

All TSOs' proposal for the 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

23 January 2019

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All TSOs, taking into account the following:

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- (1) This document is a common proposal developed by all Transmission System Operators (hereafter referred to as "TSOs") regarding a proposal for 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 "EBGL"). This proposal is hereafter referred to as the "INIF".
- (2) The INIF takes into account the general principles, goals and other methodologies set in the EBGL. The goal of the EBGL 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. Cooperation between TSOs should be strictly limited to what is necessary for the efficient and secure design, implementation and operation of those European platforms.
- (3) The 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 EBGL.
- (4) The INIF takes note of the provisions listed in the recitals (5) to (8).
- (5) Article 3(128) of the Commission Regulation (EU) 2017/1485 of 2 August 2017 establishing a guideline on electricity transmission system operation (hereafter referred to as the "SOGL") 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 SOGL 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 SOGL with other LFC areas of the same LFC block.
- (7) Article 146(10) of the SOGL 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 SOGL with other TSOs of the same synchronous area participating in that imbalance netting process.
- (8) Additional relevant references to the IN-Platform within the EBGL are listed below:
  - (a) Article 18(3)(b):

- (3) When developing proposals for terms and conditions for balancing service providers and balance responsible parties, each TSO shall:
  - (b) respect the frameworks for the establishment of European platforms for the exchange of balancing energy and for the imbalance netting process pursuant to Articles 19, 20, 21 and 22;

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- (b) Article 23:
  - (1) All TSOs shall provide a yearly report to the relevant regulatory authorities in accordance with Article 37 of Directive 2009/72/EC in which the costs of establishing, amending and operating the European platforms pursuant to Articles 19, 20, 21 and 22 are explained in detail. This report shall be published by the Agency taking due account of sensitive commercial information.
  - (2) The costs referred to in paragraph 1 shall be broken down into:
    - (a) common costs resulting from coordinated activities of all TSOs participating in the respective platforms;
    - (b) regional costs resulting from activities of several but not all TSOs participating in the respective platforms;
    - (c) national costs resulting from activities of the TSOs in that Member State participating in the respective platforms.
  - (3) Common costs referred to in paragraph 2(a) shall be shared among the TSOs in the Member States and third countries participating in the European platforms. To calculate the amount to be paid by the TSOs in each Member State and, if applicable, third country, one eighth of the common cost shall be divided equally between each Member State and third country, five eighths shall be divided between each Member State and third country proportionally to their consumption, and two eighths shall be divided equally between the participating TSOs pursuant to paragraph 2(a). The Member State's share of the costs shall be borne by the TSO or TSOs operating in a territory of that Member State. In case several TSOs are operating in a Member State, the Member State's share of the costs shall be distributed among those TSOs proportionally to the consumption in the TSOs control areas.
  - (4) To take into account changes in the common costs or changes in the participating TSOs, the calculation of common costs shall be regularly adapted.
  - (5) TSOs cooperating in a certain region shall jointly agree on a proposal for the sharing of regional costs in accordance with paragraph 2(b). The proposal shall then be individually approved by the relevant regulatory authorities of each of the Member States and, if applicable, third country in the region. TSOs cooperating in a certain region may alternatively use the cost sharing arrangements set out in paragraph 3.
  - (6) The cost sharing principles shall apply to costs contributing to the establishing, amending and operating the European platforms from the approval of the proposal

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for the relevant implementation frameworks pursuant to Articles 19(1), 20(1), 21(1) and 22(1). In case the implementation frameworks propose that existing projects shall evolve into a European platform, the participating TSOs may propose that a share of the costs incurred before the approval of the proposal for the implementation frameworks directly related to the development and implementation of this project and assessed as reasonable, efficient and proportionate is considered as part of the common costs pursuant to paragraph 2(a).

- (c) Article 37(1):
  - (1) After the intraday cross-zonal gate closure time, TSOs shall continuously update the availability of cross-zonal capacity for the exchange of balancing energy or for operating the imbalance netting process. Cross-zonal capacity shall be updated every time a portion of cross-zonal capacity has been used or when cross-zonal capacity has been recalculated.
- (d) Article 58(2) and 58(4):
  - (2) In the proposal pursuant to Article 22, all TSOs shall develop an algorithm to be operated by the imbalance netting process function. This algorithm shall minimise the counter-activation of balancing resources by performing the imbalance netting process pursuant to Part IV of SOGL.
  - (4) All algorithms developed in accordance with this Article shall:
    - (a) respect operational security constraints;
    - (b) take into account technical and network constraints;
    - (c) if applicable, take into account the available cross-zonal capacity.
- (9) The INIF contains the deliverables pursuant to Articles 22(1) and 22(3) of the EBGL and it is developed pursuant to principles of Articles 18(3)(b), 23, 37(1), 58(2) and 58(4) of the EBGL.
- (10) Article 5(5) of the EBGL requires that the INIF includes a proposed timescale for its implementation and a description of its expected impact on the objectives of the EBGL. The expected impact is described in paragraphs 11, 12, 13, 14, 15, 16 and 17. The proposed timescale is included in Article 4.
- (11) The INIF contributes to the objective of non-discrimination and transparency in balancing markets pursuant to Articles 3(1)(a), 3(2)(a) and 3(2)(b) of the EBGL, since the same rules and methodologies will apply to all TSOs and LFC areas and, by this, minimise the counteractivation 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 12 of this proposal. All TSOs will have access to the same reliable information on netted volumes at the same time and in a transparent way. All market participants will have access to the same reliable information on netted volumes.
- (12) The INIF contributes to the objective of enhancing efficiency of balancing as well as efficiency

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of European and national balancing markets pursuant to Articles 3(1)(b) and 3(2)(c)of the EBGL by implementing the imbalance netting process. 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 as stated in Articles 4 and 12 of this proposal.

- (13) The INIF contributes to the objective of integrating balancing markets pursuant to Article 3(1)(c) of the EBGL 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 as stated in Article 1 and 3 of this proposal.
- (14) The INIF contributes to the objective of contributing to operational security pursuant to Articles 3(1)(c), 3(2)(d) and 3(2)(f) of the EBGL 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. Moreover, the proposed congestion management methodologies have proved their effectiveness in operation. The fulfilment of these objectives are detailed in the Articles 4 and 12 of this proposal.
- (15) The INIF contributes to the objective of facilitating the efficient and consistent functioning balancing markets pursuant to Article 3(1)(d) of the EBGL by specifying how the imbalance netting process is interacting with, and is integrated to, each LFC area's LFC controller in a consistent manner in order to minimise the counter-activation of balancing resources and increase the available balancing resources for all participating TSOs to the imbalance netting process stated in Article 12.
- (16) The INIF serves the requirement of Article 3(2)(e) of the EBGL since only available cross-zonal capacity after the previous market timeframes is used for imbalance netting and, by this, it is ensured that the development of the forward, day-ahead and intraday electricity markets is not compromised, while the availability of cross-zonal capacity for operating the imbalance netting process shall be continuously updated by TSOs. The principles of determination cross-zonal capacity listed in Article 3(5) of this proposal are designed to ensure that the development of the forward, day-ahead and intraday markets is not compromised.
- (17) The INIF serves the requirement of Article 3(2)(h) of the EBGL since the technical framework proposed is based on agreed European standards, which are already in operation. The technical framework stated in Article 12 takes into consideration agreed European standards and technical specifications, including specifications of the SOGL and the Continental Europe Operation Handbook.
- (18) In conclusion, the INIF contributes to the general objectives of the EBGL.
- (19) For clarification:
  - (a) 'IGCC' means International Grid Control Cooperation and is the implementation project for the IN-Platform. The IGCC will evolve into the IN-Platform.

(b) All TSOs agree that the existing project IGCC is the implementation project which will serve as basis for development of the IN-Platform.

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(c) All member TSOs agree that they shall implement all necessary adaptions to the functionalities of IGCC in accordance with the INIF no later than eleven months after the approval of the INIF.

# Abbreviations

List of abbreviations used in this INIF is following:

- aFRR: frequency restoration reserves with automatic activation
- CE: Continental Europe
- CZC: cross-zonal capacity, as defined in Regulation 543/2013, Article 2(10)
- EBGL: guideline on electricity balancing
- EG: expert group
- ENTSO-E: European Network of Transmission System Operators for Electricity
- EU: European Union
- FRCE: frequency restoration control error
- FRR: frequency restoration reserves
- HVDC: high-voltage direct current
- IGCC: International Grid Control Cooperation
- INIF: proposal for the implementation framework for a European platform for the imbalance netting process
- IN-Platform: European platform for the imbalance netting process
- LFC: load-frequency control
- MW: megawatt
- RR: replacement reserves
- SC: steering committee
- SOGL: guideline on electricity transmission system operation
- TSO: transmission system operator

SUBMIT THE FOLLOWING IMPLEMENTATION FRAMEWORK TO ALL NATIONAL REGULATORY AUTHORITIES:

#### Article 1

# Subject matter and scope

(1) The IN-Platform as determined in this INIF is the common proposal of all TSOs in accordance with Article 22(1) of the EBGL.

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- (2) All TSOs performing the automatic frequency restoration process according to Article 145(4) of SOGL 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 145(4) of the SOGL 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 EBGL.
- (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 proposal applies solely to the European platform for the imbalance netting process in accordance with Article 146 of the SOGL. The European platforms for frequency restoration reserves processes and replacement reserves process are out of the scope of this proposal.
- (6) The proposal for the pricing of balancing energy and cross-zonal capacity used for exchange of balancing energy or for operating the imbalance netting process pursuant to Article 30 of the EBGL is out of the scope of this document and will be treated in a separate document.
- (7) The proposal for TSO-TSO settlement rules applicable to the imbalance netting process pursuant to Article 50 of the EBGL is out of the scope of this document and will be treated in a separate document.

#### Article 2

# **Definitions and interpretation**

- (1) For the purposes of the INIF, the terms used shall have the definition given to them in Article 2 of the EBGL, Article 3 of the SOGL, Article 2 of Commission Regulation (EU) 2015/1222 and Article 2 of the Transparency Regulation 543/2013.
- (2) In addition, in this INIF the following terms shall apply:
  - (a) 'aFRR demand' means the sum of the already activated aFRR and the FRCE without the influence of the intended exchange of balancing energy resulting from the cross-border aFRP or INP. The sign convention for aFRR demand is: negative value where the LFC area is in power surplus and indicates that downward aFRR balancing energy needs to be activated; and positive value where the LFC area is in power deficit and indicates that upward aFRR balancing energy needs to be activated. For avoidance of doubt, all aFRR demands are aFRR inelastic demands;

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(b) 'balancing market time unit' means a period of 15 minutes length. The first balancing market time unit starting right after 00:00 CET. The balancing market time units shall be consecutive and not overlapping;

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- (c) 'correction' or 'P<sub>corr</sub>' 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 SOGL between participating TSOs;
- (d) 'expert group' or 'EG' means the body including nominated experts of all member TSOs of the IN-Platform;
- (e) 'imbalance netting balancing border' means a set of physical transmission lines linking adjacent LFC areas of participating TSOs; The optimisation algorithm calculates the imbalance netting power interchange for each imbalance netting balancing border. 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;
- (f) 'imbalance netting cross-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;
- (g) 'implementation of the IN-Platform' means implementing all necessary IT systems in order to operate the imbalance netting process. If the platform is implemented by the entity designated to operate the IN-Platform, the platform is formally implemented for all TSOs;
- (h) '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;
- (i) 'member TSO' means any TSO which 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 SOGL, and in particular Articles 141 and 143;
- (j) '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;
- (k) 'participating TSO' means any member TSO which uses 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

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implementing and operating the automatic frequency restoration process pursuant to Part IV of the SOGL, and in particular Articles 141 and 143. This is without prejudice to derogation in accordance to Article 62(2)(a) from the EBGL;

- (l) 'real-time optimisation cycle' means the time in which the imbalance netting process function calculates a new correction as a result;
- (m) 'steering committee' or 'SC' means the decision-making body of the IN-Platform including nominated representatives of all member TSOs and is the superior body to the expert group;
- (n) '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;
- (o) '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 send out correction values that will be used in the load-frequency control of each LFC area.
- (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 INIF;
  - (c) 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.

# 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 SOGL that will minimise the simultaneous counter-activation of aFRR.
- (2) The European platform for imbalance netting process includes all LFC areas of the participating TSOs according to Article 146 of the SOGL and the imbalance netting balancing borders.
- (3) The IN-Platform shall consist of the imbalance netting process function and the TSO-TSO settlement function.
- (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 SOGL, 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.

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- (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 the Article 146 of the SOGL 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 EBGL;
  - (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 proposed in accordance with Article 50(1) of the EBGL. 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

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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

# Calculation of the imbalance netting cross-border capacity limits as input to the optimisation algorithm

- (1) All imbalance netting balancing borders between participating TSOs shall be included with their imbalance netting cross-border capacity limits calculated in accordance with paragraph 2 of this Article in the imbalance netting process function of the IN-Platform.
- (2) Each TSO shall continuously calculate and provide the imbalance netting cross-border capacity limits to the optimisation algorithm for each of the relevant imbalance netting balancing border or set of imbalance netting balancing borders by applying the following process:
  - (a) First step:
    - i. If the imbalance netting balancing border or set of imbalance netting balancing borders correspond to a bidding zone border or set of bidding zone borders, the imbalance netting cross-border capacity limits are equal to the cross-zonal capacity remaining after the intraday cross-zonal gate closure time in accordance with Article 37(2) of the EBGL. Once the methodology pursuant Article 37(3) of the EBGL is approved and implemented, the imbalance netting cross-border capacity limits shall be equal to the respective calculated values.
    - ii. If the imbalance netting balancing border or set of imbalance netting balancing borders does not correspond to a bidding zone border or set of bidding zone borders and hence, no cross-zonal capacity between the respective LFC areas is defined, the cross-border capacity limits are equal to the respective technical IT limitation agreed by all member TSOs.
    - iii. Bidding zone borders and the respective cross-zonal capacity limitations inside an LFC area are not considered by the optimisation algorithm.
  - (b) Second step: The imbalance netting cross-border capacity limits obtained in Article 4(2)(a) of this INIF are adjusted by the cross-border reserve replacement power interchange, the manual frequency restoration power interchange on each imbalance netting balancing border or set of imbalance netting balancing borders to which the given cross-border capacity limits are related to, in accordance with Article 37(1) of the EBGL, as follows:
    - i. The imbalance netting cross-border capacity limit in positive direction is reduced by the sum of the replacement power interchanges and the manual frequency restoration power interchanges in positive direction of the given imbalance netting balancing border or set of imbalance netting balancing borders.
    - ii. The imbalance netting cross-border capacity limit in positive direction is increased by the sum of the replacement power interchanges and the manual frequency

restoration power interchanges in the negative direction of the given imbalance netting balancing border or set of imbalance netting balancing borders.

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- iii. The imbalance netting cross-border capacity limit in negative direction is reduced by the sum of the replacement power interchanges and the manual frequency restoration power interchanges in negative direction of the given imbalance netting balancing border or set of imbalance netting balancing borders.
- iv. The imbalance netting cross-border capacity limit in negative direction is increased by the sum of the replacement power interchanges and the manual frequency restoration power interchanges in positive direction of the given imbalance netting balancing border or set of imbalance netting balancing borders.
- (c) Third step: In accordance with Article 37(1) of the EBGL, the imbalance netting crossborder capacity limits shall be updated whenever remedial actions pursuant to Article 22 of SOGL leads to cross-border exchange on the imbalance netting balancing border or set of imbalance netting balancing borders to which the imbalance netting cross-border capacity limits are related.
- (d) Fourth step: The imbalance netting cross-border capacity limits must not exceed additional limitations requested for operational security reasons by participating or affected TSOs in accordance with Article 146(3)(c), 147(3)(c), 148 (3)(c), 149(3) and 150(3)(b) of the SOGL. TSOs may also limit imbalance netting cross-border capacity limits in HVDC systems for operational security reasons, in accordance with Article 147(3)(c) of the SOGL and such limitations may limit the exchange on a single imbalance netting balancing border, set of imbalance netting balancing borders or on all imbalance netting balancing borders between two synchronous areas.
- (e) Fifth step: The imbalance netting balancing borders, where one or more transmission lines linking the adjacent LFC areas are HVDC systems, can be permanently limited if the technology to implement exchange of imbalance netting is not installed in accordance with Article 171 of the SOGL. The limitation may disable any exchange on these imbalance netting balancing borders when the imbalance netting balancing border is constituted only of HVDC. 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 NRAs shall be notified of this limitation. The technical justification shall be published by the concerned TSOs.
- (3) The participating or affected TSOs requesting an additional limitation as described in Article 4(2)(d) of the INIF, shall publish the request for additional limitations no later than 30 minutes after the end of the relevant balancing market time unit in which the additional limitations have been requested.
- (4) The participating or affected TSOs requesting an additional limitation shall provide the justification for the additional limitation on request of any participating TSO to all participating TSOs.
- (5) All participating TSOs shall implement the process described in Article 4(2) as part of the IN-

Platform.

# Article 5

# **Implementation of the IN-Platform**

- (1) By twelve months after the approval of this INIF, the IN-Platform shall fulfil every requirement defined in this INIF and further requirements according to Articles 30 and 50 of the EBGL.
- (2) The following steps and timeline shall be used as the roadmap for the implementation of the IN-Platform:
  - (a) all TSOs shall designate the entity responsible for operating the function of the IN-Platform within six months after approval of the INIF.

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- (b) all member TSOs shall develop new processes and adapt existing ones related to imbalance netting process, pricing and settlement in accordance with this INIF at the latest for the deadline of Article 22(5) of the EBGL.
- (c) all member TSOs shall agree on an IN-Platform accession roadmap at the latest one month after the approval of the INIF. The accession roadmap shall foresee timelines related to:
  - i. interoperability tests between each TSO and the IN-Platform;
  - ii. operational tests;
  - connection of each TSO to the IN-Platform: iii.
  - connection of all TSOs that have been granted a derogation by their respective iv. regulatory authorities in accordance with Article 62 of the EBGL.
- (d) the accession roadmap shall start after its finalization 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.
- (3) 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 and the TSO-TSO settlement function. If deemed efficient when implementing the methodology for CZC calculation within the balancing timeframe in accordance with Article 37(3) of the EBGL, a CZC determination function may be added.
- (2) The operation of the IN-Platform by using the multilateral TSO-TSO model as described in the INIF among the participating TSOs shall in principle result in:
  - (a) lowering the amount of activated balancing resources from automatic frequency restoration process;

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- (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 the following:
  - (a) the assignment of imbalance netting potential among participating TSOs in each real-time optimisation cycle is based upon the principles of proportional distribution and considering the imbalance netting cross-border capacity limits, according to Article 12 of this INIF;
  - (b) all imbalance netting balancing borders between participating TSOs shall be part of the IN-Platform.
- (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) If and when relevant, the purpose of the CZC determination function shall be to implement the methodology for CZC calculation within the balancing timeframe in accordance with Article 37(3) of the EBGL.

# Article 7

# 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 functions of the IN-Platform. Each member TSO shall have representatives in the SC and the EG. The member TSOs aim to find unanimous decisions. Where unanimity cannot be reached, qualified majority voting according to Article 8 of this INIF shall apply. The SC makes decisions according to Article 8(1)(a), 8(2) and 8(3) of this INIF.
- (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 8(1)(b) of this INIF. Thereto, each member TSO shall appoint at least one regular representative to the SC. It is a superior body to the EG;
  - (b) the expert group of the IN-Platform, which is the expert body of the IN-Platform and prepares background materials for the SC (e.g.: 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 EG.
- (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.

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(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 8

#### **Decision-making**

- (1) Decisions leading to a proposal for a change of the INIF or the approved methodologies according to Articles 30(3) or 50(1)(d) of the EBGL 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 EBGL, where all TSOs include both all member TSOs and non-member TSOs in the framework of the SC of the IN-Platform and this decisionmaking process is independent from the member TSO's decision process from the aspect of member TSOs.
- (2) Decisions concerning the IN-Platform not leading to a proposal for a change of the INIF or the approved methodologies according to Articles 30(3) or 50(1)(d) of the EBGL but affecting all member TSOs shall be subject to approval by all member TSOs.
- (3) Decisions concerning the IN-Platform not leading to a proposal for a change of the 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 by the member TSOs of the concerned region.
- (4) In case of decisions according to paragraph 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 decisionmaking with the aim to make decisions unanimously. Where unanimity cannot be reached, qualified majority voting shall apply.
- (6) Decisions according to paragraph 1(a) and 2 where no consensus is reached shall, pursuant to the voting principles of Article 4(3) of the EBGL, require a majority of:
  - (a) member TSOs representing at least 55 % of the TSOs' countries concerned and present or represented according to paragraph 4; and
  - (b) member TSOs representing countries comprising at least 65 % of the population of countries concerned and present or represented according to 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 EBGL, 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

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- (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 countries or less shall be decided based on consensus.
- (9) Voting on SC decisions can be made in physical meetings, conference calls or by circular resolution via e-mail.

#### Article 9

#### **Proposal for entity or entities**

- (1) All TSOs shall appoint one entity entrusted to operate all the functions of the IN-Platform.
- (2) The entity shall be a consortium of TSOs or a company owned by TSOs.

#### Article 10

#### Framework for harmonisation of the terms and conditions related to balancing

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 11

# Categorisation of costs and detailed principles for sharing the 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-Platform;
  - (c) national costs resulting from activities of the member TSOs in the TSOs' countries concerned and participating in the IN-Platform.
- (2) Common costs shall include costs resulting from the SC decisions on proposals related to:
  - (a) common costs for establishing or amending the IN-Platform consist of:
    - 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 consist of:

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 process according to Article 8;

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- 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 process according to Article 8.
- (3) Costs pursuant to paragraph 5 shall not be borne by member TSOs that are not participating TSOs in the IN-Platform.
- (4) The common costs in accordance with Article 11(2)(a) of this INIF shall be shared among the member TSOs in accordance with Article 11(15) of this INIF and in accordance with the following principles set out by Article 23 of the EBGL:
  - (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.
- (5) The common costs in accordance with Article 11(2)(b) of this INIF shall be shared among the participating TSOs in accordance with Article 11(18) of this INIF and in accordance with the following principles set out by Article 23 of the EBGL:
  - (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 to 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 only to the member TSOs of the concerned region;
    - iii. commissioning of joint studies performed for only to the member TSOs of the concerned region.
  - (b) regional costs of operating 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 process according to Article 8;

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 process according to Article 8.

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- (7) Costs pursuant to paragraph 9 shall not be borne by member TSOs that are not participating TSOs in the IN-Platform.
- (8) The regional costs in accordance with Article 11(6)(a) of this INIF shall be shared among the member TSOs of the concerned region in accordance with Article 11(15) of this INIF and in accordance with the following principles set out by Article 23 of the EBGL:
  - (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.
- (9) The regional costs in accordance with Article 11(6)(b) of this INIF shall be shared among the participating TSOs of the concerned region in accordance with Article 11(18) of this INIF and in accordance with the following principles set out by article 23 of the EBGL:
  - (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; and
  - (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 individual 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 solely to costs incurred after the approval of the INIF.
- (13) For the avoidance of any doubts, all TSOs agree not to share any costs incurred before the approval of the INIF.
- (14) For avoidance of doubts, if a TSO becomes a member TSO after approval of the INIF, the TSO shall pay its share of costs pursuant to paragraph 2(a)(i) and (ii) also retrospectively in accordance with paragraph (4), (15) and (16) of this Article.
- (15) When sharing the costs according to paragraph (4) and (8) of this Article, the TSO's share of the costs of the member TSOs shall consider only the member TSOs appointed in the LFC area

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operational agreement as responsible for implementing and operating the automatic frequency restoration process in this LFC area according to Article 143(4) of the SOGL. For the avoidance of any doubt, the member TSOs that are not appointed as responsible for implementing and operating the automatic frequency restoration process will not have to borne costs related to paragraphs (4)(c) and (8)(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) In case several participating TSOs are active in a Member State, the Member State's share of the costs shall be distributed among those participating TSOs proportionally to the consumption in the participating TSOs' monitoring areas.
- (18) When sharing the costs according to paragraph (5) and (9) of this Article, 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 SOGL. For the avoidance of any doubt, the member TSOs that are not appointed as responsible for implementing and operating the automatic frequency restoration process will not have to borne costs related to paragraphs (5)(a), (5)(c), (9)(a) and (9)(c).

#### Article 12

# 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 cross-border capacity limits in accordance with Article 4 of this INIF.
- (2) The objective functions of the optimisation algorithm are:
  - (a) First priority: minimise the deviation from the imbalance netting target values according to 12(4);
  - (b) Second priority: maximise the satisfaction of the aFRR demand of individual LFC areas;
  - (c) Third priority: minimize the deviation from the proportional distribution of deviation from the target value;
  - (d) Forth priority: minimize 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;
  - (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 crossborder capacity limits calculated in accordance with Article 4 of this INIF.

(4) 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 cross-border capacity limit is reached;

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- (5) Implicit imbalance netting between LFC areas exchanging aFRR is not considered in the imbalance netting process performed by the IN-Platform.
- (6) 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 12(6)(e) of this INIF. An aFRR area is defined as an area where two or more TSOs exchange aFRR between their LFC areas;
  - (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 12(6)(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 SOGL, or only LFC areas of one synchronous area in accordance with Article 146(10) of SOGL.
- (7) The TSOs being involved in an optimisation region may form a concerned region pursuant to the governance described in Article 7, decision-making in accordance with Article 8 and categorisation of costs in accordance with Article 11(1)(b) of this INIF.
- (8) All optimisation regions are optimised by the algorithm of imbalance netting process function of the IN-Platform.
- (9) 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 EBGL.

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#### Publication and implementation of the INIF

- (1) The TSOs shall implement the INIF in accordance with Article 5 of this INIF one year after the approval of this INIF.
- (2) The TSOs shall publish the INIF without undue delay after all NRAs have approved the INIF or a decision has been taken by the Agency for the Cooperation of Energy Regulators in accordance with Article 5(7), Article 6(1) and Article 6(2) of the EBGL.

#### Article 14

#### Language

The reference language for this proposal shall be English. For the avoidance of doubt, where TSOs need to translate this proposal into their national language(s), in the event of inconsistencies between the English version published by TSOs in accordance with Article 7 of the EBGL and any version in another language, the relevant TSOs shall, in accordance with national legislation, provide the relevant national regulatory authorities with an updated translation of the proposal.