

## **Annex 1 – CACM Regulation**

**COMMISSION REGULATION (EU) 2015/1222**

**of 24 July 2015**

**establishing a guideline on capacity allocation and congestion management**

**(Text with EEA relevance)**

THE EUROPEAN COMMISSION,

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

Having regard to Regulation (EC) No 714/2009 of the European Parliament and of the Council of 13 July 2009 on conditions for access to the network for cross-border exchanges in electricity and repealing Regulation (EC) No 1228/2003 (1) and in particular Article 18(3)(b) and (5),

Whereas:

1. The urgent completion of a fully functioning and interconnected internal energy market is crucial to the objectives of maintaining security of energy supply, increasing competitiveness and ensuring that all consumers can purchase energy at affordable prices. A well-functioning internal market for electricity should provide producers with appropriate incentives for investing in new power generation, including in electricity from renewable energy sources, paying special attention to the most isolated Member States and regions in the Union's energy market. A well-functioning market should also provide consumers with adequate measures to promote more efficient use of energy, which presupposes a secure supply of energy.
2. Security of energy supply is an essential element of public security and is therefore inherently connected to the efficient functioning of the internal market for 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 to public security, to economic competitiveness and to the well-being of the citizens of the Union.
3. Regulation (EU) 2019/943 establishes the rules to ensure the functioning of the internal market for electricity and the rules on capacity allocation and congestion management that are needed to support the functioning of the internal market. In order to move towards a genuinely integrated electricity market, the current rules on the functioning of the internal market for electricity, capacity allocation, congestion management should be further harmonised. This Regulation therefore sets out minimum harmonised rules for competition and market coupling of all electricity supply and demand in the Union in the day ahead and intraday timeframe supported by an efficient capacity allocation and congestion management system. This should facilitate Union-wide trade in electricity, allow more efficient use of the network and increase competition, for the benefit of consumers.

4. The internal market for electricity in the day-ahead and intraday timeframe consists of several segments. The first one is efficient determination of bidding zones which should be the same across all timeframes. The second segment is efficient calculation of cross-zonal capacities which translate the technical characteristics of electricity networks to carry power flows into available cross-zonal capacities which determine the maximum commercial electricity exchanges between bidding zones. The third segment is the single day-ahead and intraday coupling which matches all supply and demand orders from the whole Union taking into account the maximum commercial electricity exchanges between bidding zones represented by cross-zonal capacities. This segment ends with financial and physical settlement of all the trades and electricity exchanges within the Union resulting from the single day-ahead and intraday coupling.

5. Bidding zones reflecting long-term, structural congestions in the transmission network are a cornerstone of efficient functioning of the internal market as they are a prerequisite for reaching the full potential of electricity transmission infrastructure to carry the energy from supply to demand. The bidding zones should be identical for all market timeframes and should be regularly reviewed in order to ensure efficient functioning of the internal market and optimising the use of transmission infrastructure. This Regulation provides for regular reporting on structural congestions in the network as well as the process to review the existing bidding zone configuration in order to identify a more optimal bidding zone configuration aiming to remove structural congestions within bidding zones.

6. To calculate cross-zonal capacities between bidding zones this Regulation establishes capacity calculation regions as geographical areas in which capacity calculation needs to be fully coordinated and optimised. Regulation (EU) 2019/943 establishes that capacity calculation is performed by Regional Coordination Centres (hereinafter ‘RCC’) based on capacity calculation methodologies developed by Transmission System Operators hereinafter ‘TSOs’) and approved by regulatory authorities of the concerned capacity calculation region. The capacity calculation consists of the process where first each TSO provide capacity calculation inputs to RCC, which uses these inputs in calculation process to calculate capacity calculation outputs and these are then a validated by each TSO. Capacity calculation should be performed once in the day-ahead timeframe and several times in the intraday timeframe.

7. There are two permissible approaches for coordinated capacity calculation: flow-based approach or coordinated net transmission capacity approach. The flow-based approach should be used as a primary approach for the day-ahead and intraday capacity calculation where cross-zonal capacities between bidding zones are highly interdependent. The coordinated net transmission capacity approach should only be applied in regions where interdependency of cross-zonal capacities between different bidding zone borders in a capacity calculation region is insignificant and it can be shown that the flow-based approach would not bring added value. Prior to the change in the capacity calculation approach, market participants should be consulted and given sufficient preparation time to allow for a smooth transition.

8. The outputs of capacity calculation are the available cross-zonal capacities and allocation constraints and these are one of the key input into the single day-ahead and intraday coupling. In this process all bids and offers reflecting all supply and demand in the Union, collected by Nominated Electricity Market Operators (hereinafter ‘NEMOs’), are matched in an economically optimal manner, while taking into account available cross-zonal capacities and allocation constraints to match the bids and offers located in different bidding zones. Single day-ahead and intraday coupling ensures that electricity flows from low- price to high- price areas and should be designed in a manner that allows for its application or extension across the entire Union and for the development of future new product types.

9. The market coupling operator (hereinafter ‘MCO’) receives all bids and offers from all NEMOs and capacity calculation outputs from all RCCs and uses a specific algorithm to match these bids and offers in an optimal manner taking into account cross-zonal capacities and allocation constraints. The results of the calculation should be made available to all NEMOs, RCCs and TSOs on a non-discriminatory basis. Based on the results of the calculation by the MCO, the NEMOs should inform their clients of the successful bids and offers. The energy should then be transferred across the network according to the results of the MCO's calculation. The process for single day-ahead coupling is based on a single auction, whereas for the intraday coupling the process consists of continuous trading complemented by several auctions throughout the day.

10. Cross-zonal capacities should be allocated in the day-ahead and intraday market timeframes using implicit allocation methods which allocate electricity and capacity together. In the case of single day-ahead coupling, this method should be implicit auction and in the case of single intraday coupling it should be continuous implicit allocation complemented by few implicit auctions. The implicit allocation method should rely on effective and timely interfaces between MCO, NEMOs, TSOs, RCCs and other parties to ensure that cross-zonal capacities are allocated and congestion is managed in an efficient manner.

11. Day-ahead and intraday cross-zonal capacity should be firm to allow for effective cross-zonal allocation.

12. In order to ensure the close cooperation among TSOs, NEMOs and regulatory authorities, a robust, reliable and non-discriminatory Union governance framework for single day-ahead and intraday coupling should be established.

13. The management of single day-ahead and intraday coupling should be organised by all NEMOs and all TSOs jointly. This Regulation specifies and tasks related single day-ahead and intraday coupling and designates different entities to perform these tasks. TSOs and RCCs are designated to perform the tasks related to capacity calculation. NEMOs are designated to perform the tasks related to single day-ahead and intraday coupling where competition is possible and allowed. These tasks are related to power exchange services towards market participants. The tasks related to single day-ahead and intraday coupling which are inherently monopolistic and where no competition is possible are the MCO tasks. These tasks are currently still performed by all NEMOs and this arrangement should continue until a single regulated entity is established which can become responsible for MCO tasks.

14. Establishment of such entity is needed to ensure better and faster development of single day-ahead coupling, in particular to be able to implement future requirements and improvements without delays and excessive burden. Such arrangement should also enable more effective regulatory oversight and enforcement, simpler and less costly operation, level playing field for competition among NEMOs, easier entry for new NEMOs, more coordinated development of solutions and higher level of continuity of the single day-ahead and intraday coupling.

15. As all NEMOs and all TSOs are jointly responsible for organising the management of the single-day-ahead and intraday coupling they should jointly establish an entity to perform the MCO tasks and jointly define all rules and requirements on the implementation and performance of MCO tasks. For this purpose all NEMOs and all TSOs should cooperate closely in a joint decision making body tasked to provide rules and requirements regarding the implementation and performance of MCO tasks.

16. In single day-ahead and intraday coupling, each scheduling area should be covered by at least one NEMO to collect bids and offers that serve as input for the single day-ahead and intraday coupling. Hence, the rules for the trading of electricity provided for in this Regulation require an institutional framework that ensures that at least one NEMO operates in each scheduling area at all times. This

framework includes requirements for a market operator to be designated as a NEMO, requirements for a NEMO to offer trading services in Member States where it has not been designated and requirements for continuity of the single day-ahead and intraday coupling for the case where no NEMO offers trading services in a scheduling area.

17. The activity of performing the physical and financial settlement between NEMO trading hubs resulting from single day-ahead and intraday coupling ('shipping') was performed by TSOs before the entry into force of this Regulation. While NEMOs are now responsible for the task of physical and financial settlement between NEMO trading hubs, they should still be allowed to delegate this task to a third party, including a TSO, as long as such entity is able to meet all relevant obligations regarding physical and financial settlement between NEMO trading hubs.

18. MCO, all TSOs and all NEMOs should ensure continuity of the single day-ahead and intraday coupling to the maximum degree possible. For situations where the continuity fails, all TSOs and all NEMOs should prepare fallback solutions which should aim to keep the markets coupled and cross-zonal capacities allocated with implicit method. Decoupling of markets may only be used as a last resort measure.

19. Reliable pricing of cross-zonal capacity, reflecting congestion if capacity is scarce, should be in place for the single day-ahead coupling and for the intraday auctions. The price cross-zonal capacity in the continuous trading in the intraday timeframe should be zero.

20. Any costs of TSOs incurred efficiently to guarantee firmness of cross-zonal capacities and to perform the tasks given to them by this Regulation should be recovered via network tariffs or appropriate mechanisms in a timely manner. The costs related to the MCO tasks should be collected at European or regional level and assessed as efficient, reasonable and proportionate in a coordinated way by all regulatory authorities. Subsequently these costs should be distributed among TSOs and recovered via network tariffs or appropriate mechanisms in a timely manner. To ensure the level playing field among NEMOs, the costs related to NEMO tasks should not be recovered via network tariffs.

21. The cooperation between TSOs, NEMOs and regulatory authorities is necessary in order to promote the completion and efficient functioning of the internal market in electricity and to ensure the optimal management, coordinated operation and sound technical development of the electricity transmission system in the Union. TSOs, NEMOs and regulatory authorities should exploit synergies arising from capacity allocation and congestion management projects contributing to the development of the internal market in electricity. They should draw on the experience gained, respect the decisions made, and use solutions developed as part of those projects. However, this should not preclude necessary improvements, which are needed to improve the functioning of the single day-ahead and intraday coupling and to be fit for accommodating new requirements.

22. The objective of this Regulation, namely the establishment of single day-ahead and intraday coupling, cannot be successfully achieved without a certain set of harmonised rules for capacity calculation, congestion management and trading of electricity.

23. Given the exceptionally high degree of complexity and detail of the terms and conditions or methodologies needed to fully apply single day-ahead and intraday coupling, certain detailed terms and conditions or methodologies should be developed by TSOs and NEMOs and approved by ACER or competent regulatory authorities. However the development of certain terms and conditions or methodologies by TSOs and NEMOs and their subsequent approval by ACER or by the competent regulatory authorities must not delay the completion of the internal electricity market. Thus, it is

necessary to include specific provisions on cooperation between TSOs, NEMOs, ACER and regulatory authorities.

24. In line with Article 5 and 6 of Regulation (EU) 2019/942, ACER should take a decision on EU wide terms and conditions or methodologies or on regional terms and conditions or methodologies if the competent national regulatory authorities are not able to reach an agreement or if these terms and conditions or methodologies have a tangible impact on the internal energy market or on security of supply beyond the region.

25. Transparency is important for non-discrimination, effective competition and the efficient functioning of the single day-ahead and intraday coupling. TSOs and NEMOs should regularly publish the fundamental data on the use of electricity infrastructure and prices. This should apply also to algorithms used to calculate single day-ahead and intraday coupling results to increase the transparency of price formation. The source code of these algorithm needs to be considered as being a good of public interest that should be available to all interested public. To achieve this, the MCO should obtain ownership of these algorithms with procurement from either existing owners or new providers, while avoiding any double compensation of possible historical costs already paid by network users for these algorithms.

26. 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 61(6) of Regulation (EU) 2019/943, the Commission will consult ACER, the ENTSO for Electricity and other relevant stakeholders, notably NEMOs, before proposing any amendment to this regulation.

27. The measures provided for in this Regulation are in accordance with the opinion of the Committee referred to in Article 67 of Regulation (EU) 2019/943 .

HAS ADOPTED THIS REGULATION:

## **TITLE I**

### ***GENERAL PROVISIONS***

Article 1.      Article 1.

#### **Subject matter and scope**

1. This Regulation lays down detailed guidelines on capacity allocation and congestion management in the day-ahead and intraday markets, including the requirements for market coupling, the establishment of common methodologies for determining the volumes of cross-zonal capacity available between bidding zones and criteria to assess efficiency and a review process for defining bidding zones.

2. This Regulation shall apply to all NEMOs and all TSOs in the Union, regulatory authorities, ACER, the ENTSO for Electricity, third parties established to perform the tasks or to whom responsibilities have been delegated or assigned and other market participants. This Regulation shall not apply to the transmission systems on islands which are not connected with other transmission systems via interconnections.
3. 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.
4. The Union single day-ahead and intraday coupling may be opened to market operators and TSOs operating in Switzerland on the condition that the national law in that country implements the main provisions of Union electricity market legislation and that there is an intergovernmental agreement on electricity cooperation between the Union and Switzerland.
5. Subject to the conditions in paragraph 4 above being fulfilled, participation by Switzerland in day-ahead coupling and single intraday coupling shall be decided by the Commission based on an opinion given by ACER. The rights and responsibilities of Swiss NEMOs and TSOs joining single day-ahead coupling shall be consistent with the rights and responsibilities of NEMOs and TSOs operating in the Union to allow a smooth functioning of the single day-ahead and single intraday coupling systems implemented at Union level and a level-playing field for all stakeholders.

Article 2. Article 2

**Definitions**

For the purposes of this Regulation, the definitions in Article 2 of Regulation (EU) 2019/943 of the European Parliament and of the Council on the internal market for electricity and the definitions in the respective Commission Regulations adopted on the basis of Article 6(11) and 18(5) of Regulation (EC) No 714/2009 shall apply.

In addition, the following definitions shall apply:

1. ‘net position’ means the netted sum of electricity exports and imports for each market time unit for a bidding zone;
2. ‘allocation constraints’ means the constraints to be respected during capacity allocation to maintain the transmission system within operational security limits and have not been translated into cross-zonal capacity or that are needed to increase the efficiency of capacity allocation;
3. ‘coordinated net transmission capacity approach’ means the capacity calculation method based on the principle of assessing and defining ex ante a maximum energy exchange between adjacent bidding zones;
4. ‘flow-based approach’ means a capacity calculation method in which energy exchanges between bidding zones are limited by power transfer distribution factors and available margins on critical network elements;

5. “capacity calculation output” means allocation constraints and either flow-based parameters in case of flow based approach or available transmission capacities in case of coordinated net transmission capacity approach;
6. ‘generation shift key’ means a method of translating a net position change of a given bidding zone into estimated specific injection increases or decreases in the common grid model;
7. ‘reliability margin’ means a portion of capacity of a network element to cover the uncertainties within capacity calculation;
8. ‘market time’ means central European summer time or central European time, whichever is in effect;
9. ‘market time unit’ means the shortest time interval for which the market price is established, which shall be at least as short as the imbalance settlement period.
10. ‘congestion income’ means the revenues received as a result of capacity allocation;
11. ‘market congestion’ means a situation in which the economic surplus for single day-ahead or intraday coupling has been limited by cross-zonal capacity or allocation constraints;
12. ‘physical congestion’ means a situation on a network element where the forecasted or realised power flows exceed the maximum flow allowed on such network element that represents operational security limits;
13. ‘order’ means an intention to purchase or sell energy or capacity expressed by a market participant subject to specified execution conditions;
14. ‘matching’ means the process of identifying and effecting a trade between one or more buy and sell orders by the SDAC algorithm, intraday auction algorithm or the continuous trading algorithm
15. ‘shared order book’ means a module in the continuous trading system collecting all orders from all NEMO trading hubs participating in continuous trading;
16. ‘single day-ahead coupling (SDAC)’ means a market mechanism in the day-ahead timeframe based on an implicit auction;
17. ‘single intraday coupling (SIDC)’ means a market mechanism in the intraday timeframe based on continuous trading and complemented by a number of intraday auctions based on an implicit auction.
18. ‘implicit auction’ means the auctioning process, which simultaneously matches orders from NEMO trading hubs within a bidding zone and, where applicable, across bidding zone borders through capacity allocation.
19. ‘continuous trading’ means a continuous process of simultaneous matching of orders from NEMO trading hubs within a bidding zone and, where applicable, across bidding zone borders through capacity allocation;
20. ‘market coupling operator (MCO)’ means an entity established to perform one or more of the tasks regarding the single day-ahead and intraday coupling for all NEMO trading hubs;



21. 'joint decision making body' means a common body established by all NEMOs and all TSOs for making decisions regarding the joint management of single day-ahead and intraday coupling including its substructures;
22. 'passporting' means a situation where a NEMO designated in one Member State is offering trading services in another Member State, where it is not designated;
23. 'reference clearing price' means a single price per bidding zone determined by matching the highest accepted selling order and the lowest accepted buying order and if orders are paradoxically accepted they shall be excluded from this determination;
24. 'side payment' means a payment to a market participant for a matched order which is paradoxically accepted given the reference clearing price to ensure that it does not incur losses.
25. 'scheduled exchange' means an electricity transfer scheduled between NEMO trading hubs resulting from single day-ahead or intraday coupling and leading to internal and external commercial trade schedules between NEMO trading hubs;
26. 'NEMO trading hub' means a virtual trading point collecting all orders received by a NEMO with delivery in a specific scheduling area;
27. 'NEMO trading hub net position' means the netted sum of electricity exports and imports for each market time unit for a NEMO trading hub;
28. 'clearing' means the task of determining the financial position of each counter party in relation to the matched orders;
29. 'settlement' means the task of transferring the monetary value of financial positions between counterparties;
30. 'day-ahead timeframe' means the timeframe of the electricity market from the SDAC gate opening time until the time when the SDAC results are published;
31. 'SDAC gate opening time' means the latest point in time when a NEMO needs to allow market participants to start submitting orders for the SDAC;
32. 'SDAC gate closure time' means the single point in time from when market participants can no longer submit orders for the SDAC;
33. 'SIDC gate opening time' means either the continuous trading opening time or the first intraday auction gate opening time, whichever comes earlier;
34. 'intraday timeframe' means the timeframe of the electricity market from SIDC gate opening time until the continuous trading closure time;
35. 'intraday cross-zonal gate opening time' means the single point in time when cross-zonal capacity between bidding zones starts being available for capacity allocation in the SIDC;
36. 'intraday cross-zonal gate closure time' means the final point in time when cross-zonal capacity between bidding zones stops being available for capacity allocation in the SIDC for a given market time unit and a given bidding zone border;

37. ‘continuous trading opening time’ means the earliest single point in time when the continuous trading starts matching orders;
38. ‘continuous trading closure time’ means the latest point in time when the continuous trading stops matching orders for a given market time unit and a given bidding zone;
39. ‘intraday auction gate opening time’ means the latest point in time when a NEMO needs to allow market participants to start submitting orders for a given intraday auction;
40. ‘intraday auction gate closure time’ means the point in time when market participants can no longer submit orders for a given intraday auction;
41. ‘capacity management module’ means a module in the continuous trading system containing up-to-date information on available cross-zonal capacity for the purpose of its allocation in continuous trading;
42. ‘central counterparty (CCP)’ means an entity that provides clearing and settlement of matched orders between a NEMO and its market participants or for energy exchanges between a NEMO and the MCO;
43. ‘counterparty’ means the other party in any transaction concluded in the single day-ahead and intraday market;
44. ‘firmness’ means a guarantee that cross-zonal capacity rights will remain unchanged and that a compensation is paid if they are nevertheless changed;
45. ‘force majeure’ means any unforeseeable or unusual event or situation beyond the reasonable control of a TSO, and not due to a fault of the TSO, which cannot be avoided or overcome with reasonable foresight and diligence, which cannot be solved by measures which are from a technical, financial or economic point of view reasonably possible for the TSO, which has actually happened and is objectively verifiable, and which makes it impossible for the TSO to fulfil, temporarily or permanently, its obligations in accordance with this Regulation;
46. ‘economic surplus for the single day-ahead or intraday coupling’ means for the relevant time period the sum of (i) the producer surplus, (ii) the consumer surplus, (iii) the congestion income and (iv) other related costs and benefits where these increase economic efficiency for the relevant time period; producer and consumer surplus being the difference between the accepted orders and the reference clearing price per energy unit multiplied by the volume of energy of the orders.

Article 3.      Article 3

**Objectives of capacity allocation and congestion management cooperation**

This Regulation aims at:

- (a) promoting effective competition in the generation, trading and supply of electricity;
- (b) ensuring optimal use of the transmission infrastructure;
- (c) ensuring operational security;

- (d) optimising the calculation and allocation of cross-zonal capacity;
- (e) ensuring fair and non-discriminatory treatment of TSOs, NEMOs, ACER, regulatory authorities and market participants;
- (f) ensuring and enhancing the transparency and reliability of information;
- (g) contributing to the efficient long-term operation and development of the electricity transmission system and electricity sector in the Union;
- (h) respecting the need for a fair and orderly market and fair and orderly price formation;
- (i) creating a level playing field for NEMOs;
- (j) providing non-discriminatory access to cross-zonal capacity and transmission infrastructure.

Article 4. Article 9

**Adoption of terms and conditions or methodologies**

1. TSOs and NEMOs shall develop the terms and conditions or methodologies required by this Regulation and submit them for approval to ACER or the competent regulatory authorities within the respective deadlines set out in this Regulation. In exceptional circumstances, notably in cases where a deadline cannot be met due to circumstances external to the sphere of TSOs or NEMOs, the deadlines for terms and conditions or methodologies may be prolonged by ACER in procedures pursuant to paragraph 8, jointly by all competent regulatory authorities in procedures pursuant to paragraph 9, and by the competent regulatory authority in procedures pursuant to paragraph 10.

Where a proposal for terms and conditions or methodologies pursuant to this Regulation needs to be developed and agreed by more than one TSO or NEMO, the participating TSOs and NEMOs shall closely cooperate. TSOs, with the assistance of the ENTSO for Electricity, and all NEMOs shall regularly inform the competent regulatory authorities and ACER about the progress of developing those terms and conditions or methodologies.

2. Where TSOs and NEMOs deciding jointly on proposals for terms and conditions or methodologies listed in paragraph 8 are not able to reach an agreement, they shall decide by qualified majority voting. The qualified majority shall be reached within one voting class joining all TSOs and all NEMOs. A qualified majority for proposals listed in paragraph 8 where a joint proposal is required shall require the following majority:

- (a) TSOs and NEMOs representing at least 55 % of the Member States; and
- (b) TSOs and NEMOs representing Member States comprising at least 65 % of the population of the Union.

A blocking minority for decisions on proposals for terms and conditions or methodologies listed in paragraph 8 where a joint proposal is required shall include at least the minimum number of eight TSOs and NEMOs collecting at least four times the vote percentage representing one Member State pursuant to the first majority in accordance with paragraph 2(a), failing of which the qualified majority shall be deemed attained.

The vote percentage representing each Member State for each majority pursuant to point (a) and (b) shall be allocated 50% to the TSOs in the territory of the respective Member State and 50% to the NEMOs designated or granted a passport in the territory of the respective Member State. If there is more than one TSO or NEMO in the territory of a Member State the further allocation of voting powers among the respective TSOs or NEMOs in those Member States shall be done in accordance with paragraph 4.

3. Where TSOs or NEMOs deciding on proposals for terms and conditions or methodologies listed in paragraph 8 are not able to reach an agreement, they shall decide by qualified majority voting. The qualified majority shall be reached within each of the respective voting classes of TSOs and NEMOs. A qualified majority for proposals listed in paragraph 8 shall require the following majority:

- (a) TSOs or NEMOs representing at least 55 % of the Member States; and
- (b) TSOs or NEMOs representing Member States comprising at least 65 % of the population of the Union.

A blocking minority for decisions on proposals for terms and conditions or methodologies listed in paragraph 8 shall include at least the minimum number of four TSOs or four NEMOs collecting at least four times the vote percentage representing one Member State pursuant to the first majority in accordance with paragraph 3(a), failing of which the qualified majority shall be deemed attained.

If there is more than one TSO or NEMO in the territory of a Member State the allocation of vote percentages among the respective TSOs or NEMOs in those Member States shall be done in accordance with paragraph 4

4. When deciding on proposals for terms and conditions or methodologies listed in paragraph 8 and 9:

- (a) the vote percentage of a Member State allocated to TSOs pursuant to paragraph 2 and 3 shall be allocated to a TSO in that Member State if there is only one TSO in a Member State, otherwise the Member State shall allocate the vote percentage among the TSOs in that Member State.
- (b) the vote percentage of a Member State allocated to NEMOs pursuant to paragraph 2 and 3 shall be allocated to all NEMOs designated or granted a passport in that Member State as follows:
  - i. One third of the vote percentage shall be allocated equally among all NEMOs designated or granted a passport in such Member State.
  - ii. Two thirds of the vote percentage shall be allocated proportionally to the volume of transacted electricity of these NEMOs in that Member State in the preceding calendar year, updated every year on the 1<sup>st</sup> of April.
- (c) For the purpose of this paragraph separate percentages shall be calculated for proposals concerning only SDAC or only SIDC, whereas for proposals concerning both the average of both percentages shall be used.

5. Where TSOs deciding on proposals for terms and conditions or methodologies listed in paragraph 9 are not able to reach an agreement and where the regions concerned are composed of more than five Member States, they shall decide by qualified majority voting. The qualified majority shall be reached within the respective voting class of TSOs. A qualified majority for proposals for terms and conditions or methodologies listed in paragraph 9 shall require the following majority:

- (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 region.

A blocking minority for decisions on proposals for terms and conditions or methodologies listed in paragraph 9 shall 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 or methodologies listed in paragraph 9 in relation to regions composed of five Member States or less shall decide by consensus.

6. If TSOs or NEMOs fail to submit an initial or amended proposal for terms and conditions or methodologies to the competent regulatory authorities or ACER in accordance with paragraphs 8, 9 and 10 within the deadlines set out in this Regulation, they shall provide the competent regulatory authorities and ACER with the relevant drafts of the proposals for the terms and conditions or methodologies, and explain what has prevented an agreement. ACER, all competent regulatory authorities jointly, or the competent regulatory authority shall take the appropriate steps for the adoption of the required terms and conditions or methodologies in accordance with paragraphs 8, 9 and 10 respectively, for instance by requesting amendments or revising and completing the drafts pursuant to this paragraph, including where no drafts have been submitted, and approve them.

7. Each regulatory authority or where applicable ACER, as the case may be, shall approve the terms and conditions or methodologies used to calculate or set out the single day-ahead and intraday coupling developed by TSOs, NEMOs or TSOs and NEMOs. They shall be responsible for approving the terms and conditions or methodologies referred to in paragraphs 8, 9 and 10. Before approving the terms and conditions or methodologies, ACER or the competent regulatory authorities shall revise the proposals where necessary, after consulting the respective TSOs, NEMOs or TSOs and NEMOs, in order to ensure that they are in line with the purpose of this Regulation and contribute to market integration, non-discrimination, effective competition and the proper functioning of the market.

8. The proposals for the following terms and conditions or methodologies and any amendments thereof shall be subject to approval by ACER:

- (a) the methodology on the publication of information in accordance with Article 8.1;
- (b) the decision concerning the joint decision making body in accordance with Article 13.4;
- (c) the market coupling organization in accordance with Article 15.1 and the requirements for ensuring the continuity of single day-ahead or intraday in accordance with Article 16.1;
- (d) the methodology on eligible costs in accordance with Article 22.1;
- (e) the capacity calculation regions in accordance with Article 23.1;
- (f) the proposal for a harmonised capacity calculation methodology in accordance with Article 26.9;
- (g) the day-ahead timings and procedures in accordance with Article 42.1;
- (h) the intraday timings and procedures in accordance with Article 43.1;

- (i) the algorithm methodology in accordance with Article 41.1;
- (j) products that can be accommodated in the single day-ahead and intraday coupling process in accordance with Article 39.1;
- (k) the maximum and minimum prices in accordance with Article 40.1;
- (l) the common methodologies for the calculation of scheduled exchanges in accordance with Article 44.1;
- (m) the methodology for clearing and settlement between NEMO trading hubs in accordance with Article 45.1;
- (n) the congestion income distribution methodology in accordance with Article 46.1;

9. The proposals for the following terms and conditions or methodologies and any amendments thereof shall be subject to approval by all regulatory authorities of the concerned region:

- (a) the capacity calculation methodology in accordance with Article 25.2;

10. The following terms and conditions or methodologies and any amendments thereof shall be subject to individual approval by each regulatory authority or other competent authority of the Member States concerned:

- (a) where applicable, NEMO designation and revocation or suspension of designation, in accordance with Article 10.1, Article 10.12 and Article 10.13;
- (b) if applicable, the fees or the methodologies used to calculate the fees of NEMOs relating to trading in the day-ahead and intraday markets in accordance with Article 11.1;
- (c) proposals of individual TSOs for a review of the bidding zone configuration in accordance with Article 58.1(a);
- (d) capacity allocation and congestion management costs in accordance with Article 21.1 and Article 22.7;

11. The proposal for terms and conditions or methodologies shall include:

- (a) a timescale for their implementation, with clear implementation deadlines;
- (b) an implementation plan with clear implementation tasks, milestones and deliverables;
- (c) assignment of individual responsibilities to the entity or entities responsible for the implementation of the tasks pursuant to point b);
- (d) a description of their expected impact on each of the objectives of this Regulation; and
- (e) where necessary, rules for allowing efficient implementation and deciding on implementation and operational issues.

Proposals for terms and conditions or methodologies subject to the approval by several regulatory authorities in accordance with paragraph 9 shall be submitted to ACER within 1 week of their submission to regulatory authorities.

Proposals for terms and conditions or methodologies subject to the approval by one regulatory authority in accordance with paragraph 10 may be submitted to ACER within 1 month of their submission at the discretion of the regulatory authority while they shall be submitted upon ACER's request for information purposes in accordance with Article 3(2) of the Regulation (EU) 2019/942 if ACER considers the proposal to have a cross-border impact. Upon request by the competent regulatory authorities, ACER shall issue an opinion within 3 months on the proposals for terms and conditions or methodologies.

12. The entity or entities jointly responsible for the implementation of terms and conditions or methodology shall provide to authorities competent for approving them the following information regarding their implementation:

- (a) regular updates on the implementation plan;
- (b) the information on the implementation progress with regard to individual and joint implementation steps, milestones and deliverables;
- (c) without undue delay, the possible risks of implementation delay and possible mitigation options;
- (d) the entity responsible for delays in implementation tasks, milestones and deliverables with individual responsibilities; and
- (e) the contribution of the entity or the entities jointly responsible to the failure to meet the implementation tasks, milestones and deliverables with joint responsibilities.

13. Where the approval of the terms and conditions or methodologies in accordance with paragraph 9 or the amendment in accordance with paragraph 16 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 to reach an agreement. Where applicable, the competent regulatory authorities shall take into account the opinion of ACER. Regulatory authorities or, where competent,

14. ACER shall take decisions concerning the submitted terms and conditions or methodologies in accordance with paragraphs 8, 9 and 10 within 6 months following the receipt of the terms and conditions or methodologies by ACER or the regulatory authority or, where applicable, by the last regulatory authority concerned. The period shall begin on the day following that on which the proposal was submitted to ACER in accordance with paragraph 8, to the last regulatory authority concerned in accordance with paragraph 9 or, where applicable, to the regulatory authority in accordance with paragraph 10.

15. If the regulatory authorities have not been able to reach agreement within the period referred to in paragraph 13, or upon their joint request, or upon ACER's request according to the third subparagraph of Article 5(3) of Regulation (EU) 2019/942, ACER shall adopt a decision concerning the submitted proposals for terms and conditions or methodologies within 6 months, in accordance with Article 5(3) and the second subparagraph of Article 6(10) of Regulation (EU) 2019/942.

16. In the event that ACER, or all competent regulatory authorities jointly, or the competent regulatory authority request an amendment to approve the terms and conditions or methodologies submitted in accordance with paragraphs 8, 9 and 10 respectively, the relevant TSOs or NEMOs shall submit a proposal for amended terms and conditions or methodologies for approval within 2 months

following the request from ACER or the competent regulatory authorities or the competent regulatory authority. ACER or the competent regulatory authorities or the competent regulatory authority shall decide on the amended terms and conditions or methodologies within 2 months following their submission. Where the competent regulatory authorities have not been able to reach an agreement on terms and conditions or methodologies pursuant to paragraph 9 within the 2-month deadline, or upon their joint request, or upon ACER's request according to the third subparagraph of Article 5(3) of Regulation (EU) 2019/942, ACER shall adopt a decision concerning the amended terms and conditions or methodologies within 6 months, in accordance with Article 5(3) and the second subparagraph of Article 6(10) of Regulation (EU) 2019/942. If the relevant TSOs or NEMOs fail to submit a proposal for amended terms and conditions or methodologies, the procedure provided for in paragraph 6 of this Article shall apply.

17. ACER, or all competent regulatory authorities jointly, or the competent regulatory authority, where they are responsible for the adoption of terms and conditions or methodologies in accordance with paragraphs 8, 9 and 10 may respectively request proposals for amendments of those terms and conditions or methodologies and determine a deadline for the submission of those proposals. TSOs or NEMOs responsible for developing a proposal for terms and conditions or methodologies may propose amendments to regulatory authorities and ACER.

18. The proposals for amendment to the terms and conditions or methodologies shall be submitted to consultation in accordance with the procedure set out in Article 6 and approved in accordance with the procedure set out in this Article.

19. TSOs and NEMOs responsible for establishing the terms and conditions or methodologies in accordance with this Regulation shall publish them on the internet after approval by ACER or 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 7. This requirement shall also apply to all annexes and documents established and required to be published by such terms and conditions or methodologies.

Article 5. Article 11

### **Stakeholder involvement**

1. ACER, in close cooperation with ENTSO for Electricity, shall organise stakeholder involvement regarding single day-ahead and intraday coupling 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 single day-ahead and intraday coupling. This shall not replace the stakeholder consultations in accordance with Article 6.

2. All NEMOs and all TSOs shall establish a permanent forum to involve stakeholders and market participants in issues related to the operation of the single day-ahead and intraday coupling having direct impact on them. This shall not replace the stakeholder consultations in accordance with Article 6.

Article 6. Article 12

### **Consultation**



1. TSOs and NEMOs responsible for submitting proposals for terms and conditions or methodologies or their amendments in accordance with this Regulation shall consult stakeholders, including the relevant authorities of each Member State, on the draft proposals for terms and conditions or methodologies where explicitly set out in this Regulation.
2. The consultation shall last for a period of not less than one month, except for the draft proposals pursuant to Article 4.8 that shall be consulted for a period of not less than two months.
3. The proposals pursuant to all the points of Article 4.8 shall be subject to public consultation at European level.
4. The proposals pursuant to all the points of Article 4.9 shall be subject to public consultation at the concerned regional level.
5. The proposals pursuant to all the points of Article 4.10 shall be subject to public consultation in each concerned Member State.
6. The entities responsible for the proposal for terms and conditions or methodologies shall duly consider the views of stakeholders resulting from the consultations undertaken in accordance with paragraph Article 4.1, prior to its submission for regulatory approval if required in accordance with Article 4 or prior to publication in all other cases. In all cases, a clear and robust justification for including or not 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 proposal for terms and conditions or methodologies.

Article 7. Article 13

#### **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.
4. Without prejudice to cases covered by national law, regulatory authorities, bodies or persons which receive confidential information pursuant to this Regulation may use it only for the purpose of the performance of their functions under this Regulation.

Article 8. Article 13A

#### **Publication of information**

1. All NEMOs and all TSOs shall jointly develop, review and where necessary propose amendments to the methodology for the publication of information on single day-ahead and intraday coupling.

2. The methodology referred to in paragraph 1 shall define from the list of entities in Article 1.2, the entities that shall provide ENTSO for Electricity with all the relevant information to fulfil its obligations laid down in paragraph 5. These entities and ENTSO for Electricity shall ensure that information defined in the methodology referred to in paragraph 1 is published at a time and in a format that does not create an actual or potential competitive advantage or disadvantage to any individual or companies.
3. The methodology referred to in paragraph 1 shall include at least the requirements to publish the following information:
  - (a) information on capacity calculation provided by each RCC:
    - i. capacity calculation outputs;
    - ii. information on all critical network elements used in capacity calculation, which are needed for monitoring of minimum capacity targets pursuant to Article 16(8) of the Electricity Regulation;
  - (b) information on single day-ahead coupling and intraday auctions provided by the MCO:
    - i. reference clearing prices for bidding zones,
    - ii. traded volumes and net positions for NEMO trading hubs and bidding zones
    - iii. scheduled exchanges between NEMO trading hubs and between bidding zones;
    - iv. aggregated order curves; and
    - v. aggregated information on the volume and the price of the paradoxically accepted and paradoxically rejected orders for bidding zones.
  - (c) information on continuous trading: the aggregated traded volumes and prices.
4. The methodology pursuant to paragraph 1 shall provide detailed requirements for information listed in paragraph 3 and may provide additional requirements to publish information resulting from the application of this Regulation that is deemed relevant for publication.
5. ENTSO for Electricity shall publish the information pursuant to paragraph 3 in a commonly agreed harmonised format through the information transparency platform established pursuant to Article 3 of Regulation (EU) No 543/2013. No later than four months after the entry into force of this Regulation, ENTSO-E shall update the manual of procedures as referred to Article 5 of Regulation (EU) No 543/2013 and submit it to ACER for its opinion, which ACER shall provide within two months.

Article 9. Article 13B

#### **Delegation of tasks**

1. A TSO or NEMO may delegate all or part of any task referred to in Article 19 and Article 20.2 to one or more third parties seated in a Member State in the case the third party can carry out the respective function at least as effectively as the delegating entity.

2. Prior to the delegation, the third party concerned shall have clearly demonstrated to the delegating entity its ability to meet each of the obligations of this Regulation and shall have agreed to be subject to the regulatory oversight of the competent regulatory authority including the access to and the provision of all necessary information for monitoring to its delegating entity and the regulatory authority. The delegating entity shall not conclude any contracts which hinder the efficient monitoring by the relevant regulatory authority.
3. The relevant regulatory authority shall ensure regulatory oversight of the delegated entity in respect of the delegated tasks and obligations. The delegating entity shall remain fully responsible for the delegated tasks and for ensuring compliance with the obligations under this Regulation such that all rights and obligations with related liabilities shall remain with the delegating entity. Without prejudice to paragraph 2, the delegating entity shall remain the default point of contact for the regulatory authority and shall ensure the access to and provision of all contracts and any other information necessary for monitoring requested by the regulatory authority.
4. In the event that all or part of any task specified in this Regulation is delegated to a third party, the delegating entity shall ensure that suitable confidentiality agreements in accordance with the confidentiality obligations of the delegating entity have been put in place prior to delegation.
5. The delegating entity shall not be allowed to charge any fees to the third party in relation to the task that is delegated.

## **TITLE II**

### **ORGANISATION OF MARKET COUPLING AND OF CAPACITY CALCULATION**

#### **CHAPTER 1**

##### ***DESIGNATION OF NEMOS***

Article 10.      Article 4

##### **NEMO designation and passporting**

1. In each Member State electrically connected to another Member State, the competent authority of that Member State shall ensure that at all times one or more NEMOs are designated or are granted a passport and offer trading services for the single day-ahead and intraday coupling for all scheduling areas in the territory of such Member State. For that purpose, domestic and non-domestic market operators may be invited to apply to be designated as a NEMO or to be granted a passport.

2. Each NEMO shall offer trading services for all scheduling areas for which it is designated or granted a passport. Each NEMO designated shall start offering trading services at the latest twelve months after its designation by the competent authority in accordance with paragraph 7. Each NEMO granted a passport shall start offering trading services at the latest six months after its passport is granted in accordance with paragraph 9.
3. Except in case of national monopoly pursuant to Article 11, the competent authority of a Member State shall allow applications for designation at least annually. If not indicated differently by the relevant competent authority, the designation is not subject to expiration.
4. Each NEMO designated or granted a passport shall notify the competent authority about the starting date of its offering trading services at latest 30 days before the start. If a NEMO designated or granted a passport decides to withdraw its designation or passporting or its offering of trading services in a Member State, it shall notify the competent authority and ACER at least twelve months prior to its termination of offering of trading services in this Member State.
5. Where a scheduling area spans over a territory of more than one Member State, the competent authorities of these Member States shall cooperate in designating or granting a passport to offer trading services for the single day-ahead and/or intraday coupling in this scheduling area and define rules for the sharing of traded volumes between the Member States to ensure clear voting right attribution to the relevant NEMOs.
6. Unless otherwise provided by Member States, regulatory authorities shall be the competent authority responsible for NEMO designation, passporting, monitoring of compliance with the designation criteria and, in the case of national legal monopolies, the approval of NEMO fees or the methodology to calculate NEMO fees. Member States may provide that authorities other than the regulatory authorities be the competent authority. In these circumstances Member States shall ensure that the competent authority has the same rights and obligations as the regulatory authorities in order to effectively carry out its tasks.
7. The competent authority shall assess whether NEMO candidates for designation meet the criteria set out in Article 12. Those criteria shall apply regardless of whether one or more NEMOs are appointed. When deciding upon NEMO designations, any discrimination between applicants, notably between non-domestic and domestic applicants, shall be avoided. If the competent authority is not the regulatory authority, the regulatory authority shall give an opinion on the extent to which the applicant for designation meets the designation criteria laid down in Article 6. NEMO designations shall only be refused where the designation criteria in Article 12 are not met or in case of national legal monopoly pursuant to Article 11.1.
8. A NEMO designated in one Member State shall have the right to offer trading services for the single day-ahead and intraday coupling with delivery in another Member State. The trading rules in the latter Member State shall apply without the need for designation as a NEMO in that Member State. The competent authorities shall monitor the compliance of all NEMOs offering trading services for the single day-ahead and/or intraday coupling within their Member State. The competent authorities shall ensure compliance with this Regulation by all NEMOs designated or granted a passport for offering trading services for the single day-ahead and/or intraday coupling within their Member State, regardless of where the NEMOs were designated.
9. A NEMO designated in one Member State intending to offer trading services for the single day-ahead and/or intraday coupling with delivery in another Member State must notify the relevant competent authority. The notification shall include all necessary documents so that the competent authority can assess the NEMOs' notification in accordance with paragraph 11. If the competent

regulatory authority does not issue a decision on refusing the granting of the requested passport to such NEMO pursuant to paragraphs 11 and 12 within three months following the fully documented notification, the concerned NEMO is considered to be granted a passport and can start offering trading services in such Member State.

10. The authorities responsible for NEMO designation, monitoring and enforcement shall exchange all information necessary for an efficient supervision of NEMO activities. If a NEMO notifies a competent authority of its passporting, this competent authority may request all necessary information related to the designation of the NEMO in another Member State from the relevant competent authority of this Member State.

11. By way of exception to paragraph 8 of this Article, the competent authority may refuse granting a passport to a NEMO designated in another Member State if:

(a) a national legal monopoly for day-ahead and intraday trading services exists in the Member State or bidding zone of the Member State where delivery takes place in accordance with Article 11.1; or

(b) the competent authority of a Member State where delivery takes place can establish that there are technical obstacles to delivery into that Member State of electricity purchased on day-ahead and intraday markets using NEMOs designated in another Member State linked to the need to ensure the objectives of this Regulation are met while maintaining operational security; or

(c) the trading rules in the Member State of delivery are not compatible with the delivery into that Member State of electricity purchased on the basis of day-ahead and intraday trading services provided by a NEMO designated in another Member State; or

(d) the NEMO is a national legal monopoly in accordance with Article 11 in the Member State where it is designated.

12. In case of a decision to refuse day-ahead and/or intraday trading services with delivery in another Member State, the competent authority of the Member State of delivery shall notify its decision to the NEMO and to the competent authority of the Member State where the NEMO is designated, as well as to ACER and the Commission. The refusal shall be duly justified. In the cases set out in subparagraphs 11(b) and 11(c), the decision to refuse trading services with delivery in another Member State shall also set out how and by when the technical obstacles to trading can be overcome or the domestic trading rules can be made compatible with trading services with delivery in another Member State. The competent authority of the Member State refusing the trading services shall investigate the decision and publish an opinion on how to remove the obstacles to the trading services or how to make the trading services and the trading rules compatible.

13. The Member State where the NEMO has been designated shall ensure that designation is revoked if the NEMO fails to maintain compliance with the criteria in Article 6 and is not able to restore compliance within six months of being notified of such failure by the competent authority. If the regulatory authority is not responsible for designation and monitoring, they shall be consulted on the revocation. The competent authority shall also notify the designating or competent authority of the other Member States in which that NEMO is active of its failure to maintain compliance at the same time it notifies the NEMO.

14. If a competent authority of a Member State finds that a NEMO granted a passport but not designated in its Member State fails to maintain compliance with the criteria in Article 12 with respect to its activities in this country, it must notify the NEMO of its non-compliance. If the NEMO does not

restore compliance within three months of being notified, the competent authority can suspend the right to offer intraday and day-ahead trading services in this Member State until such time as the NEMO restores compliance. The competent authority shall notify the competent authority of the Member State in which the NEMO is designated, ACER and the Commission.

15. The joint decision making body shall maintain and publish the list of NEMOs designated or granted a passport in Member States as well as their status on active operation of offering trading services in Member States. The joint decision making body shall provide an updated list to ACER at least on annual basis or at a request.

Article 11. Article 5

**NEMOs designation in case of a national legal monopoly for trading services**

1. If a national legal monopoly for day-ahead and intraday trading services which excludes the designation of more than one NEMO already existed in a Member State or Member State's bidding zone on 14 August 2015, the Member State concerned may continue to apply a national legal monopoly after the entry into force of this Regulation and in line with the review pursuant to paragraph 4. For the purposes of this Regulation, a national legal monopoly is deemed to exist where a national law explicitly provides that no more than one entity within a Member State or a Member State's bidding zone can carry out day-ahead and intraday trading services.

2. By no later than two years after entry into force of this Regulation, ACER shall consult stakeholders and regulatory authorities on the development of competition between NEMOs and provide a report to the Commission including possible recommendations for improvements of competition. By no later than three years after the entry into force of this Regulation, the Commission shall provide its own report to the European Parliament and the Council in accordance with Article 69(2) of Regulation (EU) 2019/943 on the development of competition between NEMOs. This report shall investigate:

- (a) the need for continuation of a legal possibility for national legal monopoly;
- (b) effective competition, fair and non-discriminatory treatment and the level playing field between NEMOs where such competition is allowed; and
- (c) the effects of coexistence of competitive NEMOs and national legal monopolies on the functioning of the single day-ahead and intraday market.

On the basis of that report, and if the Commission deems that there is no justification for the continuation of national legal monopolies, the Commission may consider appropriate legislative or other appropriate measures to further increase competition and trade between and within Member States.

3. By four years of entry into force, taking also into account the reports pursuant to paragraph 2, the Member State with a national legal monopoly shall review the need for continuation of national legal monopoly. If the Member State concludes that such a need still exists, it shall notify the Commission by the same deadline.

In its notification, the Member State shall express all reasons regarding the need for the continuation of a national legal monopoly. The protection of existing power exchanges or NEMOs in that Member State from economic disadvantages through competition shall not be a valid reason for continuation.

Within four months of receipt of the notification, the Commission shall issue an opinion on whether the measure of a national legal monopoly is indispensable, and may invite the Member State to amend their notification accordingly.

The Member State shall take due account of the opinion from the Commission before deciding for the continuation of a national legal monopoly.

4. If a Member State decides on a continuation of national legal monopoly it may continue to refuse the designation of more than one NEMO or requests for passporting by other NEMOs. In such a case, the competent national authority shall fix or approve the NEMO fees for trading in the single day-ahead and intraday coupling, sufficiently in advance of their entry into force, or specify the methodologies used to calculate them.

## Article 12. Article 6

### **NEMO designation criteria**

1. An applicant shall only be designated as a NEMO if it complies with all of the following requirements:

(a) it possesses or contracts adequate resources to fulfil all the NEMO tasks pursuant to this Regulation, financial resources, the necessary information technology, technical infrastructure and operational procedures or it shall provide proof that it is able to make these resources available within a reasonable preparatory period before taking up its tasks in accordance with Article 19;

(b) it shall be able to ensure that market participants have open access to information regarding the NEMO tasks in accordance with Article 19;

(c) it shall be cost-efficient with respect to single day-ahead and intraday coupling and shall in its internal accounting keep separate accounts for NEMO tasks pursuant to Article 19 and other activities in order to prevent cross-subsidisation;

(d) it shall have an adequate level of business separation from market participants;

(e) if designated as a national legal monopoly for day-ahead and intraday trading services in a Member State, it shall not use the fees in Article 11 to finance its day-ahead or intraday activities in a Member State other than the one where these fees are collected;

(f) it shall be able to treat all market participants in a non-discriminatory way;

(g) it shall have appropriate market surveillance arrangements in place pursuant to obligations set out in Regulation (EC) No 1227/2011 on organised market places;

(h) it shall have in place appropriate transparency and confidentiality agreements with market participants and the TSOs;

(i) it shall be able to provide the necessary clearing and settlement services in accordance with the methodology pursuant to Article 45.1 and apply adequate risk management standards;

(j) it shall be able to put in place the necessary communication systems and routines for coordinating with the TSOs of the Member State.

2. The designation criteria set out in paragraph 1 shall be applied in such a way that competition between NEMOs is organised in a fair and non-discriminatory manner.

## **CHAPTER 2**

### ***MARKET COUPLING GOVERNANCE AND ORGANISATION***

Article 13. Article 3A

#### **Market coupling governance principles**

1. All NEMOs and all TSOs shall jointly organise the management of the integrated single day-ahead and intraday coupling. This management shall be organised through a joint decision making body and, where necessary, supportive bodies established by the joint decision making body.

2. All NEMOs and all TSOs shall establish a joint decision-making body for adopting decisions concerning:

(a) the detailed rules and requirements on the implementation of MCO tasks pursuant to Article 18.1;

(b) the establishment of a single legal entity to perform the MCO tasks in accordance with the principles referred to in Article 14 and the MCO organisation pursuant to Article 15.1;

3. The joint decision making body shall:

(a) organise the management of the single day-ahead and intraday coupling and decide on related issues;

(b) take all decisions pursuant to this Article using the qualified majority decision making process from Article 4.2 using the average of vote percentages applicable for SDAC and for SIDC;

(c) meet regularly and invite a limited representation of the Commission, ACER and regulatory authorities as observers to its meetings and publish summary minutes of the meetings within one month after the meeting.

4. In case the joint decision making body is unable to make a decision required pursuant to this Article within a period of three months, all TSOs and all NEMOs shall submit a proposal for a decision to ACER in accordance with Article 8. The proposal may provide different options and draft decisions and shall be supported by all the information needed to adopt a decision. ACER shall adopt a decision concerning the submitted proposal within 6 months, in accordance with Article 5(2) of Regulation (EU) 2019/942.



5. Cooperation between all NEMOs and all TSOs in the joint decision making body shall be strictly limited to what is necessary for the efficient and secure design, implementation and operation of single day-ahead and intraday coupling. The joint performance of MCO tasks shall be based on the principle of non-discrimination and the governance arrangements pursuant to Article 15.1(c) shall ensure that no NEMO or TSO can benefit from unjustified economic advantages through participation in the joint decision-making body. NEMOs and TSOs shall apply accounting unbundling for the activities related to the participation in the joint decision making body in accordance with the methodology pursuant Article 22.1.
6. All regulatory authorities and ACER shall monitor the performance of the joint decision making body and the entity established to perform the MCO tasks in accordance with Article 14 and assess their effectiveness and efficiency in accordance with Article 64.
7. By no later than three years after entry into force of this Regulation ACER shall consult stakeholders and regulatory authorities on the efficient functioning of single day-ahead and intraday coupling with emphasis on the efficiency of performing the MCO tasks and provide a report to the Commission. By no later than 4 years after entry into force of this Regulation the Commission shall provide its own report to the European Parliament and to the Council in accordance with Article 69(2) of Regulation (EU) 2019/943 evaluating the efficient functioning of single day-ahead and intraday coupling and on the efficiency of performing the MCO tasks. On the basis of that report, and if the Commission deems that improvements are necessary, the Commission may consider appropriate legislative or other appropriate measures to further increase the efficient functioning of single day-ahead and intraday coupling and performing the MCO tasks.

*This proposal of Article 14 is drafted in order to accommodate the recommendation based on conclusions of the initial impact assessment. To accommodate other alternatives on the MCO Governance considered by some NRAs changes would be required to specific Recitals and Articles (depending on the alternative): Recital 13, Recital 14, Recital 15, Recital 25, Article 1(2), Article 2(20), Article 2(42), Article 14, Article 15, Article 16, Article 22, Article 41 and Article 46 would have to be amended accordingly.*

## Article 14. Article 3BB

### **Establishment of the single legal entity performing the MCO tasks**

1. All NEMOs and all TSOs shall establish one single legal entity to perform all the MCO tasks pursuant to Article 18.1 in accordance with the requirements specified in market coupling organisation pursuant to Article 15.
2. The single legal entity established to perform the MCO tasks referred to in Article 18.1(a) to Article 18.1(p) shall be legally and functionally unbundled from NEMOs and TSOs and shall either be selected through a competitive tender or shall be a company owned by all NEMOs and all TSOs.
3. The single legal entity established to perform the MCO tasks shall be liable for the performance of the MCO tasks.
4. The single legal entity established to perform the MCO tasks shall not delegate any of its task to third parties, except if such delegation has been allowed by the market coupling organisation pursuant to Article 15 and the selection of delegated entity has been approved by the joint decision making body. The following MCO tasks may be proposed to be subject to delegation in the proposal for market coupling organisation pursuant to Article 15:
  - (a) the MCO task referred to in Article 18.1(k) (fallback) may be delegated to one or more third parties in accordance with the market coupling organisation pursuant to Article 15;
  - (b) the MCO task referred to in Article 18.1(l) (C&S, scheduling) and Article 18.1(m) (collecting CI) may be delegated to one or more third parties in accordance with the market coupling organisation pursuant to Article 15;
  - (c) the MCO task referred to in Article 18.1(n) (CI distribution) may be delegated to a single third party in accordance with the market coupling organisation pursuant to Article 15;
5. For delegation of third parties to perform MCO tasks, the provisions of Article 9(2) to (5) shall apply.
6. The entity established to perform the MCO tasks pursuant to this Article shall have a legal form referred to in Annex II to Directive (EU) 2017/1132 of the European Parliament and of the Council and have their seat in a Member State of the Union.
7. In performing their tasks under Union law, the entities performing the MCO tasks referred to in Article 18.1(c) shall act independently of individual national interests and independently of the interests of NEMOs and TSOs.
8. References to MCO in this Regulation shall be understood as referring to the entity established to perform the MCO tasks.

Article 15. Article 3C

**Market coupling organisation**

1. All NEMOs and all TSOs shall jointly develop, review and where necessary propose amendments the market coupling organisation that sets out the organisational structure to perform the tasks described in Article 18.1 in accordance with the principles referred to in Article 13 and Article 14. The market coupling organisation shall include a detailed description of the following elements:

- (a) the organisational, financial and operational arrangements necessary to ensure the efficient and reliable functioning of the single day-ahead and intraday coupling;
- (b) proposal for the establishment of the MCO entity:
  - i. the Member State of the prospective seat of the MCO entity;
  - ii. the organisational, financial and operational arrangements necessary to ensure the efficient, secure and reliable performance of the MCO tasks;
  - iii. an implementation plan for the entry into operation of the MCO entity by no later than 5 years after entry into force of this Regulation;
  - iv. the statutes and rules of procedure of the MCO entity;
  - v. a description of the arrangements concerning the liability of the MCO entity;
- (c) the rules of procedure of the joint decision making body referred to in Article 13.2 for the implementation of the task referred to in Article 13.2(a);

Article 16.

**NEMO of the last resort**

1. All NEMOs and all TSOs shall jointly develop, review and, where necessary propose amendments to the requirements for ensuring the continuity of single day-ahead or intraday coupling in accordance with the task specified in Article 19.1 in case there is no NEMO offering trading services in a Member State. This proposal shall include:

- (a) a detailed description of requirements to ensure that the MCO is able to perform NEMO tasks in accordance with Article 19.1 in last resort case;
- (b) the deadlines by which the MCO is able to perform NEMO tasks from the time when the absence of NEMO in a scheduling area has been identified by the MCO;
- (c) rules concerning standard procedures, requirements and contracts for performing NEMO task in last resort case;
- (d) rules regarding the design of the unbundled accounting systems for its operation in case of usage of one or more Member States; and

- (e) include the requirements on regular training and testing of performing NEMO tasks in last resort case.
2. The national operational costs incurred by the MCO to perform the necessary NEMO task for one or more Member States without a NEMO offering trading services shall be borne by the affected Member States.

Article 17. Article 3C

### **Annual work programme**

1. No later than 15 September of each year, the joint decision making body referred to in Article 13.2 shall provide a draft annual work programme for the subsequent year to all regulatory authorities and ACER that describes the projects aiming at implementing the task referred to in Article 13.2(a) and Article 18.1(c). For each project, the document shall indicate the scope, the interdependency with the other projects, the priority level assigned, the requested investments including research and development activities, the expected benefits, the budget, the timeline for implementation including a clear assignment of responsibilities and deadlines to involved parties, especially separating the involvement of the MCO and other parties as NEMOs and TSOs, and the expected changes of terms and conditions or methodologies impacted by the project. All projects having an impact beyond the directly involved NEMOs and TSOs shall be considered as common projects.
2. Within two months following the receipt, ACER may request amendments on the draft annual work programme referred to in paragraph 1 taking into account the objectives of market integration as well as non-discrimination, effective competition and the efficient functioning of the market.

## **CHAPTER 3**

### ***MCO TASKS AND RESPONSIBILITIES***

Article 18. Article 3B

#### **MCO tasks**

1. The MCO shall be responsible for the following tasks:
- (a) Developing and maintaining the algorithms and other systems needed for the operation of the single day-ahead and intraday coupling;
- (b) Performing tasks requested by the joint decision making body to support its decisions in accordance with Article 13(2) ;

- (c) Receiving, validating and processing input data on cross-zonal capacity outputs provided by RCCs in accordance with Article 47, Article 50, and Article 53;
- (d) Receiving, validating and processing input data on orders provided by NEMOs in accordance with Article 47, Article 50, and Article 53;
- (e) Operating the single day-ahead and single intraday coupling by using the respective algorithms referred to in Article 41.1;
- (f) Validating and sending single day-ahead and intraday coupling results to NEMOs and TSOs in accordance with Article 49, Article 52 and Article 55;
- (g) Providing the information on the single day-ahead and intraday coupling in accordance with Article 8;
- (h) Calculating scheduled exchanges between NEMO trading hubs for each market time unit resulting from single day-ahead coupling and single intraday coupling in accordance with Article 44.1 and provide them to NEMOs and TSOs;
- (i) Performing the co-optimised allocation process pursuant to Article 40 of the Regulation (EU) 2017/2195;
- (j) Performing the backup procedures in the event of incidents in the single day-ahead coupling process or in the single intraday coupling process in accordance with Article 42;
- (k) Performing the fallback procedures in the event that the single day-ahead coupling process is unable to produce results in accordance with Article 42;
- (l) Acting as a central counterparty to each NEMO for the exchange of energy between NEMO trading hubs and as a balance responsible party in each relevant scheduling area for scheduling to TSOs, in accordance with Article 48(7) and (9), Article 51(8) and (10) and Article 54(7) and (9);
- (m) Collecting the congestion income resulting from single day-ahead and intraday coupling in accordance with Article 48(10) and (11);
- (n) Distributing the congestion income in accordance with Article 46 and Article 48(12);
- (o) Providing information as required with regards to market surveillance set out in Regulation (EC) 1227/2011 on organised market places.
- (p) Ensuring the continuity of single day-ahead or intraday coupling by performing NEMO tasks in accordance with Article 19.1 when no NEMO offers trading services in a scheduling area in accordance with Article 16.1.

2. On the basis of a proposal by the Commission or a Member State, the Committee established in accordance with Article 68 of Directive (EU) 2019/944 shall issue an opinion on the assignment of new tasks to the MCO. Where that Committee issues a favourable opinion on the assignment of these tasks, the MCO shall carry out those tasks on the basis of a proposal developed jointly by all NEMOs and all TSOs and approved by ACER in accordance with the procedure set out in Article 4.

Article 19. Article 7

**NEMO tasks**

1. Each NEMO shall be responsible for the following tasks:
  - (a) Receiving orders from market participants;
  - (b) Anonymising orders received pursuant to paragraph (a) and sending them to the MCO;
  - (c) Having the possibility to verify the results received from the MCO as final and taking responsibility for them in accordance with Article 49, Article 52 and Article 55;
  - (d) Accepting all obligations stemming from day-ahead and intraday coupling calculated in accordance with Article 49, Article 52 and Article 55;
  - (e) Accepting and rejecting orders in accordance with the single day-ahead and intraday coupling results;
  - (f) Informing the market participants on the results of their orders in accordance with Article 49, Article 52 and Article 55;
  - (g) Acting as a counterparty to the MCO for the exchange of energy between NEMO trading hubs in accordance with Article 49(5), Article 52(4) and Article 55(5);
  - (h) Acting as a central counterparty to the market participants for clearing and settlement of the contracts resulting from the trades according to relevant market participant' agreements and regulations in accordance with Article 49.4, Article 52.3 and Article 55.4;
  - (i) Acting as balance responsible party for scheduling to the respective TSO in each scheduling area where NEMOs operate a NEMO trading hub in accordance with Article 49.6, Article 52.5 and Article 55.6;
  - (j) Providing the information on the single day-ahead and intraday coupling in accordance with Article 8;
  - (k) Providing the information regularly as required with regards to market surveillance set out in Regulation (EC) 1227/2011 on organised market places.

Article 20. Article 8

**TSOs' and RCCs' tasks related to single day-ahead and intraday coupling**

1. In Member States electrically connected to another Member State all TSOs shall participate in the single day-ahead and intraday coupling.
2. Each TSO shall be responsible for the following tasks:
  - (a) providing the relevant RCC with all inputs needed to perform the capacity calculation, including the allocation constraints;

- (b) validating the capacity calculation outputs for its bidding zone borders or critical network elements in accordance with Article 34;
- (c) having the possibility to verify that the day-ahead coupling results referred to in Article 49 and the intraday coupling results referred to in Article 55 have been calculated in accordance with the validated cross-zonal capacity and the allocation constraints;
- (d) accepting all obligations from day-ahead and intraday coupling results calculated in accordance with Article 47, Article 50 and Article 53;
- (e) providing the information on the single day-ahead and intraday coupling in accordance with Article 8.

3. Each RCC shall be responsible for the following tasks:

- (a) performing capacity calculation in cooperation with the relevant TSOs in accordance with the methodology pursuant to Article 26;
- (b) providing the relevant TSOs with capacity calculation outputs to be validated in accordance with Article 34;
- (c) sending the validated capacity calculation outputs to the MCO in accordance with Article 34.3;
- (d) having the possibility to verify that the day-ahead coupling results referred to in Article 49 and the intraday coupling results referred to in Article 55 have been calculated in accordance with the validated capacity calculation outputs;
- (e) providing the information on the single day-ahead and intraday coupling in accordance with Article 8;

## **CHAPTER 4**

### ***COSTS***

Article 21. Article 75

#### **TSO and RCC costs**

1. Costs related to the obligations imposed on TSOs and RCCs in accordance with Article 20 and the costs related to the development, proposal and review of the terms and conditions or methodologies of TSOs, shall be reported by 30th June of each year for the previous calendar year by all TSOs to ACER and the competent regulatory authorities.

2. The costs referred to in paragraph 1 shall be broken down into:
  - (a) common costs resulting from coordinated activities of all TSOs participating in the single day-ahead and intraday coupling;
  - (b) regional costs resulting from coordinated activities of TSOs cooperating in a certain region; and
  - (c) national costs resulting from activities of the TSOs in that Member State.

The costs referred to in paragraph 2(a) and (b) shall be shared among the Member States and third countries participating in the single day-ahead and intraday coupling or in the relevant region proportionally to their annual electricity consumption. If there is more than one TSO in a Member State, the Member State shall allocate the costs among the TSOs in that Member State.

3. The costs of ensuring firmness in accordance with Article 56 shall be borne by the relevant TSOs, to the extent possible in accordance with Article 19.2(a) of Regulation (EU) No 2019/943. These costs shall include the costs from compensation mechanisms associated with ensuring the firmness of cross-zonal capacities.
4. The costs referred to in paragraph 1 and 3 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.

## Article 22. Article 75A

### **MCO costs**

1. All NEMOs and all TSOs shall develop, review and, where necessary, propose amendments to a methodology for determining, sharing and recovering the eligible costs related to the obligations imposed on the MCO in accordance with Article 18 and the joint decision making body in accordance with Article 13. The proposal shall include at least the following elements:
  - (a) the design of the unbundled accounting systems, including the detailed list of cost categories related to the obligations imposed on the MCO and the joint decision making body;
  - (b) appropriate measures to reflect the total costs including capital and operational costs for the obligations imposed on the MCO;
  - (c) the criteria for measuring cost efficiency;
  - (d) appropriate measures to ensure cost efficiency, including incentive schemes so that the cost recovery is dependent on the performance including the compliance with the annual work programme in accordance with Article 17.1;
  - (e) the criteria for determining the amount of the eligible common and regional costs separately for the day-ahead and intraday timeframe by applying the defined criteria for cost-efficiency for the obligations imposed on the MCO;



(f) the criteria for determining the amount of eligible common and regional costs separately for the day-ahead and intraday timeframe by applying the defined criteria for cost-efficiency for the joint decision making body; and

(g) the rules for the detailed determination of applicable sharing keys for common and regional costs in accordance with paragraph 7.

2. By 30 June of each year, the MCO in accordance with Article 14 shall provide a yearly report to the regulatory authorities and ACER in which the costs of performing the tasks specified in Article 18 for the previous calendar year are outlined and explained in detail in accordance with the methodology referred to in paragraph 1. This report shall be published by ACER.

3. By 30 June of each year all TSOs and all NEMOs shall provide a yearly report to the regulatory authorities and ACER in which the costs related to the joint decision making body for the previous calendar year are outlined and explained in detail in accordance with the methodology referred to in paragraph 1. This report shall be published by ACER.

4. All data and information necessary for the efficiency assessment of the costs submitted in the reports referred to in paragraph 2 and 3 shall be made available to the regulatory authorities and ACER.

5. Within three months following the receipt of the reports referred to in paragraph 2 and 3, if no regulatory authority disagrees, the eligible costs shall be considered as approved. The regulatory authorities shall consult and closely cooperate and coordinate with each other in order to assess that MCO costs comply with the methodology referred to in paragraph 1.

6. Where one or more regulatory authorities disagree within the period referred to in paragraph 5, or upon their joint request, ACER shall adopt a decision concerning the assessment of the costs whereby eligible costs for the respective year are determined.

7. Approved eligible costs in accordance with the reports in paragraph 2 and 3 shall be broken down into:

(a) common costs resulting from coordinated activities and common projects concerning the single day-ahead and intraday coupling; and

(b) regional costs resulting from coordinated activities and projects not considered as common projects.

The costs referred to in paragraph 7(a) and 7(b) shall be shared among the Member States and third countries participating in the single day-ahead and intraday coupling or in the relevant region proportionally to their annual electricity consumption. If there is more than one TSO in a Member State, the Member State shall allocate the costs among the TSOs in that Member State.

8. The costs referred to in paragraph 7 shall be recovered by TSOs in a timely manner through network tariffs or other appropriate mechanisms as determined by the competent regulatory authorities.

## **TITLE III**

### ***CAPACITY CALCULATION***

#### **CHAPTER 1**

##### ***GENERAL REQUIREMENTS***

Article 23. Article 15

##### **Capacity calculation regions**

1. All TSOs shall jointly develop, review and, where necessary, propose amendments to the determination of capacity calculation regions.
2. The determination referred to in paragraph 1 shall define the bidding zone borders, the bidding zones and the TSOs that are assigned to each capacity calculation region. The following requirements shall be met:
  - (a) Assignment of bidding zone borders, bidding zones and TSOs to capacity calculation regions shall be determined in a way to maximise the overall economic efficiency of capacity calculation, capacity allocation and regional operational security coordination in all time frames;
  - (b) each bidding zone border through which interconnection between two bidding zones exists, shall be assigned to only one capacity calculation region. Exceptionally, a bidding zone border may be assigned to two capacity calculation regions if such bidding zone border connects two capacity calculation regions and consist of:
    - i. high-voltage direct current interconnector(s)
    - ii. alternating current interconnector(s) on which physical flows are not significantly impacted by cross-zonal electricity exchanges on any other bidding zone border;
  - (c) each capacity calculation region shall include at least those TSOs which are assigned to bidding zone borders that are assigned to such capacity calculation region. At least the TSOs that operate interconnectors on a given bidding zone border as well as TSOs having internal network elements directly connected to such interconnectors shall be assigned to such bidding zone border. As exception to this rule:
    - i. TSOs not having obligations pursuant to Article 1.3 shall be excluded from the assignment to a capacity calculation region and the respective bidding zone borders of that region;

- ii. The TSOs not operating any interconnectors or internal network elements in the on-shore territory of bidding zones included in the capacity calculation region shall be excluded from such capacity calculation region and the respective bidding zone borders of that region.
3. The determination of capacity calculation regions may provide for transitional arrangements during which the determination of capacity calculation regions may differ for different purposes for which the determination of capacity calculation regions is needed.
4. Any changes to the bidding zone configuration after a decision to amend the bidding zone configuration, in accordance with Article 14(8) of Regulation 2019/943, shall lead to an amendment of the determination referred to in paragraph 1.

Article 24. Article 15A

### **General capacity calculation provisions**

1. All TSOs shall calculate cross-zonal capacity for at least the following timeframes:
  - (a) day-ahead, for the day-ahead market;
  - (b) intraday, for the intraday market.
2. For the day-ahead market timeframe, individual values for cross-zonal capacity for each day-ahead market time unit shall be calculated. For the intraday market timeframe, individual values for cross-zonal capacity for each remaining intraday market time unit shall be calculated.
3. The capacity calculation process shall be organised as follows:
  - (a) each TSO shall provide the capacity calculation inputs to the RCC;
  - (b) each RCC shall perform the capacity calculation process;
  - (c) each RCC shall perform the coordinated validation of capacity calculation outputs and shall send them to each TSO for individual validation. For the intraday timeframe the execution of the coordinated validation shall be subject to an efficiency and feasibility assessment to be run when developing, reviewing and where necessary amending the capacity calculation methodology pursuant to Article 26.1.
  - (d) each TSO shall perform the individual validation of the capacity calculation outputs and send the results to the relevant RCC(s); and
  - (e) each RCC shall provide the validated capacity calculation outputs to the MCO.
4. The capacity calculation process shall be based on the two-days ahead, day-ahead and intraday common grid models built in accordance with Article 64(1) of Regulation 2017/1485.
5. All RCCs and TSOs of each capacity calculation region shall review the quality of data submitted within the capacity calculation every second year as part of the biennial report on capacity calculation and allocation produced in accordance with Article 61.

Article 25. Article 20

### **Capacity calculation approach**

1. For the day-ahead market timeframe and intraday market timeframe the approach used in the capacity calculation methodologies shall be a flow-based approach, except where the requirement under paragraph 2 is met.
2. All TSOs in each capacity calculation region may jointly request the competent regulatory authorities, as part of the proposal pursuant to Article 26.1, to apply the coordinated net transmission capacity approach in the concerned capacity calculation region if the TSOs concerned are able to demonstrate that flows on each bidding zone border assigned to this capacity calculation region are not significantly impacted by exchanges on other bidding zone borders within or outside this capacity calculation region. Prior to such request, all TSOs of a capacity calculation region shall coordinate and consult with regulatory authorities of such capacity calculation region the criteria and methodology to perform such an assessment.
3. To enable market participants to adapt to any change in the capacity calculation approach, the RCC(s) in coordination with the TSOs concerned shall test the new approach alongside the existing approach and involve market participants for at least six months before implementing a proposal for the change of their capacity calculation approach.

## **CHAPTER 2**

### ***CAPACITY CALCULATION METHODOLOGIES***

Article 26. Article 21

### **Capacity calculation methodology**

1. All TSOs in each capacity calculation region shall jointly develop, review and, where necessary, propose amendments to the capacity calculation methodology within the respective region.
2. The methodology determined in accordance with paragraph 1 shall include at least the following items for each capacity calculation timeframe:
  - (a) methodologies for the calculation of the inputs to capacity calculation, which shall include the following :
    - i. the methodology for determining the reliability margin in accordance with Article 27;
    - ii. the methodology for determining critical network elements, contingencies and operational security limits relevant for capacity calculation in accordance with Article 28;
    - iii. the methodology for determining the allocation constraints that may be applied in accordance with Article 29

- iv. the methodology for determining the generation and load shift keys in accordance with Article 30;
  - v. the methodology for determining remedial actions to be considered in capacity calculation in accordance with Article 31.
- (b) a detailed description of the capacity calculation approach which shall include the following:
- i. a mathematical description of the applied capacity calculation approach with different capacity calculation inputs;
  - ii. rules for avoiding undue discrimination between internal and cross-zonal exchanges to comply with Article 16(8) of the Regulation 2019/943 taking into account principles set in Article 14(1) and 16(1) of the Regulation 2019/943;
  - iii. rules for taking into account, where appropriate, previously allocated cross-zonal capacity;
  - iv. rules for optimising at least the non-costly remedial actions in capacity calculation in accordance with Article 31;
  - v. rules for determining the capacity calculation outputs for non-costly remedial actions to be optimised in capacity allocation in accordance with Article 31, if applicable;
  - vi. for the flow-based approach, a mathematical description of the calculation of power transfer distribution factors and of the calculation of available margins on critical network elements;
  - vii. for the coordinated net transmission capacity approach, the rules for calculating cross-zonal capacity, including the rules for efficiently sharing the power flow capabilities of critical network elements among different bidding zone borders;
  - viii. where the power flows on critical network elements are influenced by cross-zonal power exchanges outside of a capacity calculation region, the rules for sharing the power flow capabilities of critical network elements among capacity calculation regions in order to accommodate these flows;
- (c) a methodology for the validation of cross-zonal capacity in accordance with Article 34.
3. The capacity calculation methodology shall transpose the requirements regarding the minimum level of available capacity for cross-zonal trade pursuant to Article 16(8) of Regulation 2019/943, without prejudice to the action plans pursuant to Article 15 of Regulation 2019/943 or the derogations granted by the regulatory authorities pursuant to Article 16(9) of Regulation 2019/943.
4. For the day-ahead market timeframe, the capacity calculation shall be based on the latest available information. The information update for the day-ahead market timeframe shall not start before 15:00 market time two days before the day of delivery.
5. All TSOs in each capacity calculation region shall ensure that cross-zonal capacity is updated and/or recalculated within the intraday market timeframe based on the latest available information. For the intraday auctions before the first day-ahead common grid model becomes available, all TSOs in each capacity calculation region shall update the cross-zonal capacity to reflect the cross-zonal

capacity calculation outputs from the day-ahead capacity calculation pursuant to Article 35 adjusted for the already allocated cross-zonal capacities. For all subsequent intraday auctions, all TSOs in each capacity calculation region shall recalculate cross-zonal capacity at least by the intraday auction deadlines for delivery of capacity calculation outputs as determined in the intraday timings and procedures pursuant to Article 43. The capacity calculation output from the cross-zonal capacity update or recalculation performed for the intraday auction shall be directly provided for the allocation in the intraday auction and then the remaining capacity, which has not been allocated by the intraday auction, offered to the continuous trading. Further cross-zonal capacity recalculations not performed for specific intraday auctions are allowed, provided that the capacity calculation outputs are directly provided for the allocation in the continuous trading once available.

6. The capacity calculation methodology shall include a fallback procedure for the case where the initial capacity calculation does not lead to any results.

7. Each TSO of a capacity calculation region shall, as far as possible, use harmonised capacity calculation inputs.

8. Using the latest available information, each TSO shall regularly recalculate and update the following capacity calculation inputs in accordance with methodologies adopted pursuant to Article 26.2(a):

(a) at least annually: the critical network elements, contingencies and operational security limits used in capacity calculation;

(b) at least annually: the allocation constraints;

(c) at least every two years: the probability distribution of the deviations between expected power flows at the time of capacity calculation and realised power flows in real time and the calculation of reliability margins;

(d) at least annually: the remedial actions taken into account in capacity calculation;

(e) at least annually: the generation and load shift keys.

9. By 31 December 2025 all TSOs shall develop and submit to ACER a proposal for a harmonised capacity calculation methodology which shall, in particular, set out one harmonised capacity calculation methodology for the flow-based approach and one for the coordinated net transmission capacity approach. No later than one year after approval of the proposal for a harmonised capacity calculation methodology all TSOs in each capacity calculation region shall submit a proposal in accordance with paragraph 1 that is in line with the harmonised capacity calculation methodology. The proposal in accordance with paragraph 1 may allow for specific regional solutions subject to an efficiency assessment.

Article 27. Article 22

### **Reliability margin methodology**

1. The capacity calculation methodology shall include a methodology to determine the reliability margin. The methodology to determine the reliability margin shall consist of two steps. First, each TSO shall estimate the probability distribution of deviations between the expected power flows at the

time of the capacity calculation and realised power flows in real time. Second, the reliability margin shall be calculated by deriving a value from the probability distribution.

2. The methodology to determine the reliability margin shall set out the principles for calculating the probability distribution of the deviations between the expected power flows at the time of the capacity calculation and realised power flows in real time, and specify the uncertainties to be taken into account in the calculation. To determine those uncertainties, the methodology shall, in particular, take into account:

(a) unintended deviations of physical electricity flows within a market time unit caused by the adjustment of electricity flows within and between load frequency control areas, to maintain a constant frequency;

(b) uncertainties which affect capacity calculation and which could occur between the capacity calculation timeframe and real time, for the market time unit being considered; and

(c) inaccuracies in modelling and calculation approach which affect capacity calculation.

3. In the methodology to determine the reliability margin, all TSO of the capacity calculation region shall also set out common harmonised principles for deriving the reliability margin from the probability distribution.

4. On the basis of the methodology adopted in accordance with paragraph 1, each TSO shall determine the reliability margin respecting the operational security limits and taking into account uncertainties between the capacity calculation timeframe and real time, and the remedial actions available after capacity calculation.

#### OPTION 1:

5. For each capacity calculation timeframe, each TSO concerned shall determine the reliability margin for each critical network element independent of the specific capacity calculation approach adopted within the capacity calculation region.

#### OPTION 2:

6. For each capacity calculation timeframe, where the flow based approach is applied, each TSO concerned shall determine the reliability margin for each critical network element independent of the specific capacity calculation approach adopted within the capacity calculation region.

7. For each capacity calculation time-frame, where the coordinated net transmission capacity approach is applied, each TSO concerned may determine the reliability margin either for each critical network element or for cross-zonal capacity. The way of determination shall be proposed by the TSOs in the common capacity calculation methodology, on the basis of an assessment comparing the pros and cons associated to each way. The assessment shall be done by 31 December 2023 and repeated upon request by the regulatory authorities of the CCR.

Article 28. Article 23

**Methodologies for critical network elements, contingencies and operational security limits**

1. The capacity calculation methodology shall include a methodology to define the critical network elements to be considered while determining the cross-zonal capacity.
2. The methodology to define the critical network elements shall ensure that network congestion problems are addressed in accordance with Article 16(1) of Regulation 2019/943.
3. Each TSO shall respect the operational security limits for each critical network element established for the operational security analysis pursuant to Article 25 of Regulation 2017/1485.
4. Each TSO shall define the contingency list according to Article 33(1) of Regulation 2017/1485 and taking into account the criteria for the identification of the external contingencies included in the methodology developed pursuant to Article 75 of Regulation 2017/1485.

Article 29. Article 24

#### **Allocation constraints**

1. Each TSOs may include in the proposal pursuant to Article 26.1 to the following allocation constraints:
  - (a) constraints that are needed to maintain the transmission system within operational security limits and that cannot be transformed efficiently into maximum flows on critical network elements; or
  - (b) constraints intended to increase the economic surplus for single day-ahead or intraday coupling.
2. Each TSO proposing to use allocation constraints pursuant to paragraph 1(a) shall justify their necessity within the capacity calculation methodology, by complementing it with a cost-benefit analysis. Such an analysis shall prove that allocation constraints are the economically most efficient measure among all alternatives to address related operational security issues. This analysis shall be repeated every three years and submitted to regulatory authorities of the concerned capacity calculation region which shall decide whether allocation constraints can continue to apply.
3. For capacity calculation methodologies already approved at the entry into force of this Regulation, if not yet submitted after 31 December 2020, the first edition of the cost benefit analysis pursuant to paragraph 2 shall be submitted to the regulatory authorities by 31 December 2023.

Article 30. Article 25

#### **Generation and load shift keys methodology**

1. The capacity calculation methodology shall include a methodology to determine generation and load shift keys for each bidding zone and market time unit.
2. The generation and load shift keys shall represent the best forecast of the relation of a change in the net position of a bidding zone to a specific change of generation or load in the common grid



model. That forecast shall take into account the information included in the common grid model used for the specific capacity calculation process.

Article 31. Article 26

### **Methodology for remedial actions in capacity calculation**

1. Each TSO within each capacity calculation region shall individually define all available remedial actions that are expected to be available in real time and to be taken into account in capacity calculation to meet the objectives of this Regulation. Each TSO may exclude the following remedial actions from capacity calculation:

- (a) load shedding;
- (b) remedial actions which are verified and justified to be classified as indispensable to ensure operational security in real-time operation and for which no other remedial actions are available;
- (c) remedial actions which are offered to the capacity calculation in other CCRs in which the concerned TSO also participates.

2. Each RCC within each capacity calculation region shall coordinate with each TSO in that region the use of remedial actions to be taken into account in capacity calculation. Such coordination shall reflect the applicable coordination of remedial actions that TSOs apply based on regional operational security coordination. Until the implementation of regional operational security coordination, each TSO shall take into account in capacity validation the remedial actions used in existing coordination arrangements and are expected to be available.

3. All available remedial actions determined pursuant to paragraph 1 shall be considered in the validation of the capacity calculation outputs according to **Error! Reference source not found.** and Article 34.

## **CHAPTER 3**

### ***CAPACITY CALCULATION PROCESS***

Article 32. Article 28

#### **Regional calculation of cross-zonal capacity**

1. For each capacity calculation timeframe, each TSO shall provide the RCCs in the capacity calculation region with the following inputs: operational security limits, critical network elements and contingencies, generation and load shift keys, remedial actions, reliability margins, allocation constraints and previously allocated cross-zonal capacity. The capacity calculation methodology may also define that these inputs are created by RCC(s) directly.

2. The non-costly remedial actions whose application is determined through capacity allocation shall not be optimised or applied in capacity calculation process. The parameters necessary for their application in capacity allocation shall be calculated and added to capacity calculation outputs.
3. Each RCC shall perform the coordinated capacity calculation applying the inputs pursuant to paragraph 1 by using the common grid model created for each scenario in accordance with Article 70(1) of the Regulation (EU) 2017/1485.
4. Subject to an efficiency and feasibility analysis comparing direct current load flow to alternating current load flow, the flows calculated pursuant to paragraphs 8(d) and 0 based on common grid model shall be calculated by either applying the alternating current load flow, at least for the full network topology without contingencies or by applying the direct current load flow. The direct current load flow may be applied in case of data implausibility.
5. When calculating cross-zonal capacity, each RCC shall:
  - (a) use generation and load shift keys to calculate the impact of changes in bidding zone net positions and of flows on direct current lines;
  - (b) exclude from the list of critical network elements determined according to the methodology set out in Article 28 those internal network elements that are not significantly influenced by the changes in bidding zone net positions; and,
  - (c) ensure that all sets of bidding zone net positions and flows on direct current lines not exceeding cross-zonal capacity comply with reliability margins and operational security limits in accordance with Article 26.2(a)i) and Article 26.2(a)ii), and take into account previously allocated cross-zonal capacity in accordance with Article 26.2(b)iii);
6. Each RCC shall apply the sharing rules established in accordance with Article 26.2(b)vii).
7. Each RCC shall respect the mathematical description of the applied capacity calculation approach established in accordance with Article 26.2(b)i).
8. Each RCC, for each capacity calculation region applying the flow-based approach, and for each critical network element (with contingencies), shall:
  - (a) use operational security limits to calculate the maximum flows on critical network elements;
  - (b) use common grid model to optimize the remedial actions taken into account in capacity calculation in accordance with Article 31;
  - (c) use common grid model, generation and load shift keys and the optimized remedial actions from point (b) to calculate power transfer distribution factors;
  - (d) use common grid model and the optimized remedial actions from point (b) to calculate flows on critical network elements (with contingencies);
  - (e) use the power transfer distribution factors from point (c) to perform the following calculations:
    - i. adjust the flows from point (d) by assuming no cross-zonal power exchanges within the capacity calculation region;

- ii. calculate flows resulting from previously allocated cross-zonal capacity within the capacity calculation region;
  - iii. calculate flows resulting from cross-zonal exchanges outside the capacity calculation region within the Union as assumed in the common grid model; and
  - iv. calculate flows resulting from cross-zonal exchanges outside the capacity calculation region between the Union and third countries as well as between the third countries as assumed in the common grid model;
- (f) calculate available margins which shall equal the maximum flows from point (a) reduced by reliability margin, and flows from point (e)i and (e)ii; and
- (g) increase the available margins from point (f) such that sum of the adjusted available margin and the flows from point (e)ii, (e)iii and if applicable (e)iv is at least equal to the minimum capacity target pursuant to Article 26.3.

**OPTION 1:**

9. Each RCC, for each capacity calculation region applying the coordinated net transmission capacity approach shall:

- (a) use operational security limits to calculate maximum flows on critical network elements;
- (b) calculate the maximum power exchange on each bidding zone border such that the power flows resulting from such exchange does not exceed:
  - i. the maximum flows on critical network elements with contingencies, reduced by the reliability margin; and
  - ii. any other operational security limit;
- (c) adjust the common grid model to reflect injections, withdrawals and applied remedial actions resulting from the maximum exchange calculated pursuant to (b)
- (d) use generation and load shift keys to calculate power transfer distribution factors for all critical network elements with contingencies;
- (e) use the power transfer distribution factors from point (c) and the maximum power exchange from point (b) to calculate the following flows on all critical network elements with contingencies:
  - i. flows from cross-zonal exchanges within the capacity calculation region as the maximum power exchange from point (b) multiplied with the power transfer distribution factors from point (d);
  - ii. calculate flows resulting from cross-zonal exchanges outside the capacity calculation region within the Union as assumed in the common grid model;
  - iii. calculate flows resulting from cross-zonal exchanges outside the capacity calculation region between the Union and third countries as well as between the third countries as assumed in the common grid model;

(f) for all critical network elements with contingencies calculate the available margin which shall be equal to the flows from point (e)i and increase it such that the sum of this margin and the flows from point (e)ii and if applicable (e)iii is at least equal to the minimum capacity target pursuant to Article 26.3;

(g) calculate the maximum power exchange on each bidding zone border such that the resulting power flows calculated by dividing such exchange with the power transfer distribution factors from point (c), do not exceed the adjusted available margin on any critical network element with contingency as calculated pursuant to point (f);

(h) compute the cross-zonal capacities on each bidding zone border which shall be equal to the maximum power exchanges calculated pursuant to point (g) decreased by the previously allocated cross-zonal capacities.

## **OPTION 2:**

9. Each RCC, for each capacity calculation region applying the coordinated net transmission capacity approach shall:

(a) use operational security limits to calculate maximum flows on critical network elements;

(b) calculate the maximum power exchange on each bidding zone border such that the power flows resulting from such exchange does not exceed:

- i. the maximum flows on critical network elements with contingencies, reduced by the reliability margin; and
- ii. any other operational security limit;

(c) adjust the common grid model to reflect injections and withdrawals resulting from the maximum exchange calculated pursuant to (b) and then identify the limiting critical network elements and contingencies as the network elements with flows close to maximum flows; if no network elements and contingencies have flows close to maximum flows, all critical network element and contingencies shall considered as limiting ones.

(d) use generation and load shift keys to calculate power transfer distribution factors for at least all limiting critical network elements and contingencies from point (c);

(e) use the power transfer distribution factors from point (c) and the maximum power exchange from point (b) to calculate the following flows on at least the limiting critical network elements with contingencies:

- i. flows from cross-zonal exchanges within the capacity calculation region as the maximum power exchange from point (b) multiplied with the power transfer distribution factors from point (d);
- ii. calculate flows resulting from cross-zonal exchanges outside the capacity calculation region within the Union as assumed in the common grid model;
- iii. calculate flows resulting from cross-zonal exchanges outside the capacity calculation region between the Union and third countries as well as between the third countries as assumed in the common grid model;

- (f) for at least all the limiting critical network elements calculate the available margin which shall be equal to the flows from point (e)i and increase it such that the sum of this margin and the flows from point (e)ii and if applicable (e)iii is at least equal to the minimum capacity target pursuant to Article 26.3;
- (g) calculate the maximum power exchange on each bidding zone border such that the resulting power flows calculated by dividing such exchange with the power transfer distribution factors from point (c), do not exceed the adjusted available margin on at least the limiting critical network elements with contingency as calculated pursuant to point (f);
- (h) compute the cross-zonal capacities on each bidding zone border which shall be equal to the maximum power exchanges calculated pursuant to point (g) decreased by the previously allocated cross-zonal capacities.
10. During the capacity calculation process, each RCC shall cooperate with the neighbouring RCCs.
11. At the end of the capacity calculation process, each RCC shall set the following capacity calculation outputs:
- (a) if applying the flow-based approach, the flow-based parameters and allocation constraints, if applicable; or
- (b) if applying the coordinated net transmission capacity approach, the available transmission capacity values and allocation constraints, if applicable.

### Article 33.

#### **Coordinated validation of cross-zonal capacity**

1. The RCC(s) of each CCR in coordination with all TSO of that CCR shall perform coordinated validation of capacity calculation outputs at least during the day-ahead capacity calculation.
2. During the coordinated validation of capacity calculation outputs, the RCC and each TSO of the respective CCR shall analyse in a coordinated manner whether the capacity allocation of the capacity calculation outputs could violate operational security limits, and whether there are sufficient available remedial actions to avoid such violations.
3. In case the available remedial actions are not sufficient to guarantee that capacity allocation of capacity calculation outputs will not violate operational security limits, RCC may adjust capacity calculation outputs in accordance with Article 16(3) of Regulation 2019/943.
4. Each RCC shall send the adjusted cross-zonal capacity outputs and in case of coordinated net transmission capacity approach also available margins on critical network elements to each TSOs of the capacity calculation region for individual validation.

### Article 34. Article 30A

#### **Individual validation of cross-zonal capacity**

1. Each TSO shall validate available margins on critical network elements and capacity calculation outputs and provided pursuant to Article 33.4 for reason of operational security and may only reduce these coordinated values in accordance with Article 42(2) of Regulation 2019/943.
2. Each TSO shall send its validated available margins on critical network elements and capacity calculation outputs to the relevant RCCs and to the other TSOs of the relevant capacity calculation regions.
3. Each RCC shall determine the final capacity calculation outputs applying the outcome of the individual validation by each TSO.

Article 35. Article 30A

#### **Delivery of cross-zonal capacity**

1. Each RCC shall provide the validated capacity calculation outputs for the purposes of allocating capacity in accordance with Articles 46 and 58.

## **TITLE IV**

### ***MARKET COUPLING***

#### **CHAPTER 1**

#### ***MARKET COUPLING DEVELOPMENT***

#### **SECTION 1**

#### ***GENERAL REQUIREMENTS***

Article 36. Article 36

#### **General provisions**

1. All TSOs and all NEMOs shall jointly develop, maintain and operate the integrated day-ahead and intraday markets in accordance with Articles 7, 8, 10, 16 and 17 of Regulation (EU) 2019/943. These markets shall be operated through:
  - (a) single day-ahead coupling for the day-ahead timeframe; and
  - (b) single intraday coupling for the intraday timeframe, consisting of:
    - i. intraday continuous trading,
    - ii. intraday auctions.

Article 37. Article 36A

### **Pricing of cross-zonal capacity**

1. The price of available day-ahead and intraday cross-zonal capacity allocated through an implicit auction shall reflect market congestion and shall be equal to the difference between the corresponding reference clearing prices at which the orders are settled in the relevant bidding zones.
2. In continuous trading, the available cross-zonal capacity shall be allocated at a zero price on a first come first serve basis.
3. No charges, such as imbalance fees or additional fees, shall be applied to cross-zonal capacity in addition to the pricing in accordance with paragraph 1 and 2.

Article 38. Article 36AA

### **Algorithm objectives**

1. The SDAC algorithm shall:
  - (a) have the objective to maximize the economic surplus while complying with the following constraints and requirements;
  - (b) respect the following constraints:
    - i. capacity calculation outputs; and
    - ii. orders submitted in accordance with SDAC products, in accordance with Article 39.
  - (c) respect the following principles:
    - i. provision of an efficient price signal to market participants;

- ii. scalability, meaning that the SDAC algorithm is able to accommodate all existing and future legally binding requirements while its performance in normal operation is not endangered; and
    - iii. repeatability, meaning that the SDAC algorithm produces identical results when using two identical sets of inputs.
  - (d) use one of the following pricing mechanisms:
    - i. uniform pricing mechanism
      - a. allowing paradoxically rejected orders; and
      - b. not allowing paradoxically accepted orders; or
    - ii. non-uniform pricing mechanism
      - a. allowing paradoxically rejected orders;
      - b. allowing paradoxically accepted orders; and
      - c. allowing minimal use of side payments to compensate the losses of market participants whose orders have been paradoxically accepted.
- 2. The continuous trading algorithm shall:
  - (a) continuously match orders while taking into account the price and the time of submission and, where applicable, allocate cross-zonal capacity to orders to enable cross-zonal matching;
  - (b) have the objective to maximise the economic surplus per trade;
  - (c) respect the following constraints:
    - i. capacity calculation outputs; and
    - ii. orders submitted in accordance with SIDC products, in accordance with Article 39.
  - (d) respect the following principles:
    - i. scalability, meaning that the continuous trading algorithm is able to accommodate all existing and future legally binding requirements while its performance in normal operation is not endangered; and
    - ii. repeatability, meaning that the continuous trading algorithm produces identical results when using two identical sets of inputs.
- 3. The intraday auction algorithm shall:
  - (a) have the objective to maximize the economic surplus while complying with the following constraints and requirements;
  - (b) respect the following constraints:



- i. capacity calculation outputs; and
  - ii. orders submitted in accordance with SIDC products, in accordance with Article 39.
- (c) respect the following principles:
  - i. provision of an efficient price signal to market participants;
  - ii. scalability, meaning that the intraday auction algorithm is able to accommodate all existing and future legally binding requirements while its performance in normal operation is not endangered; and
  - iii. repeatability, meaning that the intraday auction algorithm produces identical results when using two identical sets of inputs.
- (d) use one of the following pricing mechanisms:
  - i. uniform pricing mechanism
    - a. allowing paradoxically rejected orders; and
    - b. not allowing paradoxically accepted orders; or
  - ii. non-uniform pricing mechanism
    - a. allowing paradoxically rejected orders;
    - b. allowing paradoxically accepted orders; and
    - c. allowing minimal use of side payments to compensate the losses of market participants whose orders have been paradoxically accepted.

## **SECTION 2**

### ***TERMS AND CONDITIONS OR METHODOLOGIES ON MARKET COUPLING DEVELOPMENT***

Article 39.      Article 36B

#### **Day-ahead and intraday products**

1. All NEMOs shall develop, review and, where necessary, propose amendments to the day-ahead and intraday products that can be accommodated by the SDAC algorithm, the continuous trading algorithm and the intraday auction algorithm. The day-ahead and intraday products that can be accommodated by the algorithms shall:
  - (a) include at least the products covering one market time unit and multiple market time units; and

- (b) cover the needs of market participants to the extent that ensures proper functioning of the algorithms;
2. The proposal in accordance with paragraph 1 shall include for each product a definition of essential parameter(s) which specify its nature.
  3. Each NEMO shall ensure that orders resulting from the day-ahead and intraday products submitted to the algorithms developed in accordance with Article 41:
    - (a) are expressed in euros;
    - (b) make reference to the market time unit for orders submitted to the SDAC algorithm and the intraday auction algorithm;
    - (c) make reference to the market time and market time unit for orders submitted to continuous trading algorithm.

Article 40. Article 36C

#### **Harmonised technical price limits**

1. All NEMOs shall jointly develop, review and, where necessary, propose amendments to the harmonised technical price limits which shall define maximum and minimum clearing and bidding prices to be applied in all bidding zones which participate in the SDAC and the SIDC.
2. The harmonised technical price limits shall:
  - (a) not restrict free price formation in accordance with Article 3 (a) and (b) of Regulation 2019/943; and
  - (b) take into account the maximum value of lost load.
3. The methodology shall include a transparent mechanism to adjust automatically the harmonised technical price limits to bidding prices and reference clearing prices in SDAC and SIDC in the event that the set limits are expected to be reached and are insufficient to guarantee the provisions of paragraph 2. The adjusted higher harmonised technical price limits shall remain applicable until further increases under that mechanism are required.

Article 41. Article 37

#### **Algorithm methodology**

1. The SDAC algorithm, the continuous trading algorithm and the intraday auction algorithm shall be able to accommodate orders resulting from the respective products pursuant to Article 39, except for products which cannot be accommodated pursuant to paragraph 4(f).
2. By no later than three years after the approval of the methodology pursuant to paragraph 3 the MCO shall procure and afterwards publish the source code of each of these algorithms in order to enable the verification of their compliance with this Regulation and the terms, conditions and

methodologies based upon it and in order to fulfil the public interest of transparency and comprehension of the price formation in the single day-ahead and intraday coupling. For the continuous trading algorithm the joint decision making body shall perform a cost benefit-analysis and, if positive propose, propose the publication of the source code for the continuous trading algorithm within the proposal for amendment of the Algorithm methodology.

3. All NEMOs and all TSOs shall jointly develop, review and, where necessary, propose amendments, the algorithm methodology for the SDAC algorithm, the continuous trading algorithm and the intraday auction algorithm.

4. The algorithm methodology pursuant to paragraph 3, shall include at least:

- (a) a detailed list of existing supported functionalities as well as future supported functionalities with the timeline for their implementation;
- (b) requirements for monitoring and reporting on the development and operation of the algorithm as well as on the fulfilment of the objectives, in accordance with Article 38;
- (c) rules and procedures on the operation and modification of the algorithms;
- (d) requirements on publications and reporting on point (a), (b) and (c); and
- (e) requirements for the annual work programme, in accordance with Article 17;
- (f) rules and procedures for the determination the existing or future products pursuant to Article 39 or functionalities pursuant to point (a) which cannot be accommodated by the algorithms due to constraints on algorithm performance.

### **SECTION 3**

#### ***TERMS AND CONDITIONS OR METHODOLOGIES ON MARKET COUPLING OPERATION***

Article 42. Article 36E

##### **Day-ahead timings and procedures**

1. All NEMOs and all TSOs shall jointly develop, review and, where necessary propose amendments to the day-ahead timings and procedures.

2. The day-ahead timings and procedures referred to in paragraph 1 shall include at least the following timings:

- (a) SDAC gate opening time;
- (b) SDAC deadline for delivery of capacity calculation outputs to the MCO;

- (c) SDAC gate closure time, which shall be 12:00 market time day-ahead, unless a different and duly justified time is fundamental for proper functioning of the SDAC;
- (d) SDAC deadline for provision of received orders from NEMOs to MCO;
- (e) SDAC deadline for delivery of results under normal operation;
- (f) SDAC deadline for delivery of results under back-up operation;
- (g) SDAC deadline for delivery of results under fallback operation;
- (h) SDAC deadline for delivery of scheduled exchanges calculation results; and
- (i) Other timings needed for the determination of receiving input data and for providing results and for the determination of the processes in accordance with paragraph 3.

3. The day-ahead timings and procedures referred to in paragraph 1 shall include at least the following procedures:

- (a) operational procedures under normal operation;
- (b) back-up procedures in the event that the MCO is unable to deliver part or all of the results of the SDAC algorithm by the SDAC deadline for delivery results under normal operation pursuant to paragraph 2(e); and
- (c) fallback procedures in the event that the MCO is unable to deliver part or all of the results of the SDAC algorithm by the SDAC deadline for delivery results under back-up operation pursuant to paragraph 2(f).

4. The fallback procedures referred to in paragraph 3(c) shall by default apply alternative procedures which aim to preserve the coupling of markets, whereas decoupling may only be applied as the last resort measure. The fallback procedures may take into account regional differences if properly justified and assessed by all NEMOs and all TSOs.

5. In cases where there is a risk that the MCO is unable to deliver part or all of the results within the SDAC deadline for delivery of results under normal operation, the MCO shall notify all NEMOs and all TSOs as soon as the risk is identified. All NEMOs shall immediately publish a notice to market participants that back-up or fallback procedures may be applied.

6. The SDAC gate opening time shall be set at least one hour before the SDAC gate closure time. Each NEMO may open its gate for submission of orders before the SDAC gate opening time.

7. The NEMOs shall not organise trading outside the SDAC from the SDAC gate opening time until the SIDC gate opening time with day-ahead products accommodated by the algorithm pursuant to Article 41.1. This shall also apply to day-ahead products which have one or more of the essential parameters defined pursuant to Article 39.2.

Article 43. Article 36F

### **Intraday timings and procedures**

1. All NEMOs and all TSOs shall jointly develop, review and, where necessary propose amendments the intraday timings and procedures.
2. The intraday timings and procedures referred to in paragraph 1 shall include at least the following timings:
  - (a) continuous trading opening time;
  - (b) continuous trading closure times;
  - (c) intraday auction gate opening times;
  - (d) deadlines for delivery of capacity calculation outputs to the MCO for intraday auctions and continuous trading;
  - (e) intraday auctions deadline for provision of received orders from NEMOs to MCO;
  - (f) intraday auction gate closure times;
  - (g) intraday cross-zonal gate opening time;
  - (h) intraday cross-zonal gate closure times;
  - (i) timings for delivery of results from intraday auctions and continuous trading;
  - (j) SIDC deadlines for delivery of scheduled exchanges calculation results;
  - (k) timings determining the suspension of continuous trading in accordance with paragraph 8; and
  - (l) other timings needed for the determination of receiving input data and for providing results and for the determination of the processes in accordance with paragraph 3.
3. The intraday timings and procedures referred to in paragraph 1 shall include at least the following procedures:
  - (a) operational procedures determining the functioning and co-existence of the continuous trading and the intraday auctions, including their interactions;
  - (b) back-up procedures for intraday auctions; and
  - (c) rules for ensuring non-discriminatory and efficient interoperability between intraday auctions and continuous trading.
4. The continuous trading closure time and the intraday cross-zonal gate closure time shall be, at the earliest, one hour before the start of the relevant intraday market time unit. It shall be set in such a way that they:
  - (a) maximise market participants' opportunities for adjusting their position by trading in the intraday market timeframe as close as possible to real time; and
  - (b) provide TSOs and market participants with sufficient time for their scheduling and balancing processes in relation to network and operational security;

(c) be equal to the latest point in time when the change in the commercial trade schedules is still allowed between or within scheduling areas and bidding zones.

5. The intraday auction gate opening time shall provide the market participants with sufficient time for orders submission to the NEMOs and shall be set at least 30 minutes before the intraday auction gate closure time. Each NEMO may open its gate for submission of orders before the intraday auction gate opening time.

6. In cases where there is a risk that the MCO is unable to deliver the continuous trading results, the MCO shall notify all parties as soon as the risk is identified.

7. The deadline for delivery of capacity calculation outputs to the MCO for the intraday auctions shall be at least 15 minutes before the intraday auction gate closure time.

#### **OPTION 1**

8. In order to accommodate intraday auctions, the continuous trading for a given market time unit shall be suspended for a limited time period.

#### **OPTION 2**

8. In order to accommodate intraday auctions, the cross-zonal capacity allocation within the continuous trading for a given market time unit shall be suspended for a limited time period to prevent parallel cross-zonal capacity allocation in the continuous trading and intraday auctions.

9. The timings of intraday auctions shall minimise, to the degree possible, the suspension of continuous trading, as referred to in paragraph 8.

10. Between the continuous trading opening time and continuous trading closure time, each NEMO shall submit all orders received from the market participants for a given market time unit immediately to the shared order book for matching.

11. The NEMOs shall not organise trading outside the SIDC from the SDAC gate opening time until the continuous trading closure time with intraday products accommodated by the algorithm pursuant to Article 41.1. This shall also apply to intraday products which have one or more of the essential parameters defined pursuant to Article 39.2.

#### **Article 44.**

#### **Methodology for calculating scheduled exchanges resulting from single day-ahead coupling and single intraday coupling**

1. All NEMOs and all TSOs shall jointly develop, review and, where necessary propose amendments to the methodology for calculating scheduled exchanges resulting from SDAC and SIDC.

2. The methodology shall describe the calculation and shall list the information which shall be used by the MCO to calculate scheduled exchanges for the SDAC and SIDC.

3. The calculation of scheduled exchanges in the methodology pursuant to paragraph 1 shall:

(a) use as an input:

- i. the output of the single day-ahead algorithm for calculating scheduled exchanges resulting from SDAC;
  - ii. the output of the intraday auction algorithm for calculating scheduled exchanges resulting from intraday auctions; and
  - iii. the output of the continuous trading algorithm for calculating scheduled exchanges resulting from continuous trading;
- (b) define as output the scheduled exchanges between NEMO trading hubs, between scheduling areas and on the bidding zone borders for each market time unit;
- (c) ensure that for each market time unit across all bidding zones, taking into account, where appropriate, allocation constraints, there are no deviations between the sum of energy transferred out of all surplus bidding zones and the sum of energy transferred into all deficit bidding zones;
- (d) ensure that for each market time unit electricity exports and electricity imports between bidding zones equal each other, with any deviations resulting only from considerations of allocation constraints, where appropriate.

#### Article 45.

##### **Methodology for clearing and settlement between NEMO trading hubs**

1. All NEMOs shall jointly develop, review and, where necessary, propose amendments to the methodology for clearing and settlement between the NEMO trading hubs. This methodology shall define:
  - (a) standard requirements for fair, effective and efficient clearing and settlement that limit the systemic risk including at least:
    - i. standardised contractual obligations, rules and liabilities;
    - ii. standardised processes and timelines for clearing and settlement and avoiding unnecessary processes and financial flows;
    - iii. single unified deadline for payments;
    - iv. standardised requirements on collaterals avoiding the need for multiple securities.
  - (b) requirements for monitoring and reporting on the fulfilment of the requirements for clearing and settlement.
2. The methodology pursuant to paragraph 1 shall define that the clearing and settlement between the NEMO trading hubs is performed in a centralised way between each NEMO and the MCO. Until this solution can be implemented, the methodology may provide for transitional arrangements for clearing and settlement between all NEMOs.
3. The MCO and NEMOs shall not be allowed to charge each other with fees for recovering clearing and settlement costs.

Article 46. Article 73

### **Congestion income distribution methodology**

1. All TSOs shall jointly develop, review and, where necessary propose amendments to the methodology for sharing day-ahead and intraday congestion income.
2. The methodology developed in accordance with paragraph 1 shall:
  - (a) comply with the provisions on congestion income distribution provided for in Article 19.1 of Regulation (EU) No 2019/943;
  - (b) allow for reasonable financial planning;
  - (c) be compatible across timeframes;
  - (d) establish arrangements to share congestion income deriving from transmission assets owned by parties other than TSOs.

## **CHAPTER 2**

### **SINGLE DAY-AHEAD COUPLING**

Article 47. Article 39

#### **Pre-coupling**

1. Each RCC shall ensure that the capacity calculation outputs are provided to the MCO by the SDAC deadline for delivery of capacity calculation outputs to the MCO, in accordance with Article 42.2(b).
2. If an RCC is unable to provide the capacity calculation outputs in accordance with paragraph Article 53.1, it shall notify the MCO and the relevant NEMOs and TSOs. The MCO shall immediately publish a notice for market participants. In such cases, capacity calculation outputs shall be provided by the RCC to the MCO no later than 30 minutes before the SDAC gate closure time.
3. Market participants shall submit all orders to the relevant NEMOs until the SDAC gate closure time.
4. After the SDAC gate closure time, the orders submitted to the SDAC shall be considered firm.
5. Each NEMO shall submit orders received in accordance with paragraph 3 to the MCO anonymised and no later than the SDAC deadline for provision of received orders from NEMOs to MCO, in accordance with Article 42.2(d).



Article 48. Article 39

**Coupling**

1. The MCO shall use the SDAC algorithm and the following inputs to produce results specified in paragraph 2:
  - (a) validated capacity calculation outputs, in accordance with Article 35; and
  - (b) orders submitted in accordance with Article 47.5.
2. The MCO shall use the SDAC algorithm and the inputs specified paragraph 1 and produce at least the following results for each market time unit:
  - (a) a reference clearing price for each bidding zone and market time unit in EUR/MWh;
  - (b) a net position for each bidding zone, scheduling area and NEMO trading hub for each market time unit;
  - (c) the information which enables the execution status of orders to be determined; and
  - (d) information needed to assess the compliance of results with capacity calculation outputs.
3. The MCO shall ensure the accuracy and efficiency of results produced by the SDAC algorithm.
4. No later than by the relevant times specified in the day-ahead timings and procedures as set out in Article 42.2(e) to (g), the MCO shall deliver the SDAC results:
  - (a) to each TSO, each RCC and each NEMO, for the results specified in paragraph (2)(a), (b) and (d); and
  - (b) to each NEMO, for the results specified in paragraph 2(c).
5. The MCO shall provide to each TSO for each scheduling area separately its position equal to the sum of:
  - (a) external commercial trade schedules arising from exchanges of energy between NEMO trading hubs; and
  - (b) the internal commercial trade schedules arising from exchange of energy between the MCO and the NEMO trading hub.
6. Such trade schedules shall be based on :
  - (a) NEMO trading hub net positions produced in accordance with paragraph (2)(b);
  - (b) scheduled exchanges calculated in accordance with Article 44.
7. The MCO shall provide the relevant TSOs and NEMOs with the results of the calculation of scheduled exchanges from the single day-ahead coupling by the SDAC deadline for delivery of scheduled exchanges calculation results, in accordance with Article 42.2(h).

8. The MCO shall act as the central counterparty to each NEMO for the exchange of energy between NEMO trading hubs with regard to the related financial rights and obligations arising from these energy exchanges.
9. The MCO shall bear balance responsibility for all energy exchanges between NEMO trading hubs in accordance with national terms and conditions for balancing.
10. The MCO shall collect the congestion income arising from the single day-ahead coupling.
11. The MCO shall ensure that collected congestion income is transferred to the entity performing the task pursuant to Article 18.1(n) in line with the single unified deadline for payments in accordance with the methodology for clearing and settlement between NEMO trading hubs, pursuant to Article 45.
12. The MCO shall distribute congestion income to TSOs in accordance with the congestion income distribution methodology, in accordance with Article 46, as soon as reasonably practicable and no later than one week after the congestion income has been transferred pursuant to paragraph 11.

Article 49. Article 39A

**Post-coupling**

1. Each NEMO shall have the possibility to verify that the SDAC results referred to in Article 48.2(c) have been calculated in accordance with the orders.
2. Each RCC and each TSO shall have the possibility to verify that the SDAC results referred to in Article 48.2(c) have been calculated in accordance with capacity calculation outputs.
3. Each NEMO shall publish the SDAC results simultaneously with all other NEMOs and inform the market participants on the execution status of their orders without delay.
4. Each NEMO shall act as the central counterparty to market participants for all matched orders resulting from SDAC with regard to the related financial rights and obligations. Each NEMO shall ensure clearing and settlement of all matched orders in a timely manner.
5. Each NEMO shall act as the counterparty to the MCO for the exchange of energy of the relevant NEMO trading hubs with regard to the related financial rights and obligations.
6. Each NEMO shall bear balance responsibility for all energy exchanges of their NEMO trading hubs towards their market participants in accordance with national terms and conditions for balancing.
7. Each NEMO shall maintain anonymity between market participants.
8. Each NEMO shall provide to each TSO for each scheduling area separately its position equal to the sum of:
  - (a) internal commercial trade schedules between the MCO and the NEMO trading hub; and
  - (b) internal commercial trade schedules between the NEMO trading hub and its market participants.
9. Such trade schedules shall be based on:

- (a) NEMO trading hub net positions produced in accordance with Article 48(2)(b); and
- (b) scheduled exchanges calculated in accordance with Article 44.

## **CHAPTER 3**

### **SINGLE INTRADAY COUPLING OPERATION**

#### **SECTION 1**

##### ***CONTINUOUS TRADING***

Article 50. Article 58

##### **Pre-coupling**

1. Each RCC shall ensure that the capacity calculation outputs are provided to the MCO by the deadlines for delivery of capacity calculation outputs to the MCO, in accordance with Article 43.2(d).
2. If an RCC is unable to provide the capacity calculation outputs in accordance with paragraph Article 53.1, it shall notify the MCO and the relevant NEMOs and TSOs. The MCO shall immediately publish a notice for market participants. In such cases, capacity calculation outputs shall be provided by the RCC to the MCO as soon as possible.
3. Market participants shall submit all orders to the relevant NEMOs before or after the continuous trading opening time and until the continuous trading closure time.
4. Each NEMO shall submit orders received in accordance with paragraph 3 to the MCO anonymised and without delay.

Article 51. Article 58

##### **Coupling**

1. The MCO shall use the continuous trading algorithm and the following inputs to produce results specified in paragraph 2:
  - (a) validated capacity calculation outputs, in accordance with Article 35; and
  - (b) orders submitted in accordance with Article 50.4.

2. The MCO shall use the continuous trading algorithm and the inputs specified in paragraph 1 and produce at least the following results:
  - (a) price per trade in EUR/MWh;
  - (b) a net position for each bidding zone, scheduling area and NEMO trading hub for each market time unit;
  - (c) the information which enables the execution status of orders to be determined; and
  - (d) information needed to assess the compliance of results with capacity calculation outputs.
3. The MCO shall ensure the accuracy and efficiency of results produced by the continuous trading algorithm.
4. No later than the relevant times specified in the intraday timings and procedures as set out in Article 43.2(i), the MCO shall deliver the continuous trading results:
  - (a) to each TSO, each RCC and each NEMO, for the results specified in paragraph 2(a), (b) and (d); and
  - (b) to each NEMO, for information specified in paragraph 2(c) for all orders which are or have been accessible for trade in its NEMO trading hub.
5. Orders matched in the continuous trading shall be considered firm.
6. The MCO shall provide to each TSO for each scheduling area separately its position equal to the sum of:
  - (a) external commercial trade schedules arising from exchanges of energy between NEMO trading hubs; and
  - (b) the internal commercial trade schedules arising from exchange of energy between the MCO and the NEMO trading hub.
7. Such trade schedules shall be based on :
  - (a) NEMO trading hub net positions produced in accordance with paragraph 2(b) ;
  - (b) scheduled exchanges calculated in accordance with Article 44.
8. The MCO shall provide the relevant TSOs and NEMOs with the results of the calculation of scheduled exchanges from the continuous trading by the SIDC deadline for delivery of scheduled exchanges calculation results, in accordance with Article 43(2)(j).
9. The MCO shall act as the central counterparty to each NEMO for the exchange of energy between NEMO trading hubs with regard to the related financial rights and obligations arising from these energy exchanges.
10. The MCO shall bear balance responsibility for all energy exchanges between NEMO trading hubs in accordance with national terms and conditions for balancing.

11. Throughout the intraday timeframe, the capacity calculation outputs provided pursuant to paragraph 1 shall be available in the capacity management module and continuously updated. This module may be used also for the allocation of cross-zonal capacities after the intraday cross-zonal gate closure time for exchanges of balancing energy until an equivalent functionality is implemented for the balancing timeframe.

Article 52. Article 58A

### **Post-coupling**

1. Each NEMO shall have the possibility to verify that continuous trading results referred to in Article 51.2(c) have been calculated in accordance with the orders.
2. Each NEMO shall inform without delay the market participants on the execution status of all orders which are or have been accessible for trade in its NEMO trading hub.
3. Each NEMO shall act as the central counterparty to market participants for all matched orders resulting from continuous trading with regard to the related financial rights and obligations. Each NEMO shall ensure clearing and settlement of all matched orders in a timely manner.
4. Each NEMO shall act as the counterparty to the MCO for the exchange of energy of the relevant NEMO trading hubs with regard to the related financial rights and obligations.
5. Each NEMO shall bear balance responsibility for all energy exchanges of their NEMO trading hubs towards their market participants in accordance with national terms and conditions for balancing.
6. Each NEMO shall maintain anonymity between market participants.
7. Each NEMO shall provide to each TSO for each scheduling area separately its position equal to the sum of:
  - (a) internal commercial trade schedules between the MCO and the NEMO trading hub; and
  - (b) internal commercial trade schedules between the NEMO trading hub and its market participants.
8. Such trade schedules shall be based on:
  - (a) NEMO trading hub net positions produced in accordance with Article 51(2)(b); and
  - (b) scheduled exchanges calculated in accordance with Article 44.

## **SECTION 2**

### ***INTRADAY AUCTIONS***

Article 53. Article 63B

#### **Pre-coupling**

1. Each RCC shall ensure that the capacity calculation outputs are provided to the MCO by the deadlines for delivery of capacity calculation outputs to the MCO, in accordance with Article 43.2(d).
2. If an RCC is unable to provide the capacity calculation outputs in accordance with paragraph 1, it shall notify the MCO and the relevant NEMOs and TSOs. The MCO shall immediately publish a notice for market participants. In such cases, capacity calculation outputs shall be provided by the RCC to the MCO no later than the intraday auction gate closure time.
3. Market participants shall submit all orders to the relevant NEMOs until the intraday auction gate closure time.
4. After the intraday auction gate closure time, the orders submitted to the relevant intraday auction shall be considered firm.
5. Each NEMO shall submit orders received in accordance with paragraph 3 to the MCO anonymised and no later than the deadline for provision of received orders from NEMOs to MCO for intraday auctions, in accordance with Article 43.2(e).

Article 54. Article 63B

#### **Coupling**

1. The MCO shall use the intraday auction algorithm and the following inputs to produce results specified in paragraph 2:
  - (a) validated capacity calculation outputs, in accordance with Article 35; and
  - (b) orders submitted in accordance with Article 53.5.
2. The MCO shall use the intraday auction algorithm and the inputs specified paragraph 1 and produce at least the following results for each market time unit:
  - (a) a reference clearing price for each bidding zone and market time unit in EUR/MWh;
  - (b) a net position for each bidding zone, scheduling area and NEMO trading hub for each market time unit;

- (c) the information which enables the execution status of orders to be determined; and
  - (d) information needed to assess the compliance of results with capacity calculation outputs.
3. The MCO shall ensure the accuracy and efficiency of results produced by the intraday auction algorithm.
4. No later than by the relevant times specified in the intraday timings and procedures as set out in Article 43.2(i), the MCO shall deliver the intraday auction results:
- (a) to each TSO, each RCC and each NEMO, for the results specified in paragraph 2(a), **Error! Reference source not found.** and (d); and
  - (b) to each NEMO, for the results specified in paragraph 2(c).
5. The MCO shall provide to each TSO for each scheduling area separately its position equal to the sum of:
- (a) external commercial trade schedules arising from exchanges of energy between NEMO trading hubs; and
  - (b) the internal commercial trade schedules arising from exchange of energy between the MCO and the NEMO trading hub.
6. Such trade schedules shall be based on :
- (a) NEMO trading hub net positions produced in accordance with paragraph 2(b);
  - (b) scheduled exchanges calculated in accordance with Article 44.
7. The MCO shall provide the relevant TSOs and NEMOs with the results of the calculation of scheduled exchanges from the single day-ahead coupling by the intraday auction deadline for delivery of scheduled exchanges calculation results, in accordance with Article 43(2)(j).
8. The MCO shall act as the central counterparty to each NEMO for the exchange of energy between NEMO trading hubs with regard to the related financial rights and obligations arising from these energy exchanges.
9. The MCO shall bear balance responsibility for all energy exchanges between NEMO trading hubs in accordance with national terms and conditions for balancing.
10. The MCO shall collect the congestion income arising from the intraday auctions.
11. The MCO shall ensure that collected congestion income is transferred to the entity performing the task pursuant to Article 18.1(n) in line with the single unified deadline for payments in accordance with the methodology for clearing and settlement between NEMO trading hubs, pursuant to Article 45.
12. The MCO shall distribute congestion income to TSOs in accordance with the congestion income distribution methodology, in accordance with Article 46, as soon as reasonably practicable and no later than one week after the congestion income has been transferred pursuant to paragraph 11.

Article 55. Article 63F

**Post-coupling**

1. Each NEMO shall have the possibility to verify that the intraday auction results referred to in Article 54.2(c) have been calculated in accordance with the orders.
2. Each RCC and each TSO shall have the possibility to verify that the intraday auction results referred to in Article 54.2 have been calculated in accordance with capacity calculation outputs.
3. Each NEMO shall publish the intraday auction results simultaneously with all other NEMOs and inform the market participants on the execution status of their orders without delay.
4. Each NEMO shall act as the central counterparty to market participants for all matched orders resulting from the intraday auctions with regard to the related financial rights and obligations. Each NEMO shall ensure clearing and settlement of all matched orders in a timely manner.
5. Each NEMO shall act as the counterparty to the MCO for the exchange of energy of the relevant NEMO trading hubs with regard to the related financial rights and obligations.
6. Each NEMO shall bear balance responsibility for all energy exchanges of their NEMO trading hubs towards their market participants in accordance with national terms and conditions for balancing.
7. Each NEMO shall maintain anonymity between market participants.
8. Each NEMO shall provide to each TSO for each scheduling area separately its position equal to the sum of:
  - (a) internal commercial trade schedules between the MCO and the NEMO trading hub; and
  - (b) internal commercial trade schedules between the NEMO trading hub and its market participants.
9. Such trade schedules shall be based on:
  - (a) NEMO trading hub net positions produced in accordance with Article 54.2(b); and
  - (b) scheduled exchanges calculated in accordance with Article 44.

**CHAPTER 4**

**FIRMNESS OF ALLOCATED CROSS-ZONAL CAPACITY**

Article 56. Article 70/71

**Firmness of intraday and day-ahead cross-zonal capacity**



1. The capacity calculation outputs provided by the RCCs to the MCO for allocation via implicit auctions, in accordance with Article 47 and Article 53, shall be firm at the time of their publication to the market participants.
2. The capacity calculation capacity outputs provided by the RCCs to the MCO for allocation via continuous trade, in accordance with Article 50 shall be firm as soon as it is allocated.

Article 57. Article 72

**Firmness in the event of *force majeure* or emergency situations**

1. In the event of *force majeure* or an emergency situation referred to in Article 16(2) of Regulation (EU) 2019/943 each TSO shall have the right to curtail allocated cross-zonal capacity. In all cases, curtailment shall be undertaken in a coordinated manner following liaison with the respective RCC.
2. A TSO which invokes *force majeure* or an emergency situation shall publish a notice explaining the nature of the *force majeure* or the emergency situation and its probable duration. This notice shall be made available to the market participants concerned by each NEMO. If capacity is allocated explicitly to market participants, the TSO invoking *force majeure* or an emergency situation shall send notice directly to contractual parties holding cross-zonal capacity for the relevant market timeframe.
3. If allocated cross-zonal capacity is curtailed because of force majeure or an emergency situation invoked by a TSO, the TSO shall reimburse or provide compensation for the period of force majeure or the emergency situation, in accordance with the following requirements:
  - (a) In case of an implicit auction, the MCO nor each NEMO shall be subject to financial damage or financial benefit arising from any imbalance created by such curtailment;
  - (b) in the event of force majeure, if capacity is allocated via explicit auction, market participants shall be entitled to reimbursement of the price paid for the capacity during the explicit auction process;
  - (c) in an emergency situation, if capacity is allocated via explicit auction, market participants shall be entitled to compensation equal to the price difference of relevant markets between the bidding zones concerned in the relevant timeframe; or
  - (d) in an emergency situation, if capacity is allocated via explicit auction but the bidding zone price is not calculated in at least one of the two relevant bidding zones in the relevant timeframe, market participants shall be entitled to reimbursement of the price paid for capacity during the explicit auction process.
4. The TSO invoking force majeure or an emergency situation shall limit the consequences and duration of the force majeure situation or emergency situation.
5. Where a Member State has so provided, upon request by the TSO concerned the national regulatory authority shall assess whether an event qualifies as force majeure.

## TITLE V

### ***BIDDING ZONE REVIEW PROCESS***

Article 58. Article 32

#### **Reviewing existing bidding zone configurations**

1. A review of an existing bidding zone configuration may be launched by:
  - (a) ACER or one or several regulatory authorities, pursuant to the evidences in the technical report on structural congestions and other major physical congestions between and within bidding zones issued by ENTSO for Electricity according to Article 62.1;
  - (b) TSOs of a capacity calculation region, together with all concerned TSOs whose control areas, including interconnectors, are within the geographic area in which the bidding zone configuration shall be assessed,
  - (c) one single Member State, the regulatory authority or the TSO(s) with the approval of the competent regulatory authority, for the bidding zone(s) inside the Member State, if the bidding zone configuration has negligible impact on the TSOs' control areas of neighbouring Member States, including interconnectors, and the review of bidding zone configuration is necessary to improve economic efficiency, to maximise cross-zonal trading opportunities, or to maintain operational security;
  - (d) Member States or their designated competent authorities.
2. If a review is launched in accordance with paragraph 1(a), 1(b) or 1(d), the following conditions shall apply:
  - (a) the entity launching the review shall specify the geographic area consisting of bidding zones and bidding zones borders in which the bidding zone configuration shall be assessed;
  - (b) the participating TSO(s) shall be the TSO(s) in which the bidding zone configuration shall be assessed;
  - (c) the relevant TSOs, regulatory authorities and Member States are the, TSOs, regulatory authorities and Member States that are within any of the capacity calculation regions of which the bidding zones borders referred to in a) are part of.
3. If a review is launched in accordance with paragraph 1(a), the following conditions shall apply:
  - (a) the geographic area in which bidding zone configuration is assessed shall be limited to the control area of the TSO(s), including interconnectors, of the Member State where the review is launched;
  - (b) the TSO(s) of the Member State shall be the only TSO(s) participating and relevant in the review;

(c) the competent regulatory authority and the competent Member State shall be the only regulatory authority and Member States participating and relevant in the review; and

(d) the entity launching the review, shall give all TSOs and regulatory authorities that are in the neighbouring Member States mutually agreed prior notice of the launch of the review; the entity launching the review shall in particular provide a justification of the negligible impact of the bidding zone configuration in neighbouring Member States.

4. When launching the review, pursuant to paragraph 1, the entities launching the review may provide guidance on how to identify the alternative bidding zone configurations to be considered. The participating TSOs shall take into account the guidance when developing the proposal for the alternative bidding zone configurations pursuant to paragraph 5(a)ii.

5. The review process shall consist of two steps.

(a) In the first step:

i. the participating TSOs shall develop a proposal for the methodology and assumptions to be used for the specific bidding zone review. Such a proposal shall take into duly account the methodology and assumptions developed according to Article 14(5) of Regulation 2019/943.

ii. the participating TSOs shall develop a proposal for the alternative bidding zone configurations to be considered for the review.

iii. the proposals on methodology and assumptions and alternative bidding zone configurations shall be submitted to the relevant regulatory authorities, no later than three months after the launch of the review;

iv. the relevant regulatory authorities shall take a unanimous decision within three months from the receipt by the regulatory authorities, or, where applicable, by the last relevant regulatory authority;

v. where the regulatory authorities have not been able to reach agreement within the period referred to in paragraph 5(a)(iv), or upon their joint request, ACER shall, within additional three months, adopt a decision on the methodology and assumptions and the alternative bidding zone configurations to be considered.

(b) In the second step, the participating TSOs shall:

i. assess and compare the current bidding zone configuration and each alternative bidding zone configuration using the criteria specified in 5;

ii. prepare a draft report including the approved methodology, assumptions and alternative bidding zone configurations, the results of the bidding zone review comparing the existing bidding zone configuration with alternatives, the proposal to maintain or amend bidding zone configurations, and, in case of the latter, the proposed timescales for the implementation of the new bidding zone configuration;

iii. submit the report on bidding zone review as along with the joint proposal to maintain or amend the bidding zone configuration to the relevant Member States or their designated competent authorities, and to the relevant regulatory authorities and to the relevant TSOs for

information only, within 12 months after the approval of the proposal on methodology assumptions and alternative bidding zone configurations pursuant to paragraph 5(a)iv or 5(a)v.

6. During the whole review process the participating TSOs shall organise a regular involvement of stakeholders in the process. After submission of the report the concerned Member States with the support of the concerned TSOs shall organise a public consultation on the draft report and proposal.
7. The relevant Member States or their designated competent authorities shall reach an agreement on the proposal to maintain or amend the bidding zone configuration within six months upon receiving the report and proposal.
8. Any decision adopted pursuant to this Article shall specify the date of implementation of any changes to the bidding zone configuration. That implementation date shall balance the need for expeditiousness with practical considerations, including forward trade of electricity. The decision may establish appropriate transitional arrangements.
9. NEMOs or market participants shall, if requested by TSOs, provide the participating TSOs with information to enable them to assess bidding zone configurations. This information shall be shared only between the participating TSOs for the sole purpose of assessing bidding zone configurations.
10. The initiative for the review of the bidding zones configuration, the methodology the assumptions, and the relevant input data used for the bidding zone review, the alternative bidding zone configurations, the results of the simulations and the proposal to the relevant Member States or to their designated competent authorities shall be published by the participating TSOs.
11. The provisions of this Article, shall be without prejudice to the right of each Member State to unilaterally review and amend its bidding zone configuration pursuant to Article 14(7) of the Regulation 2019/943.

Article 59.      Article 33

**Criteria for reviewing bidding zone configurations**

1. The configuration of bidding zones in the Union shall be designed in accordance with Article 14(1) of Regulation (EU) 2019/943.
2. The configuration of the bidding zones shall be assessed on the basis of Article 14(3) of the Regulation 2019/943
3. A bidding zone review pursuant to Article 58 shall at least consider the following criteria:
  - (a) in respect of network security:
    - i. the ability of bidding zone configurations to ensure operational security, including the amount of remedial actions necessary to ensure operational security after the market outcome, and security of supply;
    - ii. the degree of uncertainty in cross-zonal capacity calculation.
  - (b) in respect of overall market efficiency:

- i. any increase or decrease in economic efficiency arising from the change, comprising both the change in economic surplus resulting from the market outcome and the change in the cost of applying remedial actions to ensure that the market outcome is feasible;
  - ii. market efficiency, including, at least market liquidity, market concentration and market power, price signals for building infrastructure and the accuracy and robustness of price signals;
  - iii. transaction and transition costs, including the cost of amending existing contractual obligations incurred by market participants, NEMOs and TSOs;
  - iv. the cost of building new infrastructure which may relieve existing congestion;
  - v. any adverse effects of internal transactions on other bidding zones to enable the maximisation of cross-zonal capacity in line with Article 16 of Regulation (EU) 2019/943;
  - vi. the impact on the operation and efficiency of the balancing mechanisms and imbalance settlement processes.
- (c) in respect of the stability and robustness of bidding zones:
- i. the need for bidding zones to be sufficiently stable and robust over time, while considering infrastructure development projects pursuant to paragraph (a);
  - ii. the need for each generation and load unit to belong to only one bidding zone for each market time unit;
  - iii. the location and frequency of congestion, if structural congestion influences the delimitation of bidding zones, taking into account investments, pursuant to paragraph (a), which may relieve existing congestion;
- (d) the ability of bidding zones to ensure that the energy transition targets are met in a cost efficient and timely manner, including through cost-efficient investments in network infrastructure.
4. A bidding zone review in accordance with Article 58 shall include scenario(s) which take due account of tangible progress on infrastructure development projects that are expected to be realised within the three years starting from the year following the year in which the decision to launch the review was taken.

## **TITLE VI**

### ***REPORTING AND IMPLEMENTATION MONITORING***

#### **CHAPTER 1**

#### **REPORTING**

Article 60. Article 31

##### **Biennial report on market coupling**

1. By the 30<sup>th</sup> of June of the year following the entry into force of this Regulation the joint decision making body shall draft a report on the single day-ahead and intraday coupling covering the last two calendar years and submit it to ACER.
2. In every second subsequent year the report referred to in paragraph 1 shall be drafted, compiled and submitted to ACER.
3. Before drafting the report the joint decision making body shall prepare a proposal for a draft report. This proposal shall define the structure of the report, the content and performance indicators that will be used in the report. The proposal shall be delivered to ACER which may request amendments within two months after the submission of the proposal.
4. The report on market coupling shall contain at least:
  - (a) the assessment of benefits of single day-ahead and intraday coupling;
  - (b) the summary of costs of single day-ahead and intraday coupling;
  - (c) the future evolution of single day-ahead and intraday coupling;
  - (d) identification of problems related to implementation and operation of single day-ahead and intraday coupling; and
  - (e) recommendations for further development of single day-ahead and intraday coupling, including further harmonisation and optimisation of methodologies, procedures and governance.
5. ACER shall publish the biennial report.

Article 61. Article 31

##### **Biennial report on capacity calculation**

1. By 31<sup>st</sup> of May of the year following the entry into force of this Regulation, each RCC shall draft a report on capacity calculation covering last two calendar years. ENTSO for Electricity shall compile all the reports provided by the RCCs and submit it to ACER by 30th of June 2024.
2. In every second subsequent year the report referred to in paragraph 1 shall be drafted, compiled and submitted to ACER.
3. Before drafting the report the ENTSO-E in coordination with RCCs shall prepare a proposal for a draft report. This proposal shall define the structure of the report, the content and performance indicators that will be used in the report. The proposal shall be delivered to ACER which shall be entitled to require amendments within two months after the submission of the proposal.
4. For each bidding zone, bidding zone border, capacity calculation region and capacity calculation timeframe, the report on capacity calculation shall contain at least:
  - (a) the capacity calculation approach used;
  - (b) statistical indicators on reliability margins;
  - (c) statistical indicators of capacity calculation outputs for each capacity calculation timeframe;
  - (d) quality indicators for the information used for the capacity calculation; and
  - (e) where appropriate, proposed measures to improve capacity calculation.
5. ACER shall publish the biennial report.

Article 62. Article 34

**Regular reporting on current bidding zone configuration by ENTSO for Electricity**

1. Every three years, the ENTSO for Electricity shall issue a technical report on the structural congestions and other major physical congestions between and within bidding zones observed in the current bidding zone configuration, pursuant to Article 14(2) of Regulation (EU) 2019/943. Based on the technical report of ENTSO-E and the report on the results of the monitoring the wholesale markets in electricity, pursuant to Article 15(1) of Regulation (EU) 2019/942, ACER shall assess the efficiency of current bidding zone configuration.
2. The technical report referred to in paragraph 1 shall include at least:
  - (a) a list of structural physical congestions and other major physical congestions that occur with significant frequency, including locations and frequency of such congestions; **OPTION 2:** For the purpose of this report, a frequency of occurrence of at least two percent shall be used.
  - (b) an analysis of the expected evolution of physical congestions resulting from investment in networks or from significant changes in generation or in consumption patterns, in the following three years;
  - (c) a flow decomposition analysis aiming to identify the bidding zones originating the exchanges impacting the structurally congested network elements, pursuant to the prevailing flow decomposition method;

- (d) an assessment of whether the cross-zonal trade capacity reached the linear trajectory pursuant to the action plans pursuant to Article 15 of Regulation (EU) 2019/943 or the minimum capacity pursuant to Article 16(8) of the same Regulation;
  - (e) data on volumes and costs of remedial actions associated to all network congestions and firmness costs; .
3. Each TSO shall provide data and analysis to allow the technical report on current bidding zone configuration to be produced in a timely manner.
4. ENTSO for Electricity shall submit to ACER the technical report on structural congestions of the current bidding zone configuration, pursuant to paragraph 1 every third year by 30th September. By the same deadline each TSO with identified structural congestions shall submit the report to the competent regulatory authority and to the competent Member State or its designated competent authority.
5. The technical report on current bidding zone configuration shall cover the last three full calendar years preceding the year on which it is submitted.
6. Without prejudice to the confidentiality obligations provided for in Article 7, ENTSO for Electricity shall make the technical report available to the public.

#### Article 63. Article 30B

#### **Reporting on capacity validation**

1. Each RCC shall, every three months, report all reductions made during coordinated and individual validation of cross-zonal capacity in accordance with **Error! Reference source not found.** and Article 34 to all regulatory authorities of the capacity calculation region and to ACER and publish it on the platform which shall be determined in the capacity calculation methodology. The report shall:
- (a) specify the amount of any reduction in cross-zonal capacity due to capacity validation;
  - (b) provide reasons for cross-zonal capacity reduction and whether they comes from coordinated or individual validation (in the latter case specifying the TSOs applying the reduction);
  - (c) in case the reasons are violation of thermal limits, provide the identification of network elements causing such reduction with at least:
    - i. the location and name of a network element and associated contingency;
    - ii. maximum flow on such network element;
    - iii. forecasted flow causing the reduction and demonstrating the violation of thermal limits;
    - iv. realised flow on the same network element and with same contingency;
2. The capacity calculation methodology pursuant to Article 26 may provide further requirements for reporting on capacity validation.



## CHAPTER 2

### *IMPLEMENTATION MONITORING*

Article 64. Article 82

#### **Monitoring of the implementation of single day-ahead and intraday coupling**

1. ACER and regulatory authorities shall monitor the functioning and performance of the single day-ahead and intraday coupling. All regulatory authorities, in coordination with ACER, shall monitor the compliance of the MCO in accordance with Article 13. ACER and regulatory authorities shall fully cooperate and shall provide each other access to all necessary information in order to ensure proper monitoring and functioning of the single day-ahead and intraday coupling in accordance with Article 61 of Electricity Directive (EU) 2019/944.
2. ACER, in cooperation with ENTSO for Electricity, shall draw up by six months after the entry into force of this Regulation a list of the relevant information to be communicated by ENTSO for Electricity to ACER in accordance with Articles 30(5) of Regulation (EU) 2019/943. 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 ACER.
3. Each TSOs shall submit to ENTSO for Electricity the information required to perform the tasks in accordance with paragraph 2.
4. The MCO, the joint decision making body, each NEMO, market participants and relevant delegated entities regarding single day-ahead and intraday coupling shall, at the joint request of ACER and the ENTSO for Electricity, submit to the ENTSO for Electricity the information required for monitoring in accordance with paragraph 2, except for information already obtained by the regulatory authorities, ACER or the ENTSO for Electricity in the context of their respective tasks.

## TITLE VII

### *TRANSITIONAL AND FINAL PROVISIONS*

Article 65. Article 83

#### **Transitional provisions**

1. From the date of the entry into force of this Regulation all TSOs and all NEMOs shall:
  - (a) develop and submit for approval no later than six months after entry into force of this Regulation:
    - i. the market coupling organization in accordance with Article 15.1 and the requirements for ensuring the continuity of single day-ahead or intraday in accordance with Article 16.1;

- ii. the methodology on eligible costs in accordance with Article 22.1;
  - iii. the methodology on requirements for clearing and settlement between NEMO trading hubs in accordance with Article 45.1;
- (b) develop and submit for approval no later than twelve months after entry into force of this Regulation:
- i. products that can be accommodated in the single day-ahead and intraday coupling process in accordance with Article 39.1;
  - ii. the algorithm methodology in accordance with Article 41.1;
  - iii. the day-ahead timings and procedures in accordance with Article 42.1;
  - iv. the intraday timings and procedures in accordance with Article 43.1;
- (c) develop and submit for approval no later than eighteen months after entry into force of this Regulation:
- i. the common methodologies for the calculation of scheduled exchanges in accordance with Article 44.1;
  - ii. the methodology on the publication of information in accordance with Article 8.1;
2. From the date of entry into force of this Regulation until the implementation of intraday auctions pursuant to Article 53, Article 54, Article 55, Article 63 of the repealed Commission Regulation (EU) 2015/1222 shall apply. When intraday auctions are implemented on the relevant borders the complementary regional auctions shall cease to exist.

Article 66. Article 84

### **Entry into force**

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

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

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ANNEX

***CORRELATION TABLE***

<b>Commission Regulation (EU) 2015/1222 (CACM Regulation)</b>	<b>Amended CACM Regulation Amendment new TITLE#.CH# Article #</b>	
Article 1	I	Article 1
Article 2	I	Article 2
Article 3	I	Article 3
Article 4	II.1	Article 10
Article 5	II.1	Article 11
Article 6	II.1	Article 12
Article 7 (1)	II.3	Article 19
Article 7 (2)	II.3	Article 18.1
	II.2	Article 13.1-4
Article 7 (3)	II.2	Article 15 / 17
Article 7 (4)	II.2	Article 13.5
Article 7 (5)	II.2	Article 13.6
Article 7 (6)		-
	II.2	Article 14
	II.2	Article 16
Article 8	II.3	Article 20
Article 9	I	Article 4
Article 10	II.2	Article 13.1/13.3c
Article 11	I	Article 5
Article 12	I	Article 6
Article 13	I	Article 7

<b>Commission Regulation (EU) 2015/1222 (CACM Regulation)</b>	<b>Amended CACM Regulation Amendment new TITLE#.CH# Article #</b>	
Article 14	III.1	Article 24
Article 15	III.1	Article 23
Article 16	SOGL.1	SOGL Article 40,46,52
Article 17	SOGL.1	SOGL Article 64,70
Article 18	SOGL.1	SOGL Article 64,70
Article 19	SOGL.1	SOGL Article 64,70
Article 20 (rest)	III.1	Article 25
Article 20 (2)	III.2	Article 26(1),(7)-(9)
Article 21	III.2	Article 26(2) – (4)
Article 22	III.2	Article 27
Article 23 (1) and (2)	III.2	Article 28
Article 23(3)	III.2	Article 29
Article 24	III.2	Article 30
Article 25	III.2	Article 31
Article 26		-
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Article 27(4)	III.2	Article 26(6)
Article 28	SOGL.1	SOGL Article 64,70
Article 29	III.3	Article 32
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Article 30 (1) and (2)	III.3	Article 34
Article 30(3)	III.3	Article 35
Article 31	VI.1	Article 60,61

<b>Commission Regulation (EU) 2015/1222 (CACM Regulation)</b>	<b>Amended CACM Regulation Amendment new TITLE#.CH# Article #</b>	
Article 32	V.1	Article 58
Article 33	V.1	Article 59
Article 34	VI.1	Article 62
	VI.1	Article 63
Article 35	SOGL.2	SOGL Article 76
Article 36 (1)and (2)	II.3	Article 18.1(a)
Article 36	IV.1.1	Article 36
Article 36(3)	IV.1.3	Article 42
Article 37	IV.1.2	Article 41
Article 38	IV.1.1	Article 38.1
Article 39	IV.2	Article 48,49
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Article 41	IV.1.2	Article 40
Article 42	IV.1.1	Article 37.1
Article 43	IV.1.3	Article 44
Article 44	IV.1.3	Article 42
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Article 46	IV.2	Article 47
Article 47	IV.1.3	Article 43,47
Article 48	IV.2	Article 49
Article 49	II.3	Article 18.1(h)
Article 50	IV.1.3	Article 42
Article 51	IV.1.1	Article 38.2

<b>Commission Regulation (EU) 2015/1222 (CACM Regulation)</b>	<b>Amended CACM Regulation Amendment new TITLE#.CH# Article #</b>	
Article 52	IV.3.1	Article 52
Article 53	IV.1.2	Article 39
Article 53	IV.1.3	Article 43
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Article 56	IV.1.3	Article 44
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Article 58	IV.3.1	Article 50
Article 59	IV.1.3	Article 43
Article 60	IV.3.1	Article 51,52
Article 61	II.3	Article 18.1(h)
Article 62	I	Article 8
Article 63		-
-	IV.3.2	Article 53,54
-	IV.3.2	Article 55
Article 64		-
Article 65		-
Article 66		-
Article 67		-
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Article 71	IV.4	Article 56

<b>Commission Regulation (EU) 2015/1222 (CACM Regulation)</b>	<b>Amended CACM Regulation Amendment new TITLE#.CH# Article #</b>	
Article 72	IV.4	Article 57
Article 73	IV.1.3	Article 46
Article 74	SOGL.2	SOGL Article 76
Article 75 (1)	II.4	Article 21
Article 75 (2) and (3)	II.4	Article 22
Article 76	II.4	-
Article 77	IV.1.3	Article 45
Article 78	II.4	Article 21
Article 79	II.4	Article 21.4
Article 80	II.4	Article 22
Article 81	I	Article 9
Article 82	VI.2	Article 64
Article 83	VII	Article 65
Article 84	VII	Article 66