Member State's share of the costs shall be distributed among those member TSOs proportionally to the consumption in the member TSOs' monitoring areas.
17. When sharing the common and regional costs for operating the IN-Platform in accordance with Articles 12(5) and 12(9), the consumption share of the costs of a participating TSO shall consider respectively the consumption of the member TSOs, which appointed the participating TSO to perform the automatic frequency restoration process according to Article 143(4) of the SO Regulation.

### **Article 13**

#### **Description of the algorithm for the operation of imbalance netting process function**

1. The inputs to the algorithm for the operation of the imbalance netting process function are:
  - (a) the aFRR demands;
  - (b) the imbalance netting balancing border capacity limits, as output of the CMF, determined in accordance with Article 4.
2. The objective functions of the optimisation algorithm are:
  - (a) First priority: minimise the deviation from the imbalance netting target values according to Article 13(5);
  - (b) Second priority: maximise the satisfaction of the aFRR demand of individual LFC areas;
  - (c) Third priority: minimise the deviation from the proportional distribution of deviation from the target value;
  - (d) Forth priority: minimise the absolute value of imbalance netting power interchange.
3. The constraints of the optimisation algorithm are:
  - (a) the imbalance netting power balance equation of each LFC area must be satisfied, meaning that the sum of cross-zonal imbalance netting power interchanges and the satisfied aFRR demand is equal to zero;
  - (b) the sum of all imbalance netting power interchanges of all participating LFC areas must be zero;
  - (c) the imbalance netting power interchange on an imbalance netting balancing border or set of imbalance netting balancing borders shall not exceed the imbalance netting balancing border capacity limits determined in accordance with Article 4.

4. The outputs of the optimisation algorithm in every optimisation cycle are:
  - (a) the imbalance netting power interchange on the imbalance netting balancing borders as defined in Article 146 of the SO Regulation to be used in the load-frequency control of each LFC area of each participating TSO;
  - (b) the updated imbalance netting cross-zonal capacity limits.
5. For the purposes of the optimisation, each imbalance netting balancing border has a mathematically defined negative and positive direction for the imbalance netting power interchange.
6. The imbalance netting target value for distribution of the imbalance netting potential of an individual LFC area is based on the ratio of a participating TSO's aFRR demand to the sum of aFRR demands of all participating TSOs for the same direction of aFRR demand, which ensures a proportional distribution of imbalance netting potential in case no imbalance netting balancing border capacity limit is reached;
7. Implicit imbalance netting between LFC areas exchanging aFRR is not considered in the imbalance netting process performed by the IN-Platform.
8. Each participating TSO shall have the right to participate with their LFC area(s) in an optimisation region in accordance with the following rules:
  - (a) an optimisation region is a region of LFC areas preceding the imbalance netting among all LFC areas of the IN-Platform and, by this, the TSOs of the concerned optimisation region have prior access to the transmission capacity of imbalance netting balancing borders which are shared by two LFC areas, involved in the concerned optimisation region. The TSOs of the concerned optimisation region have no prior access to any other transmission capacity of imbalance netting balancing borders;
  - (b) the optimal distribution of activation of balancing energy bids in an optimisation region obtained as a result of the TSOs exchanging balancing energy from aFRR shall be respected by the imbalance netting process function, without reducing the overall netting volume;
  - (c) the number of possible optimisation regions shall not exceed the sum of the number of aFRR areas of participating TSOs, number of LFC blocks of participating TSOs where the reserve capacity on FRR as well as the reserve capacity on RR is calculated based on the LFC block imbalances and number of synchronous areas of participating TSOs by more than one and in accordance with Article 13(7)(e);
  - (d) each participating TSO may have only one optimisation region with other participating TSOs preceding the imbalance netting among all LFC areas of the IN-Platform;
  - (e) in contrary to 13(7)(d), a participating TSO may have additional optimisation regions with other participating TSO(s), if the additional optimisation region of this participating TSO includes either only LFC areas of one LFC block where the reserve capacity on FRR as well as the reserve capacity on RR is calculated based on the LFC block imbalances, in accordance with Article 146(9) of the SO Regulation, or only LFC areas of one synchronous area in accordance with Article 146(10) of the SO Regulation.
9. The TSOs being involved in an optimisation region may form a concerned region pursuant to the governance described in Article 8, decision-making in accordance with Article 9 and categorisation of costs in accordance with Article 12(1)(b).

10. All optimisation regions are optimised by the algorithm of the imbalance netting process function of the IN-Platform.
11. The impact of optimisation regions on the individual netting volumes of all participating TSOs shall be regularly monitored and reported in accordance with Article 59 of the EB Regulation.

#### **Article 14**

##### **Publication and implementation of this INIF**

1. The TSOs shall publish this INIF without undue delay pursuant to Article 7 of the EB Regulation after a decision has been made by the European Union Agency for the Cooperation of Energy Regulators in accordance with Article 5(7) and 6(2) of the EB Regulation.
2. The TSOs shall implement the INIF in accordance with Article 5.
3. One month before the deadline for the implementation of the IN-Platform pursuant to Article 5, the member TSOs shall publish a description of the optimisation algorithm pursuant to Article 12(3)(k) of the EB Regulation.

#### **Article 15**

##### **Language**

The reference language for this INIF shall be English. For the avoidance of doubt, where TSOs need to translate this INIF into their national language(s), in the event of inconsistencies between the English version published by TSOs in accordance with Article 7 of the EB Regulation and any version in another language, the relevant TSOs shall be obliged to dispel any inconsistencies by providing a revised translation of this INIF to their relevant regulatory authorities.