
Proposed amendments to the Network Code

ENTSO-E Network Code on Electricity Balancing

Version 3.0

This document called “Network Code on Electricity Balancing” ("Network Code") has been formally submitted to ACER for ACER’s reasoned opinion pursuant to Article 6(7) of Regulation (EC) No 714/2009, on 23 December 2013. Based on ACER’s opinion, received on 21 March 2014, ENTSO-E has included a limited number of specific amendments to this Network Code and resubmitted it to ACER pursuant to Article 6(8) of Regulation (EC) No 714/2009, on X, with the aim of a recommendation to the EC that it be adopted within a reasonable time period.

06 August 2014

Notice
THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,


Having regard to the priority list issued by the European Commission on 19 July 2012,

Having regard to the Framework Guideline on Electricity Balancing issued by the Agency for the Coordination of Energy Regulators on 18 September 2012,


Whereas:


(2) TSOs are according to Article 2 and 12 of Directive 2009/72/EC responsible for operating, ensuring the maintenance of and, if necessary, developing the extra high-voltage and high-voltage interconnected system, its interconnections with other systems, and for ensuring the long-term ability of the system to meet reasonable demands for the transmission of electricity and with a view to its delivery of electricity to final customers or to distributors.

(3) As stated in Directive 2009/72/EC a well-functioning internal market in electricity should provide producers with the appropriate incentives for investing in new power generation, including electricity from Renewable Energy Sources, paying special attention to the most isolated countries and regions in the European Union’s energy market. A well-functioning market should also provide consumers with adequate measures to promote the more efficient use of energy for which a secure supply of energy is a precondition.

(4) The security of energy supply is an essential element of public security and is therefore inherently connected to the efficient functioning of the internal market in electricity and the integration of the isolated electricity markets of Member States. Electricity can reach the citizens of the Union only through the network. Functioning electricity markets and, in particular, the
networks and other assets associated with electricity supply are essential for public security, for the competitiveness of the economy and for the well-being of the citizens of the Union.

(5) ENTSO-E has drafted this Network Code on Electricity Balancing aiming to set out clear and objective requirements for TSOs, National Regulatory Authorities and Market Participants in order to contribute to non-discrimination, effective competition and the efficient functioning of the internal electricity market, and incentivising market participants to contribute solving the system scarcities for which they are responsible, and to ensure operational security in particular for the rules for trading related to technical and operational provision of system Balancing and the Balancing rules including network-related power reserve rules.

(6) This Network Code has been drafted in accordance with the Article 8(7) of Regulation (EC) N°714/2009 according to which the Network Codes shall be developed for cross-border issues and market integration issues and shall be without prejudice to the right of Member States to establish national network codes which do not affect cross-border trade.

(7) This Network Code has the objective of providing benefits for customers, participation of Demand Side Response, supporting the achievement of the EU’s targets for penetration of renewable generation, as well as ensuring the optimal management and coordinated operation of the European electricity transmission network.

(8) TSOs shall be responsible for organising European Balancing Markets and shall strive for their integration, keeping the system in balance in the most efficient manner. To do so, they shall work in close cooperation and shall coordinate their activities as much as necessary.

(9) Establishing a cooperation within Coordinated Balancing Areas and developing a framework for the development of the terms and conditions related to Balancing all TSOs shall take into account, where economically efficient, the regional specificities of different electricity market designs and in particular shall take into account the existence of Central Dispatching Model in European electricity markets.

(10) The requirements of the Network Code on Load-Frequency Control and Reserves, especially regarding the functions and responsibilities established, or to be established as a consequence of the cooperation within a Coordinated Balancing Area, shall apply to all concerned TSOs. As maintaining the Operational Security of the transmission systems remains the main responsibility of TSOs, the provisions of this Network Code should be implemented without prejudice to the provisions of the Networks Codes on system operation, currently known as the Network Code on Operational Planning and Scheduling, the Network Code on Operational Security and the Network Code on Load-Frequency Control and Reserves, and of the decisions implementing those Network Codes. In case of conflict of norms, the provisions of this network code should be interpreted in light of the overarching objective of maintaining the Operational Security of the transmission systems.

(11) In fulfilling the requirements of this Network Code, TSOs and regulatory authorities shall exploit synergies and draw on experience gained through existing Balancing cooperation projects which have commenced, have concluded or are on-going at the date of the entry into force of this Network Code.

(12) TSOs shall facilitate the possibilities to Exchange of Balancing Energy within a Coordinated Balancing Area. Each Balancing Service Provider intending to provide Balancing Capacity or Balancing Energy needs to successfully pass the concerned Prequalification defined by the Connecting TSOs terms and conditions related to Balancing.

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While a fully integrated European electricity balancing market requires TSOs to share and exchange all balancing resources with other TSOs, within the transition period towards full integration, the TSOs may withhold some balancing resources from sharing and exchanging with other TSOs in order to ensure fulfilment of reserve requirements. After full integration is achieved the efficient market signals and reciprocity among TSOs should ensure sufficient reserve requirements to balance the electricity system and minimise the withholding of balancing resources from sharing and exchanging with other TSOs.

Integration electricity balancing market shall facilitate the efficient functioning of the intraday market in order to provide the possibility for market participants to balance themselves as close as possible to real time. Only the imbalances remaining after the end of intraday market shall be balanced by TSOs with the balancing market.

The pricing method used in the procurement of Balancing Capacity shall strive for an economically efficient use of Demand Side Response and other Balancing resources subject to Operational Security limits.

The pricing methods for each Standard Product for Balancing Energy shall strive for an economically efficient use of Demand Side Response and other Balancing resources subject to Operational Security limits.

This Regulation has been developed in close cooperation with ACER, the ENTSO for Electricity and stakeholders, in order to adopt effective, balanced and proportionate rules in a transparent and participative manner. In accordance with Article 18(3) of Regulation (EC) 714/2009, the Commission will consult ACER, the ENTSO for Electricity and other relevant stakeholders, notably NEMOs, before proposing any amendment to this regulation.
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CHAPTER 1
GENERAL PROVISIONS

Article 1
SUBJECT MATTER AND SCOPE

1. **This Regulation lays down detailed Guidelines on** common rules for Electricity Balancing including the establishment of common principles for procurement and settlement of Frequency Containment Reserves, Frequency Restoration Reserves and Replacement Reserves and common methodology for the activation of Frequency Restoration Reserves and Replacement Reserves.

2. The requirements set forth by this *Regulation* shall apply in particular to transmission system operators, national regulatory authorities, the Agency, distribution system operators, third parties to whom responsibilities have been delegated or assigned, where applicable, and Market Participants.

3. This Regulation shall apply to all transmission systems and interconnections in the Union except the transmission systems on islands which are not connected with other transmission systems via interconnections.

4. In Member States where more than one transmission system operator exists, this *Regulation* shall apply to all transmission system operators within that Member State. Where a transmission system operator does not have a function relevant to one or more obligations under this *Regulation*, Member States may provide that the responsibility for complying with those obligations is assigned to one or more different, specific transmission system operators.

5. **This Regulation shall apply to all System States**, as defined in [Article 8 System States] of the *Guidelines on Operational Security*, except during periods when market activities have been suspended, pursuant to the Network Code on Emergency and Restoration.

Article 2
DEFINITIONS

For the purposes of this *Regulation*, the definitions in Article 2 of Regulation (EC) No 714/2009, in Commission Regulations that have been adopted according to Article 6(11) of Regulation (EC) No 714/2009, the definitions contained in Article 2 of Regulation (EU) No 543/2013 as well as those of Article 2 of Directive 2009/72/EC shall apply.

In addition, the following definitions shall apply:

**Activation Optimisation Function** means the role to operate the algorithm applied for the optimisation of the activation of Balancing Energy bids within a Coordinated Balancing Area.

**Allocated Volume** means an energy volume physically injected or withdrawn from the system and attributed to a Balance Responsible Party, for the calculation of the imbalance of that Balance Responsible Party.

**Balance Responsible Party** means a market-related entity or its chosen representative responsible for its imbalances.
**Balancing** means all actions and processes, on all timelines, through which TSOs ensure, in a continuous way, to maintain the system frequency within a predefined stability range as set forth in [Article 19 Frequency Quality Target Parameters] of the Network Code on Load-Frequency Control and Reserves, and to comply with the amount of reserves needed per Frequency Containment Process, Frequency Restoration Process and Reserve Replacement Process with respect to the required quality, as set forth in [Chapter 6 Frequency Containment Reserves, Chapter 7 Frequency Restorations Reserves and Chapter 8 Replacement Reserves] of the Network Code on Load-Frequency Control and Reserves.

**Balancing Capacity** means a volume of Reserve Capacity which a Balancing Service Provider has agreed to hold and in respect to which the Balancing Service Provider has agreed to submit bids for a corresponding volume of Balancing Energy to the TSO for the duration of the contract.

**Balancing Energy** means energy used by TSOs to perform Balancing and provided by a Balancing Service Provider from Power Generating Facilities or Demand Facilities.

**Balancing Energy Gate Closure Time** means the point in time when submission or update of a Balancing Energy bid for a Standard Product on a Common Merit Order List in a Coordinated Balancing Area is no longer permitted.

**Balancing Market** means the entirety of institutional, commercial and operational arrangements that establish market-based management of Balancing.

**Balancing Services** means either or both Balancing Capacity and Balancing Energy.

**Balancing Service Provider** means a market participant with Reserve Providing Units or Reserve Providing Groups able to provide Balancing Services to TSOs.

**Capacity Procurement Optimisation Function** means the role to operate the algorithm applied for the optimisation of the procurement of Balancing Capacity within a Coordinated Balancing Area in which Balancing Capacity is exchanged.

**Central Dispatching Model** means a scheduling and dispatching model where the Generation Schedules and Consumption Schedules as well as dispatching of dispatchable Power Generating Facilities and Demand Facilities are determined by a TSO with the Integrated Scheduling Process.

**Common Merit Order List** means a list of Balancing Energy bids sorted in order of their bid prices, used for the activation of Balancing Energy bids within a Coordinated Balancing Area.

**Connecting TSO** means the TSO which operates the Control Area in which Balancing Service Providers and Balance Responsible Parties shall be compliant with the terms and conditions related to Balancing.

**Contracting TSO** means, in case of the TSO-BSP Model, the TSO which has contractual arrangements for Balancing Services with a Balancing Service Provider in another Control Area.
**Coordinated Balancing Area** means a region in which TSOs are Exchanging Balancing Capacity, Sharing Reserves, Exchanging Balancing Energy and operating the Imbalance Netting Process, cooperation with respect to the Exchange of Services of or between two or more TSOs.

**Deactivation Period** means the time period for ramping, from full delivery or withdrawal back to a set point.

**Delivery Period** means a time period of delivery during which the Balancing Service Provider delivers the full requested change of power in-feed or withdrawals to the system.

**Divisibility** means the possibility for the TSO to use only part of the Balancing Energy bids or Balancing Capacity bids offered by the Balancing Service Provider, either in terms of power activation or time duration.

**Exchange of Balancing Capacity** means the provision of Balancing Capacity to a TSO in a different Control Area or Scheduling Area when appropriate than the one in which the procured Balancing Service Provider is connected.

**Exchange of Balancing Energy** means the process of instructing the activation of Balancing Energy bids for the delivery of Balancing Energy by a TSO in a different Control Area or Scheduling Area when appropriate, than the one in which the activated Balancing Service Provider is connected.

**Exchange of Balancing Services** means either or both Exchange of Balancing Capacity and Exchange of Balancing Energy.

**Full Activation Time** means the time period between the activation request by TSO and the corresponding full activation of the concerned product.

**Imbalance** means an energy volume calculated for a Balance Responsible Party and representing the difference between the Allocated Volume attributed to that Balance Responsible Party, and the final Position of that Balance Responsible Party and any Imbalance Adjustment applied to that Balance Responsible Party, within a given Imbalance Settlement Period.

**Imbalance Adjustment** means an energy volume representing the Balancing Energy from a Balancing Service Provider and applied by the Connecting TSO for an Imbalance Settlement Period to the concerned Balance Responsible Parties, for the calculation of the Imbalance of these Balance Responsible Parties.

**Imbalance Area** means the area for the calculation of an Imbalance.

**Imbalance Netting Process Function** means the role to operate the algorithm applied for operating the Imbalance Netting Process.

**Imbalance Price** means the price, positive, 0 or negative, in each Imbalance Settlement Period for an Imbalance in each direction.

**Imbalance Price Area** means the area for the calculation of an Imbalance Price.
Imbalance Settlement means a financial settlement mechanism aiming at charging or paying Balance Responsible Parties for their Imbalances.

Imbalance Settlement Period means time units for which Balance Responsible Parties’ Imbalance is calculated.

Integrated Scheduling Process means an iterative process that uses at least Integrated Scheduling Process bids which contain commercial data, complex technical data of each Power Generating Facilities or Demand Facilities which explicitly includes the start-up characteristics, the latest Control Area Adequacy analysis, and the Operational Security Limits as an input to the process; which then simultaneously optimises reserve procurement, congestion management and Balancing Energy procurement over a set time horizon in order to produce an indicative Active Power output schedule for the dispatchable resources in order to ensure Operational Security.

Integrated Scheduling Process Gate Closure Time means the point in time when the submission or update of Integrated Scheduling Process bids is no longer permitted for the given iterations of the Integrated Scheduling Process.

Mode of Activation means the implementation of activation of Balancing Energy bids, manual or automatic, depending on whether Balancing Energy is triggered manually by an operator or automatically by means of a closed-loop regulator.

Position means the declared energy volume of a Balance Responsible Party used for the calculation of its Imbalance.

Preparation Period means the time duration between the request by the TSO and start of the energy delivery.

Requesting TSO means the TSO that requests the delivery of Balancing Energy.

Self-Dispatching Model means a scheduling and dispatching model where the Generation Schedules and Consumption Schedules as well as dispatching of Power Generating Facilities and Demand Facilities are determined by the owners of those facilities.

Specific Product means a product different from a Standard Product.

Standard Product means a harmonised Balancing product defined by all TSOs for the Exchange of Balancing Services.

Transfer of Balancing Capacity means a transfer of Balancing Capacity from the initially contracted Balancing Service Provider to another transfer receiving Balancing Service Provider.

Transfer of Balancing Capacity Function means the role to operate the algorithm applied for the optimisation of the Transfer of Balancing Capacity.
TSO Energy Bid Submission Gate Closure Time means the latest point in time when a Connecting TSO can forward the Balancing Energy bids received from a Balancing Service Provider to the Activation Optimisation Function. The TSO Energy Bid Submission Gate Closure Time is after Balancing Energy Gate Closure Time.

TSO-BSP Model means a model for the Exchange of Balancing Services where the Balancing Service Provider provides Balancing Services directly to the Contracting TSO, which then provides these Balancing Services to the Requesting TSO.

TSO-TSO Model means a model for the Exchange of Balancing Services where the Balancing Service Provider provides Balancing Services to its Connecting TSO, which then provides these Balancing Services to the Requesting TSO.

TSO-TSO Settlement Function means the role to perform the settlement of cooperation processes between the TSOs of a Coordinated Balancing Area.

Validity Period means the time period when the Balancing Energy bid offered by the Balancing Service Provider can be activated, whereas all the characteristics of the product are respected. The Validity Period is defined by a beginning time and an ending time.

Article 3

RECOVERY OF COSTS

1. Costs relating to the obligations imposed on Network Operators or assigned third entities in accordance with this Regulation shall be assessed by the competent regulatory authorities.

2. Costs assessed as reasonable, efficient and proportionate shall be recovered in a timely manner through network tariffs or other appropriate mechanisms as determined by the competent regulatory authorities.

3. If requested by the regulatory authorities, Network Operators or assigned entities shall, within three months of the request, provide information necessary to facilitate the assessment of the costs incurred.

Article 4

CONFIDENTIALITY OBLIGATIONS

1. Any confidential information received, exchanged or transmitted pursuant to this Regulation shall be subject to the conditions of professional secrecy laid down in paragraphs 2, 3 and 4.

2. The obligation of professional secrecy shall apply to any person subject to the provisions of this Regulation.

3. Confidential information received by the persons referred to in paragraph 2 in the course of their duties may not be divulged to any other person or authority, without prejudice to cases covered by national law, the other provisions of this Regulation or other relevant Union legislation.
Article 5

CONSULTATION

1. The TSOs responsible for submitting proposals for terms and conditions, methodologies and other implementing measures pursuant to this Regulation shall consult stakeholders, including the relevant authorities of each Member State, on the draft proposals for terms and conditions, methodologies and other implementing measures for a period of not less than one month.

2. At least the draft proposals pursuant to Article 6(6)(a), (b), (c), (d), (e) and (f) shall be consulted for a period of not less than two months.

3. At least the proposals pursuant to Article 6(6)(a), (b), (c), (d), (e), (f), (h), (i), (j), (k), (l) and (o) shall be subject to consultation at European level.

4. At least the proposals pursuant to Article 6(7)(a), (b) and (c) shall be subject to consultation at regional level.

5. At least the proposals pursuant to Article 6(8)(a), (c), (d), (e), (f) and (h) shall be subject to consultation in each concerned Member State.

6. TSOs responsible for the proposal for terms and conditions, methodologies and other implementing measures shall duly consider the views of stakeholders resulting from the consultations undertaken in accordance with paragraph 3 to 5, prior to its submission for regulatory approval. In all cases, a clear and robust justification for not including the views resulting from the consultation shall be developed in the submission and published in a timely manner before or simultaneously with the publication of the proposals for terms and conditions, methodologies and other implementing measures.

Article 6

REGULATORY APPROVALS

1. TSOs shall develop the terms and conditions, methodologies and other implementing measures required by this Regulation and submit them for approval to the competent regulatory authorities within the respective deadlines set out in this Regulation. Where a proposal for terms and conditions, methodologies and other implementing measures pursuant to this Regulation needs to be developed and agreed by more than one TSO, the participating TSOs shall closely cooperate. TSOs, with the assistance of ENTSO for Electricity, shall regularly inform the competent regulatory authorities and the Agency about the progress of developing these terms and conditions, methodologies and other implementing measures.

2. TSOs deciding on proposals for terms and conditions, methodologies and other implementing measures in accordance with Article 6(6) shall decide with qualified majority if no consensus could be reached among them. A qualified majority for proposals in accordance with Article 6(6) shall require a majority of:
   (a) TSOs representing at least 55% of the Member States and
   (b) TSOs representing Member States comprising at least 65% of the population of the Union.
A blocking minority for decisions in accordance with Article 6(6) must include TSOs representing at least four Member States, failing of which the qualified majority shall be deemed attained.

For TSO decisions under Article 6(6), one vote shall be attributed per Member State. If there is more than one TSO in the territory of a Member State, the Member State shall allocate the voting powers among the TSOs.

3. TSOs deciding on proposals for terms and conditions, methodologies and other implementing measures in accordance with Article 6(7) shall decide with qualified majority if no consensus can be reached among them and where the regions concerned are composed of more than five Member States. A qualified majority for proposals in accordance with these Articles shall require a majority of:
   (a) TSOs representing at least 72% of the Member States concerned; and
   (b) TSOs representing Member States comprising at least 65% of the population of the concerned Area.

A blocking minority for decisions in accordance with Article 6(7) must include at least the minimum number of TSOs representing more than 35% of the population of the participating Member States, plus TSOs representing at least one additional Member State concerned, failing of which the qualified majority shall be deemed attained.

TSOs deciding on proposals for terms and conditions, methodologies and other implementing measures in accordance with Article 6(7) in relation to regions composed of five Member States or less shall decide based on consensus.

For TSO decisions under Article 6(7) one vote shall be attributed per Member State. If there is more than one TSO in the territory of a Member State, the Member State shall allocate the voting powers among the TSOs.

4. If TSOs fail to submit a proposal for terms and conditions, methodologies and other implementing measures to the national regulatory authorities within the deadlines defined in this Regulation, they shall provide the competent regulatory authorities and the Agency with the relevant drafts of the terms and conditions, methodologies and other implementing measures, and explain what has prevented an agreement. The Agency shall inform the Commission and shall, in cooperation with the competent regulatory authorities, at the Commission’s request, investigate the reasons for the failure and inform the Commission thereof. The Commission shall take the appropriate steps to make possible the adoption of the required terms and conditions, methodologies and other implementing measures within four months from the receipt of the Agency’s information.

5. Each regulatory authority shall approve the terms and conditions, methodologies and other implementing measures developed by TSOs. They shall be responsible for approving the terms and conditions, methodologies and other implementing measures referred to in paragraphs 6 to 8.

6. The following proposals shall be subject to approval by all regulatory authorities:
   (a) the rules and conditions for Exchange of Balancing Services and the Sharing of Reserves between Coordinated Balancing Areas pursuant to Article 13;
   (b) the implementation frameworks for regional and integration models pursuant to Article 16, Article 18, Article 20 and Article 22;
   (c) the proposal for Coordinated Balancing Areas pursuant to Article 23;
   (d) the modifications of the European integration models pursuant to Article 16, Article 18, Article 20 and Article 22;
   (e) the harmonisation of the main features of Imbalance Settlement pursuant to Article 24;
   (f) the Standard Products for Balancing Capacity and Balancing Energy pursuant to Article 32.
g) the methodology for the probabilistic provision of Cross Zonal Capacity pursuant to Article 39;

h) the pricing method for Balancing Energy pursuant to Article 42;

i) the classification methodology for activation purposes Balancing Energy bids pursuant to Article 41;

j) the methodology for a co-optimised Capacity Allocation pursuant to Article 48;

k) the methodology for a market-based reservation process pursuant to Article 49;

l) the specific capacity calculation methodology and specific cross-zonal capacity pricing methodology, pursuant to Article 51 and Article 54;

m) the TSO-TSO settlement rules for the intended exchange of energy pursuant to Article 61;

n) the TSO-TSO settlement rules for the unintended exchange of energy pursuant to Article 62, and

(o) the principles for balancing algorithms pursuant to Article 69.

7. The following proposals shall be subject to approval by all regulatory authorities of the concerned region:

(a) the establishment of Coordinated Balancing Area pursuant to Article 12,

(b) the application of a TSO-BSP Model pursuant to Article 41,

(c) the methodology for reservation and each individual reservation of Cross Zonal Capacity based on an economic efficiency analysis pursuant to Article 50;

(d) the TSO-TSO settlement rules for the intended exchange of energy pursuant to Article 61;

(e) the TSO-TSO settlement rules for the intended exchange of energy pursuant to Article 62, and

(f) the TSO-TSO settlement rules for the unintended exchange of energy pursuant to Article 62.

8. The following proposals shall be subject to approval by each regulatory authority of each concerned Member State on a case-by-case basis:

(a) the request for the derogation to allow TSOs to offer Balancing Energy to the Balancing Market pursuant to Article 29(4);  

(b) the methodology for allocating costs resulting from actions taken by DSOs, pursuant to Article 29;

(c) the terms and conditions related to Balancing pursuant to Article 30;

(d) the proposal for defining and using Specific Products pursuant to Article 3;

(e) exemptions from the procurement rules of Balancing Capacity pursuant to Article 37;

(f) the methodology for application of unshared bids pursuant to Article 44;

(g) costs relating to the obligations imposed on Network Operators or assigned third entities in accordance with this Regulation; and

(h) the derogation in respect of one or more provisions of this Regulation pursuant to Article 75.

9. The proposal for terms and conditions, methodologies and other implementing measures shall include a proposed timescale for their implementation and a description of their expected impact on the objectives of this Regulation. The implementation timescale shall not be longer than twelve months after the approval by the competent regulatory authorities, except where all competent regulatory authorities agree to extend the implementation timescale. Proposals on terms and conditions, methodologies and other implementing measures subject to the approval by several or all regulatory authorities shall be submitted to the Agency at the same time that they are submitted to regulatory authorities. Upon request by the competent regulatory authorities, the Agency shall issue an opinion within three months on the proposals for terms and conditions, methodologies and other implementing measures.
10. Where the approval of the terms and conditions, methodologies and other implementing measures requires a decision by more than one regulatory authority, the competent regulatory authorities shall consult and closely cooperate and coordinate with each other in order reach an agreement. Where applicable, the competent regulatory authorities shall take into account the opinion of the Agency. Regulatory authorities shall take decisions concerning the submitted terms and conditions, methodologies and other implementing measures in accordance with paragraphs 6 to 8, within six months following the receipt of the terms and conditions, methodologies and other implementing measures by the regulatory authority or, where applicable, by the last regulatory authority concerned.

11. Where the regulatory authorities have not been able to reach agreement within the period referred to in paragraph 10, or upon their joint request, the Agency shall adopt a decision concerning the submitted proposals for terms and conditions, methodologies and other implementing measures within six months, in accordance with Article 8(1) of Regulation (EC) No 713/2009.

12. In the event that one or several regulatory authorities request an amendment to approve the terms and conditions, methodologies and other implementing measures submitted in accordance with paragraphs 6 to 8, the relevant TSOs shall submit a proposal for amended terms and conditions, methodologies and other implementing measures for approval within two months following the requirement from the regulatory authorities. The competent regulatory authorities shall decide on the amended terms and conditions, methodologies and other implementing measures within two months following their submission. Where the competent regulatory authorities have not been able to reach an agreement on terms and conditions, methodologies and other implementing measures within the two-month deadline, or upon their joint request, the Agency shall adopt a decision concerning the amended terms and conditions, methodologies and other implementing measures within six months, in accordance with Article 8(1) of Regulation (EC) No 713/2009. If the relevant TSOs fail to submit a proposal for amended terms and conditions, methodologies and other implementing measures, the procedure provided for in paragraph 4 of this Article shall apply.

13. TSOs responsible for establishing the terms and conditions, methodologies and other implementing measures in accordance with this Regulation shall publish them on the internet after approval by the competent regulatory authorities or, if no such approval is required, after their establishment, except where such information is considered as confidential in accordance with Article 4.

14. The references to TSOs in this article should be understood, in the case of paragraph 8(b), as referring to both TSOs and DSOs.

### Article 7

**REVIEW OF TERMS AND CONDITIONS, METHODOLOGIES AND OTHER IMPLEMENTING MEASURES**

1. TSOs responsible for developing a proposal for terms and conditions, methodologies and other implementing measures subject to approval pursuant to Article 6 may launch a review of these terms and conditions, methodologies and other implementing measures and propose the necessary amendments to the competent regulatory authorities.
2. Regulatory authorities responsible for the adoption of terms and conditions, methodologies and other implementing measures in accordance with Article 6 may, on their own initiative, request amendments of these terms and conditions, methodologies and other implementing measures.

3. The proposals for amendments to the terms and conditions, methodologies and other implementing measures shall be submitted to consultation in accordance with the procedure set out in Article 5 and approved in accordance with the procedure set out in Article 6.

Article 8
STAKEHOLDER INVOLVEMENT

The Agency, in close cooperation with ENTSO for Electricity, shall organise stakeholder involvement regarding the Balancing Market and other aspects of the implementation of this Regulation. This shall include regular meetings with stakeholders to identify problems and propose improvements notably related to the integration of the Balancing Market. This shall not replace the stakeholder consultations in accordance with Article 5.

Article 9
PUBLICATION OF INFORMATION

1. All entities referred to in Article 1(a) shall ensure that information pursuant to paragraphs 2, 3 and 4 of this Article are published at a time and in a format which does not create an actual or potential competitive advantage or disadvantage to any individual or category of individuals.

2. Each TSO shall publish the following information:
   (a) the terms and conditions related to Balancing pursuant to Article 30 at least one week before the application;
   (b) the volume of unshared bids pursuant to Article 44 no later than one hour after the end time of the Validity Period;
   (c) the details on the reservation of Cross Zonal Capacity pursuant to Article 46; this information shall include the volumes reserved, the time period of the reservation and the market value calculated in accordance with Article 47 at the latest 24 hours after the reservation;
   (d) the details of the use of reserved Cross Zonal Capacity pursuant to Article 46; this information shall include details on the release of Cross Zonal Capacity and estimation of the realised costs and benefits of reservation at the latest one week after the use of reserved Cross Zonal Capacity;
   (e) the approved methodologies pursuant to Article 48 to Article 50 at least one month before the application;
   (f) the description of the requirements of any algorithm developed and amendments to it, pursuant to Article 69 at least one month before the application;
   (g) the common annual report pursuant to Article 70;
   (h) the volumes and prices of all Balancing Energy bids for Standard Products, anonymised to protect confidentiality no later than one hour after the procurement process ends;
   (i) the activation purpose of each activated Balancing Energy bid no later than one hour after the ending time of the Validity Period.

3. Each TSO shall publish the following information on Specific Products, Integrated Scheduling Process bids and Balancing Energy offered by TSO themselves:
   (a) the procured volumes and prices of Balancing Capacity from Specific Products no later than one hour after the procurement process ends;
4. The obligations specified in paragraphs 2 to 3 are without prejudice to the obligations of ENTSO-E to publish the information on the central information transparency platform, established pursuant to Article 3, of Commission Regulation (EU) 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, or on a public website.

**Article 10**

**DELEGATION AND ASSIGNMENT OF TASKS**

1. A TSO may delegate all or part of any task assigned to it under this Regulation to one or more third parties in the case the third party can carry out the respective function at least as effectively as the delegating TSO. The delegating TSO shall remain responsible for ensuring compliance with the obligations under this Regulation, including ensuring access necessary for monitoring by the regulatory authorities.

2. Prior to the delegation, the third party concerned shall have clearly demonstrated to the delegating TSO its ability to meet each of the obligations of this Regulation.

3. In the event that all or part of any tasks specified in this Regulation is delegated to a third party, the delegating TSO shall ensure that suitable confidentiality agreements in accordance with the confidentiality obligations of the delegating TSO have been put in place prior to delegation.

4. The tasks and obligations assigned to TSOs under this Regulation, which do not have an impact on Operational Security and integration of the Balancing Market and which do not require direct cooperation, joint decision making or entering into contractual relationship with TSOs from other Member States, may be assigned to a third entity by the Member States through national legislation or, where applicable, by the regulatory authorities through an administrative decision.

5. The assigned entity shall demonstrate its ability to fulfil the assigned tasks and obligations that are applicable to the TSO according to this Regulation. Prior to the assignment, the Member State or, where applicable, the regulatory authority, shall ask the relevant TSOs for an opinion on whether the assignment is in line with paragraph 4. In case of disagreement from the TSOs, the Agency shall be asked for the opinion on the subject matter. The assigned entity shall work in close cooperation with the relevant TSOs, where such coordination is needed for the effective execution of the assigned tasks and obligations.

6. The delegated or assigned entity shall notably comply with the following requirements:

   (a) it has or contracts adequate resources necessary to fulfil the assigned functions and obligations, including financial resources, the necessary information technology, technical infrastructure and operational procedures;

   (b) it shall be cost-efficient with respect to the assigned functions and obligations;

   (c) the volumes and prices of Balancing Energy and Balancing Capacity bids from Specific Products alongside the corresponding volumes and prices of converted Standard Products;

   (d) the activated volumes, prices all Integrated Scheduling Process bids converted into Standard Products, and

   (e) the activated volumes of Balancing Energy offered by TSO themselves no later than one hour after the operating period pursuant to Article 25.
(c) it shall be independent from market participants and shall treat all market participants in a non-discriminatory way;
(d) it shall have in place appropriate transparency and confidentiality agreements with market participants and the TSOs;
(e) it shall be able to put in place the necessary communication systems and procedures for coordinating with the concerned TSOs.

7. The competent regulatory authorities on territory of Member States where the third entity is assigned shall ensure regulatory oversight of the assigned entity.

8. In case of assignment of the tasks and obligations of TSOs to other entities pursuant to this Article, references to TSOs in this Regulation shall be understood as referring to the assigned entities.

Deleted: procedures.

Deleted: <P>Notwithstanding paragraph 4, if the rules of national law at the date of the entry into force of this Network Code assign to a different party and according to a different legal framework non-essential tasks which, according to this Network Code, are assigned to the TSO, then the national legislation prevails.¶
¶
CHAPTER 2
THE ELECTRICITY BALANCING MARKET

SECTION 1
PRINCIPLES OF THE BALANCING MARKET

Article 11
GENERAL OBJECTIVES OF THE BALANCING MARKET

1. This Regulation shall facilitate the achievement of the following objectives:
   (a) fostering effective competition, non-discrimination and transparency in Balancing Markets;
   (b) enhancing efficiency of Balancing as well as the efficiency of European, regional and national Balancing Markets;
   (c) integrating Balancing Markets and promoting the possibilities for Exchanges of Balancing Services;
   (d) ensuring Operational Security;
   (e) contributing to the efficient long-term operation and development of the electricity transmission system and electricity sector in the Union;
   (f) facilitating the efficient and consistent functioning of day-ahead, intraday and Balancing Markets;
   (g) ensuring that the procurement of Balancing Services is fair, objective, transparent and market-based, avoids undue barriers to entry for new entrants, fosters the liquidity of Balancing Markets while preventing undue distortions within the internal market in electricity;
   (h) facilitating the participation of Demand Side Response including aggregation facilities and energy storage, while ensuring they compete with other Balancing Services at a level playing field and where necessary act independently of energy suppliers when serving a single Demand Facility; and
   (i) facilitating the participation of Renewable Energy Sources and support the achievement of the European Union target for the penetration of renewable generation.

Article 12
ESTABLISHMENT OF COORDINATED BALANCING AREAS

1. Coordinated Balancing Area shall be established for one of the following purposes:
   (a) Exchange of Balancing Capacity in a form of TSO-TSO model;
   (b) Sharing of Balancing Reserves;
   (c) Exchange of Balancing Energy in a form of TSO-TSO model; and
   (d) Operating Imbalance Netting Process.

2. To establish a Coordinated Balancing Area, the concerned TSOs shall develop a common proposal for establishment of Coordinated Balancing Area. TSOs shall cooperate when establishing Coordinated Balancing Areas and shall not prevent any other TSO from fulfilling its obligations under this Regulation.

3. The proposal for establishment of Coordinated Balancing Area for Exchange of Balancing Energy shall include at least the following:
   (a) the framework for the establishment of the terms and conditions related to Balancing pursuant to Article 30;
   (b) the Balancing Energy Gate Closure Time for each Standard Product for Balancing Energy pursuant Article 35;
   (c) the TSO Energy Bid Submission Gate Closure Time pursuant to Article 4311;
(d) the description of the algorithm for the operation of Activation Optimisation Function pursuant to Article 45;
(e) the minimum available volumes of Balancing Energy bids of concerned products required to be compliant with [Article 43 FCR Dimensioning, Article 46 FRR Dimensioning and Article 48 RRP Dimensioning] of the Network Code on Load-Frequency Control and Reserves;
(f) the Common Merit Order Lists to be organised by the common Activation Optimisation Function pursuant to Article 45;
(g) the principles for the algorithms to be applied pursuant to Article 69;
(h) if applicable, the alternative proposal of the common pricing method of Standard Products for Balancing Energy pursuant to Article 42;
(i) if applicable, the activation of Balancing Energy bids for purposes other than Balancing pursuant to Article 43;
(j) if applicable, local rules to convert each Specific Product into a Standard Product.

4. The proposal for establishment of Coordinated Balancing Area for Exchange of Balancing Capacity shall include at least the following:
(a) the framework for the establishment of the terms and conditions related to Balancing pursuant to Article 30;
(b) harmonised rules for common procurement of Balancing Capacity including the harmonised procurement timeframes and gate closure times for submission of Balancing Capacity bids;
(c) common pricing method for Balancing Capacity pursuant to Article 39;
(d) the description of the algorithm for the operation of Capacity Procurement Optimisation Function pursuant to Article 69;
(e) algorithm for the operation of Transfer of Balancing Capacity Function pursuant to Article 66;
(f) requirements and rules including the approval process for the Transfer of Balancing Capacity pursuant to Article 40;
(g) the applied methodology for ensuring the availability of Cross Zonal Capacity pursuant to Article 39, and
(h) if applicable, local rules to convert each Specific Product into a Standard Product.

5. The proposal for establishment of Coordinated Balancing Area for Operating Imbalance Netting Process shall include at least the following:
(a) the framework for the establishment of the terms and conditions related to Balancing pursuant to Article 30;
(b) the description of the algorithm for the operation of Imbalance Netting Process Function pursuant to Article 69.

6. The framework to be developed pursuant to paragraph 3(a), 4(a) and 5(a) shall define harmonised principles for the terms and conditions related to Balancing and shall ensure a sufficient level of coordination between all TSOs of the Coordinated Balancing Area in order to facilitate the achievement of the objectives of the Balancing Market as defined in Article 11 as well as reaching the integration models defined in Chapter 2.

7. Coordinated Balancing Area established for the Exchange of Balancing Capacity or Sharing of Reserves shall be equal or part of the Coordinated Balancing Area established for the Exchange of Balancing Energy for the same process.
Article 13
EXCHANGES BETWEEN COORDINATED BALANCING AREAS

1. All TSOs of two or more interconnected Coordinated Balancing Areas shall have the right to
Exchange Balancing Services or Share the Reserves between these Coordinated Balancing Areas.

2. No later than 18 months after the entry into force of this Regulation all TSOs shall jointly develop
the rules and conditions for Exchange of Balancing Services and the Sharing of Reserves between
Coordinated Balancing Areas.

Article 14
EXTENSION AND MERGING OF COORDINATED BALANCING AREAS

1. All TSOs shall cooperate in promoting the extension and merging of Coordinated Balancing Areas
in order to develop and implement the regional integration models and European integration
models.

2. Each TSO shall report to the Agency as soon as incompatibilities between the actual developments
within a Coordinated Balancing Area and the developments foreseen in the regional integration
model or the European integration model in accordance with CHAPTER 2, SECTION 2, to SECTION 5,
are identified.

3. The extension of a Coordinated Balancing Area regarding the participating TSOs or the Standard
Products exchanged or shared shall follow the process described in Article 12(2).

4. The merging of Coordinated Balancing Areas shall follow the process described in Article 12(2).
Where two or more Coordinated Balancing Areas for a Standard Product or operating the
Imbalance Netting Process merge, the result shall have the form of a single Coordinated Balancing
Area replacing the previous ones.

SECTION 2
MODELS FOR THE EXCHANGE OF BALANCING ENERGY FOR REPLACEMENT RESERVES

Article 15
REGIONAL INTEGRATION MODEL FOR REPLACEMENT RESERVES

1. No later than 1 July 2018, all TSOs using Replacement Reserves shall implement the regional
integration model for the Replacement Reserves.

2. The regional integration model for the Replacement Reserves shall consist of one or more
Coordinated Balancing Areas. All TSOs involved in such Coordinated Balancing Areas shall apply a
multilateral TSO-TSO model with Common Merit Order List to share and exchange all Balancing
Energy bids from all Standard and Specific Products for Replacement Reserves, except unshared
bids pursuant to Article 44.

3. The regional integration model for the Replacement Reserves shall be implemented within the
Coordinated Balancing Areas as defined pursuant to Article 23, where each TSO using Replacement
Reserves shall be a member of one such Coordinated Balancing Area.
Article 16
EUROPEAN INTEGRATION MODEL FOR REPLACEMENT RESERVES

1. No later than 1 July 2022 all TSOs using Replacement Reserves shall implement the European integration model for the Replacement Reserves.

2. The European integration model for the Replacement Reserves shall consist of one or more Coordinated Balancing Areas. Such Coordinated Balancing Areas shall include all neighbouring interconnected TSOs using the Replacement Reserves. In such Coordinated Balancing Areas all TSOs using Replacement Reserves shall apply a multilateral TSO-TSO model with Common Merit Order List to share and exchange all Balancing Energy bids from all Standard and Specific Products for Replacement Reserves.

3. No later than 1 July 2019, all TSOs defined in the implementation framework pursuant to Article 23 shall have the right to jointly develop a proposal for modification of the European integration model for the Replacement Reserves. Proposed modifications shall be supported by a Cost-Benefit Analysis performed by all TSOs pursuant to Article 23.

4. No later than 1 July 2020, all TSOs pursuant to paragraph 3 shall jointly develop a proposal for the implementation framework to implement the European integration model for the Replacement Reserves. This proposal shall include at least:
   (a) a list of TSOs to which the implementation of the European integration model applies;
   (b) implementation timeline of the European integration model;
   (c) high-level principles for algorithms and methodologies used; and
   (d) details of any modifications approved pursuant to paragraph 3.

SECTION 3
MODELS FOR THE EXCHANGE OF BALANCING ENERGY FOR FREQUENCY RESTORATION RESERVES WITH MANUAL ACTIVATION

Article 17
REGIONAL INTEGRATION MODEL FOR FREQUENCY RESTORATION RESERVES WITH MANUAL ACTIVATION

1. No later than 1 July 2020, all TSOs shall implement the regional integration model for the Frequency Restoration Reserves with manual activation.

2. The regional integration model for Frequency Restoration Reserves with manual activation shall consist of one or more Coordinated Balancing Areas. All TSOs involved in such Coordinated Balancing Areas shall apply a multilateral TSO-TSO model with Common Merit Order List to share and exchange all Balancing Energy bids from all Standard and Specific Products for Frequency Restoration Reserves with manual activation, except unshared bids pursuant to Article 44.

3. The regional integration model for Frequency Restoration Reserves with manual activation shall be implemented within the Coordinated Balancing Areas as defined pursuant to Article 23, where each TSO shall be a member of one such Coordinated Balancing Area.
Article 18
EUROPEAN INTEGRATION MODEL FOR FREQUENCY RESTORATION RESERVES WITH MANUAL ACTIVATION

1. No later than 1 July 2022 all TSOs shall implement the European integration model for the Frequency Restoration Reserves with manual activation.

2. The European integration model for the Frequency Restoration Reserves with manual activation shall consist of a single Coordinated Balancing Area. In this Coordinated Balancing Area all TSOs shall apply a multilateral TSO-TSO model with Common Merit Order List to share and exchange all Balancing Energy bids from all Standard and Specific Products for Frequency Restoration Reserves with manual activation.

3. No later than 1 July 2019, all TSOs shall have the right to jointly develop a proposal for modification of the European integration model for the Frequency Restoration Reserves with manual activation. Proposed modifications shall be supported by a Cost-Benefit Analysis performed by all TSOs.

4. No later than 1 July 2020, all TSOs shall jointly develop a proposal for the implementation framework to implement the European integration model for the Frequency Restoration Reserves with manual activation. The proposal shall include at least:
   (a) implementation timeline of the European integration model;
   (b) high-level principles for algorithms and methodologies used; and
   (c) details of any modifications approved pursuant to paragraph 3.

SECTION 4
MODELS FOR THE EXCHANGE OF BALANCING ENERGY FOR FREQUENCY RESTORATION RESERVES WITH AUTOMATIC ACTIVATION

Article 19
REGIONAL INTEGRATION MODEL FOR FREQUENCY RESTORATION RESERVES WITH AUTOMATIC ACTIVATION

1. No later than 1 July 2020, all TSOs using Frequency Restoration Reserves with automatic activation pursuant to [Network Code on load Frequency Control and Reserves] shall implement the regional integration model for the Frequency Restoration Reserves with automatic activation pursuant to paragraph 2.

2. The regional integration model for the Frequency Restoration Reserves with automatic activation shall consist of one or more Coordinated Balancing Areas. All TSOs involved in such Coordinated Balancing Areas shall apply a TSO-TSO Model to exchange and optimise the activation of all Balancing Energy bids from all Standard and Specific Products for Frequency Restoration Reserves with automatic activation, except for unshared bids pursuant to Article 44.

3. The regional integration model for the Frequency Restoration Reserves with automatic activation shall be implemented within the Coordinated Balancing Areas as defined pursuant to Article 23, where each TSO shall be a member of one such Coordinated Balancing Area.
Article 20
EUROPEAN INTEGRATION MODEL FOR FREQUENCY RESTORATION RESERVES WITH AUTOMATIC ACTIVATION

1. No later than 1 July 2022, all TSOs shall implement the European integration model for the Frequency Restoration Reserves with automatic activation.

2. The European integration model for the Frequency Restoration Reserves with automatic activation shall consist of a single Coordinated Balancing Area. In this Coordinated Balancing Area all TSOs shall apply a multilateral TSO-TSO model to share and exchange all Balancing Energy bids from all Standard and Specific Products for Frequency Restoration Reserves with automatic activation respecting the principles of a Common Merit Order List.

3. No later than 1 July 2019, all TSOs shall have the right to jointly develop a proposal for modification of the European integration model for the Frequency Restoration Reserves with automatic activation. Proposed modifications shall be supported by a Cost-Benefit Analysis performed by all TSOs.

4. No later than 1 July 2020, all TSOs shall jointly develop a proposal for the implementation framework to implement the European integration model for the Frequency Restoration Reserves with automatic activation. This proposal shall include at least:
   (a) implementation timeline of the European integration model;
   (b) high-level principles for algorithms and methodologies used; and
   (c) details of any modifications approved pursuant to paragraph 3.

SECTION 5
MODELS FOR IMBALANCE NETTING PROCESS

Article 21
REGIONAL INTEGRATION MODEL FOR IMBALANCE NETTING PROCESS

1. No later than 1 July 2018 all TSOs in the Synchronous Area Continental Europe shall implement the regional integration model for Imbalance Netting Process.

2. The regional integration model for the Imbalance Netting Process shall consist of one Coordinated Balancing Area covering the whole Synchronous Area Continental Europe. All TSOs involved in this Coordinated Balancing Area shall apply a TSO-TSO Model to perform the Imbalance Netting Process.

Article 22
EUROPEAN INTEGRATION MODEL FOR IMBALANCE NETTING PROCESS

1. No later than 1 July 2022 all TSOs shall implement the European integration model for the Imbalance Netting Process.

2. The European integration model for the Imbalance Netting Process shall consist of a single Coordinated Balancing Area. In this Coordinated Balancing Area all TSOs shall apply a multilateral TSO-TSO model to operate the Imbalance Netting Process in times when economically efficient.

3. No later than 1 July 2019 all TSOs shall have the right to jointly develop a proposal for modification of the European integration model for the Imbalance Netting Process. Proposed modifications shall be supported by a Cost-Benefit Analysis performed by all TSOs.
4. No later than 1 July 2020 all TSOs shall jointly develop a proposal for the implementation framework to implement the European integration model for the Imbalance Netting Process. This proposal shall include at least:
(a) implementation timeline of the European integration model;
(b) high-level principles for algorithms and methodologies used; and
(c) details of any modifications approved pursuant to paragraph 3.

Article 23
COORDINATED BALANCING AREAS FOR REGIONAL IMPLEMENTATION MODELS

1. No later than six months after entry into force of this Regulation, all TSOs shall jointly develop a proposal for Coordinated Balancing Areas for implementation of:
(a) the regional implementation model for Replacement Reserves;
(b) the regional implementation model for Frequency Restoration Reserves with manual activation;
(c) the regional implementation model for Frequency Restoration Reserves with automatic activation.

2. The proposal referred to in paragraph 1 shall define the control areas and TSOs attributed to each Coordinated Balancing Area. Each TSO may be attributed to only one Coordinated Balancing Area for each regional implementation model, unless a TSO has responsibilities in several Synchronous Areas. In that case, the TSO can be attributed to several Coordinated Balancing Areas, corresponding to the number of Synchronous Areas. There shall be no more than [X] Coordinated Balancing Areas for regional implementation models pursuant to paragraph 1(b) and (c).

3. Coordinated Balancing Areas established for the regional implementation models pursuant to paragraph 1 shall:
(a) be consistent and ensure efficient functioning of regional balancing markets and implementation models;
(b) prevent delays in implementation projects for regional implementation models;
(c) facilitate smooth and efficient convergence and merging of Coordinated Balancing Areas into European integration models pursuant to Article 16, Article 18 and Article 20.

4. The proposal pursuant to paragraph 1 shall be accompanied with the implementation framework to implement the regional integration models pursuant to Article 15 and Article 21. This framework shall include at least:
(a) the description of implementation projects for the regional integration models pursuant to Article 15 and Article 21;
(b) the implementation timeline of implementation projects for regional integration models pursuant to Article 15 and Article 21;
(c) the monitoring plan for implementation projects to ensure their consistency and smooth and efficient convergence and merging of Coordinated Balancing Areas into European integration models and to be applied pursuant to Article 70.

1 In Annex I of Recommendation No 03/2015 of 20 July 2015 on the Network Code on Electricity Balancing, the Agency recommends that the number of CoBAs is not higher than five. The Agency also proposes that this recommendation is further scrutinised based on the evidence provided by the early implementation initiatives undertaken by ENTSO-E, which is expected to become available before this Regulation enters into the Comitology proceeding.
5. No later than two years after entry into force of this Regulation, all TSOs shall jointly develop a proposal for the implementation framework to implement the regional integration models pursuant to Article 17 and Article 19. This framework shall include at least:
   (a) the description of implementation projects for the regional integration models pursuant to Article 17 and Article 19;
   (b) the implementation timeline of implementation projects for regional integration models pursuant to Article 17 and Article 19;
   (c) the monitoring plan for implementation projects to ensure their consistency and smooth and efficient convergence and merging of Coordinated Balancing Areas into European integration models and to be applied pursuant to Article 70.

SECTION 6
TARGETS FOR IMBALANCE SETTLEMENT

Article 24
TARGETS FOR IMBALANCE SETTLEMENT

1. No later than one year after the entry into force of this Regulation, all TSOs shall develop a proposal for harmonisation of the main features of Imbalance Settlement.

2. The proposal pursuant to paragraph 1 shall harmonise:
   (a) the calculation of a Position, Imbalance, Allocated Volume and Imbalance Adjustment;
   (b) the definition of Imbalance Price Area equal to a Bidding Zone in case of Self-Dispatching Model;
   (c) the calculation of Imbalance Price;
   (d) price components included in the Imbalance price; and
   (e) the use of single price for all imbalances with the possibility for the use of dual price based on clear criteria and justification provided in the proposal.

3. Harmonisation pursuant to paragraph 1 may distinguish between Self Dispatching Model and Central Dispatching Model.

4. The proposal pursuant to paragraph 1 shall provide an implementation date no later than 1 July 2019.

5. No later than 1 July 2019, the Imbalance Settlement Period shall be set to \(X\) minutes in all Control Areas while ensuring that all boundaries of Market Time Unit shall coincide with boundaries of Imbalance Settlement Periods.

SECTION 7
FUNCTIONS AND RESPONSIBILITIES

Article 25
ROLE OF THE TSOs

\[\text{In Annex I of Recommendation No 03/2015 of 20 July 2015 on the Network Code on Electricity Balancing, the Agency recommends that the Imbalance Settlement Period is set to 15 minutes. The Agency also proposes that this recommendation is further scrutinised on the basis of the evidence provided by the ENTSO-E cost-benefit analysis that is expected to be finalised before this Regulation enters into the Comitology proceeding.}\]

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1. Each TSO shall respect the terms and conditions related to Balancing pursuant to Article 29.

2. Each TSO shall apply the Self-Dispatching Model for determining Generation Schedules and Consumption Schedules. TSOs applying a Central Dispatching Model at the time of the entry into force of this Regulation may apply for the exemption to competent regulatory authorities to be allowed to continue to apply a Central Dispatching Model for determining Generation Schedules and Consumption Schedules. The application process shall be performed in accordance with Article 6(8). The competent regulatory authorities shall verify whether the tasks and responsibilities of the TSO are consistent with the definitions of a Central Dispatching Model and Integrated Scheduling Process in this Regulation.

3. Each TSO shall be responsible for procuring Balancing Services from Balancing Service Providers to ensure Operational Security.

4. All TSOs shall be responsible for contributing to the integration of Balancing Markets pursuant to Article 12.

5. TSOs shall not provide any Balancing Services to the Balancing Market. Derogation to this rule may be requested by the TSOs if they are able to demonstrate that Balancing Service Providers cannot provide sufficient Balancing Energy bids to ensure sufficient Reserve Capacity with respect to dimensioning requirements pursuant to [Article 46 FRR Dimensioning] and [Article 48 RR Dimensioning] of the Network Code on Load-Frequency Control and Reserves. The derogation request shall be subject to the approval by the competent regulatory authority in accordance with Article 6(8) and may only apply for Balancing Energy. In case derogation is approved, the competent regulatory authority shall decide on the duration of such derogation and provide other regulatory authorities within the concerned Coordinated Balancing Area, the Agency and the European Commission the relevant information about the request and the reasons for such approval.

6. The derogation request pursuant to paragraph 5 shall include:
   (a) proposal and justification of the volume of Balancing Energy to be offered by a TSO and the time period in which the TSO would need to offer Balancing Energy;
   (b) demonstration that Balancing Service Providers are not able to provide sufficient Balancing Energy bids to ensure sufficient Reserve Capacity with respect to dimensioning requirements pursuant to [Article 46 FRR Dimensioning] and [Article 48 RR Dimensioning] of the Network Code on Load-Frequency Control and Reserves;
   (c) demonstration that other market-based alternatives, including the cross-border exchanges of Balancing Energy, have been explored;
   (d) proposal for long term solution that avoids the need for a TSOs to offer Balancing Energy;
   (e) proposal for rules for defining the prices of Balancing Energy bids offered by TSOs; and
   (f) proposal for activation rules of Balancing Energy offered by TSOs that shall avoid undue distortion within Balancing Markets.

Article 26
COOPERATION WITH DSOs

1. Each DSO shall respect the terms and conditions related to Balancing pursuant to Article 30.

2. DSOs, TSOs, Balancing Service Providers and Balance Responsible Parties shall cooperate to ensure efficient and effective Balancing.
3. Each DSO shall provide, in due time, all necessary information to perform the Imbalance Settlement to the Connecting TSO in accordance with the terms and conditions related to Balancing pursuant to Article 30.

4. No later than twelve months after the entry into force of this Regulation, each TSO and Reserve Connecting DSOs within the TSO’s Control Area shall jointly elaborate a methodology for allocating costs resulting from actions taken by DSOs pursuant to [Article 68 Reserve Providing Units connected to the DSO Grid] of the Network Code on Load-Frequency Control and Reserves for submission to the competent regulatory authority if no such methodology or national legislation is already covering these matters. The methodology shall provide for a fair allocation of costs taking into account the responsibilities of the parties involved and shall allocate costs to the real originator of the costs.

5. Any limits defined by DSOs pursuant to [Article 68 Reserve Providing Units connected to the DSO Grid] of the Network Code on Load-Frequency Control and Reserves that could affect the provision of this Regulation shall be reported without delay by the DSO to the Connecting TSO.

Article 27

ROLE OF BALANCING SERVICE PROVIDERS

1. Each Balancing Service Provider shall respect the terms and conditions related to Balancing pursuant to Article 30.

2. A Balancing Service Provider shall be qualified before being allowed to provide bids for Balancing Energy or Balancing Capacity products. The qualification shall be based on the successful completion of the corresponding Prequalification as defined in [Article 47 RR Technical Minimum Requirements and Article 49 RR Technical Minimum Requirements] of the Network Code on Load-Frequency Control and Reserves. A Balancing Service Provider may be qualified for provisions of Balancing Energy or Balancing Capacity products which are procured or activated by the Connecting TSO or in case of TSO-BSP model by the Contracting TSO.

3. Each Balancing Service Provider shall submit its Balancing Capacity bids if any, as defined by the Connecting TSO, to the Connecting TSO in which the Balancing Service Provider affects one or more Balance Responsible Parties.

4. All Balancing Service Providers which participate in the procurement process for Balancing Capacity shall submit and shall have the right to update their Balancing Capacity bids before the gate closure time of the procurement process.

5. Balancing Service Providers with a contract for Reserve Capacity shall submit to their Connecting TSO the Balancing Energy bids corresponding to the volume, products and other requirements of the Balancing Capacity contract in line with the requirements of this Regulation.

6. Any Balancing Service Provider shall have the right to submit to its Connecting TSO the Balancing Energy bids for Standard Products or Specific Products or Integrated Scheduling Process bids for which it has passed the Prequalification in line with the requirements of this Regulation.

7. The price of the Balancing Energy Bids pursuant to paragraph 5 shall not be predetermined within a contract for Balancing Capacity for Standard and Specific Products. An exemption to this rule may be proposed by TSOs within the terms and conditions related to Balancing pursuant to Article 30. Such a proposal shall:
   (a) be accompanied with the justification demonstrating higher economic efficiency;
(b) avoid distortion of Balancing Energy prices and Imbalance Prices; and  
(c) ensure that the prices of such Balancing Energy bids in the Common Merit Order List reflect the real time value of Balancing Energy.

8. There shall be no discrimination between Balancing Energy bids submitted pursuant to paragraph 5 and Balancing Energy bids submitted pursuant to paragraph 6.

9. For each product for Balancing Capacity or Balancing Energy, the Reserve Providing Unit, Reserve Providing Group, Demand Facility or Aggregator and the associated Balance Responsible Parties pursuant to Article 30(1)(d) shall belong to the same Control Area or Scheduling Area when appropriate.

Article 28

ROLE OF BALANCE RESPONSIBLE PARTIES

1. Each Balance Responsible Party shall respect the terms and conditions related to Balancing pursuant to Article 30.

2. Each Balance Responsible Party shall be financially responsible for the Imbalance to be settled with the Connecting TSO.

3. In real time, each Balance Responsible Party shall strive to be balanced or help the power system to be balanced. The detailed requirements with this respect shall be defined in the terms and conditions related to Balancing pursuant to Article 30.

4. Each Balance Responsible Party shall have the right to regularly change its Generation Schedules, Consumption Schedules, Internal Commercial Trade Schedules and External Commercial Trade Schedules prior to the Intraday Cross Zonal Gate Closure Time. TSOs applying Central Dispatching Model may define specific conditions and rules for changing the schedules of a Balance Responsible Party within the terms and conditions related to balancing pursuant to Article 30.

5. After the Intraday Cross Zonal Gate Closure Time, each Balance Responsible Party shall have the right to change its Generation Schedules, Consumption Schedules and Internal Commercial Trade Schedules, pursuant to the rules defined in the terms and conditions related to balancing.

Article 29

FUNCTIONS IN COORDINATED BALANCING AREAS

1. All TSOs in Coordinated Balancing Areas shall appoint an entity entrusted with the task of:
   (a) Imbalance Netting Process Function in case the Coordinated Balancing Areas is established for the Imbalance Netting Process;
   (b) Capacity Procurement Optimisation Function in case the Coordinated Balancing Areas is established for the Exchange of Balancing Capacity or Sharing of Reserves;
   (c) Transfer of Balancing Capacity Function in case the Coordinated Balancing Areas is established for the Exchange of Balancing Capacity;
   (d) Activation Optimisation Function in case the Coordinated Balancing Area is established for the Exchange of Balancing Energy; and
   (e) TSO-TSO Settlement Function.

2. The entity pursuant to paragraph 1 shall operate the corresponding algorithm developed pursuant to Chapter 6.
Article 30

TERMS AND CONDITIONS RELATED TO BALANCING

1. Each TSO shall develop for its Control Area or Scheduling Area when appropriate a proposal for:
   (a) the terms and conditions for Balancing Service Providers; and
   (b) the terms and conditions for Balance Responsible Parties.

2. When developing proposals for terms and conditions for Balancing Service Providers and Balance Responsible Parties, each TSO shall:
   (a) coordinate with the TSOs and DSOs that might be affected by these terms and conditions;
   (b) respect the frameworks for the establishment of the terms and conditions pursuant to Article 12[5](a), when one or more such frameworks have been established in Coordinated Balancing Areas to which the TSO belongs;
   (c) involve DSOs and other stakeholders throughout the proposal development and take into account their views, without prejudice to public consultation pursuant to Article 5.

3. The terms and conditions for Balancing Service Providers shall:
   (a) define reasonable and justified requirements for provision of Balancing Services;
   (b) allow the aggregation of Demand Facilities and Power Generating Facilities, within a Control Area or Scheduling Area when appropriate to offer Balancing Services, subject to conditions defined pursuant to Article 30(4)(c);
   (c) allow Demand Facility owners, Aggregators and owners of Power Generating Facilities from conventional and Renewable Energy Sources as well as owners of storage elements to become Balancing Service Providers; and
   (d) require that each Balancing Energy bid from a Balancing Service Provider is assigned to one or more Balance Responsible Parties to enable the calculation of an Imbalance Adjustment pursuant to Article 60.

4. The terms and conditions for Balancing Service Providers shall contain at least:
   (a) the rules for Prequalification for becoming a Balancing Service Provider, in particular, as defined in Article 47 FRR Technical Minimum Requirements and Article 49 RR Technical Minimum Requirements) of the Network Code on Load-Frequency Control and Reserves;
   (b) rules for the procurement of Balancing Capacity pursuant to Article 37 to Article 39;
   (c) the rules and conditions for the aggregation of Demand Facilities and Power Generating Facilities within a Control Area or Scheduling Area when appropriate to become a Balancing Service Provider where applicable;
   (d) requirements on data and information, to be delivered to the Connecting TSO and where relevant the Reserve Connecting DSO during Prequalification and operation;
   (e) the modalities to assign each Balancing Energy bid from a Balancing Service Provider to one or more Balance Responsible Parties, pursuant to paragraph 3(d);
   (f) requirements on data and information, to be delivered to the Connecting TSO and where relevant the Reserve Connecting DSO to evaluate the provision of Balancing Services and to calculate Imbalance pursuant to Article 44(1) and Article 44(8) FCR Technical Minimum Requirements) for Frequency Containment Reserves, Article 47(1)(c) and Article 47(8) FRR Technical Minimum Requirements) for Frequency Restoration Reserves and Article 49(1)(c) and Article 49(8) RR Technical Minimum Requirements) for Replacement Reserves of Network Code on Load-Frequency Control and Reserves;
   (g) the requirements and rules for transfer of Balancing Capacity pursuant to Article 38 and Article 49;
   (h) the definition of a location for each Standard Product and Specific Product, taking into account Article 30(4)(c).
5. The rules for Balance Responsible Parties shall contain at least:

(a) the definition of balance responsibility for each connection in a way that avoids any gaps or overlaps in the balance responsibility of different market participants providing services to that connection;
(b) the requirements for becoming a Balance Responsible Party;
(c) the requirement that all Balance Responsible Parties without exemption shall be financially responsible for the imbalance to be settled with the Connecting TSO;
(d) the requirements on data and information to be delivered to the Connecting TSO to calculate the imbalance;
(e) the rules for changing the schedules of a Balance Responsible Party prior to and after the Intraday Energy Gate Closure Time according to Article 28;
(f) rules for the settlement defined pursuant to Chapter 5 Section 4;
(g) the delineation of Imbalance Area and Imbalance Price Area;
(h) a maximum period for the finalisation of settlement of Imbalance with Balance Responsible Parties, pursuant to Article 63, for any given Imbalance Settlement Period;
(i) the consequences in case of non-compliance with the terms and conditions for Balance Responsible Parties;
(j) an obligation for Balance Responsible Parties to submit any modification of the Position to the Connecting TSO; and
(k) the settlement procedures pursuant to Articles 63(j) and 64(j).

6. Each Connecting TSO may include the following within the proposal for the terms and conditions for Balancing Service Providers or terms and conditions for Balance Responsible Parties:

(a) a requirement for Balancing Service Providers to provide information on unused generation capacity and other Balancing resources from Balancing Service Providers after Day Ahead Market Gate Closure Time and Intraday Cross Zonal Gate Closure Time;
(b) a requirement for Balancing Service Providers to offer their unused generation capacity or other Balancing resources through Balancing Energy bids in the Balancing Markets after Day Ahead Market Gate Closure Time without prejudice to the possibility of Balancing Service Providers to change their Balancing Energy bids prior to the Balancing Energy Gate Closure Time due to trading within intraday market;
(c) a requirement for Balancing Service Providers to offer their unused generation capacity or other Balancing resources through Balancing Energy bids in the Balancing Markets after Intraday Cross Zonal Gate Closure Time;
(d) specific requirements with regard to the Position of Balance Responsible Parties at the end of the day-ahead timeframe to ensure that their Position is balanced;
(e) the exemption to predetermine the price of the Balancing Energy Bids from Balancing Capacity pursuant to Article 27(7);
(f) and 7(e).

For the cases defined in paragraph 6(b), (c) and (d) the proposal for the terms and conditions related to Balancing shall be complemented with a justification for these additional requirements.

7. TSOs applying Central Dispatching Model shall include the following within the terms and conditions related to Balancing:

(a) the Integrated Scheduling Process Gate Closure Times;
8. Each TSO shall monitor the fulfillment of the requirements set in the terms and conditions related to Balancing by all parties.

### Article 31

**INDEPENDENT PROVISION OF DEMAND SIDE RESPONSE**

1. Where there are identified substantial entry barriers for providers of Demand Side Response including aggregation facilities or where they cannot compete at a level playing field, the Member State through national legislation or, where applicable, the regulatory authorities through an administrative decision shall:
   (a) implement adequate measures to mitigate the entry barriers for providers of Demand Side Response including aggregation facilities and ensure they can compete at a level playing field; or
   (b) enable provision of Demand Side Response independently of energy suppliers.

2. In a case the measure according to paragraph 1(b) is chosen, the terms and conditions related to balancing pursuant to Article 30 shall define rules and procedures by which a Balancing Service Provider can provide Demand Side Response service from a Demand Facility without the need for a consent or a contract with the energy supplier of that Demand Facility or its Balance Responsible Party.

3. When the Balancing Service Provider and the energy supplier act on a single Demand Facility pursuant to paragraph 1(b), the Balancing Service Provider shall establish or contract with a Balance Responsible Party that is independent from the Balance Responsible Party of the energy supplier of that Demand Facility.

4. When the Balancing Service Provider and the energy supplier act on a single Demand Facility pursuant to paragraph 1(b), the TSO shall:
   (a) adjust the final Position and determine the Allocated Volume of the Balance Responsible Party of the Balancing Service Provider and Balance Responsible Party of the energy supplier such that the imbalance of the latter is not affected by the activation of Demand Side Response pursuant to Article 60 and Article 63;
   (b) establish financial settlement between the Balance Responsible Party of the Balancing Service Provider and Balance Responsible Party of the energy supplier with regard to the change in the final Position pursuant to paragraph 4(a).

5. The financial settlement pursuant to paragraph 4(b) shall:
   (a) be facilitated by a TSO and shall not require a contract between the involved Balance Responsible Parties;
   (b) ensure reimbursement to Balance Responsible Party of the energy supplier in case of demand curtailment and reimbursement to Balance Responsible Party of the Balancing Service Provider in case of demand enhancement;
   (c) ensure the reimbursement is made at a price that represent the average sourcing costs of energy supplied by the energy supplier to the Demand Facility.
CHAPTER 3
PROCUREMENT OF BALANCING SERVICES

SECTION 8
GENERAL PROVISIONS FOR PROCUREMENT

Article 32

REQUIREMENTS FOR STANDARD PRODUCTS

1. Each TSO shall use Standard Products in order to ensure Operational Security and to maintain the system balance in the respect of [Article 19 Frequency Quality Target Parameters], [Article 46 FRR Dimensioning] and [Article 48 RR Dimensioning] of the Network Code on Load-Frequency Control and Reserves.

2. No later than six months after entry into force of this Regulation, all TSOs shall develop a proposal for a list of Standard Products for Balancing Capacity and Standard Products for Balancing Energy for Frequency Restoration Reserves and Replacement Reserves.

3. All TSOs shall review at least every two years the list of Standard Products for Balancing Capacity and Standard Products for Balancing Energy. The review of Standard Products shall consider:
   (a) the objectives as defined in Article 23(6);
   (b) possible reduction of the number of Standard Products and the number of Common Merit Order Lists pursuant to Article 45(2); and
   (c) the performance indicators as defined in Article 70(4).

4. The list of Standard Products for Balancing Capacity and Standard Products for Balancing Energy shall define at least the following standard characteristics of a Standard Product bid:
   (a) Preparation Period;
   (b) Ramping Period;
   (c) Full Activation Time;
   (d) minimum and maximum quantity;
   (e) Deactivation Period;
   (f) minimum and maximum duration of Delivery Period;
   (g) Validity Period; and
   (h) Mode of Activation.

5. The list of Standard Products for Balancing Capacity and Standard Products for Balancing Energy shall also define at least the following variable characteristics of Standard Products to be determined by Balancing Service Providers during the Prequalification or when submitting the Standard Product bids:
   (a) price of the bid;
   (b) divisibility;
   (c) location; and
   (d) minimum duration between the end of Deactivation Period and the following activation.

   (a) ensure efficient standardisation and foster cross-border competition, liquidity and avoid undue market fragmentation;
   (b) facilitate the participation of Demand Facility owners, Aggregators and owners of Power Generating Facilities from Renewable Energy Sources as well as owners of storage elements as Balancing Service Providers; and
   (c) satisfy the needs of TSOs in order to ensure Operational Security and efficiently fulfil Frequency Quality Target Parameters and Reserve Capacity requirements pursuant to...
Article 33

REQUIREMENTS FOR SPECIFIC PRODUCTS

1. After the proposal for the list of Standard Products pursuant to Article 32 has been submitted for regulatory approval pursuant to Article 6(b), each TSO may develop a proposal for defining and using Specific Products for Balancing Capacity and Specific Products for Balancing Energy. This proposal shall include at least:
   (a) definition of Specific Products and time period in which they will be used;
   (b) demonstration that Standard Products are not sufficient to ensure Operational Security and to maintain the system balance or demonstration that some Balancing resources cannot participate in Balancing Market through Standard Products;
   (c) a description of measures to minimise the use of Specific Products subject to economic efficiency;
   (d) rules for conversion of Balancing Energy bids for Specific Products into Balancing Energy bids for Standard Products;
   (e) the information in which process and which Common Merit Order List the Balancing Energy bids from Specific Products shall be included; and
   (f) demonstration that Specific Products do not create significant inefficiencies and distortions in the balancing market within the Control Area or within the Coordinated Balancing Area.

2. Each TSO using Specific Products shall review at least once a year the necessity to use Specific Products in accordance with the criteria laid down in paragraph 1.

3. All TSOs shall submit all Balancing Energy bids for Specific Products to the Activation Optimisation Function.

4. The Connecting TSO may declare Balancing Energy bids for Specific Products as unavailable for activation by other TSOs of the Coordinated Balancing Area in Alert State or Emergency State when such declaration helps to alleviate the severity of these system states.

5. When all TSOs in Coordinated Balancing Area agree that some Balancing Energy bids for Specific Products can only be activated by the connecting TSO, the connecting TSO may:
   (a) declare these Balancing Energy bids as part of unshared bids and mark them as unavailable for activation by other TSOs pursuant to Article 44,
   (b) convert these Balancing Energy bids into Balancing Energy bids for Standard Products that are used in the concerned Coordinated Balancing Area.

6. Rules for conversion of Balancing Energy bids for Specific Products into Balancing Energy bids for Standard Products pursuant to paragraph 1(d) shall:
   (a) be fair, transparent and non-discriminatory;
   (b) not create barriers for exchanges of Balancing Services;
   (c) ensure financial neutrality of TSOs.

Article 34

CONVERSION OF BIDS IN CENTRAL DISPATCHING MODEL

1. Each TSO applying Central Dispatching Model shall use the Integrated Scheduling Process bids for the purpose of the Exchange of Balancing Services or Sharing of Reserves.
2. Each TSO applying the Central Dispatching Model shall use all the latest Integrated Scheduling Process bids available for the real time management of the system while respecting Operational Security Constraints to provide Balancing Services to other TSOs.

3. Each TSO applying the Central Dispatching Model shall convert Integrated Scheduling Process bids pursuant to paragraph 2 into Standard Products exchanged within the Coordinated Balancing Area, taking into account Operational Security. The rules for converting Integrated Scheduling Process bids into Standard Products shall:
   (a) be defined within the terms and conditions for Balancing Service Providers pursuant to Article 30;
   (b) be fair, transparent and non-discriminatory;
   (c) not create barriers for exchanges of Balancing Services;
   (d) ensure financial neutrality of TSOs.

Article 35
BALANCING ENERGY GATE CLOSURE TIME

1. All TSOs of a Coordinated Balancing Area shall jointly propose within the proposal for the establishment of Coordinated Balancing Area the Balancing Energy Gate Closure Time.

2. Balancing Energy Gate Closure Time shall be harmonised per Coordinated Balancing Area and at least for each of the following processes:
   (a) Frequency Restoration Reserves with automatic activation;
   (b) Frequency Restoration Reserves with manual activation; and
   (c) Replacement Reserves.

3. After the Balancing Energy Gate Closure Time the update of a Balancing Energy bids is no longer permitted.

4. A Balancing Energy Gate Closure Time shall:
   (a) be as close as possible to real time;
   (b) be after the Intraday Cross Zonal Gate Closure Time for all Balancing Energy bids and avoid to the highest possible extent the Intraday Market and Balancing Market taking place at the same time;
   (c) ensure sufficient time for common processing of Balancing Energy bids; and
   (d) ensure sufficient time for all TSOs of a Coordinated Balancing Area to perform all processes linked to the activation of Balancing Energy bids.

5. When defining the proposal for Balancing Energy Gate Closure Time for automatically activated Balancing Energy bids, the concerned TSOs may propose a derogation from the requirements pursuant to paragraph 4(b). In such a case the proposed Balancing Energy Gate Closure Time for automatically activated Balancing Energy bids shall be as close as possible to Intraday Cross Zonal Gate Closure Time and shall not be longer than 12 hours before real time. The proposal for such derogation shall:
   (a) justify and demonstrate that requirements of paragraph 4(b) would lead to significant violations of Operational Security;
   (b) propose and justify the Balancing Energy Gate Closure Time for automatically activated Balancing Energy bids;
   (c) avoid distortion of Balancing Energy prices and Imbalance Prices; and
   (d) ensure that the prices of Balancing Energy bids in the Common Merit Order List reflect the real time value of Balancing Energy.

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(e) **demonstrate** that other alternatives have been explored and do not resolve the situation; and

(f) **propose** a long-term solution that eliminates the need to define Balancing Energy Gate Closure Time for automatically activated Balancing Energy bids before the Intraday Cross Zonal Gate Closure Time.

6. Unexpected unavailable volumes of Balancing Energy bids of a Balancing Service Provider after the Balancing Energy Gate Closure Time shall be reported without undue delay by the Balancing Service Provider to the Connecting TSO. Connecting TSOs shall qualify such Balancing Energy bids as invalid within the concerned Common Merit Order List.

7. No later than two years after entry into force of this Regulation each Central Dispatch TSO shall define **within the terms and conditions related to balancing** at least one Integrated Scheduling Process Gate Closure Time which shall:
   (a) enable Balancing Service Providers to update Integrated Scheduling bids as close as possible to real time;
   (b) not be longer than eight hours before real-time; and
   (c) be before TSO Energy Bid Submission Gate Closure Time, unless paragraph 8 applies.

8. **After each Integrated Scheduling Process Gate Closure Time** the Integrated Scheduling Process bids can only be changed according to the rules defined by Connecting TSO in the terms and conditions for Balancing Service Providers pursuant to Article 30. These rules shall allow Balancing Service Providers to update Integrated Scheduling Process bids **until the Balancing Energy Gate Closure Time**, while ensuring:
   (a) economic efficiency of Integrated Scheduling Process;
   (b) Operational Security;
   (c) consistency of all iterations of the Integrated Scheduling Process; and
   (d) fair and equal treatment of all Balancing Service Providers within **Control Area**.

9. Each TSO applying Central Dispatching Model shall define **within the terms and conditions related to balancing the rules to activate or reserve Integrated Scheduling Process bids before the Balancing Energy Gate closure time** according Article 30(2)(d), in order to:
   (a) ensure that the TSO meets Reserve Capacity requirements in real time;
   (b) ensure sufficient resources to solve internal congestions;
   (c) ensure the possibility of feasible dispatch of Power Generating Facilities and Demand Facilities in real time.

**Article 36**

**FALL-BACK PROCEDURES**

1. Each TSO shall ensure that fall-back solutions are in place in case the normal procedures fail.

2. In case the procurement of Balancing Services fails, all TSOs of a Coordinated Balancing Area shall perform a repetition of the procurement process consistent with the objectives of this Regulation. TSOs shall inform Market Participants that fall-back procedures will be used as soon as reasonably practicable.

3. In case the coordinated activation of Balancing Energy fails, each TSO shall have the right to deviate from the Common Merit Order List activation and shall inform Market Participants as soon as reasonably practicable.
SECTION 9
PROCUREMENT OF BALANCING CAPACITY

Article 37
GENERAL PROVISIONS

1. **Each TSO shall** regularly and at least once a year review and define the Reserve Capacity requirements for its Control Area pursuant to dimensioning rules as defined in [Article 43 FCR Dimensioning, Article 46 FRR Dimensioning and Article 48 RR Dimensioning] of the Network Code on Load-Frequency Control and Reserves. Each TSO shall perform an analysis on optimal provision of Reserve Capacity aiming at minimization of costs associated with the provision of Reserve Capacity. This analysis shall take into account options for the provision of Reserve Capacity:
   (a) Procurement of Balancing Capacity within Control Area, within Coordinated Balancing Area or within neighboring Coordinated Balancing Area;
   (b) Sharing of Reserves;
   (c) the volume of non-contracted Balancing Energy bids which are expected to be available both within their Control Area and within their Coordinated Balancing Area taking into account the available Cross Zonal Capacity.

2. Each TSO procuring Balancing Capacity shall define the rules for procurement of Balancing Capacity within the terms and conditions for Balancing Service Providers pursuant to Article 30. These rules shall respect the following:
   (a) procurement shall be based on market-based method for at least the Frequency Restoration Reserves and Replacement Reserves;
   (b) procurement shall be done close to real time to the extent possible;
   (c) the contracting period shall have a maximum period of one month;
   (d) contracting should be done for a maximum of one month in advance of the provision of the Balancing Capacity; and
   (e) contracted volume may be divided into several contracting periods.

3. The procurement of upward and downward Balancing Capacity for Frequency Restoration Reserves and Replacement Reserves shall be carried out separately.

4. Each TSO may submit a proposal to the competent regulatory authority requesting the exemption to the procurement rules according to paragraph 3(c), (d) and 4. The proposal for exemption shall include:
   (a) specification of the time period during which the exemption would apply;
   (b) specification of the volume of Balancing Capacity for which the exemption would apply;
   (c) analysis of the impact of such an exemption on the participation of balancing resources pursuant to Article 32(3)(b); and
   (d) justification for the exemption demonstrating that such an exemption would lead to higher economic efficiency.

Article 38
TRANSFER OF BALANCING CAPACITY WITHIN A CONTROL AREA OR SCHEDULING AREA

1. TSOs of a Control Area or Scheduling Area when appropriate shall allow a Balancing Service Provider to perform a Transfer of Balancing Capacity to another Balancing Service Provider within the same Control Area or Scheduling Area when appropriate.
2. Upon receiving a request for Transfer of Balancing Capacity the concerned TSO shall approve the transfer, if the following conditions are met:
   (a) the transfer receiving Balancing Service Provider has passed the Prequalification for the Balancing Capacity for which the transfer is performed; and
   (b) the Transfer of Balancing Capacity is not expected to endanger Operational Security.

3. In the event that the Transfer of Balancing Capacity is not approved, the concerned TSO shall explain the reason for the rejection to the Balancing Service Providers involved.

SECTION 10
EXCHANGE OF A BALANCING CAPACITY IN A FORM OF TSO-TSO MODEL

Article 39
GENERAL PROVISIONS

1. Except in cases where TSO-BSP model is applied pursuant to Article 41, or where exchange between Coordinated Balancing Areas is applied pursuant to Article 13, the Exchange of Balancing Capacity shall always be performed in a form of a TSO-TSO model with the common procurement of Balancing Capacity within a Coordinated Balancing Area established by two or more TSOs pursuant to Article 12, taking into account the available Cross Zonal Capacity and the limits for the Exchange of Reserves pursuant to [Chapter 9 Section 1 Exchange and Sharing of Reserves within a Synchronous Area and Chapter 9 Section 2 Exchange and Sharing of Reserves between Synchronous Areas] of the Network Code on Load-Frequency Control and Reserves.

2. All TSOs within a Coordinated Balancing Area established for the exchange of Balancing Capacity shall use common and harmonised procurement rules and process for the procurement and exchange of Balancing Capacity and respecting the requirements of Article 37. The proposal for the establishment of Coordinated Balancing Area pursuant to Article 12(5) shall contain the proposal for such harmonised rules and process.

3. The proposal for the establishment of Coordinated Balancing Area pursuant to Article 12(5) shall include a proposal for a pricing method used in the procurement of Balancing Capacity. Such pricing method shall:
   (a) give correct price signals and incentives to Market Participants; and
   (b) ensure that there are no significant distortions between adjacent Coordinated Balancing Areas.

4. All TSOs of a Coordinated Balancing Area for the Exchange of Balancing Capacity shall submit all Balancing Capacity bids for Standard Products to the Capacity Procurement Optimisation Function. TSOs shall not modify or withhold any Balancing Capacity bids and shall include them in the procurement, except under conditions pursuant to Article 33 and Article 34.

5. All TSOs of a Coordinated Balancing Area performing the Exchange of Balancing Capacity shall ensure the availability of Cross Zonal Capacity whilst ensuring that the Operational Security requirements pursuant to the Network Code on Operational Planning and Scheduling, the Network Code on Operational Security and the Network Code on Load-Frequency Control and Reserves are met either by:
   (a) the probabilistic provision of Cross Zonal Capacity using the methodology pursuant to paragraph 7; or
   (b) the reservation of Cross Zonal Capacity according to CHAPTER 4 SECTION 1.
6. Each TSO in a Coordinated Balancing Area using the probabilistic provision of Cross Zonal Capacity shall inform other TSOs within their LFC Block how the risk of unavailability of Reserve Capacity in the Control Area or Scheduling Area when appropriate of the TSO affects the fulfilment of the requirements pursuant to [Article 46(2)](d) FRR Dimensioning of the Network Code on Load-Frequency Control and Reserves.

7. No later than two years after the entry into force of this Regulation all TSOs shall jointly develop a methodology for the probabilistic provision of Cross Zonal Capacity. The methodology shall at least describe:
   (a) the procedures to notify the use of probabilistic provision of Cross Zonal Capacity to other TSOs within LFC Block;
   (b) the description of the process to perform the assessment for the relevant period of Exchange of Balancing Capacity or Sharing of Reserves;
   (c) the method to assess the risk of unavailability of Cross Zonal Capacity due to planned and unplanned outages and due to congestions;
   (d) the method to assess the risk of insufficient Reserve Capacity due to unavailability of Cross Zonal Capacity;
   (e) requirements for a fall-back solution in case of unavailability of Cross Zonal Capacity or insufficient Reserve Capacity;
   (f) requirements for ex-post review and monitoring of risks; and
   (g) rules in order to ensure the settlement pursuant to CHAPTER 5.

8. TSOs shall not increase the Reliability Margin calculated pursuant to the Guideline on Capacity Allocation and Congestion Management due to the Exchange of Balancing Capacity or Sharing of Reserves.

### Article 40

**TRANSFER OF BALANCING CAPACITY WITHIN A COORDINATED BALANCING AREA**

1. TSOs of a Coordinated Balancing Area established for the Exchange of Balancing Capacity shall allow a Balancing Service Provider to perform a Transfer of Balancing Capacity to another Balancing Service Provider within the same Coordinated Balancing Area.

2. Upon receiving a request for Transfer of Balancing Capacity the concerned TSOs of the Coordinated Balancing Area shall approve the transfer, if the following conditions are met:
   (a) the transfer receiving Balancing Service Provider has passed a Prequalification for the Balancing Capacity for which the transfer is performed;
   (b) There is sufficient Cross Zonal Capacity available for the Transfer of Balancing Capacity pursuant to Article 39(1);
   (c) the Transfer of Balancing Capacity, does not exceed the limits pursuant to the [Chapter 9 Section 1 Exchange and Sharing of Reserves within a Synchronous Area and Chapter 9 Section 2 Exchange and Sharing of Reserves between Synchronous Areas] Network Code on Load-Frequency Control and Reserves; and
   (d) the Transfer of Balancing Capacity is not expected to endanger Operational Security.

3. In the event that the Transfer of Balancing Capacity is not approved, the concerned TSOs of the Coordinated Balancing Area shall explain the reason for the rejection to the Balancing Service Providers involved.
SECTION 11
TSO-BSP MODEL

EXCHANGES OF BALANCING SERVICES IN A FORM OF TSO-BSP MODEL

Article 41

1. Two TSOs may at their initiative or at the request of the competent regulatory authorities develop a proposal for the application of the TSO-BSP model.

2. The proposal for application of a TSO-BSP model shall include:
   (a) a Cost-Benefit Analysis performed pursuant to Article 72, identifying the efficiency of applying the TSO-BSP Model for at least the Control Area or Scheduling Area of the involved TSOs;
   (b) the requested application period; and
   (c) description of the methodology for ensuring sufficient Cross Zonal Capacity in accordance with Article 39(8).

3. In case of application of a TSO-BSP Model, the respective TSOs and Balancing Service Providers may be exempted from the application of the provisions from Article 27(3), Article 27(5), Article 27(6), Article 43(9), and Article 55(8) for the relevant processes.

4. In case of application of a TSO-BSP Model, the involved TSOs shall establish an agreement on technical and contractual requirements, and information exchange for the activation of Balancing Energy bids. The Contracting TSO and the Balancing Service Provider shall establish contractual arrangements in the form of a TSO-BSP Model.

5. TSO-BSP model for Exchange Balancing Capacity for FRR or RR may be applied before 1 July 2020. After 1 July 2020, TSO-BSP model for Exchange Balancing Capacity RR may be applied if one of the two involved TSOs does not operate the Reserve Replacement Process as part of the Load-Frequency-Control Structure pursuant to Network Code on Load-Frequency Control and Reserves. After 1 July 2020, all other Exchanges of Balancing Capacity shall be in the form of the TSO-TSO model.

6. TSO-BSP model for Exchange Balancing Energy for Frequency Restoration Reserves may be applied only in case the TSO-BSP model is applied for Exchange of Balancing Capacity for Frequency Restoration Reserves.

7. TSO-BSP model for Exchange Balancing Energy for Replacement Reserves may be applied in case the TSO-BSP model is applied for Exchange Balancing Capacity for Replacement Reserves or in case one of the two involved TSOs does not operate the Reserve Replacement Process as part of the Load-Frequency-Control Structure pursuant to Network Code on Load-Frequency Control and Reserves.
SECTION 12
PROCUREMENT OF BALANCING ENERGY

Article 42.
PRICING METHOD FOR BALANCING ENERGY

1. No later than one year after the entry into force of this Regulation, all TSOs shall develop a proposal for harmonised pricing method for Balancing Energy. The proposed pricing method shall be based on marginal pricing (pay-as-cleared), unless TSOs complement the proposal with a detailed analysis demonstrating that a different pricing method is more efficient for European-wide implementation pursuing the general objectives defined in Article 11. Such pricing method shall:
   (a) establish the price of Balancing Energy for each Imbalance Settlement Period;
   (b) give correct price signals and incentives to Market Participants; and
   (c) take previous electricity market timeframes into account.

2. Balancing Energy prices shall not be capped. In case TSOs identify that caps are needed for consistency with other market timeframes, they may develop within a proposal for harmonised pricing method for Balancing Energy a proposal for harmonised maximum and minimum Balancing Energy prices to be applied in all control areas. In such a case, harmonised maximum and minimum Balancing Energy prices shall take into account the maximum and minimum clearing price for day-ahead and intraday timeframes pursuant to Guideline on Capacity Allocation and Congestion Management.

3. The harmonised pricing method shall be used for all Standard Products for Balancing Energy and Specific Products for Balancing Energy pursuant to Article 33(5)(b) no later than at the deadlines for the implementation of regional integration models. For Specific Products pursuant to Article 33(5)(d), the concerned TSO may propose a different pricing method within the proposal for Specific Products pursuant to Article 33.

4. The TSOs of a Coordinated Balancing Area shall have the right to propose in their common proposal for a Coordinated Balancing Area pursuant to Article 13(3) a pricing method different from the harmonised pricing method, if approved by competent regulatory authorities, such pricing method may be applied within the concerned Coordinated Balancing Area until the deadlines for the implementation of the European integration model pursuant to CHAPTER 2, SECTION 2 to SECTION 5. In this case, the proposal shall include a detailed analysis demonstrating that the proposed pricing method is more efficient in pursuing the general objectives defined in Article 11.

SECTION 13
ACTIVATION OF BALANCING ENERGY BIDS

Article 43
GENERAL PROVISIONS

1. Each TSO shall use cost effective Balancing Energy bids available for delivery in its control area through Common Merit Order Lists for ensuring Operational Security.

2. In case Balancing Energy bids are activated for purposes other than Balancing, the price of these activated Balancing Energy bids shall not determine the Imbalance Price and the price of Balancing Energy in case marginal price is applied.

3. TSOs shall not activate Balancing Energy Bids before the corresponding Balancing Energy Gate Closure Time and the Intraday Cross Zonal Gate Closure Time, except in Alert State or Emergency...
State, when such activations help alleviating the severity of these system states, and except when the bids serve purposes other than Balancing pursuant to paragraph 4.

4. No later than twelve months after the entry into force of this Regulation, all TSOs shall develop a proposal for classification methodology for activation purposes of Balancing Energy bids. This methodology shall:
   (a) be in line with the general objectives of the Balancing Market pursuant to Article 11;
   (b) describe all possible activation purposes of Balancing Energy bids; and
   (c) define classification criteria for each possible activation purpose.

5. For each Balancing Energy bids activated from the Common Merit Order List, the TSO activating the bid shall define the activation purpose based on methodology pursuant to paragraph 3. The activation purpose shall be notified and visible to all TSOs in a Coordinated Balancing Area through the Activation Optimisation Function.

6. Balancing Energy bids for Frequency Restoration Reserves with automatic activation shall be exclusively available for the purpose of maintaining the active power balance.

7. In the event that the activation of Balancing Energy bids for Balancing purposes deviates from the merit order, the TSO shall publish the information about the reasons for the occurrence of such activation in a timely manner.

8. The activation request of a Balancing Energy bid from the Activation Optimisation Function of a Coordinated Balancing Area shall oblige the Requesting TSO and Connecting TSO to accept the firm exchange of Balancing Energy from the activated Balancing Energy bid from the Connecting TSO to the Requesting TSO. Each Connecting TSO of a Coordinated Balancing Area shall ensure the activation of the Balancing Energy bid selected by the Activation Optimisation Function. The Balancing Energy shall be settled between the Requesting TSO and the Connecting TSO pursuant to Article 61 and between the Connecting TSO and the Balancing Service Provider pursuant to CHAPTER 5, SECTION 2.

9. The activation of Balancing Energy bids shall be based on a TSO-TSO Model.

10. Each TSO of a Coordinated Balancing Area shall submit all necessary data for the operation of the algorithm pursuant Article 69(1) to the Activation Optimisation Function in accordance with the rules developed pursuant to Article 45(1).

11. Each Connecting TSO shall submit prior to the TSO Energy Bid Submission Gate Closure Time all Balancing Energy bids received from Balancing Service Providers to the Activation Optimisation Function, taking into account the provisions of Article 33 and Article 34 and Article 44. The Connecting TSOs shall not modify or withhold Balancing Energy bids, except as permitted by Article 34, Article 33 and Article 34.

12. Each Requesting TSO shall have the right to request the activation of Balancing Energy bids from the Common Merit Order Lists of the respective Coordinated Balancing Area up to the total volume. The total volume of Balancing Energy that can be activated by the requesting TSO from Balancing Energy bids submitted by the other TSOs as a result of Balancing Capacity procured on behalf of Requesting TSO; and...
(c) Balancing Energy bids from Sharing of Reserves under the condition that the other TSOs participating in the Sharing of Reserves have not already requested the activation of these shared volumes.

13. All TSOs of the Coordinated Balancing Area may propose within the proposal for the establishment of Coordinated Balancing Area the conditions or situations in which the limitation as defined in paragraph 12 shall not apply. When TSO is requesting Balancing Energy beyond limitation pursuant to paragraph 12, all other TSOs of the concerned Coordinated Balancing Area shall be informed in a timely manner.

Article 44

REQUIREMENTS FOR UNSHARED BIDS

1. Before the deadlines for the implementation of European integration models pursuant to Article 16, Article 18 and Article 20, TSOs may declare any Balancing Energy bids submitted to Activation Optimisation Function as unshared bids and make these bids unavailable for activation by other TSOs.

2. The following requirements on the maximum volumes of unshared bids shall apply:
   (a) The volume of unshared bids for Replacement Reserves shall not be higher than the volume of Balancing Capacity for Replacement Reserves procured by the TSO;
   (b) The volume of unshared bids for Frequency Restoration Reserves with manual activation shall not be higher than the volume of Balancing Capacity for Frequency Restoration Reserves with manual activation procured by the TSO; and
   (c) The volume of unshared bids for Frequency Restoration Reserves with automatic activation shall not be higher than the volume of Balancing Capacity for Frequency Restoration Reserves with automatic activation procured by the TSO.

3. The unshared bids may only consist of the following Balancing Energy bids:
   (a) Balancing Energy bids with the highest prices; and
   (b) Balancing Energy bids from Specific products, which cannot be activated by other TSOs pursuant to Article 33(5)(a).

4. Before the application of unshared bids the concerned TSO shall develop a proposal for a methodology for application of unshared bids, which shall respect the requirements in this Article. Based on this methodology the concerned TSO shall regularly and at least every year recalculate the volumes of unshared bids for Replacement Reserves, Frequency Restoration Reserves with manual activation and Frequency Restoration Reserves with automatic activation.

5. All TSOs may jointly develop a proposal for continuation of application of unshared bids after the deadlines for the implementation of European integration models pursuant to Article 16, Article 18 and Article 20. Such continuation may only apply to unshared bids pursuant to paragraph 3(b). The proposal shall be accompanied with the justification demonstrating higher economic efficiency and be subject to approval by all regulatory authorities.

Article 45

ACTIVATION MECHANISM FOR BALANCING ENERGY

1. No later than specified in CHAPTER 2 SECTION 2 to SECTION 5 for all targets, all TSOs of a Coordinated Balancing Area shall establish an Activation Optimisation Function and define rules for its operation.


4. TSOs shall ensure that Balancing Energy bids submitted to Common Merit Order List are expressed in euros and make reference to the market time.

5. Depending on the requirement for Standard Products for Balancing Energy, TSOs shall have the right to create more Common Merit Order Lists.

6. Each TSO shall submit its activation requests for Balancing Energy bids to the Activation Optimisation Function.

7. The Activation Optimisation Function shall select Balancing Energy bids and request the activation of selected Balancing Energy bids from the Connecting TSOs of the respective Coordinated Balancing Area where the Balancing Service Provider, associated with the selected Balancing Energy bid, is connected.

8. The Activation Optimisation Function shall submit confirmation of the activated Balancing Energy bids to the TSO, requesting the activation of Balancing Energy bids. The activated Balancing Service Providers shall be responsible for delivering the requested volume until the end of the Delivery Period.

9. All TSOs of a Coordinated Balancing Area shall have the right to establish an Activation Optimisation Function in accordance with Article 43 and Article 45 for the optimisation of the activation of Balancing Energy bids from different Common Merit Order Lists. This function shall at least take into account:
   (a) activation processes and technical constrains from different Balancing Energy products;
   (b) Operational Security;
   (c) all Balancing Energy bids included in the compatible Common Merit Order Lists;
   (d) the possibility to net the counteracting activation requests from TSOs;
   (e) submitted activation requests of all TSOs of a Coordinated Balancing Area; and
   (f) available Cross Zonal Capacity.

10. All TSOs that operate the Frequency Restoration Process and the Reserve Replacement Processes to balance their Control Area shall strive for using all Balancing Energy bids from relevant Common Merit Order Lists to balance the system in the most efficient way taking into account Operational Security.

11. TSOs that do not use the Reserve Replacement Process to balance their Control Area shall strive for using all Balancing Energy bids from relevant Common Merit Order Lists for Frequency Restoration Reserves to balance the system in the most efficient way taking into account Operational Security.

12. Except in case of Normal State, TSOs may decide to balance the system using only the Balancing Energy bids from Balancing Service Providers in its own Control Area if such
decision helps to alleviate the severity of the current system state. Justification for each such decision shall be published without undue delay.
CHAPTER 4
CROSS ZONAL CAPACITY FOR BALANCING SERVICES

SECTION 1
CROSS ZONAL CAPACITY FOR THE EXCHANGE OF BALANCING CAPACITY AND SHARING OF RESERVES

Article 46
GENERAL REQUIREMENTS FOR RESERVATION OF CROSS ZONAL CAPACITY

1. Each TSO shall have the right to reserve Cross Zonal Capacity for the Exchange of Balancing Capacity or Sharing of Reserves when socio-economic efficiency is proved in accordance with this Section using one of the following approaches:
   (a) co-optimisation process pursuant to Article 48;
   (b) market-based reservation process pursuant to Article 49; or
   (c) reservation based on economic efficiency analysis, pursuant to Article 50.

2. Each TSO shall be able to reserve Cross Zonal Capacity only when Cross Zonal Capacity is calculated in line with the Capacity Calculation Methodologies developed pursuant to the Network Code on Forward Capacity Allocation and pursuant to the Guideline on Capacity Allocation and Congestion Management.

3. Cross Zonal Capacity reserved for the Exchange of Balancing Capacity or Sharing of Reserves shall be included as previously allocated Cross Zonal Capacity in calculations of Cross Zonal Capacity.

4. In case Cross Zonal Capacity for the Exchange of Balancing Capacity is reserved by Physical Transmission Right holders it shall be considered as nominated solely for the purpose of excluding it from the application of the Use-it-or-lose-it (UIOLI) principle pursuant to Article 2.5 Congestion-management Methods of the Congestion Management Guidelines which form an Annex I to the Regulation (EC) No 714/2009.

5. Cross Zonal Capacity reserved for the Exchange of Balancing Capacity or Sharing of Reserves shall be used exclusively for Replacement Reserves or Frequency Restoration Reserves with manual activation or Frequency Restoration Reserves with automatic activation and operating the Imbalance Netting Process or Frequency Containment Reserves it was reserved for. Cross Zonal Capacity reserved for Frequency Restoration Reserves with automatic activation can also be used for operating the Imbalance Netting Process.

6. Each TSO shall regularly assess whether the Cross Zonal Capacity reserved for the Exchange of Balancing Capacity or Sharing of Reserves is still needed for that purpose. When Cross Zonal Capacity reserved for the Exchange of Balancing Capacity or Sharing of Reserves is no longer needed for that purpose, it shall be released and returned for allocation of Cross Zonal Capacity in the following Capacity Allocation timeframes. Such Cross Zonal Capacity shall not longer be included as previously allocated Cross Zonal Capacity in the Capacity Calculation Methodology.

7. When Cross Zonal Capacity reserved for the Exchange of Balancing Capacity or Sharing of Reserves has not been used for the associated Exchange of Balancing Energy it shall be released for the Exchange of Balancing Energy with shorter activation times or for operating the Imbalance Netting Process.

8. Two years after the methodology for reservation of Cross-Zonal Capacity pursuant to paragraph 1(a) based on explicit auction has been approved and implemented in Cross Zonal Capacity Allocation pursuant to [Network Code on Forward Capacity Allocation], the reservation of Cross-
Zonal Capacity pursuant to paragraph 1(c) shall no longer be allowed, whereas the reservation of Cross-Zonal Capacity pursuant to paragraph 1(b) for timeframes equal or longer than one month shall no longer be allowed.

Article 47
CALCULATION OF MARKET VALUE OF CROSS ZONAL CAPACITY

1. The market value of Cross Zonal Capacity for the Exchange of Balancing Capacity or Sharing of Reserves and for the exchange of energy used in a co-optimisation process or in a market-based reservation process shall be based on actual or forecasted market values of Cross Zonal Capacity.

2. The actual market value of Cross Zonal Capacity for the exchange of energy shall be calculated based on the bids by Market Participants in the auctions for Cross Zonal Capacity for the exchange of energy.

3. The actual market value of Cross Zonal Capacity for the Exchange of Balancing Capacity used in the co-optimisation process or the market-based reservation process shall be calculated based on Balancing Capacity bids, submitted to the Capacity Procurement Optimisation Function pursuant to Article 39(4).

4. The actual market value of Cross Zonal Capacity for Sharing of Reserves used in the co-optimised process or the market-based reservation process shall be calculated based on the avoided costs of procuring Reserve Capacity.

5. The methodology to forecast the market value of Cross Zonal Capacity shall be based on one of the following principles:
   (a) the use of transparent market indicators that disclose the market value of Cross Zonal Capacity; or
   (b) the use of forecasting methodology that enable accurate and reliable assessment of the market value of Cross Zonal Capacity.

Article 48
CO-OPTIMISED CAPACITY ALLOCATION

1. No later than two years after entry into force of this Regulation all TSOs shall jointly develop a methodology for a co-optimised Capacity Allocation. This methodology shall describe:
   (a) the notification process for the use of the co-optimised Capacity Allocation;
   (b) how Cross Zonal Capacity shall be allocated to bids for exchanging energy and bids for exchanging Balancing Capacity or Sharing of Reserves in a single optimisation process performed for both implicit and explicit auction;
   (c) the detailed description of the pricing method; the firmness regime; and the sharing of congestion income for the Cross Zonal Capacity that has been allocated to bids for exchanging Balancing Capacity or Sharing of Reserves via the co-optimised Capacity Allocation; and
   (d) the process to define the maximum volume of reserved Cross Zonal Capacity.

2. The pricing method, the firmness regime and the sharing of congestion income for the Cross Zonal Capacity that has been allocated to bids for exchanging Balancing Capacity or Sharing of Reserves via the co-optimised Capacity Allocation shall ensure equal treatment with the Cross Zonal Capacity allocated to bids for exchanging energy.
3. TSOs of a Coordinated Balancing Area shall bid the actual market value of Cross Zonal Capacity for the Exchange of Balancing Capacity or Sharing of Reserves in a coordinated manner, as described in Article 47, to the co-optimised Capacity Allocation.

4. Cross Zonal Capacity allocated to bidders for exchanging Balancing Capacity or Sharing of Reserves via the co-optimised Capacity Allocation shall be used only for the Exchange of Balancing Capacity or Sharing of Reserves.

**Article 49**

**MARKET-BASED RESERVATION**

1. No later than two years after entry into force of this Regulation all TSOs shall jointly develop a methodology for a market-based reservation of Cross Zonal Capacity for the Exchange of Balancing Capacity or Sharing of Reserves. This methodology shall describe:
   (a) the notification process for the use of the methodology for a market-based reservation;
   (b) the detailed description how to determine the actual market value of Cross Zonal Capacity for the Exchange of Balancing Capacity or Sharing of Reserves, and the forecasted market value of Cross Zonal Capacity for exchanges of energy;
   (c) the detailed description of the pricing method, the firmness regime, and the sharing of congestion income for the Cross Zonal Capacity that has been allocated to bids for exchanging Balancing Capacity or Sharing of Reserves via the market-based reservation; and
   (d) the process to define the maximum volume of reserved Cross Zonal Capacity.

2. The Cross Zonal Capacity reservation methodology for the Exchange of Balancing Capacity or Sharing of Reserves shall be based on a comparison of the actual market value of Cross Zonal Capacity for the Exchange of Balancing Capacity or Sharing of Reserves, and the forecasted market value of Cross Zonal Capacity for the exchange of energy, calculated as described in Article 47.

3. The pricing method, the firmness regime and the sharing of congestion income for the Cross Zonal Capacity that has been reserved via market-based reservation shall ensure equal treatment with the Cross Zonal Capacity allocated for exchange of energy.

**Article 50**

**RESERVATION BASED ON AN ECONOMIC EFFICIENCY ANALYSIS**

1. The TSOs may reserve Cross Zonal Capacity for the Exchange of Balancing Capacity or the Sharing of Reserves by using the economic efficiency analysis as a justification for such reservation.

2. For reservation of Cross Zonal Capacity based on economic efficiency analysis, the TSOs pursuant to paragraph 4 shall first develop the appropriate methodology for such reservation. Pursuant to this methodology, the TSOs may propose to reserve of Cross Zonal Capacity based on economic efficiency analysis. The proposal for methodology and proposal for each reservation shall be approved by regulatory authorities competent for TSOs that have developed the proposal.

3. The proposal for methodology for reservation of Cross Zonal Capacity based on economic efficiency analysis shall include:
   (a) the rules and principles for performing the economic efficiency analysis to be used as a basis for a decision to reserve Cross Zonal Capacity for the Exchange of Balancing Capacity or Sharing of Reserves based on an economic efficiency analysis;
(b) the detailed description how to determine forecasted market value of Cross Zonal Capacity for the Exchange of Balancing Capacity or Sharing of Reserves, and the forecasted market value of Cross Zonal Capacity for exchanges of energy;

(c) the detailed description of pricing method, firmness regime and the sharing of congestion income for the Cross Zonal Capacity that has been reserved based on an economic efficiency analysis; and

(d) the maximum volume of reserved Cross Zonal Capacity for Bidding Zone Borders, where reservation based on economic efficiency analysis may take place.

4. The proposal pursuant to paragraph 2 may be developed by:

(a) all TSOs of a Capacity Calculation Region to which the Bidding Zone Border where the reservation shall take place is attributed; or

(b) the TSOs on each side of the Bidding Zone Border in case the Bidding Zone Border includes only DC interconnectors.

5. The methodology for reservation based on an economic efficiency analysis shall be based on a comparison of the forecasted market value of Cross Zonal Capacity for the Exchange of Balancing Capacity or Sharing of Reserves, and the forecasted market value of Cross Zonal Capacity for exchanges of energy, pursuant to Article 47.

6. The pricing method, the firmness regime and the sharing of congestion income for the Cross Zonal Capacity that has been reserved based on an economic efficiency analysis shall ensure equal treatment with the Cross Zonal Capacity allocated for exchange of energy.

7. For each individual reservation of Cross Zonal Capacity based on economic efficiency analysis, the TSOs that have developed the methodology pursuant to paragraph 3 shall develop a proposal for approval by the competent regulatory authorities. Such proposal shall include:

(a) the specification of Bidding Zone Border;

(b) the volume of reserved Cross Zonal Capacity;

(c) the time period during which the Cross Zonal Capacity would be reserved; and

(d) the economic efficiency analysis justifying the efficiency of such reservation.

8. TSOs shall reassess the value of the reserved Cross Zonal Capacity within the process of procurement of Balancing Capacity and release the reserved Cross Zonal Capacity, which is no longer beneficial to use for the Exchange of Balancing Capacity.

Article 51

USE OF CROSS ZONAL CAPACITY BY BALANCING SERVICE PROVIDERS

1. Balancing Service Providers having a contract for Balancing Capacity with a TSO in a form of TSO-BSP model pursuant to Article 41, shall have the right to use Cross Zonal Capacity for the Exchange of Balancing Capacity if they are the holders of Physical Transmission Rights.

2. Balancing Service Providers using Cross Zonal Capacity for the Exchange of Balancing Capacity shall nominate their Physical Transmission Rights for the Exchange of Balancing Capacity to the concerned TSOs. Such Physical Transmission Rights shall provide the right to their holders to nominate the exchange of Balancing Energy to the concerned TSOs within balancing timeframe and shall therefore be excluded from the application of the Use-it-or-sell-it (UIOSI) principle pursuant to (Article 36(2) Physical Transmission Rights) of the Network Code on Forward Capacity Allocation or Use-it-or-lose-it (UIOLI) principle pursuant to (Article 2.5 Congestion-management
3. Cross Zonal Capacity reserved for the Exchange of Balancing Capacity shall be included as previously allocated Cross Zonal Capacity in Cross Zonal Capacity calculation.

SECTION 2
CROSS ZONAL CAPACITY FOR THE EXCHANGE OF BALANCING ENERGY

Article 52
USE OF CROSS ZONAL CAPACITY FOR THE EXCHANGE OF BALANCING ENERGY OR IMBALANCE NETTING PROCESS

Each TSO shall have the right to use Cross Zonal Capacity for the Exchange of Balancing Energy or operating the Imbalance Netting Process when Cross Zonal Capacity is:

(a) available after the Intraday Cross Zonal Gate Closure Time; or
(b) reserved in accordance with CHAPTER 4 SECTION 1; or
(c) released, pursuant to Article 46.

Article 53
CALCULATION OF CROSS ZONAL CAPACITY FOR THE EXCHANGE OF BALANCING ENERGY OR IMBALANCE NETTING PROCESS

1. All TSOs shall use the available Cross Zonal Capacity after Intraday Cross-Zonal Gate Closure Time, pursuant to of the Guideline on Capacity Allocation and Congestion Management, as the initial available Cross Zonal Capacity, if no other methodology is applied.

2. All TSOs of a Coordinated Balancing Area shall ensure that the available Cross Zonal Capacity is adjusted in sufficient time due to the use of Cross Zonal Capacity for the Exchange of Balancing Energy.

3. All TSOs shall have the right to develop a proposal for a specific capacity calculation methodology to be applied for the Exchange of Balancing Energy or operating the Imbalance Netting Process. Such methodology shall be consistent with the capacity calculation methodology applied in the intraday timeframe and shall avoid market distortions.

4. The availability of Cross Zonal Capacity shall be updated by the TSOs.

Article 54
PRICING OF CROSS ZONAL CAPACITY FOR THE EXCHANGE OF BALANCING ENERGY OR IMBALANCE NETTING PROCESS

1. Cross Zonal Capacity used for the Exchange of Balancing Energy or operating the Imbalance Netting Process shall be priced consistent with pricing methods for the exchange of energy in the intraday timeframe and shall provide an adequate compensation for Cross Zonal Capacity.

2. All TSOs shall have the right to develop a proposal for a specific Cross Zonal Capacity pricing methodology to be applied for the Exchange of Balancing Energy or operating the Imbalance Netting Process. The pricing of Cross Zonal Capacity shall be consistent with the arrangements established under the Guideline on Capacity Allocation and Congestion Management and...
(a) reflect Market Congestion; and
(b) be based on actual Balancing Energy bids.

3. TSOs are not allowed to charge any additional charges for the Exchange of Balancing Energy or operating the Imbalance Netting Process except charges for losses, if the charge is consistent with other timeframes and if approved by the competent regulatory authorities as part of the proposal for the establishment of Coordinated Balancing Area or the proposal for rules and conditions for Exchange of Balancing Services and the Sharing of Reserves between Coordinated Balancing Areas.

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No later than one year before its implementation, TSOs shall develop the applicable pricing methods consistent with the arrangements established under [Article 5.3 Pricing of Intraday Capacity] of the Network Code on Capacity Allocation and Congestion Management.
CHAPTER 5
SETTLEMENT

SECTION 1
SETTLEMENT PRINCIPLES (GENERALITIES)

Article 55
GENERAL SETTLEMENT PRINCIPLES

1. The settlement principles shall:
   (a) establish adequate economic signals which reflect the Imbalance situation;
   (b) ensure that imbalances are settled at a price that reflects the real-time value of energy;
   (c) incentivise Balance Responsible Parties to strive to be balanced or help the system to restore its balance;
   (d) facilitate harmonisation of Imbalance Settlement mechanisms;
   (e) incentivise TSOs to fulfil their obligations pursuant to [Article 19 Frequency Quality Target Parameters, Article 43 FCR Dimensioning, Article 46 FRR Dimensioning and Article 48 RR Dimensioning] the Network Code on Load-Frequency Control and Reserves;
   (f) avoid distortions of incentives or counterproductive incentives to Balance Responsible Parties, Balancing Service Providers and TSOs;
   (g) support competition among Market Participants;
   (h) provide a fair distribution of the benefits and costs associated to the Balancing Markets; and
   (i) incentivise Balancing Service Providers to offer and deliver Balancing Services to the Connecting TSO.

2. Each regulatory authority shall ensure the financial neutrality of all TSOs under its competence with regard to the financial outcome as a result of the settlement pursuant to SECTION 2, SECTION 3 and SECTION 4 of this Chapter, over the regulatory period as defined by the competent regulatory authority.

3. Each TSO may develop a proposal for a settlement mechanism separate from the Imbalance Settlement, to settle the procurement costs of Balancing Capacity pursuant to SECTION 5, procurement costs of Reserve Capacity, administrative costs and other costs related to Balancing with Balance Responsible Parties in order to ensure that the charges for Balance Responsible Parties reflect the full costs of balancing. Such a proposal shall be subject to approval by a competent regulatory authority.

4. TSOs shall not be allowed to use the financial outcome as a result of the settlement pursuant to SECTION 2, SECTION 3 and SECTION 4 of this Chapter to cover the cost of any congestion.

5. All Balancing Energy procured by the Connecting TSO in its Control Area shall be subject to settlement pursuant to SECTION 2 of this Chapter.

6. All exchanged energy between TSOs shall be subject to settlement pursuant to SECTION 3 of this Chapter.

7. The injections and withdrawals within a Bidding Zone that are not subject to settlement pursuant to SECTION 3 shall be subject to settlement pursuant to SECTION 4 of this Chapter without exemption.

8. The procurement of Balancing Capacity pursuant to Article 37 and Article 39 shall be subject to settlement pursuant to SECTION 5 of this Chapter.
SECTION 2
SETTLEMENT OF BALANCING ENERGY WITH BALANCING SERVICE PROVIDERS

Article 56
GENERAL PRINCIPLES FOR BALANCING ENERGY

1. Each TSO shall establish for the settlement of Balancing Energy with Balancing Service Providers, for at least the Frequency Restoration Process and Reserve Replacement Process, a procedure for:
   (a) calculation of activated volume of Balancing Energy based on requested or metered activation; and
   (b) claiming recalculation of activated volume of Balancing Energy.

2. Each TSO shall calculate the activated volume of Balancing Energy according to the procedure pursuant to paragraph 1(a) at least:
   (a) for each Imbalance Settlement Period;
   (b) for each Imbalance Area; and
   (c) for each direction, with a negative sign indicating relative withdrawal by the Balancing Service Provider, and a positive sign indicating relative injection by the Balancing Service Provider.

3. Each TSO shall settle the activated volume of Balancing Energy, calculated pursuant to paragraph 2, with the Balancing Service Provider.

Article 57
BALANCING ENERGY FOR FREQUENCY CONTAINMENT PROCESS

1. Each Connecting TSO shall have the right to calculate and to settle the activated volume of Balancing Energy for the Frequency Containment Process with Balancing Service Providers pursuant to Article 56(2).

2. The price, positive, 0 or negative, of the activated volume of Balancing Energy for the Frequency Containment Process shall be defined for each direction, and is to be received by the Balancing Service Provider from the TSO, in case of Balancing Energy with a positive sign, and is to be paid by the Balancing Service Provider to the TSO, in case of Balancing Energy with a negative sign.

Article 58
BALANCING ENERGY FOR THE FREQUENCY RESTORATION PROCESS WITH MANUAL OR AUTOMATIC ACTIVATION

1. Each Connecting TSO shall calculate and settle the activated volume of Balancing Energy for the Frequency Restoration Process with Balancing Service Providers pursuant to Article 56(1) and Article 56(2).

2. The price, positive, 0 or negative, of the activated volume of Balancing Energy for the Frequency Restoration Process shall be defined for each direction pursuant to Article 42 and is to be received by the Balancing Service Provider from the TSO, in case of Balancing Energy with a positive sign, and is to be paid by the Balancing Service Provider to the TSO, in case of Balancing Energy with a negative sign.
Article 59
BALANCING ENERGY FOR THE RESERVE REPLACEMENT PROCESS

1. Each Connecting TSO shall calculate and settle the activated volume of Balancing Energy for the Reserve Replacement Process with Balancing Service Providers pursuant to Article 56(1) and Article 56(2).

2. The price, positive, 0 or negative, of the activated volume of Balancing Energy for Reserve Replacement Process shall be defined for each direction pursuant to Article 42 and is to be received by the Balancing Service Provider from the TSO, in case of Balancing Energy with a positive sign, and is to be paid by the Balancing Service Provider to the TSO, in case of Balancing Energy with a negative sign.

Article 60
IMBALANCE ADJUSTMENT TO THE BALANCE RESPONSIBLE PARTY

1. Each TSO shall calculate an Imbalance Adjustment to be applied to the concerned Balance Responsible Parties for each activated Balancing Energy bid.

2. For Imbalance Areas where several finalised Positions for a single Balance Responsible Party are calculated pursuant to Article 63(2) an Imbalance Adjustment may be calculated per notified Position.

3. Each TSO shall determine each Imbalance Adjustment as the activated volume of Balancing Energy calculated pursuant Article 56(3) and activation for other purposes than Balancing where appropriate.

SECTION 3
SETTLEMENT OF THE EXCHANGES OF ENERGY BETWEEN TSOs

Article 61
INTENDED EXCHANGES OF ENERGY

1. No later than one year after the entry into force of this Regulation all TSOs shall develop a proposal following the principles pursuant to Article 55(1), for common settlement rules of all intended exchanges of energy as a result of one or more of either the:
   (a) Reserve Replacement Process;
   (b) Frequency Restoration Process with manual activation;
   (c) Frequency Restoration Process with automatic activation; or
   (d) operating the Imbalance Netting Process.

2. Each TSO-TSO Settlement Function shall perform the settlement.

3. No later than one year after the entry into force of this Regulation, all TSOs intentionally exchanging energy within a Synchronous Area as a result of one or both of either:
   (a) the Frequency Containment Process; or
   (b) the Ramping Period;
   shall develop a proposal for common settlement rules of intended exchanges of energy.
4. No later than one year after the entry into force of this Regulation, all asynchronously connected TSOs intentionally exchanging energy between Synchronous Areas as a result of one or both of either:
   (a) the Frequency Containment Process for active power output on Synchronous Area level; or
   (b) the ramping restrictions for active power output on Synchronous Area level;
shall develop a proposal for common settlement rules of above mentioned intended exchanges of energy.

5. The common settlement rules according to paragraph 1 shall at least contain the provisions that the intended exchange of energy for each the Replacement Reserves or Frequency Restoration Reserves with manual activation or Frequency Restoration Reserves with automatic activation or operating the Imbalance Netting Process, as agreed pursuant to [Article 36 Imbalance Netting Process, Article 37 Cross-Border FRR Activation Process, Article 38 Cross-Border RR Activation Process, and Article 39 General Requirements for Cross-Border Control Process] of the Network Code on Load-Frequency Control and Reserves is calculated:
   (a) over time periods agreed between relevant TSOs;
   (b) per direction; and
   (c) as the integral of the calculated power interchange over the time periods pursuant to subparagraph (a).

6. The proposals for common settlement rules of intended exchanges of energy between TSOs shall ensure fair and equal distribution of costs and benefits between TSOs.

**Article 62**

**UNINTENDED EXCHANGES OF ENERGY**

1. No later than two years after the entry into force of this Regulation, all TSOs shall develop a proposal for common settlement rules of all unintended exchanges of energy within a Synchronous Area that includes:
   (a) the price for unintended exchanges of energy withdrawn from the Synchronous Area shall reflect the prices for activated upward Balancing Energy for Frequency Restoration Process or Reserve Replacement Process for this Synchronous Area; and
   (b) the price for unintended exchanges of energy injected into the Synchronous Area shall reflect the prices for activated downward Balancing Energy for Frequency Restoration Process or Reserve Replacement Process for this Synchronous Area.

2. No later than two years after the entry into force of this Regulation, all asynchronously connected TSOs shall develop a proposal for common settlement rules of all unintended exchanges of energy between asynchronously connected TSOs.

3. The proposals of common settlement rules of unintended exchanges of energy between TSOs shall ensure fair and equal distribution of costs and benefits between TSOs.

**SECTION 4**

**IMBALANCE SETTLEMENT**

**Article 63**

**IMBALANCE CALCULATION**

1. Each TSO shall calculate the Imbalance for each Balance Responsible Party for each Imbalance Area from the final Position, the Allocated Volume and the Imbalance Adjustment.
2. Imbalance Area shall be equal to Scheduling Area, except in case of application of Central Dispatching Model, where Imbalance Area may constitute a part of Scheduling Area.

3. Each TSO shall calculate the final Positions of a Balance Responsible Party using one of the following approaches:
   (a) Balance Responsible Party has one final Position equal to the sum of its External Commercial Trade Schedules and Internal Commercial Trade Schedules;
   (b) Balance Responsible Party has two final Positions the first being equal to the sum of its External Commercial Trade Schedules and Internal Commercial Trade Schedules from generation and second being equal to the sum External Commercial Trade Schedules and Internal Commercial Trade Schedules for consumption;
   (c) In Central Dispatching Model, a Balance Responsible Party can have several final Positions per Imbalance Area equal to Generation Schedules of Power Generating Facilities or Consumption Schedules of Demand Facilities.

4. Each TSO shall develop within the terms and conditions related to balancing the rules for:
   (a) the calculation of the final Position;
   (b) the determination of the Allocated Volume of all injections and withdrawals;
   (c) the determination of the Imbalance Adjustment pursuant to Article 60 and in case of any curtailment or any activation for other purposes than Balancing;
   (d) the calculation of the Imbalance; and
   (e) claim for recalculation of the Imbalance by a Balance Responsible Party.

5. Allocated Volume shall not be calculated for a Balance Responsible Party which does not cover injections or withdrawals.

6. Each TSO shall calculate the final Position, the Allocated Volume, the Imbalance Adjustment and the Imbalance:
   (a) for each Imbalance Settlement Period; and
   (b) for each Imbalance Area.

7. An Imbalance shall have a size and a direction, indicating the direction of the settlement transaction between Balance Responsible Party and TSO, with negative indicating Balance Responsible Party’s shortage, and positive indicating Balance Responsible Party surplus.

Article 64
IMBALANCE PRICE

1. Each TSO shall develop rules to calculate the Imbalance Price, positive, 0 or negative, to be paid by the Balance Responsible Party to the TSO, in case of an Imbalance with a negative sign, or received by the Balance Responsible Party from the TSO, in case of an Imbalance with a positive sign. The rules shall include a definition of the value of avoided activation of Balancing Energy from Frequency Restoration Reserves or Replacement Reserves.

2. Each TSO shall determine the Imbalance Price:
   (a) for each Imbalance Settlement Period;
   (b) for each Imbalance Area; and
   (c) for each Imbalance direction.

3. The Imbalance Price for shortage shall not be less than:
   (a) the weighted average price for activated positive Balancing Energy for Frequency Restoration Reserves and Replacement Reserves; or
in the event that no activation of Balancing Energy in either direction has occurred during the Imbalance Settlement Period, the value of the avoided activation of Balancing Energy for Frequency Restoration Reserves or Replacement Reserves.

4. The Imbalance Price for surplus shall not be greater than:
   (a) the weighted average price for activated negative Balancing Energy for Frequency Restoration Reserves and Replacement Reserves; or
   (b) in the event that no activation of Balancing Energy in either direction has occurred during the Imbalance Settlement Period, the value of the avoided activation of Balancing Energy for Frequency Restoration Reserves or Replacement Reserves.

5. Imbalance Settlement Price, in the event that both positive and negative Balancing Energy for Frequency Restoration Reserves or Replacement Reserves have been activated during the same Imbalance Settlement Period, shall be determined for shortage and surplus based on at least one of the principles pursuant to paragraphs 3 and 4.

Article 65
IMBALANCE SETTLEMENT

Each TSO shall settle with each Balance Responsible Party all calculated Imbalances pursuant to Article 63 for each Imbalance Settlement Period pursuant to Article 24 against the appropriate Imbalance Price pursuant to Article 64.

SECTION 5
SETTLEMENT OF BALANCING CAPACITY

Article 66
PROCUREMENT OF BALANCING CAPACITY WITHIN A CONTROL AREA

1. Each TSO of a Control Area using Balancing Capacity bids shall define rules for the settlement of at least Frequency Restoration Reserves and Replacement Reserves pursuant to Article 37.

2. Each TSO of a Control Area using Balancing Capacity bids shall settle at least all procured Frequency Restoration Reserves and Replacement Reserves pursuant to Article 37.

Article 67
PROCUREMENT OF A BALANCING CAPACITY WITHIN A COORDINATED BALANCING AREA

1. All TSOs participating in a Coordinated Balancing Area declared for the Exchange of Balancing Capacity shall define rules for the settlement of procured Balancing Capacity pursuant to Article 39.

2. All TSOs participating in a Coordinated Balancing Area declared for the Exchange of Balancing Capacity shall settle jointly procured Balancing Capacity using the TSO-TSO Settlement Function pursuant to Article 39.

3. All TSOs participating in a Coordinated Balancing Area declared for the Exchange of Balancing Capacity shall define rules for the settlement of reservation of Cross Zonal Capacity pursuant to CHAPTER 4 SECTION 3.
4. All TSOs participating in a Coordinated Balancing Area declared for the Exchange of Balancing Capacity shall settle the reservation of Cross Zonal Capacity pursuant to CHAPTER 4 SECTION 1.

SECTION 6
SETTLEMENT AMENDMENTS

Article 68
GENERAL PRINCIPLES

All TSOs of a Coordinated Balancing Area shall establish a coordinated mechanism for amendments to settlements between all TSOs of a Coordinated Balancing Area, based on the principles set forth in Article 61 and Article 62.
CHAPTER 6
ALGORITHM

Article 69
ALGORITHM DEVELOPMENT

1. No later than one year after the entry into force of this Regulation, all TSOs shall jointly develop the principles for balancing algorithms that are to be applied for the following functions:
   (a) Imbalance Netting Process Function;
   (b) Capacity Procurement Optimisation Function;
   (c) Transfer of Balancing Capacity Function; and
   (d) Activation Optimisation Function.

2. All functions as described in this article shall:
   (a) respect Operational Security constraints;
   (b) take into account technical and network constraints; and
   (c) if applicable, take into account the available Cross Zonal Capacities.

3. All TSOs of a Coordinated Balancing Area established for Imbalance Netting Process shall develop an algorithm to be operated by the Imbalance Netting Process Function, in accordance with the principles for balancing algorithms. This algorithm shall minimise, when economically efficient, the counter activation of Balancing resources by performing the Imbalance Netting Process as defined in Network Code on Load-Frequency Control and Reserves.

4. All TSOs of a Coordinated Balancing Area established for the Exchange of Balancing Capacity shall develop an algorithm to be operated by the Capacity Procurement Optimisation Function for the common procurement of Balancing Capacity in accordance with the principles for balancing algorithms. This algorithm shall:
   (a) minimise the overall procurement costs of all jointly procured Balancing Capacity for the Coordinated Balancing Area declared for the Exchange of Balancing Capacity; and
   (b) take into account the availability of Cross Zonal Capacity pursuant including possible costs for its provision.

5. All TSOs of a Coordinated Balancing Area established for the Transfer of Balancing Capacity shall develop an algorithm to be operated by the Transfer of Balancing Capacity Function for the Transfer of Balancing Capacity, in accordance with the principles for balancing algorithms. This algorithm shall allow Balancing Service Providers to transfer their Balancing Capacity obligation to another Balancing Service Provider taking into account the requirements of Article 40.

6. All TSOs of a Coordinated Balancing Area established for the Exchange of Balancing Energy shall develop an algorithm to be operated by the Activation Optimisation Function for the activation of Balancing Energy bids in accordance with the principles for balancing algorithms. This algorithm shall:
   (a) minimise the costs of Balancing; and
   (b) take into account the process descriptions for imbalance netting and cross-border activation pursuant to [Chapter 4 Load Frequency Control Structure] of the Network Code on Load-Frequency Control and Reserves.

7. The description of the algorithms pursuant to paragraphs 3 to 6 shall be included in the proposals for the establishment of Coordinated Balancing Area.

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ALGORITHM AMENDMENTS

All TSOs of a Coordinated Balancing Area shall have the right to propose an amendment
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Proposal for amendments of algorithms from one TSO
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and supported by detailed information explaining and documenting the rationale for them.
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All TSOs of a Coordinated Balancing Area agree on the proposed amendment, they shall implement the amendment of the algorithm and publish information pursuant to Article 8(1) ¶

REPORTING

ENTSO-E AISBL • Avenue Cortenbergh 100 • 1930 Brussels • Belgium • Tel: +32 2 741 59 00 • Fax: +32 2 741 59 11
CHAPTER 7
REPORTING

Article 70
EUROPEAN REPORT ON INTEGRATION OF BALANCING MARKET

1. ENTSO-E shall publish an European report on integration of balancing market focused on monitoring, describing and analysing the implementation of this Regulation, as well as the progress made in terms of harmonisation and integration of Balancing Markets.

2. The level of report shall vary as follows:
   (a) two years after entry into force of this Regulation and subsequently every second year a detailed report shall be published; and
   (b) three years after entry into force of this Regulation and subsequently every second year a simpler version of the report shall be published to review the progress made and update performance indicators, but without performing additional detailed analysis.

3. The report pursuant to paragraph 2(a) shall:
   (a) describe and analyse the harmonisation process through the evolution of Coordinated Balancing Areas, as well as the progress made in terms of harmonisation and integration of Balancing Markets through the application of this Regulation;
   (b) describe the status of implementation projects pursuant to this Regulation;
   (c) assess the compatibility between implementation projects in Coordinated Balancing Areas and investigate any possible development that pose a risk for future integration and merger of Coordinated Balancing Areas;
   (d) analyse the development of the Exchanges of Balancing Capacity and the Sharing of Reserves and describe possible barriers, prerequisites and actions to further enhance the Exchange of Balancing Capacity and the Sharing of Reserves;
   (e) describe the existing and analyse the potential for further exchanges of Balancing Services between Coordinated Balancing Areas;
   (f) analyse the suitability of Standard Products with respect to the latest development and evolution of different Balancing resources and propose possible improvements of Standard Products;
   (g) assess the need for further harmonisation of Standard Products and possible effects of non-harmonisation on integration of Balancing Markets;
   (h) assess the existence and justifications for Specific Products used by TSOs and their effect on the integration of Balancing Markets;
   (i) assess the progress of harmonisation of Imbalance Settlement arrangements as well as the consequences and possible distortions due to non-harmonisation;
   (j) report the results of Cost-Benefit Analyses pursuant to Article 72.

4. ENTSO-E shall develop performance indicators for Balancing Market that will be used in the reports pursuant to paragraph 2(a) and (b). These performance indicators shall reflect:
   (a) availability of Balancing Energy bids, including the bids from Balancing Energy products;
   (b) monetary gains and savings due to Imbalance Netting, Exchange of Balancing Services and Sharing of Reserves;
   (c) benefits from the use of Standard Products;
   (d) total cost of Balancing;
   (e) economic efficiency and quality of Balancing;
   (f) possible inefficiencies and distortions on Balancing Markets;
   (g) the efficiency losses due to Specific Products and Unshared Bids.
5. **ENTSO-E** shall develop the proposal for the structure of the reports pursuant to paragraph 2. This proposal shall also define the content and performance indicators developed pursuant to paragraph 6 that will be used in the report. For each report, the proposal shall be delivered to the Agency, which shall be entitled to require amendments within two months after the submission of the proposal.

6. Each TSO may propose amendments of the report structure, content and the performance indicators. The proposal shall be submitted to **ENTSO-E** including detailed information explaining and documenting the rationale for the amendments.

7. The report pursuant to paragraph 2(a) shall also contain an executive summary in English language of each TSO report on balancing efficiency pursuant to Article 69.

8. The reports pursuant to paragraph 2 shall provide disaggregated information and indicators for Control Areas or Scheduling Areas, Bidding Zone Borders, Control Blocks, or Coordinated Balancing Areas.

9. **ENTSO-E** shall publish the reports pursuant to paragraph 2 on the **ENTSO-E** website and submit it to the Agency no later than six months after the end of the year it refers to.

10. After implementation of the European integration models pursuant to **CHAPTER 2 SECTION 2** to **SECTION 5**, all TSOs shall review the content and conditions of publication of the reports. Based on the outcome of that review, **ENTSO-E** shall develop a proposal for a new structure and timing for the publication of the reports and submit it to the Agency. The Agency shall be entitled to require amendments within three months after the submission of the proposal.

### Article 71

**TSO REPORT ON BALANCING EFFICIENCY**

1. At least every two years, each TSO shall publish a report on balancing efficiency covering the previous two calendar years.

2. The report on balancing efficiency shall:
   - include information concerning the volumes of available, procured and used Specific Products, as well as justification of Specific Products subject to conditions pursuant to Article 33;
   - provide the summary analysis of the dimensioning of reserves including the justification and explanation for the calculated Reserve Capacity requirements;
   - provide the summary analysis of optimal provision of Reserve Capacity including the justification of the volume of Balancing Capacity;
   - analyse the costs and benefits, and the possible inefficiencies and distortions of having Specific Products in terms of competition and market fragmentation, participation of Demand Side Response and Renewable Energy Sources, integration of Balancing Markets and side-effects on other electricity markets;
   - analyse the opportunities for the Exchange of Balancing Capacity and Sharing of Reserves;
(f) provide an explanation and justification of procurement of Balancing Capacity without the Exchange of Balancing Capacity with common procurement or without Sharing of Reserves;
(g) analyse the efficiency of coordination of the Balancing Energy activation from Frequency Restoration Reserves and, if applicable, from Replacement Reserves;
(h) list all events where the TSOs did not use the Activation Optimisation Function for balancing including a detailed justification;

3. The report on balancing efficiency shall either be in English language or at least contain an executive summary in English language.

4. Based on previously published reports, the competent regulatory authority shall be entitled to require changes to the structure and content of the next TSO report on balancing efficiency.
CHAPTER 8
COST-BENEFIT ANALYSIS; TRANSITIONAL ARRANGEMENTS AND DEROGATIONS
Article 72
COST-BENEFIT ANALYSIS

1. When TSOs intend to perform Cost-Benefit Analysis to support the proposal or a decision to be made pursuant to this Regulation, they shall develop the criteria and methodology for Cost-Benefit Analysis and submit them to the regulatory authorities concerned by such a proposal or a decision, no later than six months before the application. The concerned regulatory authorities shall be entitled to require amendments to the criteria and methodology in a coordinated way.

2. The Cost-Benefit Analysis shall at least take into account the objectives of this Regulation set forth in Article 11, and:
   (a) technical feasibility;
   (b) economic efficiency;
   (c) the impact on competition and integration of balancing markets;
   (d) the costs and benefits of implementation;
   (e) the impact on European, regional and national Balancing costs;
   (f) the potential impact on regional energy market prices;
   (g) the ability of TSOs and Balancing Responsible Parties to fulfil their obligations;
   (h) the impact on market parties in terms of additional technical or IT requirements assessed in cooperation with the affected stakeholders.

3. All concerned TSOs shall provide the results of the Cost-Benefit Analysis to all concerned regulatory authorities, together with a justified proposal on how to address possible issues identified by the Cost-Benefit Analysis. The proposal shall be publically consulted pursuant to Article 5. On that basis, the above mentioned regulatory authorities and TSOs shall decide on the way forward.
CHAPTER 9
DEROGATIONS AND MONITORING

Article 73
DEROGATIONS

1. Each TSO shall have the right to apply for derogation in respect of one or more provisions of this Regulation by submitting a written request to the competent regulatory authority.

2. The derogation process shall be transparent, non-discriminatory, non-biased, well documented and based on a reasoned request by the TSO seeking the derogation and demonstrating the fulfilment of the conditions pursuant to paragraph 3.

3. Derogations shall be granted to TSOs who would be unable to implement certain provisions of this Regulation within the timelines required by this Regulation for the reasons that:
   (a) the TSO seeking the derogation would be, at the day of application of the provisions for which derogation is requested, in a significantly different situation from other TSOs in Europe in terms of Balancing arrangements; or
   (b) the implementation of the provisions for which derogation is requested would result in significant problems in Balancing the Control Area of the TSO seeking the derogation.

4. The request for derogation shall be submitted at the latest six months prior to the day of application of the provisions from which derogation is requested. During the derogation process the TSO requesting derogation shall be deemed compliant with the provision from which derogation is requested.

5. Derogation shall be granted once and for a maximum period of two years.

6. The request for derogation shall include all the following information and documents:
   (a) provisions for which derogation is requested;
   (b) requested derogation period;
   (c) a detailed plan and timeline specifying how the TSO requesting derogation intends to address the underlying reasons and intends to ensure the implementation of the concerned provisions of this Regulation after expiration of the derogation period;
   (d) assessment of the consequences of requested derogation on adjacent markets; and
   (e) assessment of the possible jeopardies for the integration of Balancing Markets across Europe caused by the requested derogation.

7. No later than six months following the reception of request for derogation, the competent regulatory authority shall decide on whether to grant the derogation or not. In assessing the request for derogation, the competent regulatory authority shall consider the following aspects:
   (a) difficulties of implementing the concerned provisions due to the specificities of the situation of the TSO seeking the derogation, in terms of national Balancing arrangements;
   (b) risks and implications of the concerned provisions, in terms of Operational Security;
   (c) actions taken by the TSO seeking the derogation to facilitate the implementation of the concerned provisions;
   (d) impacts of non-implementation of the concerned provisions, in terms of non-discrimination and competition with other European market participants, in particular as regards Demand Side Response and Renewable Energy Sources;
   (e) impacts on overall economic efficiency; and
   (f) impacts on other Control Areas and overall consequences on European market integration process.
8. The competent regulatory authority shall communicate to the TSO requesting derogation, the Agency and the European Commission its decision granting or rejecting derogation. The decision shall also be published on its website.

9. The competent regulatory authority shall create and operate a register in which derogations are recorded, together with the reasons for their granting and the consequences of the derogations.

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Article 74

MONITORING OF THE IMPLEMENTATION OF EUROPEAN BALANCING MARKET

1. Monitoring of the implementation of the Balancing Market by ENTSO for Electricity in accordance with Article 8(8) of Regulation (EC) No 714/2009 shall in particular cover the following matters:
   (a) preparing the European report on integration of balancing market pursuant to Article 70;
   (b) preparing report on monitoring of the implementation of this regulation including its effect on the harmonisation of applicable rules aimed at facilitating market integration;

2. ENTSO for Electricity shall submit a monitoring plan which includes the reports to be prepared and any updates in accordance with paragraph 2, to the Agency for an opinion by six months after entry into force of this Regulation.

3. The Agency, in cooperation with ENTSO for Electricity, shall draw up by twelve months after the entry into force of this Regulation a list of the relevant information to be communicated by ENTSO for Electricity to the Agency in accordance with Articles 8(9) and 9(1) of Regulation (EC) No 714/2009. The list of relevant information may be subject to updates. ENTSO for Electricity shall maintain a comprehensive, standardised format, digital data archive of the information required by the Agency.

4. All TSOs shall submit to ENTSO for Electricity the information required to perform the tasks in accordance with paragraphs 2 and 4.

5. Market participants and other relevant organisations regarding the Electricity Balancing Market shall, at the joint request of the Agency and ENTSO-E, submit to ENTSO for Electricity the information required for monitoring in accordance with paragraph 2 and 4, except for information already obtained by the regulatory authorities, the Agency or ENTSO-E in the context of their respective implementation monitoring tasks.
CHAPTER 10
TRANSITIONAL AND FINAL PROVISIONS

Article 75
TRANSITION PERIOD

1. The requirements of this Regulation shall not apply to Article 30, Article 37 to Article 40 and to CHAPTER 5 during a transition period of one year starting on the day of entry into force of this Regulation.

2. During the transition period the requirements of this Regulation shall not apply to agreements related to Electricity Balancing concluded between TSOs or between a TSO and a concerned grid user being in force at the date of the entry into force of this Regulation. After the end of the transition period the requirements of this Regulation shall also apply to agreements related to Electricity Balancing concluded between TSOs or between a TSO and a concerned grid user being in force at the date of the entry into force of this Regulation as well as to those concluded during the transition period.

3. TSOs of a Coordinated Balancing Area may develop interim methodologies for reservation of Cross Zonal Capacity for Balancing Capacity until methodologies for reservation of Cross Zonal Capacity for Balancing Capacity are developed and approved pursuant to Article 48 and Article 49. These interim methodologies shall be consistent with the principles set out in Article 48 and Article 49 and shall be approved by the competent regulatory authorities.

Article 76
ENTRY INTO FORCE

1. This Regulation shall enter into force on the twentieth day following that of its publication in the Official Journal of the European Union.

2. This Regulation shall be binding in its entirety and directly applicable in all Member States.