

Annex 1a – Amended CACM Regulation TC compared to the current 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 <u>infor</u> 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 <u>infor</u> 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 (EC) No 714/2009 sets out non-discriminatory EU) 2019/943 establishes the rules to ensure the functioning of the internal market for access conditions to the network for cross-border exchanges in electricity—and, in particular, the rules on capacity allocation and congestion management for interconnections and transmission systems affecting cross border electricity flows.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 and trade in electricity should be further harmonised. This Regulation therefore sets out minimum harmonised rules for the ultimately single competition and market coupling of all electricity supply and demand in the Union in the day-ahead and intraday eoupling, in order to provide a clear legal framework for-timeframe supported by an

ACER European Union Agency for the Cooperation of Energy Regulators

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efficient and modern-capacity allocation and congestion management system, facilitating. This should facilitate Union-wide trade in electricity, allowing more efficient use of the network and increasinge 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.

<u>6.</u> To implement single day ahead and intraday coupling, the available cross border calculate cross-zonal capacities between bidding zones this Regulation establishes capacity calculation regions as geographical areas in which capacity calculation needs to be calculated in a fully coordinated manner by theand 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'). For this purpose, they should establish a common grid model including estimates on generation, load and network status for each hour. The available capacity should normally be calculated according to the so-called 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 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 ealeulation method, a method that takes into account that electricity can approach or coordinated net transmission capacity approach. The flow-via different paths and optimises the available capacity in-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 grids. 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.

<u>4.8.</u> The outputs of capacity calculation are the available cross-border capacity should be zonal capacities and allocation constraints and these are one of the key inputs into the further calculations ingle day-ahead and intraday coupling. In this process, in which all Union bids and offers



reflecting all supply and demand in the Union, collected by power exchanges, Nominated Electricity Market Operators (hereinafter 'NEMOs'), are matched, in an economically optimal manner, while taking into account available cross-border capacity in an economically optimal manner.zonal capacities and allocation constraints to match the bids and offers located in different bidding zones. Single day-ahead and intraday coupling ensures that power usually 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.

5.9. 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 power exchanges NEMOs, RCCs and TSOs on a non-discriminatory basis. Based on the results of the calculation by the MCO, the power exchanges 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 and intraday coupling is similar, with the exception that based on a single auction, whereas for the intraday coupling should use a the process consists of continuous process trading coupling.

6. Capacity calculation for the day-ahead and intraday market time-frames should be coordinated at least at regional level to ensure that capacity calculation is reliable and that optimal capacity is made available to the market. Common regional capacity calculation methodologies should be established to define inputs, calculation approach and validation requirements. Information on available capacity should be updated in a timely manner based on latest information through an efficient capacity calculation process.

7. There are two permissible approaches when calculating Cross-zonal capacity: flow based or based on coordinated net transmission capacity. The flow based approach should be used as a primary approach for day ahead and intraday capacity calculation where cross zonal capacity between bidding zones is highly interdependent. The flow based approach should only be introduced after market participants have been consulted and given sufficient preparation time to allow for a smooth transition. The coordinated net transmission capacity approach should only be applied in regions where cross zonal capacity is less interdependent and it can be shown that the flow based approach would not bring added value.

8. A common grid model for single day-ahead and intraday coupling purposes representing the European interconnected system should be established to calculate cross zonal capacity in a coordinated way. The common grid model should include a model of the transmission system with the location of generation units and loads relevant to calculating cross zonal capacity. The provision of accurate and timely information by each TSO is essential to the creation of the common grid model.

9. Each TSO should be required to prepare an individual grid model of its system and send it to TSOs responsible for merging them into a common grid model. The individual grid models should include information from generation and load units.

10. TSOs should use a common set of remedial actions such as countertrading or redispatching to deal with both internal and cross-zonal congestion. In order to facilitate more efficient capacity allocation and to avoid unnecessary curtailments of cross-border capacities, TSOs should coordinate the use of remedial actions in capacity calculation.

11. Bidding zones reflecting supply and demand distribution are a cornerstone of market-based electricity trading and are a prerequisite for reaching the full potential of capacity allocation methods



including the flow based method. Bidding zones therefore should be defined in a manner to ensure efficient congestion management and overall market efficiency. Bidding zones can be subsequently modified by splitting, merging or adjusting the zone borders. The bidding zones should be identical for all market time frames. The review process of bidding zone configurations provided for in this Regulation will play an important role in the identification of structural bottlenecks and will allow for more efficient bidding zone delineation.

12. TSOs should implement coordinated redispatching of cross-border relevance or countertrading at regional level or above regional level. Redispatching of cross-border relevance or countertrading should be coordinated with redispatching or countertrading internal to the control area.

13.10. Capacity should be allocated in the day-ahead and intraday market time-framestimeframes using implicit allocation-methods, in particular 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 of implicit auction should rely on effective and timely interfaces between MCO, NEMOs, TSOs, power exchanges RCCs and a series of other parties to ensure capacity is that cross-zonal capacities are allocated and congestion is managed in an efficient manner.

14. For efficiency reasons and in order to implement single day-ahead and intraday coupling as soon as possible, single day-ahead and intraday coupling should make use of existing market operators and already implemented solutions where appropriate, without precluding competition from new operators.

15. The Commission, in cooperation with the Agency for the Cooperation of Energy Regulators (hereinafter the 'Agency') may create or appoint a single regulated entity to perform common MCO functions relating to the market operation of single day ahead and intraday coupling.

16. The development of more liquid intraday markets which give parties the ability to balance their positions closer to real time should help to integrate renewable energy sources into the Union electricity market and thus, in turn, facilitate renewable energy policy objectives.

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

12. In order forto ensure the implicit auctions to take placeclose cooperation among TSOs, NEMOs and regulatory authorities, a robust, reliable and non-discriminatory Union-wide, it is necessary to ensure Union wide price governance framework for single day-ahead and intraday coupling process. This process should respect transmission capacity and allocation constraints be established.

13. The management of single day-ahead and intraday coupling should be designed in a manner that allows 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 its application or extension across the entire Union and for the MCO tasks.

18.14. Establishment of such entity is needed to ensure better and faster_development of single dayahead 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 product types. <u>NEMOs</u>, more coordinated development of solutions and higher level of continuity of the single day-ahead and intraday coupling.

<u>15.</u> <u>Power exchanges As all NEMOs and all TSOs are jointly responsible for organising the</u> 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.

19:16. In single day-ahead and intraday coupling, each scheduling area should be covered by at least one NEMO to collect bids and offers within different time-frames which that serve as a necessary input for eapacity calculation in the single day-ahead and intraday coupling-process. Hence, the rules for the trading of electricity provided for in this Regulation require an institutional framework for power exchanges. Common that ensures that at least one NEMO operates in each scheduling area at all times. This framework includes requirements for the designation of nominated electricity market operators (hereinafter NEMOs) 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 their tasks should facilitate the achievement of the aims of Regulation (EC) No 714/2009 and allow continuity of the single day-ahead and intraday coupling to take due account of the internal market for the case where no NEMO offers trading services in a scheduling area.

20. Establishing single day-ahead and intraday coupling process requires cooperation between potentially competing power exchanges in order to establish common market coupling functions. That is why oversight and compliance with competition rules is of utmost importance regarding these common functions.

21. Despite the creation of a reliable algorithm to match bids and offers and appropriate back-up processes, there may be situations where the price coupling process is unable to produce results. Consequently, it is necessary to provide for fallback solutions at a national and regional level to ensure capacity can still be allocated.

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.

22.19. Reliable pricing of transmission capacity should be introduced for the intraday market timeframecross-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.



23.20. Any costs of TSOs incurred efficiently to guarantee firmness of <u>eapaeitycross-zonal capacities</u> and to <u>set up processesperform the tasks given</u> to <u>comply withthem by</u> this Regulation should be recovered via network tariffs or appropriate mechanisms in a timely manner. <u>NEMOs, including in performing MCO functions should be entitled to recover their incurred costs if they are efficiently incurred, reasonable and proportionate. 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.</u>

24. Rules for sharing the common costs of single day-ahead coupling and single intraday coupling between NEMOs and TSOs from different Member States should be agreed before the implementation process starts in order to avoid delays and disputes due to cost sharing.

25:21. 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.

26. 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.

27.22. 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.

28. However, single day-ahead and intraday coupling should only be implemented stepwise, as the regulatory framework for electricity trade and the physical structure of the transmission grid are characterised by significant differences between Member States and regions. The introduction of single day-ahead and intraday coupling therefore requires a successive alignment of the existing methodologies on capacity calculation, allocation and congestion management. Single intraday and day-ahead coupling may therefore be introduced at a regional level as an intermediate step where necessary.

29. Single day-ahead and intraday coupling require the introduction of harmonised maximum and minimum clearing prices that contribute to the strengthening of investment conditions for secure capacity and long term security of supply both within and between Member States.

30:23. 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 the<u>ACER or competent</u> regulatory authorities. However the development of certain terms and conditions or methodologies by TSOs and power exchanges<u>NEMOs</u> and their subsequent approval by <u>ACER or by the competent</u> 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, <u>ACER</u> and regulatory authorities.



<u>24.</u> In line with Article <u>85 and 6</u> of Regulation (<u>EC) No 713/2009 of the European Parliament and of the Council (2), the AgencyEU) 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 on common 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.</u>

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.

<u>31.26.</u> 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 <u>18(361(6)</u> of Regulation (EC) No <u>714/2009EU</u>) 2019/943, the Commission will consult ACER, the ENTSO for Electricity and other relevant stakeholders, notably NEMOs, before proposing any amendment to this regulation.

32. This Regulation supplements Annex I of Regulation (EC) No 714/2009, in accordance with the principles set out in Article 16 of that Regulation.

33. Due to the significant challenges in introducing single day-ahead and intraday coupling into the current market of Ireland and Northern Ireland, it is undergoing a process of major redesign. Additional time is, therefore, needed for the implementation of parts of this Regulation, with a number of transitional arrangements being put in place.

<u>34.27.</u> The measures provided for in this Regulation are in accordance with the opinion of the Committee referred to in Article <u>23(1)67</u> of Regulation (<u>EC) No 714/2009.EU</u>) 2019/943.

HAS ADOPTED THIS REGULATION:

TITLE I

GENERAL PROVISIONS

Article 1. Article 1.

Subject matter and scope

1.

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

2. <u>2.</u>—This Regulation shall apply to all <u>transmission systemsNEMOs</u> and <u>interconnectionsall</u> <u>TSOs</u> in the Union-except, 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. 3. \exists . 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. <u>4.</u>—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. <u>5.</u> Subject to the conditions in paragraph 44 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 the Agency <u>ACER</u>. 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 <u>single</u> 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 (EC) No 714/2009, Article 2 of Commission Regulation (EU) No 543/2013¹ and Article 2 of Directive 2009/72/EC2019/943 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. 'individual grid model' means a data set describing power system characteristics (generation, load and grid topology) and related rules to change these characteristics during capacity calculation, prepared by the responsible TSOs, to be merged with other individual grid model components in order to create the common grid model;

¹ Commission Regulation (EU) No 543/2013 of 14 June 2013 on submission and publication of data in electricity markets and amending Annex1 to Regulation (EC) No 714/2009 of the European Parliament and of the Council (OJ L 163, 15.6.2013, p. 1).



2. 'common grid model' means a Union wide data set agreed between various TSOs describing the main characteristic of the power system (generation, loads and grid topology) and rules for changing these characteristics during the capacity calculation process;

3. 'capacity calculation region' means the geographic area in which coordinated capacity calculation is applied;

4. 'scenario' means the forecasted status of the power system for a given time-frame;

1. <u>5.</u> 'net position' means the netted sum of electricity exports and imports for each market time unit for a bidding zone;

2. <u>6.</u> '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;

7. 'operational security limits' means the acceptable operating boundaries for secure grid operation such as thermal limits, voltage limits, short circuit current limits, frequency and dynamic stability limits;

3. <u>8.</u> '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. <u>9.</u> '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;

10. 'contingency''capacity calculation output'' means the identified<u>allocation</u> constraints and possible or already occurred faulteither flow-based parameters in case of an element, including not only the flow based approach or available transmission system elements, but also significant grid users and distribution network elements if relevant for the transmission system operational security;

5. <u>11. <u>'capacities in case of</u> coordinated capacity calculator' means the entity or entities with the task of <u>calculatingnet</u> transmission capacity, at regional level or above approach;</u>

6. <u>12.</u> '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;

13. 'remedial action' means any measure applied by a TSO or several TSOs, manually or automatically, in order to maintain operational security;

7. <u>14.</u> 'reliability margin' means the reduction<u>a portion</u> of <u>eross zonal</u> capacity <u>of a</u> <u>network element</u> to cover the uncertainties within capacity calculation;

8. <u>15.</u> 'market time' means central European summer time or central European time, whichever is in effect;

9. <u>16.</u> <u>'market time unit' means the shortest time interval for which the market price</u> is established, which shall be at least as short as the imbalance settlement period.

9.10. 'congestion income' means the revenues received as a result of capacity allocation;

10.11. <u>17.</u> '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;

18. 'physical congestion' means any networka situation <u>on a network element</u> where the forecasted or realised power flows violate the thermal limits of exceed the elements of the grid and voltage stability or the angle stability limits of the power system;

<u>11.12.</u> 19. 'structural congestion' means congestion in the transmission system maximum flow allowed on such network element that can be unambiguously defined, is predictable, is geographically stable over time and is frequently reoccurring under normal power system conditions represents operational security limits;

20. 'matching' means the trading mode through which sell orders are assigned to appropriate buy orders to ensure the maximisation of economic surplus for single day ahead or intraday coupling;

<u>12.13.</u> <u>21.</u> 'order' means an intention to purchase or sell energy or capacity expressed by a market participant subject to specified execution conditions;

<u>13.14.</u> 22. <u>'matched orders' matching'</u> means all the process of identifying and effecting a trade between one or more buy and sell orders matched by the price coupling SDAC algorithm, intraday auction algorithm or the continuous trade matchingtrading algorithm;

23. 'nominated electricity market operator (NEMO)' means an entity designated by the competent authority to perform tasks related to single day ahead or single intraday coupling;

<u>15.</u> <u>24.</u> 'shared order book' means a module in the continuous intraday coupling trading system collecting all matchable orders from the NEMOsall 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;



<u>14.20.</u> 'market coupling operator (MCO)' means an entity established to perform one or more of the tasks regarding the single day-ahead and intraday coupling and performing continuous matching of those orders for all NEMO trading hubs;

25. 'trade' means one or more matched orders;

- -26. 'single day ahead coupling' means the auctioning process where collected orders are matched and cross zonal capacity is allocated simultaneously for different bidding zones in the day ahead market;
- 27. 'single intraday coupling' means the continuous process where collected orders are matched and cross-zonal capacity is allocated simultaneously for different bidding zones in the intraday market;
- 28. 'price coupling algorithm' means the algorithm used in single day ahead coupling for simultaneously matching orders and allocating cross zonal capacities;
- 29. 'continuous trading matching algorithm' means the algorithm used in single intraday coupling for matching orders and allocating cross zonal capacities continuously;
- 30. 'market coupling operator (MCO) function' means the task of matching orders from the day ahead and intraday markets for different bidding zones and simultaneously allocating cross zonal capacities;

<u>21.</u><u>31.</u><u>'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;</u>

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;

<u>15.23.</u> 'reference clearing price' means the<u>a</u> single price <u>per bidding zone</u> determined by matching the highest accepted selling order and the lowest accepted buying order in the electricity market<u>and if</u> orders are paradoxically accepted they shall be excluded from this determination;

24. <u>32.</u> <u>'side payment' means a payment to a market participant for a matched order</u> which is paradoxically accepted given the reference clearing price to ensure that it does not incur losses.

<u>25.</u> 'scheduled exchange' means an electricity transfer scheduled between <u>geographic areas</u>,<u>NEMO</u> 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;

16.27. 'NEMO trading hub net position' means the netted sum of electricity exports and imports for each market time unit and for a given direction <u>NEMO trading hub;</u>



17.28. 33. 'seheduled exchange calculator' clearing' means the entity or entities with the task of calculating scheduled exchanges determining the financial position of each counter party in relation to the matched orders;

<u>29.</u><u>34.</u><u>'settlement' means the task of transferring the monetary value of financial positions between counterparties;</u>

<u>30.</u> 'day-ahead market time frame' timeframe' means the time frame timeframe of the electricity market from the SDAC gate opening time until the day ahead time when the SDAC results are published;

31. 'SDAC gate opening time' means the latest point in time when a NEMO needs to allows market participants to start submitting orders for the SDAC;

<u>18.32.</u> <u>'SDAC</u> gate closure time, where, for each market time unit, products are traded the day prior to deliverytime' means the single point in time from when market participants can no longer submit orders for the SDAC;

- 35. 'day ahead firmness deadline' means the point in time after which cross zonal capacity becomes firm;

36. 'day ahead market'SIDC gate closure opening time' means either the continuous trading opening time or the point in time until which orders are accepted in the day ahead market;

<u>19.33.</u> <u>37.</u> <u>'first</u> intraday market time frame' means the time frame of the electricity market after intraday cross zonal gate opening time and before intraday cross zonal gate closure time, where for each market time unit, products are traded prior to the delivery of the traded products auction gate opening time, whichever comes earlier;

<u>34.</u><u>38.</u><u>'intraday timeframe' means the timeframe of the electricity market from SIDC gate opening time until the continuous trading closure time;</u>

<u>35.</u> 'intraday cross-zonal gate opening time' means the <u>single</u> point in time when cross-zonal capacity between bidding zones is released starts being available for capacity allocation in the SIDC;

20.36. '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;

<u>37.</u> <u>39.</u> <u>'intraday cross-zonal gate 'continuous trading opening time' means the earliest</u> single point in time when the continuous trading starts matching orders;

21.38. 'continuous trading closure time' means the <u>latest point</u> in time where cross zonal capacity allocation is no longer permitted when the continuous trading stops matching orders for a given market time unit; and a given bidding zone;

<u>39.</u> <u>40.</u> <u>'intraday auction gate opening time' means the latest point in time when a</u> NEMO needs to allows 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;



<u>22.41.</u> 'capacity management module' means a <u>module in the continuous trading</u> system containing up-to-date information on available cross-zonal capacity for the purpose of allocating intra-day cross-zonal capacity its allocation in continuous trading;

41. 'non standard intraday product' means a product for continuous intraday coupling not for constant energy delivery or for a period exceeding one market time unit with specific characteristics designed to reflect system operation practices or market needs, for example orders covering multiple market time units or products reflecting production unit start up costs;

42. 'central counter party' means the entity or entities with the task of entering into contracts with market participants, by novation of the contracts resulting from the matching process, and of organising the transfer of net positions resulting from capacity allocation with other central counter parties or shipping agents;

-43. 'shipping agent' means the entity or entities with the task of transferring net positions between different central counter parties;

42. <u>44.</u> <u>'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;</u>

43. 'counterparty' means the other party in any transaction concluded in the single day-ahead and intraday market;

23.44. 'firmness' means a guarantee that cross-zonal capacity rights will remain unchanged and that a compensation is paid if they are nevertheless changed;

24.45. 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;

<u>46.</u> <u>46.</u> 'economic surplus for the single day-ahead or intraday coupling' means the sum of (i) the supplier surplus for the single day-ahead or intraday coupling for the relevant time period the sum of (i) the producer surplus, (ii) the consumer surplus for the single day ahead or intraday coupling, (iii) the congestion income and (iv) other related costs and benefits where these increase economic efficiency for the relevant time period, supplier; producer and consumer surplus being the difference between the accepted orders and the <u>reference</u> 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) (a) promoting effective competition in the generation, trading and supply of electricity;

(b) <u>(b)</u>ensuring optimal use of the transmission infrastructure;

(c) <u>(c)</u> ensuring operational security;

(d) <u>(d)</u> optimising the calculation and allocation of cross-zonal capacity;

(e) <u>(e)</u> ensuring fair and non-discriminatory treatment of TSOs, NEMOs, the <u>Agency ACER</u>, regulatory authorities and market participants;

(f) ______ensuring and enhancing the transparency and reliability of information;

(g) <u>(g)</u> 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) <u>(i)</u> 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. <u>1.</u>—TSOs and NEMOs shall develop the terms and conditions or methodologies required by this Regulation and submit them for approval to the <u>AgencyACER</u> 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 the <u>AgencyACER</u> in procedures pursuant to paragraph 86_{72} jointly by all competent regulatory authorities in procedures pursuant to paragraph 97_{72} and by the competent regulatory authority in procedures pursuant to paragraph 108_{72}

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 the <u>AgencyACER</u> about the progress of developing those terms and conditions or methodologies.

2. <u>2.</u> Where TSOs <u>or and</u> NEMOs deciding <u>jointly</u> on proposals for terms and conditions or methodologies listed in paragraph 86 are not able to reach an agreement, they shall decide by qualified majority voting. The qualified majority shall be reached within <u>each of the respective one</u> voting <u>classes</u> <u>of class joining all</u> TSOs and <u>all</u> NEMOs. A qualified majority for proposals listed in paragraph 86 where a joint proposal is required shall require the following majority:

(a) <u>(a)</u>—TSOs <u>or and</u> NEMOs representing at least 55 % of the Member States; and

(b) <u>(b)</u>—TSOs <u>or and</u> 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 86 where a joint proposal is required shall include at least the minimum number of eight TSOs or and NEMOs representing collecting at least four times the vote percentage representing one Member States, State pursuant to the first majority in accordance with paragraph 2(a), failing of which the qualified majority shall be deemed attained.

For TSO decisions on proposals for terms and conditions or methodologies listed in paragraph 6, one The vote shall be attributed perpercentage representing each Member State. If there is more than one TSO 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 a Member State, the respective Member State shall allocate the. 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 4TSOs.

<u>3.</u> For Where TSOs or NEMOs deciding on proposals for terms and conditions or methodologies listed in paragraph 86, one vote shall be attributed per Member State. Each NEMO 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 8have a shall include at least the minimum number of votes equal to the number of Member States where it is designated. If more than one 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 is designated in the territory of a Member State, the Member State shall allocate the voting powers the allocation of vote percentages among the <u>NEMOs</u>, taking into account their respective volume of transacted electricity <u>TSOs or NEMOs</u> in that particular those Member <u>State States shall be done in the preceding financial year.accordance with paragraph 4</u>

<u>4.</u> <u>3.</u> Except for Article 43(1), Article 44, Article 56(1), Article 63 and Article 74(1), where TSOs When deciding on proposals for terms and conditions or methodologies listed in paragraph 8 and 9(7):

(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 1st 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.

3.5. 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 each of the respective voting classes of TSOs and NEMOs. A qualified majority for proposals for terms and conditions or methodologies listed in paragraph 97 shall require the following majority:

(a) <u>(a)</u>—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 97 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 97 in relation to regions composed of five Member States or less shall decide by consensus.

For TSO decisions on proposals for terms and conditions or methodologies listed in paragraph 7, one vote shall be attributed per Member State. If there is more than one TSO in the territory of a Member State, the Member State shall allocate the voting powers among the TSOs.

NEMOs deciding on proposals for terms and conditions or methodologies listed in paragraph 7 shall decide by consensus.

4.6. 4. If TSOs or NEMOs fail to submit an initial or amended proposal for terms and conditions or methodologies to the competent regulatory authorities or the AgencyACER in accordance with paragraphs 8, 96 to 8 or 12 and 10 within the deadlines set out in this Regulation, they shall provide the competent regulatory authorities and the AgencyACER with the relevant drafts of the proposals for the terms and conditions or methodologies, and explain what has prevented an agreement. The AgencyACER, 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 86, 7, 9 and 108 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.

5.7. 5. Each regulatory authority or where applicable the Agency<u>ACER</u>, 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, <u>NEMOs or TSOs</u> and NEMOs. They shall be responsible for approving the terms and conditions or methodologies referred to in paragraphs 86, 7, 9 and 108. Before approving the terms and conditions or methodologies, the Agency<u>ACER</u> or the competent regulatory authorities shall revise the proposals where necessary, after consulting the



respective TSOs, <u>NEMOs</u> or <u>TSOs</u> and <u>NEMOs</u>, 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.

6.8. 6. The proposals for the following terms and conditions or methodologies and any amendments thereof shall be subject to approval by the Agency<u>ACER</u>:

(a) <u>(a)</u> the <u>plan</u>methodology on <u>joint performance</u>the publication of <u>MCO</u> <u>functions</u> in accordance with Article 8.1<u>Article 7(3);</u>

(b) the decision concerning the joint decision making body in accordance with <u>0Article 13.4;</u>

(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 (b);

(b)(e) the capacity calculation regions in accordance with Article 23.1 Article 15(1);

(c) the generation and load data provision methodology in accordance with Article 16(1);

(d) the common grid model methodology in accordance with Article 17(1);

(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 (f) back-up;

(d)(i) the algorithm methodology in accordance with Article 41.1Article 36(3);

(g) the algorithm submitted by NEMOs in accordance with Article 37(5), including the TSOs' and NEMOs' sets of requirements for algorithm development in accordance with Article 37(1);

(c)(j) (h) products that can be taken into account by NEMOs accommodated in the single day-ahead and intraday coupling process in accordance with Article 39.1 Articles 40 and 53;

(j) the intraday capacity pricing methodology to be developed in accordance with Article 55(1);

(k) the intraday cross zonal gate opening and intraday cross zonal gate closure times in accordance with Article 59(1);

(g)(1) (l) the day-ahead firmness deadline the common methodologies for the calculation of scheduled exchanges in accordance with Article 44.1<u>Article 69;</u>



(m) the methodology for clearing and settlement between NEMO trading hubs in accordance with Article $45.1 - (m) - \frac{1}{2}$;

(h)(n) the congestion income distribution methodology in accordance with Article 46.1 Article 73(1):

7.

7.9. 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) <u>(a)</u> the common capacity calculation methodology in accordance with $\underline{OArticle}$ <u>25.2Article</u> 20(2);

(b) decisions on the introduction and postponement of flow based calculation in accordance with Article 20(2) to (6) and on exemptions in accordance with Article 20(7);

(c) the methodology for coordinated redispatching and countertrading in accordance with Article 35(1);

(d) the common methodologies for the calculation of scheduled exchanges in accordance with Articles 43(1) and 56(1);

(e) the fallback procedures in accordance with Article 44;

(f) complementary regional auctions in accordance with Article 63(1);

(g) the conditions for the provision of explicit allocation in accordance with Article 64(2);

(h) the redispatching or countertrading cost sharing methodology in accordance with Article 74(1).

8.10. 8. 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 $\frac{\text{Article 4}(2), (8)}{\text{Article 10.12}}$ and Article 10.13(9);

(b) <u>(b)</u> 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 Article 5(1);

(c) <u>(c)</u> proposals of individual TSOs for a review of the bidding zone configuration in accordance with Article 58.1(a) Article 32(1)(d);

(d) where applicable, the proposal for cross zonal capacity allocation and other arrangements in accordance with Articles 45 and 57;

(d) (e) capacity allocation and congestion management costs in accordance with $\underline{0}$ Article 21.1 and Article 22.7 Articles 75 to 79;



(f) if applicable, cost sharing of regional costs of single day ahead and intraday coupling in accordance with Article 80(4).

<u>11.</u> <u>9.</u> The proposal for terms and conditions or methodologies shall include-:

(a) <u>a proposed</u> timescale for their implementation and, 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 97 shall be submitted to <u>the AgencyACER</u> 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 108 may be submitted to the Agency<u>ACER</u> within 1 month of their submission at the discretion of the regulatory authority while they shall be submitted upon the Agency's<u>ACER's</u> request for information purposes in accordance with Article 3-paragraph(2) of the Regulation (EU) 2019/942 if the Agency<u>ACER</u> considers the proposal to have a cross-border impact. Upon request by the competent regulatory authorities, the Agency<u>ACER</u> shall issue an opinion within 3 months on the proposals for terms and conditions or methodologies.

<u>12.</u> <u>10.</u> <u>The entity or entities jointly responsible for the implementation of terms and conditions</u> 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.

<u>13.</u> Where the approval of the terms and conditions or methodologies in accordance with paragraph 97 or the amendment in accordance with paragraph <u>161512</u> 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 <u>the AgeneyACER</u>. Regulatory authorities or, where competent, <u>the Agency</u>



9.14. ACER shall take decisions concerning the submitted terms and conditions or methodologies in accordance with paragraphs 86, 7, 9 and 108, within 6 months following the receipt of the terms and conditions or methodologies by the AgencyACER 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 the AgencyACER in accordance with paragraph 86, 2, 3 to the last regulatory authority concerned in accordance with paragraph 97 or, where applicable, to the regulatory authority in accordance with paragraph 108.2

<u>10.15.11.</u> Where If the regulatory authorities have not been able to reach agreement within the period referred to in paragraph 1310, or upon their joint request, or upon the Agency's ACER's request according to the third subparagraph of Article 5(3) of Regulation (EU) 2019/942, the AgencyACER 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.

-In the event that the AgencyACER, or all competent regulatory authorities jointly, or 11.16.12. the competent regulatory authority request an amendment to approve the terms and conditions or methodologies submitted in accordance with paragraphs 86, 7, 9 and 108 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 the AgencyACER or the competent regulatory authorities or the competent regulatory authority. The Agency 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 97 within the 2-month deadline, or upon their joint request, or upon the Agency's ACER's request according to the third subparagraph of Article 5(3) of Regulation (EU) 2019/942, the Agency 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 64 of this Article shall apply.

<u>12:17.13.</u> The Agency<u>ACER</u>, 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 $_{86, 7, 9}$ and $_{108, may}$ 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 the <u>AgencyACER</u>.

13.18. 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 6Article 12 and approved in accordance with the procedure set out in this Article.

14:19.14. 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 the Agency<u>ACER</u> 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 7Article 13. This requirement shall also apply to all annexes and documents established and required to be published by such terms and conditions or methodologies.



Article 10

Day-to-day management of the single day-ahead and intraday coupling

TSOs and NEMOs shall jointly organise the day to day management of the single day ahead and intraday coupling. They shall meet regularly to discuss and decide on day to day operational issues. TSOs and NEMOs shall invite the Agency and the Commission as observers to these meetings and shall publish summary minutes of the meetings.

Article 5. Article 11

Stakeholder involvement

1. <u>The Agency ACER</u>, 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<u>Article 12.</u>

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 $6_{\underline{}}$

Article 6. Article 12

Consultation

1. <u>1.</u>—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. The consultation shall last for a period of not less than one month.

2. <u>2.</u> The <u>consultation shall last for a period of not less than one month, except for the draft</u> proposals <u>pursuant to</u> Article 4.8for terms and conditions or methodologies submitted by the TSOs and NEMOs at Union level 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.

<u>4.</u> The proposals pursuant to all the points of Article 4.9 published and submitted to shall be subject to public consultation at Union level. Proposals submitted by the TSOs and NEMOs at the concerned regional level.

2.5. The proposals pursuant to all the points of Article 4.10 shall be submitted subject to public consultation at least at regional level. Parties submitting proposals at bilateral or at multilateral level shall consult at least the in each concerned Member States concerned State.



3.6. 3. 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. Article 9 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. <u>1.</u> Any confidential information received, exchanged or transmitted pursuant to this Regulation shall be subject to the conditions of professional secrecy laid down in paragraphs 22, 3, 3 and 44.

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

3. 3. Confidential information received by the persons referred to in paragraph 22 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. 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

<u>1. All NEMOs and all TSOs shall jointly develop, review and where necessary propose</u> 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

5.1. <u>1.</u> A TSO or NEMO may delegate all or part of any task <u>assigned_referred</u> to <u>in</u> Article 19# <u>under this Regulation</u> and Article 20.2 to one or more third parties <u>seated in a Member State</u> in the case the third party can carry out the respective function at least as effectively as the delegating entity. The delegating entity shall remain responsible for ensuring compliance with the obligations under this Regulation, including ensuring access to information necessary for monitoring by the regulatory authority.

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

<u>3.</u> <u>3.</u> <u>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</u>



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.

7.4. In the event that all or part of any task specified in this Regulation is delegated to a third party, the delegating <u>partyentity</u> shall ensure that suitable confidentiality agreements in accordance with the confidentiality obligations of the delegating <u>partyentity</u> 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

8.1. In each Member State electrically connected to a bidding zone in another Member State, the competent authority of that Member State shall ensure that at all times one or more NEMOs are designated by four months after the entry into force of this Regulation to perform or are granted a passport and offer trading services for the single day-ahead and/or 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. <u>Each Member State concerned NEMO shall ensure that at least one NEMO offer trading</u> services for all scheduling areas for which it is designated in each bidding zone on its territory. NEMOs shall be 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 is passport is granted in accordance with paragraph 9for an initial term of four years.</u>

9-3. Except in case of national monopoly pursuant to Article 11where Article 5(1) applies, the competent authority of a Member States 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. <u>3.</u> 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.

10.6. Unless otherwise provided by Member States, regulatory authorities shall be the designatingcompetent 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 designatingcompetent authority. In these circumstances Member States shall ensure that the designatingcompetent authority has the same rights and obligations as the regulatory authorities in order to effectively carry out its tasks.

<u>11.7.</u> 4. The <u>designating_competent</u> authority shall assess whether NEMO candidates <u>for</u> <u>designation</u> meet the criteria set out in Article 12Article 6. 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 <u>designating_competent</u> 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 12Article 6 are not met or in <u>case of national legal monopoly pursuant to</u> Article 11.1accordance with Article 5(1).

8. <u>5.</u> A NEMO designated in one Member State shall have the right to offer <u>trading services</u> for the single day-ahead and intraday trading services 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 <u>designating competent</u> authorities shall monitor the compliance of all NEMOs performing offering trading services for the single day-ahead and/or intra-dayintraday coupling within their Member State. In accordance with Article 19 of Regulation (EC) No 714/2009 the designating The competent authorities shall ensure compliance with this Regulation by all NEMOs performing designated or granted a passport for offering trading services for the single day-ahead and/or intra-dayintraday coupling within their Member State. The 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 dayahead 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.

12:10. The authorities in charge of responsible for NEMO designation, monitoring and enforcement shall exchange all information necessary for an efficient supervision of NEMO activities. If a NEMO

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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.

A designated NEMO must notify the designating authority of another Member State if it proposes to perform single day ahead or intraday coupling in that Member State two months before commencing operation.

<u>13.11.6.</u> By way of exception to paragraph 85 of this Article, <u>a Member State the competent</u> <u>authority</u> may refuse the trading services by granting a passport to a NEMO designated in another Member State if:

(a) <u>(a)</u> 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 11.1Article 5(1); or

(b) <u>(b) the the competent authority of a</u> 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) (e)—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) (d) the NEMO is a national legal monopoly in accordance with Article 11Article 5 in the Member State where it is designated.

14:12.7. In case of a decision to refuse day-ahead and/or intraday trading services with delivery in another Member State, the <u>competent authority of the</u> Member State of delivery shall notify its decision to the NEMO and to the <u>designatingcompetent</u> authority of the Member State where the NEMO is designated, as well as to <u>the AgeneyACER</u> and the Commission. The refusal shall be duly justified. In the cases set out in subparagraphs 11(b)6(b) and 11(c)6(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 <u>designatingcompetent</u> 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.

<u>15:13.8.</u> 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 <u>designatingcompetent</u> authority. If the regulatory authority is not responsible for designation and monitoring, they shall be consulted on the revocation. The <u>designatingcompetent</u> authority shall also notify the designating<u>or</u> <u>competent</u> 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.

<u>16:14.9.</u> If a <u>designatingcompetent</u> authority of a Member State finds that a NEMO <u>activegranted a passport</u> but not designated in its <u>countryMember State</u> fails to maintain compliance with the criteria in Article 12Article 6 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 <u>designatingcompetent</u> 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 <u>designatingcompetent</u> authority shall notify the <u>designatingcompetent</u> authority of the Member State in which the NEMO is designated, <u>the AgeneyACER</u> and the Commission.

17.15.10. The designating authority shall inform the Agency of the designation and revocation of NEMOs. The Agency joint decision making body shall maintain a and publish the list of NEMOs designated NEMOs, or granted a passport in Member States as well as their status and where they operate on its website. 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 8. Article 11. Article 5

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

1. <u>1.</u> If a national legal monopoly for day-ahead and intraday trading services which excludes the designation of more than one NEMO already existsed in a Member State or Member State's bidding zone at the time of on 14 August 2015, the Member State concerned may continue to apply a national legal monopoly after the entry into force of this Regulation, the Member State concerned must notify and in line with the review pursuant to paragraph 2. For the Commission within two months after entry into force purposes of this Regulation and may refuse the designation of, a national legal monopoly is deemed to exist where a national law explicitly provides that no more than one NEMO perentity within a Member State or a Member State's bidding zone can carry out day-ahead and intraday trading services.

2. For the purposes of this regulation, a national legal monopoly is deemed to exist where national law expressly provides that By no more later than one entity within a Member State or Member State bidding zone can carry out day ahead and intraday trading services.

2. <u>3.</u> 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 forward aprovide its own report to the European Parliament and the Council in accordance with Article <u>24 of Regulation (EC)</u> No 714/2009 on the development<u>69(2)</u> of single day ahead and intraday coupling in the Member States, with particular emphasis 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 or for the continued refusal of a Member State to allow eross border trading by a NEMO designated in another Member State, the Commission may consider appropriate legislative or other appropriate measures to further increase competition and trade between and within Member States. The Commission shall also include an assessment in the report evaluating



the governance of single day ahead and intraday coupling established by this Regulation, with particular emphasis on the transparency of MCO functions carried jointly by the NEMOs. On the basis of that report, and if the Commission deems that there is ambiguity in carrying out the monopolistic MCO functions and other NEMO tasks, the Commission may consider appropriate legislative or other appropriate measures to further increase transparency and efficient functioning of single day ahead and intraday coupling.

<u>3.</u> If there are several applicants to be designated as By four years of entry into force, taking also into account the only NEMO reports pursuant to paragraph 4, the Member State concerned with a national legal monopoly shall designate review the applicant which best meets need for continuation of national legal monopoly. If the criteria listed 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 Article 6. 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.

2.4. If a Member State refuses decides on a continuation of national legal monopoly it may continue to refuse the designation of more than one NEMO per bidding zone 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 markets coupling, sufficiently in advance of their entry into force, or specify the methodologies used to calculate them.

In accordance with Article 4(6), the Member State concerned may also refuse cross border trading services offered by a NEMO designated in another Member State; however, the protection of existing power exchanges in that Member State from economic disadvantages through competition is not a valid reason for refusal.

Article 9. Article 12. Article 6

NEMO designation criteria

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

(a) <u>(a)</u> it has contracted possesses or contracts adequate resources for common, coordinated and compliant operation of single day ahead and/or intraday coupling, including the resources necessary to fulfil <u>all</u> the NEMO functionstasks 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 19Article 7;



(b) <u>(b)</u> it shall be able to ensure that market participants have open access to information regarding the NEMO tasks in accordance with Article 19Article 7;

(c) (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 <u>MCO functions</u><u>NEMO tasks pursuant</u> to Article 19 and other activities in order to prevent cross-subsidisation;

(d) <u>(d)</u> it shall have an adequate level of business separation from other-market participants;

(e) (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 11Article 5(1) 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) (g) it shall have appropriate market surveillance arrangements in place <u>pursuant to</u> obligations set out in Regulation (EC) No 1227/2011 on organised market places;

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

(i) <u>(i)</u> 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. 2.— The designation criteria set out in paragraph 14 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 10. Article 13. Article 73A

NEMO tasks

1. <u>Market coupling governance principles</u>

<u>1.</u> <u>All_NEMOs</u> <u>and all_TSOs</u> <u>shall</u> <u>aet as market operators in national or regional markets to</u> <u>perform in cooperation with TSOs-jointly organise the management of the integrated single day-ahead</u> 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 18.1Their;

(b) the establishment of a single legal entity to perform the MCO tasks shall include receiving orders from market participants, having overall responsibility for matching and allocating orders 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) <u>organise the management of the single day-ahead and intraday coupling results, publishing</u> prices and settling and clearing the contracts resulting from the trades according to relevant participant agreements and regulations.and decide on related issues;

take all decisions pursuant to this Article using the qualified majority decision making process from Article 4.2With regard to single day ahead and intraday coupling, NEMOs shall in particular be responsible for the following tasks:

(a) implementing the MCO functions set out in paragraph 2 in coordination with other NEMOs;

(b) establishing collectively the requirements for the single day ahead and intraday coupling, requirements for MCO functions and the price coupling algorithm with respect to all matters related to electricity market functioning in accordance with paragraph 2 of this Article, and Articles 36 and 37;

(c) determining maximum and minimum prices in accordance with Articles 41 and 54;

(b) (d) making anonymous and sharing 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.

In case the received order information necessaryjoint decision making body is unable to make a decision required pursuant to perform the MCO functions provided for in paragraph 2 of this Article and Articles 40 and 53;

(e) assessing the results calculated by the MCO functions set out in paragraph 2 of this Article allocating the orders based on these results, validating the results as final if they are considered correct and taking responsibility for them in accordance with Articles 48 and 60;

(f) informing the market participants on the results of their orders in accordance with Articles 48 and 60;



(g) acting as central counter parties for clearing and settlement of the exchange of energy resulting from single day ahead and intraday coupling within a period of three months, all TSOs and all NEMOs shall submit a proposal for a decision to ACER in accordance with Article 68(3);

(h) establishing jointly with relevant NEMOs and TSOs back up procedures for national or regional market operation <u>8</u>. 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 <u>6</u> months, in accordance with Article <u>36(3)</u> if no results are available from the MCO functions in accordance with Article <u>39(2)</u>, taking account of fallback procedures provided for in Article <u>44</u>;

- (i) jointly providing single day ahead and intraday coupling cost forecasts and cost information to competent regulatory authorities and TSOs where NEMO costs for establishing, amending and operating single day ahead and intraday coupling are to be covered by the concerned TSOs' contribution in accordance with Articles 75 to 77 and Article 80;
 - (j) Where applicable, in accordance with Article 45 and 57, coordinate with TSOs to establish arrangements concerning more than one NEMO within a bidding zone and perform single day ahead and/or intraday coupling in line with the approved arrangements.

2. NEMOs shall carry out MCO functions jointly with other NEMOs. Those functions shall include the following:

(a) developing and maintaining the algorithms, systems and procedures for single day ahead and intraday coupling in accordance with Articles 36 and 51;

- (b) processing input data on cross zonal capacity and allocation constraints provided by coordinated capacity calculators in accordance with Articles 46 and 58;
- (c) operating the price coupling and continuous trading matching algorithms in accordance with Articles 48 and 60;
- (d) validating and sending single day ahead and intraday coupling results to the NEMOs in accordance with Articles 48 and 60.

2:4. 3. By eight months after the entry into force of this 5(2) of Regulation all NEMOs shall submit to all regulatory authorities and the Agency a plan that sets out how to jointly set up and perform the MCO functions set out in paragraph 2, including necessary draft agreements between NEMOs and with third parties. The plan shall include a detailed description and the proposed timescale for implementation, which shall not be longer than 12 months, and a description of the expected impact of the terms and conditions or methodologies on the establishment and performance of the MCO functions in paragraph 2(EU) 2019/942.

3.5. 4. Cooperation between <u>NEMOsall NEMOs and all TSOs in the joint decision making</u> 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



functions<u>tasks</u> shall be based on the principle of non-discrimination and <u>the governance arrangements</u> <u>pursuant to</u> Article 15.1(c) <u>shall</u> ensure that no NEMO <u>or TSO</u> can benefit from unjustified economic advantages through participation in <u>the joint decision-making body</u>. 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 22.1MCO functions.

6. <u>5.</u> <u>The Agency All regulatory authorities and ACER</u> shall monitor <u>the performance of the</u> 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 64NEMOs' progress in establishing and performing the MCO functions, in particular regarding the contractual and regulatory framework and regarding technical preparedness to fulfil the MCO functions. By 12 months .

4.7. By no later than three years after entry into force of this Regulation, the Ageney ACER shall report to the Commission whether progress in establishing and performing consult stakeholders and regulatory authorities on the efficient functioning of single day-ahead or and intraday coupling is satisfactory 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 ahead and intraday coupling and performing the MCO tasks.

The Agency may assess

Article 14. Article 3BB

Establishment of the effectiveness and efficiency of establishment and performance of the MCO function at any time. If that single legal entity performing the MCO tasks

This proposal is drafted in order to accommodate the recommendation base don conclusions of the initial impact assessment. To accommodate other alternatives on the MCO Governance considered by some NRAs options for changes would be required to specific Recitals and Articles (depending on the alternative): Recital 13, Recital 14, Recital 15, 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 adjusted accordingly.

1. All NEMOs and all TSOs shall establish one single legal entity to perform all the MCO tasks pursuant to Article 18.1-demonstrates that 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)are 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 15fulfilled, the Agency and the selection of delegated entity has been approved by



the joint decision making body. The following MCO tasks may recommend be proposed to be subject to delegation in the Commission any further measures needed 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)timely effective (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) <u>the organisational, financial and operational arrangements necessary to ensure the efficient</u> delivery of and reliable functioning of the single day-ahead and intraday coupling-:

(b) 6. If NEMOs fail to submit a plan in accordance with Article 7(3) to establish 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)functions. 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.



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2. Within two months following the receipt, ACER may request amendments on the draft annual work programme referred to in paragraph 2 of this Article for either the intraday or the day ahead1 taking into account the objectives of market time frames, the Commission may, in accordance with Article 9(4), propose an amendment to this Regulation, considering in particular appointing the ENTSO for Electricity or another entity to earry the MCO functions for 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:

(b)(a) Developing and maintaining the algorithms and other systems needed for the operation of the single day-ahead eoupling or for and intraday coupling instead of the NEMOs.:

(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 <u>Article 4</u><u>Article 8</u>;

(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;

(1) 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(79) and (911), Article 51(8) and (10) and Article 54(79) and (911);

(m) Collecting the congestion income resulting from single day-ahead and intraday coupling in accordance with Article 48(10+2) and (11+3);

(n) Distributing the congestion income in accordance with Article 46 and Article 48(124);

(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(54), Article 52(4) and Article 55(54);



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(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 49.3, Article 52.3 and Article 55.4 Article 55.3;

(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 49.5, Article 52.5 and Article 55.6 Article 55.5;

Providing the information on the single day-ahead and intraday coupling in accordance with <u>Article 4Article 8Article 8</u>

<u>(j) ;</u>

(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.

5.1. In Member States electrically connected to another Member State all TSOs shall participate in the single day-ahead and intraday coupling.

2. TSOs shall:

2. (a) jointly establish Each TSO requirements for the price coupling and continuous trading matching algorithms 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;

(a) (b) validating the capacity calculation outputs for all aspects related to capacity allocation its bidding zone borders or critical network elements in accordance with Article 34Article 37(1)(a);

(b) jointly validate <u>having</u> the <u>matching algorithms against possibility</u> to verify that the <u>requirements</u> <u>day-ahead</u> <u>coupling</u> results referred to in Article 49 and the intraday <u>coupling</u> results referred to in Article 55 point (a) of this paragraph have been <u>calculated</u> in accordance with Article 37(4);

(c) establish and perform capacity calculation in accordance with Articles 14 to 30;

(c) (d) where necessary, establish the validated cross-zonal capacity and the allocation and other arrangements constraints;

(b)(d) accepting all obligations from day-ahead and intraday coupling results calculated in accordance with Article 47Articles 45, Article 50 and Article 5357;

(e) (e) calculate and send cross zonal capacities and allocation constraints providing the information on the single day-ahead and intraday coupling in accordance with <u>Article 4Article</u> 8Articles 46 and 58;.

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

having the possibility to verify single that the day-ahead coupling results in terms of validated cross-zonal capacities referred to in Article 49 and allocation constraints in accordance with Articles 48(2) and 52;

(g) where required, establish scheduled exchange calculators for calculating and publishing scheduled exchanges on borders between bidding zones in accordance with Articles 49 and 56;

(d) (h) respect the intraday coupling results referred to in Article 55from have been calculated in accordance with the validated capacity calculation outputs;

(d)(e) providing the information on the single day-ahead and intraday coupling ealculated in accordance with Article 4Article 8Article 39 and Article 52;

(i) establish and operate fallback procedures as appropriate for capacity allocation in accordance with Article 44;

(j) propose the intraday cross-zonal gate opening and intraday cross-zonal gate closure times

CHAPTER 4

<u>Costs</u>

Article 21. Article 75

TSO and RCC costs

Costs related to the obligations imposed on TSOs and RCCs in accordance with Article 20



6.1. and the costs related to the development, proposal and <u>NEMOs shall developreview of</u> 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 01 shall be broken down into:

(a) common costs resulting from coordinated activities of all TSOs participating in the single dayahead 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 <u>01</u> and <u>3</u> 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.

7.3. 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.

8.4. 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.

9.5. 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 <u>considered as approved</u>. The regulatory authorities shall consult and closely cooperate and coordinate with each other in order to <u>assess that</u> MCO costs comply with the methodology referred to in paragraph 1.

<u>6.</u><u>11.</u> Where the <u>one</u> or more regulatory authorities <u>have not</u> been able to reach agreement<u>disagree</u> within the period referred to in paragraph 510, or upon their joint request, or upon the Agency's request according to the third subparagraph of Article 5(3) of Regulation (EU) 2019/942, the Agency<u>ACER</u> shall adopt a decision concerning the <u>submitted proposals</u> assessment of the costs whereby eligible costs for terms and conditions or methodologies within 6 months, the respective year are determined.

10.7. Approved eligible costs in accordance with the reports in paragraph 2 and 3Article 5(3) and the second subparagraph of Article 6(10) of Regulation (EU) 2019/942. 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.



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TITLE III

REQUIREMENTS FOR TERMS, CONDITIONS AND METHODOLOGIES CONCERNING CAPACITY ALLOCATION AND CONGESTION MANAGEMENT

CAPACITY CALCULATION

CHAPTER 1

CAPACITY CALCULATION

Section 1

GENERAL REQUIREMENTS

Article 11. Article 23. Article 1415

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) <u>Assignment of bidding zone borders, bidding zones and TSOs to capacity calculation regions</u> 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 onshore 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 11.

Article 24. Article 15A

General capacity calculation provisions

2.1.__All TSOs shall calculate cross-zonal capacity for at least the following time frames: timeframes:

(a) <u>(a)</u> day-ahead, for the day-ahead market;

(b) <u>(b)</u> intraday, for the intraday market.

3.2. 2. For the day-ahead market time frametimeframe, individual values for cross-zonal capacity for each day-ahead market time unit shall be calculated. For the intraday market time frametimeframe, individual values for cross-zonal capacity for each remaining intraday market time unit shall be calculated.

3. For the day ahead market time frame, the capacity calculation shall be based on the latest available information. The information update for the day ahead market time frame shall not start before 15:00 market time two days before the day of delivery.



4. All TSOs in each capacity calculation region shall ensure that cross zonal capacity is recalculated within the intraday market time frame based on the latest available information. The frequency of this recalculation shall take into consideration efficiency and operational security.

Article 15

3. The capacity calculation process shall be organised as follows:

(a) each TSO shall provide the capacity calculation inputs to the RCC;

(a)(b) each RCC shall perform the capacity calculation regions process;

1. By three months after the entry into force of this Regulation all TSOseach RCC shall jointly develop a common proposal regarding the determination perform the coordinated validation of capacity calculation regions. The proposal 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 consultation in accordance with Article 12.

(c) 2. The proposal referred to in paragraph 1 shall define the bidding zone borders attributed an efficiency and feasibility assessment to TSOs who are members of each be run when developing, reviewing and where necessary amending the capacity calculation methodology pursuant to \underline{O} Article 26.1region. The following requirements.

each TSO shall be met:

(a) it shall take into consideration the regions specified in point 3(2) of Annex I to Regulation (EC) No 714/2009;

(b) (b) each bidding zone border, or two separate bidding zone borders if applicable, through which interconnection between two bidding zones exists, shall be assigned to one perform the individual validation of the capacity calculation region; outputs and send the results to the relevant RCC(s); and

(c) (c) at least those TSOseach RCC shall be assigned to all provide the validated capacity calculation regions in which they have bidding zone borders outputs to the MCO.

3. Capacity calculation regions applying a flow based approach shall be merged into one <u>The capacity calculation region if process shall be based on</u> the following cumulative conditions are fulfilled:

(a) their transmission systems are directly linked to each other;

- (b) they participate in the same singletwo-days ahead, day-ahead orand intraday coupling area;
- (c) merging them is more efficient than keeping them separate. The competent regulatory authorities may request a joint cost benefit analysis from the TSOs concerned to assess the efficiency of the merger.



Section 2

4. *The* common grid *model* models built in accordance with Article 64(1) of Regulation 2017/1485.

Article 16

Generation<u>All RCCs</u> and **load data provision methodology**

1. By 10 months after the entry into force of this Regulation all TSOs shall jointly develop a proposal for a single methodology for the delivery of the generation and load data required to establish the common grid model, which shall be subject to consultation in accordance with Article 12. The proposal shall include a justification based on the objectives of this Regulation for requiring the information.

2. The proposal for the generation and load data provision methodology shall specify which generation units and loads are required to provide information to their respective TSOs for the purposes of of each capacity calculation.

3. The proposal for a generation and load data provision methodology shall specify the information to be provided by generation units and loads to TSOs. The information shall at least include the following:

(a) information related to their technical characteristics;

(b) information related to the availability of generation units and loads;

(c) information related to the schedules of generation units;

(d) relevant available information relating to how generation units will be dispatched.

4. The methodology shall specify the deadlines applicable to generation units and loads for providing the information referred to in paragraph 3.

5. Each TSO shall use and share with other TSOs the information referred to in paragraph 3. The information referred to in paragraph 3(d) shall be used for region shall review the quality of data submitted within the capacity calculation purposes only.

6. No later than two months after the approval of the generation and load data provision methodology by all regulatory authorities, ENTSO for Electricity shall publish:

(a) a list of the entities required to provide information to the TSOs;

(b) a list of the information referred to in paragraph 3 to be provided;

(c) deadlines for providing information.



Article 17

Common grid model methodology

1. By 10 months after the entering into force of this Regulation all TSOs shall jointly develop a proposal for a common grid model methodology. The proposal shall be subject to consultation in accordance with Article 12.

2. The common grid model methodology shall enable a common grid model to be established. It shall contain at least the following items:

(a) a definition of scenarios in accordance with Article 18;

(b) a definition of individual grid models in accordance with Article 19;

(c) a description of the process for merging individual grid models to form the common grid model.

Article 18

Scenarios

5. <u>1.</u> All TSOs shall jointly develop common scenarios for each every second year as part of the biennial report on capacity calculation and allocation produced in accordance with Article 61time-frame referred to in Article 14(1)(a) and (b). The common scenarios shall be used to describe a specific forecast situation for generation, load and grid topology for the transmission system in the common grid model.

2. One scenario per market time unit shall be developed both for the day ahead and the intraday capacity calculation time frames.

3. For each scenario, all TSOs shall jointly draw up common rules for determining the net position in each bidding zone and the flow for each direct current line. These common rules shall be based on the best forecast of the net position for each bidding zone and on the best forecast of the flows on each direct current line for each scenario and shall include the overall balance between load and generation for the transmission system in the Union. There shall be no undue discrimination between internal and cross zonal exchanges when defining scenarios, in line with point 1.7 of Annex I to Regulation (EC) No 714/2009.

Article 19

Individual grid model

1. For each bidding zone and for each scenario:

(a) all TSOs in the bidding zone shall jointly provide a single individual grid model which complies with Article 18(3); or



(b) each TSO in the bidding zone shall provide an individual grid model for its control area, including interconnections, provided that the sum of net positions in the control areas, including interconnections, covering the bidding zone complies with Article 18(3).

2. Each individual grid model shall represent the best possible forecast of transmission system conditions for each scenario specified by the TSO(s) at the time when the individual grid model is created.

3. Individual grid models shall cover all network elements of the transmission system that are used in regional operational security analysis for the concerned time frame.

4. All TSOs shall harmonise to the maximum possible extent the way in which individual grid models are built.

5. Each TSO shall provide all necessary data in the individual grid model to allow active and reactive power flow and voltage analyses in steady state.

6. Where appropriate, and upon agreement between all TSOs within a capacity calculation region, each TSO in that capacity calculation region shall exchange data between each other to enable voltage and dynamic stability analyses.

SECTION 3

CAPACITY CALCULATION METHODOLOGIES

Article 12. Article 25. Article 20

Introduction of flow-based

Capacity calculation methodologyapproach

1. <u>1.</u> For the day-ahead market <u>time frame timeframe</u> and intraday market <u>time-frame timeframe</u> the approach used in the <u>common</u> capacity calculation methodologies shall be a flow-based approach, except where the requirement under paragraph $\underline{027}$ is met.

2. No later than 10 months after the approval of the proposal for a capacity calculation region in accordance with Article 15(1), all TSOs All TSOs in each capacity calculation region shall submit a proposal for a common coordinated capacity calculation methodology within the respective region. The proposal shall be subject to consultation in accordance with Article 12. The proposal for the capacity calculation methodology within regions pursuant to this paragraph in capacity calculation regions based on the 'North West Europe' ('NWE') and 'Central Eastern Europe' ('CEE') as defined in points (b), and (d) of point 3.2 of Annex I to Regulation (EC) No 714/2009 as well as in regions referred to in paragraph 3 and 4, shall be complemented with a common framework for coordination and compatibility of flow based methodologies across regions to be developed in accordance with paragraph 5.



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3. The TSOs from the capacity calculation region where Italy, as defined in point (c) of point 3.2 of Annex I to Regulation (EC) No 714/2009, is included, may extend the deadline without prejudice to the obligation in paragraph 1 for submitting the proposal for a common coordinated capacity calculation methodology using flow based approach for the respective region pursuant to paragraph 2 up to six months after Switzerland joins the single day ahead coupling. The proposal does not have to include bidding zone borders within Italy and between Italy and Greece.

4. No later than six months after at least all South East Europe Energy Community Contracting Parties participate in the single day ahead coupling, the TSOs from at least Croatia, Romania, Bulgaria and Greece shall jointly submit a proposal to introduce a common capacity calculation methodology using the flow based approach for the day ahead and intraday market time frame. The proposal shall provide for an implementation date of the common capacity calculation methodology using the flow based approach of no longer than two years after the participation of all SEE Energy Community Contracting Parties in the single day ahead coupling. The TSOs from Member States which have borders with other regions are encouraged to join the initiatives to implement a common flow based capacity calculation methodology with these regions.

5. At the time when two or more adjacent capacity calculation regions in the same synchronous area implement a capacity calculation methodology using the flow based approach for the day ahead or the intraday market time frame, they shall be considered as one region for this purpose and the TSOs from this region shall submit within six months a proposal for applying a common capacity calculation methodology using the flow based approach for the day ahead or intraday market time frame. The proposal shall provide for an implementation date of the common cross regional capacity calculation methodology of no longer than 12 months after the implementation of the flow based approach in these regions for the methodology for the day ahead market time frame, and 18 months for the methodology for the intraday time frame. The timelines indicated in this paragraph may be adapted in accordance with paragraph 6.

The methodology in the two capacity calculation regions which have initiated developing a common capacity calculation methodology may be implemented first before developing a common capacity calculation methodology with any further capacity calculation region.

6. If the TSOs concerned are able to demonstrate that the application of common flowbased methodologies in accordance with paragraphs 4 and 5 would not yet be more efficient assuming the same level of operational security, they may jointly request the competent regulatory authorities to postpone, as part of the proposal pursuant to <u>OArticle 26.1deadlines</u>.

2. 7. TSOs may jointly request the competent regulatory authorities, to apply the coordinated net transmission capacity approach in regions and bidding zone borders other than those referred to in paragraphs 2 to 4, the concerned capacity calculation region if the TSOs concerned are able to demonstrate that the application of the capacity calculation methodology using the flow based approach would not yet be more efficient compared to the coordinated net transmission capacity approach and assuming the same level of operational security in the concerned region 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

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authorities of such capacity calculation region the criteria and methodology to perform such an assessment.

3. 8.—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 changing the change of their capacity calculation approach.

9. THECHAPTER 2

CAPACITY CALCULATION METHODOLOGIES

Article 26. Article 21

Capacity calculation methodology

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<u>All</u> TSOs of <u>in</u> each capacity calculation region applying the flow based approach shall establish jointly develop, review and make available a tool which enables market participants, where necessary, propose amendments to evaluate the interaction between cross zonal capacities and cross zonal exchanges between bidding zones.

Article 21

Capacity calculation methodology

4.2. The methodology determined in accordance with Article 20(2) paragraph 04 shall include at least the following items for each capacity calculation time frame time frame:

(a) <u>(a)</u> methodologies for the calculation of the inputs to capacity calculation, which shall include the following parameters:

i. <u>(i) athe</u> methodology for determining the reliability margin in accordance with Article 27<u>Article 22;</u>

<u>ii.</u> (ii) the methodologiesy for determining <u>critical network elements</u>, <u>contingencies and operational security limits</u>, <u>contingencies</u> relevant to<u>for</u> capacity calculation <u>in accordance with Article 28and</u>;

ii. iii. the methodology for determining the allocation constraints that may be applied in accordance with Article 29Article 23;



<u>iii.iv.</u> (iii) the methodology for determining the generation <u>and load</u> shift keys in accordance with Article 30<u>Article 24;</u>

iv.v. (iv)—the methodology for determining remedial actions to be considered in capacity calculation in accordance with Article 31<u>Article 25.</u>

(b) ______a detailed description of the capacity calculation approach which shall include the following:

i. <u>(i)</u> a mathematical description of the applied capacity calculation approach with different capacity calculation inputs;

ii. <u>(ii)</u>—rules for avoiding undue discrimination between internal and crosszonal exchanges to <u>ensure compliance_comply</u> with <u>point 1.7Article 16(8)</u> of <u>Annex I tothe</u> Regulation (EC) No 714/20092019/943 taking into account principles set in Article 14(1) and 16(1) of the Regulation 2019/943;

iii. <u>(iii)</u>-rules for taking into account, where appropriate, previously allocated cross-zonal capacity;

iv. <u>(iv)</u> rules on the adjustment of power flows on critical network elements or of cross zonal capacity due to for optimising at least the non-costly remedial actions in <u>capacity calculation in</u> accordance with Article 31Article 25;

v. rules for determining the capacity calculation outputs for non-costly remedial actions to be optimised in capacity allocation in accordance with Article 31 (v), if applicable;

<u>v.vi.</u> 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;

vi.vii. (vi) 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;

vii.viii. (vii) where the power flows on critical network elements are influenced by cross-zonal power exchanges in differentoutside of a capacity calculation regions, the rules for sharing the power flow capabilities of critical network elements among different capacity calculation regions in order to accommodate these flows-;

(c) <u>(e)</u> a methodology for the validation of cross-zonal capacity in accordance with Article 34<u>Article 26.</u>

3. 2. 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.



<u>4.</u> For the intraday capacity calculation time frame<u>day-ahead market timeframe</u>, 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 35methodology shall also state the frequency 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 eapacity will be reassessed in accordance with Article 14(4), giving reasons for the chosen frequency. 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. 3.—The capacity calculation methodology shall include a fallback procedure for the case where the initial capacity calculation does not lead to any results.

<u>7.</u> <u>4.</u> <u>All TSOs in eachEach TSO of a capacity calculation region shall, as far as possible, use harmonised capacity calculation inputs.</u>

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.

7.9. By 31 December 2020,5 all regions TSOs shall usedevelop and submit to ACER a proposal for a harmonised capacity calculation methodology which shall, in particular provide for a, set out one harmonised capacity calculation methodology for the flow-based approach and one for the coordinated net transmission capacity approach. The harmonisation of capacity calculation methodology shall be subject to an efficiency assessment concerning the harmonisation of the flow-based methodologies and the coordinated net transmission capacity methodologies that provide No later than one year after approval of the proposal for the transition towards a harmonised capacity calculation methodology to all regulatory authorities within 12 months after at least two TSOs in each capacity calculation



regions have implemented commonregion 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 01Article 20(5). may allow for specific regional solutions subject to an efficiency assessment.

Article 13. Article 27. Article 22

Reliability margin methodology

1. <u>1.</u> The proposal for a common<u>The</u> 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, the relevant <u>TSOseach TSO</u> 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. 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) <u>(a)</u>-unintended deviations of physical electricity flows within a market time unit caused by the adjustment of electricity flows within and between <u>load frequency</u> control areas, to maintain a constant frequency;

(b) ______uncertainties which could-affect capacity calculation and which could occur between the capacity calculation <u>time-frame</u> and real time, for the market time unit being considered-; and

(c) <u>3.</u> inaccuracies in modelling and calculation approach which affect capacity calculation.

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

4. 4. On the basis of the methodology adopted in accordance with paragraph 11, TSOs, each<u>TSO</u> shall determine the reliability margin respecting the operational security limits and taking into account uncertainties between the capacity calculation <u>time frametimeframe</u> and real time, and the remedial actions available after capacity calculation.

5. <u>OPTION 1:</u>

<u>5.</u> For each capacity calculation time frame, the <u>TSOstimeframe</u>, each <u>TSO</u> concerned shall determine the reliability margin for <u>each</u> critical network <u>elements</u> <u>element independent of the specific</u> <u>capacity calculation approach adopted within the capacity calculation region.</u>

OPTION 2:

<u>6.</u> For each capacity calculation timeframe, where the flow-based approach is applied, and each TSO concerned shall determine the reliability margin for eross zonal capacity each critical network

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element independent of the specific capacity calculation approach adopted within the capacity calculation region.

5.7. 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 contras 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 14. Article 28. Article 23_

Methodologies for <u>critical network elements</u>, <u>contingencies and</u> operational security limits, <u>contingencies and allocation constraints</u>_

1____

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.

<u>1.3.</u> Each TSO shall respect the operational security limits and contingencies used in for each critical network element established for the operational security analysis <u>pursuant to Article 25 of Regulation</u> 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

Each TSOs may include in the proposal pursuant to <u>OArticle 26.12</u>. If the operational security limits and contingencies used in capacity calculation are not the same as those used in operational security analysis, TSOs shall describe in the proposal for the common capacity calculation methodology the particular method and criteria they have used to determine the operational security limits and contingencies used for capacity calculation.

2.1. <u>3.</u> If TSOs apply to the following allocation constraints, they can only be determined using:

(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_



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(b) _______ (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 15. Article 30. Article 2425

Generation and load shift keys methodology

1. The proposal for a common

1. <u>The</u> capacity calculation methodology shall include a proposal for a methodology to determine a common generation and load shift keys for each bidding zone and scenario developed in accordance with Article 18 market time unit.

2. <u>2.</u> The generation <u>and load</u> 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 notably take into account the information from the generation and load data provision methodologyincluded in the common grid model used for the specific capacity <u>calculation process</u>.

Article 16. Article 31. Article 2526

Methodology for remedial actions in capacity calculation_

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

(a) <u>2.</u> load shedding;

1.

(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.

Each $\underline{TSO_{RCC}}$ within each capacity calculation region shall coordinate with the other $\underline{TSO_{Seach} TSO}$ in that region the use of remedial actions to be taken into account in capacity calculation and their actual application in real time operation.

3. To enable remedial actions to be taken into account in capacity calculation, all TSOs in each capacity calculation region. Such coordination shall agree onreflect the useapplicable coordination of remedial actions that require the action of more than one TSO.

4. Each TSO shall ensure that remedial actions are taken into account in capacity calculation under the condition that the available remedial actions remaining after calculation, taken together with the reliability margin referred to in Article 22, are sufficient to ensure <u>TSOs</u> apply based on regional operational security.

5. <u>coordination</u>. Until the implementation of regional operational security coordination, each TSO shall take into account remedial actions without costs in capacity calculation.

2. <u>6.</u> Each TSO shall ensure that validation the remedial actions used in existing coordination arrangements and are expected to be available.

3. All available remedial actions determined pursuant to paragraph 1to be taken into account shall be considered in expacitly calculation are the same for all the validation of the capacity calculation outputs according to **Error! Reference source notfound.** Article 33 and Article 34 time frames, taking into account their technical availabilities for each.

CHAPTER 3

CAPACITY CALCULATION TIME-FRAME, PROCESS

Article 26

Cross-zonal capacity validation methodology

1. Each TSO shall validate and have the right to correct cross zonal capacity relevant to the TSO's bidding zone borders or critical network elements provided by the coordinated capacity calculators in accordance with Articles 27 to 31.

2. Where a coordinated net transmission capacity approach is applied, all TSOs in the capacity calculation region shall include in the capacity calculation methodology referred to in Article 21 a rule for splitting the correction of cross zonal capacity between the different bidding zone borders.

3. Each TSO may reduce cross zonal capacity during the validation of cross zonal capacity referred to in paragraph 1 for reasons of operational security.

4. Each coordinated capacity calculator shall coordinate with the neighbouring coordinated capacity calculators during capacity calculation and validation.



5. Each coordinated capacity calculator shall, every three months, report all reductions made during the validation of cross zonal capacity in accordance with paragraph 3 to all regulatory authorities of the capacity calculation region. This report shall include the location and amount of any reduction in cross zonal capacity and shall give reasons for the reductions.

6. All the regulatory authorities of the capacity calculation region shall decide whether to publish all or part of the report referred to in paragraph 5.

SECTION 4

THE CAPACITY CALCULATION PROCESS

Article 27

General provisions

1. No later than six months after the decision on the generation and load data provision methodology referred to in Article 16 and the common grid model methodology referred to in Article 17, all TSOs shall organise the process of merging the individual grid models.

2. No later than four months after the decisions on the capacity calculation methodologies referred to in Articles 20 and 21, all the TSOs in each capacity calculation region shall jointly set up the coordinated capacity calculators and establish rules governing their operations.

3. All 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 31.

4. Using the latest available information, all TSOs shall regularly and at least once a year review and update:

(a) the operational security limits, contingencies and allocation constraints used for capacity calculation;

(b) the probability distribution of the deviations between expected power flows at the time of capacity calculation and realised power flows in real time used for calculation of reliability margins;

(c) the remedial actions taken into account in capacity calculation;

(d) the application of the methodologies for determining generation shift keys, critical network elements and contingencies referred to in Articles 22 to 24.

Article 17. Article 32. Article 28

Creation of a common grid model

1. For each capacity calculation time frame referred to in Article 14(1), each generator or load unit subject to Article 16 shall provide the data specified in the generation and load data provision methodology to the TSO responsible for the respective control area within the specified deadlines.

2. Each generator or load unit providing information pursuant to Article 16(3) shall deliver the most reliable set of estimations practicable.

3. For each capacity calculation time frame, each TSO shall establish the individual grid model for each scenario in accordance with Article 19, in order to merge individual grid models into a common grid model.

4. Each TSO shall deliver to the TSOs responsible for merging the individual grid models into a common grid model the most reliable set of estimations practicable for each individual grid model.

5. For each capacity calculation time frame a single, Union wide common grid model shall be created for each scenario as set out in Article 18 by merging inputs from all TSOs applying the capacity calculation process as set out in paragraph 3 of this Article.

Article 29

Regional calculation of cross-zonal capacity

1. <u>1.</u>—For each capacity calculation <u>time frametimeframe</u>, each TSO shall provide the <u>coordinated capacity calculators and all other TSOsRCCs</u> in the capacity calculation region with the following <u>inputems</u>: operational security limits, <u>critical network elements and contingencies</u>, generation<u>and load</u> 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. <u>2.</u> <u>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.</u>

2.3. Each <u>RCC shall perform the coordinated capacity ealculator shall perform an operational security analysis calculation applying operational security limits the inputs pursuant to paragraph 1 by using the common grid model created for each scenario in accordance with Article 28(5).70(1) of the Regulation (EU) 2017/1485.</u>

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 03. 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.

3.5. When calculating cross-zonal capacity, each coordinated capacity calculator RCC shall:

(a) <u>(a)</u>—use generation <u>and load</u> shift keys to calculate the impact of changes in bidding zone net positions and of flows on direct current lines;

(b) <u>exclude from the list of critical network elements determined according to the methodology set</u> <u>out in Article 28</u> (b) <u>ignore those critical those internal</u> network elements that are not significantly influenced by the changes in bidding zone net positions according to the methodology set out in Article 21; and,

(c) (e) 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)iArticle 21(1)(a)(i) and Article 26.2(a)ii(ii), and take into account previously allocated cross-zonal capacity in accordance with Article 26.2(b)iiiArticle 21(1)(b)(iii).

4. Each coordinated capacity calculator shall optimise cross zonal capacity using available remedial actions taken into account in capacity calculation in accordance with Article 21(1)(a)(iv).

4.6. 5. Each coordinated capacity calculator \underline{RCC} shall apply the sharing rules established in accordance with Article 26.2(b)vii. Article 21(1)(b)(vi).

5.7. 6. Each coordinated capacity calculator <u>RCC</u> shall respect the mathematical description of the applied capacity calculation approach established in accordance with Article 26.2(b)iArticle 21(1)(b)(i).

6.8. 7. Each coordinated RCC, for each capacity calculator calculation region applying the flow-based approach, and for each critical network element (with contingencies), shall:

(a) <u>(a)</u> use data on operational security limits to calculate the maximum flows on critical network elements;_

(b) use the common grid model to optimize the remedial actions taken into account in capacity calculation in accordance with Article 31;

(b)(c) use common grid model, generation and load shift keys and contingencies to calculate 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) (e) use to calculate flows on critical network elements (with contingencies);

(e) use the power transfer distribution factors from point (c)to calculate the flows resulting from previously allocated cross-zonal capacity in the capacity calculation region; to perform the following calculations:

<u>i.</u> (d) calculate flows on critical network elements for each scenario (taking into account contingencies), and adjust them<u>the flows from point</u> (d) by assuming no cross-zonal power exchanges within the capacity calculation region, applying the rules for avoiding undue discrimination between internal and;

ii. calculate flows resulting from previously allocated cross-zonal capacity within the capacity calculation region;

i-iii. calculate flows resulting from cross-zonal power exchanges established in accordance with Article 21(1)(b)(ii);outside the capacity calculation region within the Union as assumed in the common grid model; and

iv. (e) calculate the 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 on critical network elements, taking into account contingencies, 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)ivflows referred 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)in 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):

(d)(h) compute the cross-zonal capacities on each biding zone border which shall be equal to the maximum power exchanges calculated pursuant to point (g)), reliability margins, and flows resulting from decreased by the previously allocated cross-zonal capacity; ies.

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 biding zone border which shall be equal to the maximum power exchanges calculated pursuant to point (g) (f) adjust the 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.

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 or power transfer distribution factors using available remedial actions to be considered in capacity calculation in accordance with Article 25.

8. Each coordinated capacity calculator applying the coordinated net transmission capacity approach shall:

(a) use the common grid model, generation shift keys and contingencies to calculate maximum power exchange on bidding zone borders, which shall equal the maximum calculated exchange between two bidding zones on either side of the bidding zone border respecting operational security limits;



(b) adjust maximum power exchange using remedial actions taken into account in capacity calculation in accordance with Article 25;

(c) adjust maximum power exchange, applying rules for avoiding undue discrimination between internal and cross zonal exchanges in accordance with Article 21(1)(b)(ii);

(d) apply the rules set out in accordance with Article 21(1)(b)(vi) for efficiently sharing the power flow capabilities of critical network elements among different bidding zone borders;

(e) calculate cross zonal capacity, which shall be equal to maximum power exchange adjusted for the reliability margin and previously allocated cross zonal capacity.

9. Each coordinated capacity calculator shall cooperate with the neighbouring coordinated eapacity calculators. Neighbouringto each TSOs shall ensure such cooperation by exchanging and confirming information on interdependency with the relevant regional coordinated capacity calculators, for the purposes of capacity calculation and validation. Neighbouring TSOs shall provide information on interdependency to the coordinated capacity calculators before capacity calculation. An assessment of the accuracy of this information and corrective measures shall be included in the biennial report drafted in accordance with Article 31, where appropriate.

10. Each coordinated capacity calculator shall set:

(a) flow based parameters for each bidding zone within the capacity calculation region, if applying the flow based approach; or

(b) cross zonal capacity values for each bidding zone border within the capacity calculation region, if applying the coordinated net transmission capacity approach.

 $\frac{7.4. 11.}{\text{within its of the capacity calculation region for individual validation in accordance with Article 21(1)(c).}{21(1)(c).}$

Article 18. Article 34. Article 30A

Validation and delivery Individual validation of cross-zonal capacity

1. Each TSO shall validate the results of the regional capacity calculation for its bidding zone borders or available margins on critical network elements and capacity calculation outputs and provided pursuant to <u>OArticle 33.4</u>, for reason of operational security and may only reduce these coordinated values in accordance with Article 26.

<u>1. 42(2.) of Regulation 2019/943.</u>

1.2. Each TSO shall send its <u>validated available margins on critical network elements and capacity</u> validation and allocation constraints <u>calculation outputs</u> to the relevant coordinated capacity <u>calculators RCCs</u> and to the other TSOs of the relevant capacity calculation regions.



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<u>3.</u> <u>--</u>Each <u>eoordinated</u><u>RCC</u> shall determine the final capacity <u>ealeulator</u> <u>calculation</u> <u>outputs</u> <u>applying the outcome of the individual validation by each TSO.</u>

Article 35. Article 30A

Delivery of cross-zonal capacity

2.1. Each RCC shall provide the validated eross-zonal capacities and allocation constraints 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 51

Biennial report<u>General requirements</u>

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.

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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 <u>a</u> 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 $\frac{1}{\text{Article 37.1}}$ and $\frac{2}{\text{Article 37.2}}$.

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 <u>outputs</u>; and *allocation*

orders submitted in accordance with SDAC products, in accordance with Article 39Article 31

ii. Biennial report on .

(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

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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:

ii. capacity calculation <u>outputs;</u> and allocation

ii. orders submitted in accordance with SIDC products, in accordance with Article 391. By two years after the entry into force of this Regulation, ENTSO for Electricity shall draft a report on _____

(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

<u>TERMS AND CONDITIONS OR METHODOLOGIES ON MARKET COUPLING</u> <u>DEVELOPMENT</u>

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. <u>All NEMOs and all TSOs shall jointly develop, review and, where necessary, propose</u> 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 Article 42.1. 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

(1) 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.

<u>3.</u> 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

<u>1.</u> 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;



(b)(c) ensure that for each market time unit across all bidding zones, taking into account, where appropriate, allocation and submit it to the Agency.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) <u>2</u>. If the Agency requests it, in every second subsequent year ENTSO<u>ensure that</u> for Electricityeach 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

<u>1.</u> All NEMOs shall draft-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 1report on_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

<u>1.</u> Each RCC shall ensure that the capacity calculation <u>outputs are provided to the MCO by the</u> <u>SDAC deadline for delivery of capacity calculation outputs to the MCO, in accordance with Article</u> 42.2(b).

2. If an RCC is unable to provide the capacity calculation outputs in accordance with paragraph Article 53.11 and allocation and, 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. <u>Market participants shall</u> submit it to the Agency.<u>all orders to the relevant NEMOs until the SDAC gate closure time.</u>

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 13. 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;

(a)(b) a net position for each bidding zone border and capacity calculation region, the report on capacity calculation and allocation shall contain at least:, scheduling area and NEMO trading hub for each market time unit;

(c) (a) the information which enables the execution status of orders to be determined; and

(b)(d) information needed to assess the compliance of results with capacity calculation approach used;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 1143.

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)Article 48.2 have been calculated in accordance with the orders.

Each RCC and each TSO shall have the possibility to verify that the SDAC results referred to in Article 48.2(c)Article 48.2 (b) statistical indicators on reliability margins;

2. (c) statistical indicators of cross zonal 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, including allocation constraints where appropriate for each.

CHAPTER 3

SINGLE INTRADAY COUPLING OPERATION

SECTION 1

CONTINUOUS TRADING

Article 50. Article 58

Pre-coupling

<u>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).</u>

2. If an RCC is unable to provide the capacity calculation outputs in accordance with paragraph Article 53.14, 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.

4.3. Market participants shall submit all orders to the relevant NEMOs before or after the continuous trading opening time-frame; 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 <u>Article 50.4</u><u>Article 50.5</u>.

2. The MCO shall use the continuous trading algorithm and the inputs specified in paragraph 1
(d) quality indicators for _ 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;

(a)(c) the information used for the capacity calculation; which enables the execution status of orders to be determined; and

(b)(d) (e) where appropriate, proposed measures information needed to improve assess the compliance of results with capacity calculation; outputs.

(f) for regions where the coordinated net transmission capacity approach is applied, an analysis of whether the conditions specified in Article 20(7) are still fulfilled;

3. (g) indicators for assessing and following in the longer term the <u>The MCO shall</u> ensure the accuracy and efficiency of single day ahead and <u>results produced by the continuous trading</u> algorithm.

4. No later than the relevant times specified in the intraday timings and procedures as set out in Article 43.2(i) Article 43.2(h) coupling, including, 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)merging of capacity calculation regions 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 :

(c)(a) <u>NEMO</u> trading hub net positions produced in accordance with paragraph 2(b)Article 15(3) where relevant;

(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)(i).



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) Article 51.2 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.



Recommendation No 02/2021

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.

The MCO shall use the intraday auction algorithm and the inputs specified paragraph 1—(h) — recommendations for further development of single day ahead and intraday coupling, including further harmonisation of methodologies, processes and governance arrangements.

4. After consulting the Agency, all TSOs shall jointly agree on the statistical and quality indicators for the report. The Agency may require the amendment of those indicators, prior to the agreement by the TSOs or during their application.



5. The Agency shall decide whether to publish all or part of the biennial report.

CHAPTER 2

2. and produce at least the following results for each market time unit:

(d)(a) a reference clearing price for each bidding zone *configuration*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) Article 43.2(h), the MCO shall deliver the intraday auction results:

(a) to each TSO, each RCC and each NEMO, for the results specified in paragraph 0²(a), Error! Reference source not found. (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 <u>0</u>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 $43(2)(\underline{i})$.

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 1143.

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)Article 54.2 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 <u>OArticle 54.2</u> 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) Article 54.2(c); 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 <u>RCC.</u>

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 <u>concerned the national</u> regulatory authority shall assess whether an event qualifies as force majeure.

TITLE V

BIDDING ZONE REVIEW PROCESS

Article 19. Article 58. Article 32_

Reviewing existing bidding zone configurations_

1. <u>1.</u>—A review of an existing bidding zone configuration may be launched by:_

(a) the Agency, in accordance with Article 34(7);

(a) <u>(b)</u><u>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 <u>0</u><u>Article 62.1a</u> recommendation from the Agency in accordance with Article 34;</u>

(b) (c) 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 in accordance with paragraph 2(a);

(c) (d) one single regulatory authority or TSO with Member State, the approval of its competent regulatory authority or the TSO(s) with the approval of the competent regulatory authority, for the bidding zoneszone(s) inside the TSO's control area Member State, if the bidding zone configuration has negligible impact on the TSOs' control areas of neighbouring TSOs' control areas 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) <u>(e)</u> Member States in a capacity calculation region<u>or their designated competent</u> <u>authorities</u>.

2. _____If a review is launched in accordance with paragraph $1(a)\frac{1(a),(b), (c), 1(b)}{1(a),(c), 1(b)}$ or 1(d)(c), 1(b) or 1(d)(c), 1(c), 1(c)

the entity launching the review shall specify:



(e)(b) the participating TSO(s) shall be the TSO(s) in which the bidding zone configuration shall be assessed and the neighbouring geographic areas for which impacts shall be taken into account;

(b) the participating TSOs;

(c) the participating regulatory authorities.

(c) <u>3.</u> 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.

2.3. If a review is launched in accordance with paragraph $1(a)\frac{1}{1(d)_{52}}$ the following conditions shall apply:_

(a) (a) the geographic area in which bidding zone configuration is assessed shall be limited to the control area of the relevant $TSO_{7}(s)$, including interconnectors, of the Member State where the review is launched;

(b) <u>(b)</u> the TSO(s) of the <u>relevant control area</u><u>Member State</u> shall be the only TSO(s) participating <u>and relevant</u> in the review;

(c) the competent regulatory authority shall be the only regulatory authority participating in and the review;

(c) (d) <u>competent Member State shall be the relevant TSO and only</u> regulatory authority, respectively and Member States participating and relevant in the review; and

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

- 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 (e) the conditions for the review shall be specified, and the results of the review and proposal for the relevant regulatory authorities shall be published.
- <u>4. 4. .</u>

3.5. The review process shall consist of two steps.

(a) (a) In the first step,-:

the TSOs-participating in a review of bidding zone configuration TSOs shall develop a proposal for the methodology and assumptions that willto be used in the review process and propose alternative for the specific bidding zone configurations for the assessment.



<u>i.</u> <u>Thereview. Such a proposal on shall take into duly account the methodology</u> and assumptions and alternative bidding zone configuration shall be submitted to developed according to Article 14(5) of Regulation 2019/943.

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

<u>i-iii.</u> the proposals on methodology and assumptions and alternative bidding zone configurations shall be submitted to the relevant regulatory authorities, which shall be able to require coordinated amendments within 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(b)), 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 <u>TSOs</u>-participating in a review of bidding zone configuration<u>TSOs</u> shall:

i. <u>(i)</u> assess and compare the current bidding zone configuration and each alternative bidding zone configuration using the criteria specified in 5Article 33;

(ii) hold<u>prepare</u> a consultation in accordance with Article 12 and a workshop regarding the <u>draft</u> report including the approved methodology, assumptions and alternative bidding zone configuration proposals compared to<u>configurations</u>, the results of the bidding zone review comparing the existing bidding zone configuration, including timescales for implementation, unless the bidding zone configuration has negligible impact on neighbouring TSOs' control areas;

ii. (iii) submit a joint 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;

submit the report on bidding zone review as along with the joint proposal to maintain or amend the bidding zone configuration to the participating Member States and the participating regulatory authorities within 15 months of the decision to launch a review.

<u>iii.</u> (c) On receiving the joint proposal to maintain or to amend the bidding zone configuration in accordance with point (iii) above, the participating relevant Member States or, where provided by Member States, the 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 within six months 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.

4.7. 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. <u>5.</u><u>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.</u>

5.9. NEMOs or market participants shall, if requested by TSOs, provide the $\frac{\text{TSOs}}{\text{TSOs}}$ participating in a review of a bidding zone $\frac{\text{TSOs}}{\text{TSOs}}$ 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.

6.10. 6. _____The initiative for the review of the bidding zones configuration, the methodology the assumptions, and its 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 ENTSO for Electricity, or if the review was launched in accordance with paragraph 1(d), by the 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 20. Article 59. Article 33_

Criteria for reviewing bidding zone configurations_

<u>1.</u> If a review of bidding zone The configuration is carried out 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

<u>+.3.</u> <u>A bidding zone review pursuant to Article 5832, shall at least consider the following criteria shall be considered:</u>

(a) <u>(a)</u> in respect of network security:

i. <u>(i)</u>—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. <u>(ii)</u> the degree of uncertainty in cross-zonal capacity calculation.

(b) <u>(b)</u> in respect of overall market efficiency:_



i. (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. <u>(ii)</u> market efficiency, including, at least the cost of guaranteeing firmness of capacity, market market liquidity, market concentration and market power, the facilitation of effective competition, price signals for building infrastructure, and the accuracy and robustness of price signals;

iii. <u>(iii)</u>—transaction and transition costs, including the cost of amending existing contractual obligations incurred by market participants, NEMOs and TSOs;_

iv. (iv)—the cost of building new infrastructure which may relieve existing congestion;_

(v) the need to ensure that the market outcome is feasible without the need for extensive application of economically inefficient remedial actions;

v. <u>(vi)</u> any adverse effects of internal transactions on other bidding zones to ensure compliance enable the maximisation of cross-zonal capacity in line with point 1.7 Article 16 of Annex I to Regulation (EC) No 714/2009; EU) 2019/943;

vi. <u>(vii)</u> the impact on the operation and efficiency of the balancing mechanisms and imbalance settlement processes.

(c) (c) in respect of the stability and robustness of bidding zones:

i. (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 bidding zones to be consistent for all capacity calculation time frames;

ii. <u>(iii)</u>—the need for each generation and load unit to belong to only one bidding zone for each market time unit;_

iii. <u>(iv)</u> the location and frequency of congestion, if structural congestion influences the delimitation of bidding zones, taking into account <u>investments</u>, pursuant to <u>paragraph</u> (a)any future investment, which may relieve existing congestion-;

(d) <u>2.</u> 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.

2:4. A bidding zone review in accordance with Article 58Article 32 shall include scenariosscenario(s) which take intodue account a range of likely infrastructure developments throughout the period of 10tangible 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 30th 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 1shall 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 31st 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 21. Article 62. Article 34_

Regular reporting on current bidding zone configuration by ENISO for Electricity and the <u>Agency</u>

1. The Agency shall assess the efficiency of current bidding zone configuration every Every three years-

It shall:

(a) request, the ENTSO for Electricity to draftshall issue a technical report on current bidding zone configuration; and

(b) draft a market report evaluating the impact of the structural congestions and other major physical congestions between and within bidding zones observed in the current bidding zone configuration on market efficiency.

<u>1.</u>, 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.

<u>**1.2.**</u> The technical report referred to in paragraph $\underline{011}$ second subparagraph point (a) shall include at least:_



(a) <u>(a)</u> a list of structural <u>congestion physical congestions</u> and other major physical <u>congestion congestions</u> that occur with significant frequency, including locations and frequency; of <u>such congestions</u>; <u>OPTION 2</u>; For the purpose of this report, a frequency of occurrence of at least two percent shall be used.

(b) <u>(b)</u> an analysis of the expected evolution <u>or removal</u> of physical congestions resulting from investment in networks or from significant changes in generation or in consumption patterns; in the following three years;

(c) (c) an <u>a flow decomposition</u> analysis of <u>aiming to identify</u> the share of power flows that do not result from <u>bidding zones originating</u> the <u>exchanges impacting the structurally congested</u> network elements, pursuant to the prevailing flow decomposition method;

(e)(d) an assessment of whether the cross-zonal trade capacity allocation mechanism, for each reached the linear trajectory pursuant to the action plans pursuant to Article 15 of Regulation (EU) 2019/943 or the minimum capacity ealculation region, where appropriate pursuant to Article 16(8) of the same Regulation;

(d) <u>(d)</u> <u>(</u>

(e) a scenario encompassing a ten year time frame.

2.3. <u>3.</u> Each TSO shall provide data and analysis to allow the technical report on current bidding zone configuration to be produced in a timely manner.

3.4. <u>4</u>. <u>ENTSO for Electricity shall deliversubmit</u> to the Agency<u>ACER</u> the technical report on <u>structural congestions of the current bidding zone configuration, pursuant to paragraph <u>0</u>1 no later than nine months after the request every third year by the Agency. <u>30th September</u>. 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.</u>

4.5. 5. The technical report on current bidding zone configuration shall cover the last three full calendar years preceding the request by the Agency. year on which it is submitted.

5.6. 6. Without prejudice to the confidentiality obligations provided for in Article 7.4. ENTSO for Electricity shall make the technical report available to the public.

Article 63. 7. If the technical or marketArticle 30B

Reporting on capacity validation

Each RCC shall, every three months, report reveals inefficiencies in the current bidding zone configuration, the Agency may request TSOs to launch a review of an existing bidding zone configuration in all reductions made during coordinated and individual validation of cross-zonal capacity in accordance with Error! Reference source not found. Article 33Article 32(1).



CHAPTER 3

REDISPATCHING AND COUNTERTRADING

Article 35

Coordinated redispatching and Article 34countertrading

6.1. <u>1.</u> Within 16 months after the regulatory approval on capacity calculation regions referred to in Article 15, all the TSOs in each to all regulatory authorities of the capacity calculation region shall develop a proposal for a common and to ACER and publish it on the platform which shall be determined in the capacity calculation methodology for coordinated redispatching and countertrading. The proposal shall be subject to consultation in accordance with Article 12.. The report shall:

2. The methodology for coordinated redispatching and countertrading shall include actions of cross border relevance and shall enable all TSOs in each capacity calculation region to effectively relieve physical congestion irrespective of whether the reasons for the physical congestion fall mainly outside their control area or not. The methodology for coordinated redispatching and countertrading shall address the fact that its application may significantly influence flows outside the TSO's control area.

3. Each TSO may redispatch all available generation units and loads in accordance with the appropriate mechanisms and agreements applicable to its control area, including interconnectors.

By 26 months after the regulatory approval of capacity calculation regions, all TSOs in each capacity calculation region shall develop a report, subject to consultation in accordance with Article 12, assessing the progressive coordination and harmonisation of those mechanisms and agreements and including proposals. The report shall be submitted to their respective regulatory authorities for their assessment. The proposals in the report shall prevent these mechanisms and agreements from distorting the market.

4. Each TSO shall abstain from unilateral or uncoordinated redispatching and countertrading measures of cross border relevance. Each TSO shall coordinate the use of redispatching and countertrading resources taking into account their impact on operational security and economic efficiency.

5. The relevant generation units and loads shall give TSOs the prices of redispatching and countertrading before redispatching and countertrading resources are committed.

Pricing of redispatching and countertrading shall be based on:

(a) prices in the relevant electricity markets for the relevant time frame; or

(b) the cost of redispatching and countertrading resources calculated transparently on the basis of incurred costs.



6. Generation units and loads shall *ex ante* provide all information necessary for calculating the redispatching and countertrading cost to the relevant TSOs. This information shall be shared between the relevant TSOs for redispatching and countertrading purposes only.

CHAPTER 4

Algorithm development

Article 36

General provisions

1. All NEMOs shall develop, maintain and operate the following algorithms:

(a) a price coupling algorithm;

(b) a continuous trading matching algorithm.

2. NEMOs shall ensure that the price coupling algorithm and the continuous trading matching algorithm meet the requirements provided for in Articles 39 and 52 respectively.

3. By 18 months after the entry into force of this Regulation, all NEMOs shall in cooperation with TSOs develop a proposal for a back up methodology to comply with the obligations set out in Articles 39 and 52 respectively. The proposal for a methodology shall be subject to consultation in accordance with Article 12.

4. Where possible, NEMOs shall use already agreed solutions to efficiently implement the objectives of this Regulation.

Article 37

Algorithm development

1. By eight months after the entry into force of this Regulation:

(a) all TSOs shall jointly provide all NEMOs with a proposal for a common set of requirements for efficient capacity allocation to enable the development of the price coupling algorithm and of the continuous trading matching algorithm. These requirements shall specify functionalities and performance, including deadlines for the delivery of single day ahead and intraday coupling results and details of the cross-zonal capacity and allocation constraints to be respected;

(b) all NEMOs shall jointly propose a common set of requirements for efficient matching to enable the development of the price coupling algorithm and of the continuous trading matching algorithm.



2. No later than three months after the submission of the TSO and NEMO proposals for a common set of requirements in accordance with paragraph 1, all NEMOs shall develop a proposal for the algorithm in accordance with these requirements. This proposal shall indicate the time limit for the submission of received orders by NEMOs required to perform the MCO functions in accordance with Article 7(1)(b).

3. The proposal referred to in paragraph 2 shall be submitted to all TSOs. If additional time is required to prepare this proposal, all NEMOs shall work together supported by all TSOs for a period of not more than two months to ensure that the proposal complies with paragraphs 1 and 2.

4. The proposals referred to in paragraphs 1 and 2 shall be subject to consultation in accordance with Article 12.

5. All NEMOs shall submit the proposal developed in accordance with paragraphs 2 and 3 to the regulatory authorities for approval by no later than 18 months after the entry into force of this Regulation.

6. No later than two years after the approval of the proposal in accordance with paragraph 5, all TSOs and all NEMOs shall review the operation of the price coupling algorithm and continuous trading matching algorithm and submit the report to the Agency. If requested by the Agency, the review shall then be repeated every second year.

CHAPTER 5

SINGLE DAY-AIIEAD COUPLING

SECTION 1

THE PRICE COUPLING ALGORITHM

Article 38

Objectives of the price coupling algorithm

1. The price coupling algorithm shall produce the results set out in Article 39(2), in a manner which:

- (a) aims at maximising economic surplus for single day ahead coupling for the price coupled region for the next trading day;
 - (b) uses the marginal pricing principle according to which all accepted bids will have the same price per bidding zone per market time unit;

(c) facilitates efficient price formation;



(a) (d) respects specify the amount of any reduction in cross-zonal capacity due to capacity validation;

provide reasons for cross-zonal capacity reduction and allocation constraints;

(e) is repeatable and scalable.

2. The price coupling algorithm shall be developed in such a way that it would be possible to apply it to a larger or smaller number of bidding zones.

Article 39

Inputs and results of the price coupling algorithm

1. In order to produce results, the price coupling algorithm shall use:

(a) allocation constraints established in accordance with Article 23(3);

(b) cross zonal capacity results validated in accordance with Article 30;

(c) orders submitted in accordance with Article 40.

2. The price coupling algorithm shall produce at least the following results simultaneously for each market time unit:

(a) a single clearing price for each bidding zone and market time unit in EUR/MWh;

(b) a single net position for each bidding zone and each market time unit;

(c) the information which enables the execution status of orders to be determined.

3. All NEMOs shall ensure the accuracy and efficiency of results produced by the single price coupling algorithm.

4. All TSOs shall verify that the results of the price coupling algorithm are consistent with eross zonal capacity and allocation constraints.

Article 40

Products accommodated

1. No later than 18 months after the entry into force of this Regulation NEMOs shall submit a joint proposal concerning products that can be taken into account in the single day ahead coupling. NEMOs shall ensure that orders resulting from these products submitted to the price coupling algorithm are expressed in euros and make reference to the market time.

2. All NEMOs shall ensure that the price coupling algorithm is able to accommodate orders resulting from these products covering one market time unit and multiple market time units.



3. By two years after the entry into force of this Regulation and in every second subsequent year, all NEMOs shall consult, in accordance with Article 12:

(a) market participants, to ensure that available products reflect their needs;

(b) all TSOs, to ensure products take due account of operational security;

(c) all regulatory authorities, to ensure that the available products comply with the objectives of this Regulation.

4. All NEMOs shall amend the products if needed pursuant to the results of the consultation referred to in paragraph 3.

Article 41

Maximum and minimum prices

1. By 18 months after the entry into force of this Regulation, all NEMOs shall, in cooperation with the relevant TSOs, develop a proposal on harmonised maximum and minimum clearing prices to be applied in all bidding zones which participate in single day ahead coupling. The proposal shall take into account an estimation of the value of lost load.

The proposal shall be subject to consultation in accordance with Article 12.

2. All NEMOs shall submit the proposal to the regulatory authorities for approval.

Where a Member State has provided that an authority other than the national regulatory authority has the power to approve maximum and minimum clearing prices at the national level, the regulatory authority shall consult the proposal with the relevant authority as regards its impact on national markets.

After receiving a decision for approval from all regulatory authorities, all NEMOs shall inform the concerned TSOs of that decision without undue delay.

Article 42

Pricing of day-ahead cross-zonal capacity

1. The day ahead cross zonal capacity charge shall reflect market congestion and shall amount to the difference between the corresponding day ahead clearing prices of the relevant bidding zones.

2. No charges, such as imbalance fees or additional fees, shall be applied to day ahead eross zonal capacity except for the pricing in accordance with paragraph 1.

Article 43

Methodology for calculating scheduled exchanges resulting from single day-aheadcoupling

1. By 16 months after the entry into force of this Regulation, TSOs which intend to calculate scheduled exchanges resulting from single day ahead coupling shall develop a proposal for a common methodology for this calculation. The proposal shall be subject to consultation in accordance with Article 12.

2. The methodology shall describe the calculation and shall list the information which shall be provided by the relevant NEMOs to the scheduled exchange calculator established in accordance with Article 8(2)(g) and the time limits for delivering this information. The time limit for delivering information shall be no later than 15.30 market time day ahead.

3. The calculation shall be based on net positions for each market time unit.

4. No later than two years after the approval by the regulatory authorities of the concerned region of the proposal referred to in paragraph 1, TSOs applying scheduled exchanges shall review the methodology. Thereafter, if requested by the competent regulatory authorities, the methodology shall be reviewed every two years.

Article 44

Establishment of fallback procedures

By 16 months after the entry into force of this Regulation, each TSO, in coordination with all the other TSOs in the capacity calculation region, shall develop a proposal for robust and timely fallback procedures to ensure efficient, transparent and non discriminatory capacity allocation in the event that the single day ahead coupling process is unable to produce results.

The proposal for the establishment of fallback procedures shall be subject to consultation in accordance with Article 12.

Article 45

Arrangements concerning more than one NEMO in one bidding zone and forinterconnectors which are not operated by certified TSOs

1. TSOs in bidding zones where more than one NEMO is designated and/or offers trading services, or where interconnectors which are not operated by TSOs certified according to Article 3 of Regulation (EC) No 714/2009 exist, shall develop a proposal for cross zonal capacity allocation and other necessary arrangements for such bidding zones in cooperation with concerned TSOs, NEMOs and operators of interconnectors who are not certified as TSOs to ensure that the relevant NEMOs and interconnectors provide the necessary data and financial coverage for such arrangements. These arrangements must allow additional TSOs and NEMOs to join these arrangements.



2. The proposal shall be submitted to the relevant national regulatory authorities for approval within 4 months after more than one NEMO has been designated and/or allowed to offer trading services in a bidding zone or if a new interconnector is not operated by a certified TSO. For existing interconnectors which are not operated by certified TSOs the proposal shall be submitted within four months after entry into force of this Regulation.

SECTION 2

THE SINGLE DAY-AHEAD COUPLING PROCESS

Article 46

Provision of input data

1. Each coordinated capacity calculator shall ensure that cross zonal capacity and allocation constraints shall be provided to relevant NEMOs in time to ensure the publication of cross zonal capacity and of allocation constraints to the market no later than 11.00 market time day ahead.

2. If a coordinated capacity calculator is unable to provide for cross zonal capacity and allocation constraints one hour prior to the day ahead market gate closure time, that coordinated capacity calculator shall notify the relevant NEMOs. These NEMOs shall immediately publish a notice for market participants.

In such cases, cross zonal capacity and allocation constraints shall be provided by the coordinated capacity calculator no later than 30 minutes before the day ahead market gate closure time.

Article 47

Operation of single day-ahead coupling

1. The day ahead market gate opening time shall be at the latest 11:00 market time day ahead.

2. The day ahead market gate closure time in each bidding zone shall be noon market time day ahead. TSOs or NEMOs in the region based on the CEE region or its neighbouring countries may set a different gate closure time until this region has joined single day ahead coupling.

3. Market participants shall submit all orders to the relevant NEMOs before day ahead market gate closure time, in accordance with Articles 39 and 40.

4. Each NEMO shall submit the orders received in accordance with paragraph 3 to perform the MCO functions in accordance with Article 7(2) by no later than a time specified by all NEMOs in the proposal for a single price coupling algorithm set out in Article 37(5).

5. Orders matched in single day ahead coupling shall be considered firm.

6. MCO functions shall ensure anonymity of submitted orders.

Article 48

Delivery of results

1. No later than by the time specified by all TSOs in the requirements set out in Article 37(1)(a), all NEMOs performing MCO functions shall deliver the single day ahead coupling results:

(a) to all TSOs, all coordinated capacity calculators and all NEMOs, for the results specified in Article 39(2)(a) and (b);

(b) to all NEMOs, for the results specified in Article 39(2)(c).

2. Each TSO shall verify that the single day ahead coupling results of the price coupling algorithm referred to in Article 39(2)(b) have been calculated in accordance with the allocation constraints and validated cross zonal capacity.

3. Each NEMO shall verify that the single day ahead coupling results of the price coupling algorithm referred to in Article 39(2)(c) have been calculated in accordance with the orders.

4. Each NEMO shall inform market participants on the execution status of their orders without unjustifiable delay.

Article 49

Calculation of scheduled exchanges resulting from single day-ahead coupling

1. Each scheduled exchange calculator shall calculate scheduled exchanges between bidding zones for each market time unit in accordance with the methodology established in Article 43.

2. Each scheduled exchange calculator shall notify relevant NEMOs, central counter parties, shipping agents and TSOs of the agreed scheduled exchanges.

Article 50

Initiation of fallback procedures

1. In the event that all NEMOs performing MCO functions are unable to deliver part or all of the results of the price coupling algorithm by the time specified in Article 37(1)(a), the fallback procedures established in accordance with Article 44 shall apply.



2. In cases where there is a risk that all NEMOs performing MCO functions are unable to deliver part or all of the results within the deadline, all NEMOs shall notify all TSOs as soon as the risk is identified. All NEMOs performing MCO functions shall immediately publish a notice to market participants that fallback procedures may be applied.

CHAPTER 6

SINGLE INTRADAY COUPLING

Section 1

OBJECTIVES, CONDITIONS AND RESULTS OF SINGLE INTRADAY COUPLING

Article 51

Objectives of the continuous trading matching algorithm

1. From the intraday cross zonal gate opening time until the intraday cross zonal gate closure time, the continuous trading matching algorithm shall determine which orders to select for matching such that matching:

(a) aims at maximising economic surplus for single intraday coupling per trade for the intraday market time frame by allocating capacity to orders for which it is feasible to match in accordance with the price and time of submission;

(b) respects the allocation constraints provided in accordance with Article 58(1);

(c) respects the cross zonal capacity provided in accordance with Article 58(1);

(d) respects the requirements for the delivery of results set out in Article 60;

(e) is repeatable and scalable.

2. The continuous trading matching algorithm shall produce the results provided for in Article 52 and correspond to the product capabilities and functionalities set out in Article 53.

Article 52

Results of the continuous trading matching algorithm

1. All NEMOs, as part of their MCO function, shall ensure that the continuous trading matching algorithm produces at least the following results:

(a) the execution status of orders and prices per trade;



(b) a single net position for each bidding zone and market time unit within the intraday market.

2. All NEMOs shall ensure the accuracy and efficiency of results produced by the continuous trading matching algorithm.

3. All TSOs shall verify that the results of the continuous trading matching algorithm are consistent with cross zonal capacity and allocation constraints in accordance with Article 58(2).

Article 53

Products accommodated

1. No later than 18 months after the entry into force of this Regulation NEMOs shall submit a joint proposal concerning products that can be taken into account in the single intraday coupling. NEMOs shall ensure that all orders resulting from these products submitted to enable the MCO functions to be performed in accordance with Article 7 are expressed in euros and make reference to the market time and the market time unit.

2. All NEMOs shall ensure that orders resulting from these products are compatible with the characteristics of cross zonal capacity, allowing them to be matched simultaneously.

3. All NEMOs shall ensure that the continuous trading matching algorithm is able to accommodate orders covering one market time unit and multiple market time units.

4. By two years after the entry into force of this Regulation and in every second subsequent year, all NEMOs shall consult in accordance with Article 12:

(a) market participants, to ensure that available products reflect their needs;

(b) all TSOs, to ensure products take due account of operational security;

(c) all regulatory authorities, to ensure that the available products comply with the objectives of this Regulation.

5. All NEMOs shall amend the products if needed pursuant to the results of the consultation referred to in paragraph 4.

Article 54

Maximum and minimum prices

1. By 18 months after the entry into force of this Regulation, all NEMOs shall, in cooperation with the relevant TSOs, develop a proposal on harmonised maximum and minimum clearing prices to be applied in all bidding zones which participate in single intraday coupling. The proposal shall take into account an estimation of the value of lost load.

The proposal shall be subject to consultation in accordance with Article 12.



2. All NEMOs shall submit the proposal to all regulatory authorities for approval. Where a Member State has provided that an authority other than the national regulatory authority has the power to approve maximum and minimum clearing prices at the national level, the regulatory authority shall consult the proposal with the relevant authority as regards its impact on national markets.

3. After receiving a decision from the regulatory authorities, all NEMOs shall inform the concerned TSOs of that decision without unjustifiable delay.

Article 55

Pricing of intraday capacity

1. Once applied, the single methodology for pricing intraday cross zonal capacity developed in accordance with Article 55(3) shall reflect market congestion and shall be based on actual orders.

2. Prior to the approval of the single methodology for pricing intraday cross zonal capacity set out in paragraph 3, TSOs may propose an intraday cross zonal capacity allocation mechanism with reliable pricing consistent with the requirements of paragraph 1 for approval by the regulatory authorities of the relevant Member States. This mechanism shall ensure that the price of intraday cross zonal capacity is available to the market participants at the time of matching the orders.

3. By 24 months after the entry into force of this Regulation, all TSOs shall develop a proposal for a single methodology for pricing intraday cross zonal capacity. The proposal shall be subject to consultation in accordance with Article 12.

4. No charges, such as imbalance fees or additional fees, shall be applied to intraday crosszonal capacity except for the pricing in accordance with paragraphs 1, 2 and 3.

Article 56

Methodology for calculating scheduled exchanges resulting from single intradaycoupling

1. By 16 months after the entry into force of this Regulation, the TSOs which intend to calculate scheduled exchanges resulting from single intraday coupling shall develop a proposal for a common methodology for this calculation.

The proposal shall be subject to consultation in accordance with Article 12.

2. The methodology shall describe the calculation and, where required, shall list the information which the relevant NEMOs shall provide to the scheduled exchange calculator and the time limits for delivering this information.

3. The calculation of scheduled exchanges shall be based on net positions as specified in Article 52(1)(b).



4. No later than two years after the approval by the regulatory authorities of the concerned region of the proposal referred to in paragraph 1, the relevant TSOs shall review the methodology. Thereafter, if requested by the competent regulatory authorities, the TSOs shall review the methodology every two years.

Article 57

Arrangements concerning more than one NEMO in one bidding zone and forinterconnectors which are not operated by certified TSOs

1. TSOs in bidding zones where more than one NEMO is designated and/or offers trading services, or where interconnectors which are not operated by TSOs certified according to Article 3 of Regulation (EC) No 714/2009 exist, shall develop a proposal for cross zonal capacity allocation and other necessary arrangements for such bidding zones in cooperation with concerned TSOs, NEMOs and operators of interconnectors who are not certified as TSOs to ensure that the relevant NEMOs and interconnectors provide the necessary data and financial coverage for such arrangements. These arrangements must allow additional TSOs and NEMOs to join these arrangements.

2. The proposal shall be submitted for approval by the relevant national regulatory authorities within 4 months of more than one NEMO being designated and/or allowed to offer trading services in a bidding zone or if a new interconnector is not operated by a certified TSO. For existing interconnectors which are not operated by certified TSOs the proposal shall be submitted within 4 months after entry into force of this Regulation.

SECTION 2

THE SINGLE INTRADAY COUPLING PROCESS

Article 58

Provision of input data

1. Each coordinated capacity calculator shall ensure that cross zonal capacity and allocation constraints are provided to the relevant NEMOs no later than 15 minutes before the intraday cross zonal gate opening time.

2. If updates to cross zonal capacity and allocation constraints are required, due to operational changes on the transmission system, each TSO shall notify the coordinated capacity calculators in its capacity calculation region. The coordinated capacity calculators shall then notify the relevant NEMOs.

3. If any coordinated capacity calculator is unable to comply with paragraph 1, that coordinated capacity calculator shall notify the relevant NEMOs. These NEMOs shall publish a notice to all market participants without unjustifiable delay.

Article 59

Operation of single intraday coupling

1. By 16 months after the entry into force of this Regulation, all TSOs shall be responsible for proposing the intraday cross zonal gate opening and intraday cross zonal gate closure times. The proposal shall be subject to consultation in accordance with Article 12.

2. The intraday cross zonal gate closure time shall be set in such a way that it:

- (a) maximises market participants' opportunities for adjusting their balances by trading in the intraday market time frame as close as possible to real time; and
 - (b) provides TSOs and market participants with sufficient time for their scheduling and balancing processes in relation to network and operational security.

3. One intraday cross zonal gate closure time shall be established for each market time unit for a given bidding zone border. It shall be at most one hour before the start of the relevant market time unit and shall take into account the relevant balancing processes in relation to operational security.

4. The intraday energy trading for a given market time unit for a bidding zone border shall start at the latest at the intraday cross zonal gate opening time of the relevant bidding zone borders and shall be allowed until the intraday cross zonal gate closure time.

5. Before the intraday cross zonal gate closure time, market participants shall submit to relevant NEMOs all the orders for a given market time unit. All NEMOs shall submit the orders for a given market time unit for single matching immediately after the orders have been received from market participants.

6. Orders matched in single intraday coupling shall be considered firm.

7. MCO functions shall ensure the anonymity of orders submitted via the shared order book.

Article 60

Delivery of results

1. All NEMOs performing MCO functions shall deliver the continuous trading matching algorithm results:

- (a) to all other NEMOs, for results on the execution status per trade specified in Article 52(1)(a);
- (b) to all TSOs and scheduled exchange calculators, for results single net positions specified in Article 52(1)(b).



2. If, in accordance with paragraph 1(a), any NEMO, for reasons outside its responsibility, is unable to deliver these continuous trading matching algorithm results, it shall notify all other NEMOs.

3. If, in accordance with paragraph 1(b), any NEMO, for reasons outside its responsibility, is unable to deliver these continuous trading matching algorithm results, it shall notify all TSOs and each scheduled exchange calculator as soon as reasonably practicable. All NEMOs shall notify the market participants concerned.

4. All NEMOs shall send, without undue delay, the necessary information to market participants to ensure that the actions specified in Articles 68 and 73(3) can be undertaken.

Article 61

Calculation of scheduled exchanges resulting from single intraday coupling

1. Each scheduled exchange calculator shall calculate scheduled exchanges between bidding zones for each market time unit in accordance with the methodology established in accordance with Article 56.

2. Each scheduled exchange calculator shall notify the relevant NEMOs, central counter parties, shipping agents, and TSOs of the agreed scheduled exchanges.

Article 62

Publication of market information

1. As soon as the orders are matched, each NEMO shall publish for relevant market participants at least the status of execution of orders and prices per trade produced by the continuous trading matching algorithm in accordance with Article 52(1)(a).

2. Each NEMO shall ensure that information on aggregated executed volumes and prices is made publicly available in an easily accessible format for at least 5 years. The information to be published shall be proposed by all NEMOS within the proposal for continuous trading matching algorithm pursuant to Article 37(5).

Article 63

Complementary regional auctions

1. By 18 months after the entry into force of this Regulation, the relevant NEMOs and TSOs on bidding zone borders may jointly submit a common proposal for the design and implementation of complementary regional intraday auctions. The proposal shall be subject to consultation in accordance with Article 12.

2. Complementary regional intraday auctions may be implemented within or between bidding zones in addition to the single intraday coupling solution referred to in Article 51. In

order to hold regional intraday auctions, continuous trading within and between the relevant bidding zones may be stopped for a limited period of time before the intraday cross zonal gate closure time, which shall not exceed the minimum time required to hold the auction and in any case 10 minutes.

3. For complementary regional intraday auctions, the methodology for pricing intraday cross zonal capacity may differ from the methodology established in accordance with Article 55(3) but it shall nevertheless meet the principles provided for in Article 55(1).

4. The competent regulatory authorities may approve the proposal for complementary regional intraday auctions if the following conditions are met:

- (a) regional auctions shall not have an adverse impact on the liquidity of the single intraday coupling;
- (b) all cross zonal capacity shall be allocated through the capacity management module;
- (c) the regional auction shall not introduce any undue discrimination between market participants from adjacent regions;
 - (d) the timetables for regional auctions shall be consistent with single intraday coupling to enable market participants to trade as close as possible to real time;
 - (e) regulatory authorities shall have consulted the market participants in the Member States concerned.

5. At least every two years after the decision on complementary regional auctions, the regulatory authorities of the Member States concerned shall review the compatibility of any regional solutions with single intraday coupling to ensure that the conditions above continue to be fulfilled.

SECTION 3

TRANSITIONAL INTRADAY ARRANGEMENTS

Article 64

Provisions relating to explicit allocation

1. Where jointly requested by the regulatory authorities of the Member States of each of the bidding zone borders concerned, the TSOs concerned shall also provide explicit allocation, in addition to implicit allocation, that is to say, capacity allocation separate from the electricity trade, via the capacity management module on bidding zone borders.

2. The TSOs on the bidding zone borders concerned shall jointly develop a proposal on the conditions that shall be fulfilled by market participants to participate in explicit allocation.



The proposal shall be subject to the joint approval by the regulatory authorities of the Member States of each of the bidding zone borders concerned.

3. When establishing the capacity management module, discrimination shall be avoided when simultaneously allocating capacity implicitly and explicitly. The capacity management module shall determine which orders to select for matching and which explicit capacity requests to accept, according to a ranking of price and time of entrance.

Article 65

Removal of explicit allocation

1. The NEMOs concerned shall cooperate closely with the TSOs concerned and shall consult market participants in accordance with Article 12 in order to translate the needs of market participants linked to explicit capacity allocation rights into non standard intraday products.

2. Prior to deciding on the removal of explicit allocation, the regulatory authorities of the Member States of each of the bidding zone borders concerned shall jointly organise a consultation to assess-whether the proposed non standard intraday products meet the market participants' needs for intraday trading.

3. The competent regulatory authorities of the Member States of each of the bidding zone borders concerned shall jointly approve the introduced non standard products and the removal of explicit allocation.

Article 66

Provisions relating to intraday arrangements

1. Market participants shall ensure the completion of nomination, clearing and settlement related to explicit allocation of cross zonal capacity.

2. Market participants shall fulfil any financial obligations, relating to clearing and settlement arising from explicit allocation.

3. The participating TSOs shall publish relevant information on the interconnections to which explicit allocation is applicable, including the cross zonal capacity for explicit allocation.

Article 67

Explicit requests for capacity

A request for explicit cross zonal capacity may be submitted by a market participant only for an interconnection where the explicit allocation is applicable. For each request for explicit capacity the market participant shall submit the volume and the price to the capacity management module. The price and volume of explicit allocated capacity shall be made publicly available by the relevant TSOs.

CHAPTER 7

CLEARING AND SETTLEMENT FOR SINGLE DAY-AHEAD AND INTRADAY COUPLING

Article 68

Clearing and settlement

1. The central counter parties shall ensure clearing and settlement of all matched orders in a timely manner. The central counter parties shall act as the counter party to market participants for all their trades with regard to the financial rights and obligations arising from these trades.

2. Each central counter party shall maintain anonymity between market participants.

3. Central counter parties shall act as counter party to each other for the exchange of energy between bidding zones with regard to the financial rights and obligations arising from these energy exchanges.

4. Such exchanges shall take into account:

(a) net positions produced in accordance with Articles 39(2)(b) and 52(1)(b);

(b) scheduled exchanges calculated in accordance with Articles 49 and 61.

- 5. Each central counter party shall ensure that for each market time unit:
 - (a) 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;
 - (b) electricity exports and electricity imports between bidding zones equal each other, with any deviations resulting only from considerations of allocation constraints, where appropriate.

6. Notwithstanding paragraph 3, a shipping agent may act as a counter party between different central counter parties for the exchange of energy, if the parties concerned conclude a specific agreement to that effect. If no agreement is reached, the shipping arrangement shall be decided by the regulatory authorities responsible for the bidding zones between which the clearing and settlement of the exchange of energy is needed.

7. All central counter parties or shipping agents shall collect congestion incomes arising from the single day ahead coupling specified in Articles 46 to 48 and from the single intraday coupling specified in Articles 58 to 60.



8. All central counter parties or shipping agents shall ensure that collected congestion incomes are transferred to the TSOs no later than two weeks after the date of settlement.

9. If the timing of payments is not harmonised between two bidding zones, the Member States concerned shall ensure that an entity is appointed to manage the timing mismatch and to bear the relevant costs.

CHAPTER 8

FIRMNESS OF ALLOCATED CROSS-ZONAL CAPACITY

Article 69

Proposal for day-ahead firmness deadline

By 16 months after the entry into force of this Regulation, all TSOs shall develop a common proposal for a single day ahead firmness deadline, which shall not be shorter than half an hour before the day ahead market gate closure time. The proposal shall be subject to consultation in accordance with Article 12.

Article 70

Firmness of day-ahead capacity and allocation constraints

1. Prior to the day ahead firmness deadline, each coordinated capacity calculator may adjust cross zonal capacity and allocation constraints provided to relevant NEMOs.

2. After the day ahead firmness deadline, all cross zonal capacity and allocation constraints shall be firm for day ahead capacity allocation unless the requirements of Article 46(2) are met, in which case cross zonal capacity and allocation constraints shall be firm as soon as they are submitted to relevant NEMOs.

3. After the day ahead firmness deadline, cross zonal capacity which has not been allocated may be adjusted for subsequent allocations.

Article 71

Firmness of intraday capacity

Cross zonal intraday capacity shall be firm as soon as it is allocated.

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 (EC) No 714/2009, where the TSO shall act in an expeditious manner and redispatching or countertrading is not possible, 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 all directly concerned TSOs.

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 through NEMOs. 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 time frame.

3. If allocated 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) if there is implicit allocation, central counter parties or shipping agents shall not 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 allocation, market participants shall be entitled to reimbursement of the price paid for the capacity during the explicit allocation process;
- (c) in an emergency situation, if capacity is allocated via explicit allocation, market participants shall be entitled to compensation equal to the price difference of relevant markets between the bidding zones concerned in the relevant time frame; or
- (d) in an emergency situation, if capacity is allocated via explicit allocation but the bidding zone price is not calculated in at least one of the two relevant bidding zones in the relevant time frame, market participants shall be entitled to reimbursement of the price paid for capacity during the explicit allocation 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*.



Recommendation No 02/2021

TITLE III

COSTS

CHAPTER 1

Concestion income distribution methodology for single day-aliead and intraday coupling

Article 73

Congestion income distribution methodology

1. By 12 months after the entry into force of this Regulation, all TSOs shall develop a proposal for a methodology for sharing congestion income.

2. The methodology developed in accordance with paragraph 1 shall:

(a) facilitate the efficient long term operation and development of the electricity transmission system and the efficient operation of the electricity market of the Union;

(b) comply with the general principles of congestion management provided for in Article 16 of Regulation (EC) No 714/2009;

(c) allow for reasonable financial planning;

(d) be compatible across time frames;

(e) establish arrangements to share congestion income deriving from transmission assets owned by parties other than TSOs.

3. TSOs shall distribute congestion incomes in accordance with the methodology in paragraph 1 as soon as reasonably practicable and no later than one week after the congestion incomes have been transferred in accordance with Article 68(8).



CHAPTER 2

REDISPATCHING AND COUNTERTRADING COST SHARING METHODOLOGY FOR SINGLE DAY-AHEAD AND INTRADAY COUPLING

Article 74

Redispatching and countertrading cost sharing methodology

1. No later than 16 months after the decision on the capacity calculation regions is taken, all TSOs in each capacity calculation region shall develop a proposal for a common methodology for redispatching and countertrading cost sharing.

2. The redispatching and countertrading cost sharing methodology shall include costsharing solutions for actions of cross border relevance.

3. Redispatching and countertrading costs eligible for cost sharing between relevant TSOs shall be determined in a transparent and auditable manner.

4. The redispatching and countertrading cost sharing methodology shall at least:

- (a) determine which costs incurred from using remedial actions, for which costs have been considered in the capacity calculation and where a common framework on the use of such actions has been established, are eligible for sharing between all the TSOs of a capacity calculation region in accordance with the capacity calculation methodology set out in Articles 20 and 21;
- (b) define which costs incurred from using redispatching or countertrading to guarantee the firmness of cross zonal capacity are eligible for sharing between all the TSOs of a capacity calculation region in accordance with the capacity calculation methodology set out in Articles 20 and 21;
- (c) set rules for region wide cost sharing as determined in accordance with points (a) and (b).

5. The methodology developed in accordance with paragraph 1 shall include:

(a) a mechanism to verify the actual need for redispatching or countertrading between the TSOs involved;

(b) an *ex post* mechanism to monitor the use of remedial actions with costs;

- (c) a mechanism to assess the impact of the remedial actions, based on operational security and economic criteria;
- (d) a process allowing improvement of the remedial actions;



(e) a process allowing monitoring of each capacity calculation region by the competent regulatory authorities.

6. The methodology developed in accordance with paragraph 1 shall also:

(a) provide incentives to manage congestion, including remedial actions and incentives to invest effectively;

(b) be consistent with the responsibilities and liabilities of the TSOs involved;

(c) ensure a fair distribution of costs and benefits between the TSOs involved;

(d) be consistent with other related mechanisms, including at least:

(i) the methodology for sharing congestion income set out in Article 73;

 (ii) the inter TSO compensation mechanism, as set out in Article 13 of Regulation (EC) No 714/2009 and Commission Regulation (EU) No 838/2010²;

- (e) facilitate the efficient long term development and operation of the pan European interconnected system and the efficient operation of the pan European electricity market;
- (f) facilitate adherence to the general principles of congestion management as set out in Article 16 of Regulation (EC) No 714/2009;

(g) allow reasonable financial planning;

(h) be compatible across the day ahead and intraday market time frames; and

(i) comply with the principles of transparency and non discrimination.

7. By 31 December 2018, all TSOs of each capacity calculation region shall further harmonise as far as possible between the regions the redispatching and countertrading cost sharing methodologies applied within their respective capacity calculation region.

CHAPTER 3

CAPACITY ALLOCATION AND CONGESTION MANAGEMENT COST RECOVERY

Article 75

General provisions on cost recovery

² Commission Regulation (EU) No 838/2010 of 23 September 2010 on laying down guidelines relating to the inter-transmission system operator compensation mechanism and common regulatory approach to transmission charging (OJ L 250, 24.9.2010, p. 5).



1. Costs relating to the obligations imposed on TSOs in accordance with Article 8, including the costs specified in Article 74 and Articles 76 to 79, shall be assessed by the competent regulatory authorities. Costs assessed as reasonable, efficient and proportionate shall be recovered in a timely manner through network tariffs or other appropriate mechanisms as determined by the competent regulatory authorities.

2. Member States' share of the common costs referred to in Article 80(2)(a), regional costs referred to in Article 80(2)(b) and national costs referred to in Article 80(2)(c) assessed as reasonable, efficient and proportionate shall be recovered through NEMO fees, network tariffs or other appropriate mechanisms as determined by the competent regulatory authorities.

3. If requested by the regulatory authorities, relevant TSOs, NEMOs and delegates in accordance with Article 78 shall, within three months of the request, provide information necessary to facilitate the assessment of the costs incurred.

Article 76

Costs of establishing, amending and operating single day-ahead and intraday coupling

1. All NEMOs shall bear the following costs:

(a) common, regional and national costs of establishing, updating or further developing the price coupling algorithm and single day ahead coupling;

(b) common, regional and national costs of establishing, updating or further developing the continuous trading matching algorithm and single intraday coupling;

(c) common, regional and national costs of operating single day ahead and intraday coupling.

2. Subject to agreement with the NEMOs concerned, TSOs may make a contribution to the costs provided for in paragraph 1 subject to approval by the relevant regulatory authorities. In such cases, within two months of receiving a forecast from the NEMOs concerned, each TSO shall be entitled to provide a cost contribution proposal to the relevant regulatory authority for approval.

3. The NEMOs concerned shall be entitled to recover costs in accordance with paragraph 1 which have not been borne by TSOs in accordance with paragraph 2 by means of fees or other appropriate mechanisms only if the costs are reasonable and proportionate, through national agreements with the competent regulatory authority.

Article 77

Clearing and settlement costs

1. All costs incurred by central counter parties and shipping agents shall be recoverable by means of fees or other appropriate mechanisms if they are reasonable and proportionate.



2. The central counter parties and shipping agents shall seek efficient clearing and settlement arrangements avoiding unnecessary costs and reflecting the risk incurred. The cross-border clearing and settlement arrangements shall be subject to approval by the relevant national regulatory authorities.

Article 78

Costs of establishing and operating the coordinated capacity calculation process

1. Each TSO shall individually bear the costs of providing inputs to the capacity calculation process.

(a)(b) 2. All TSOs shall bear jointly the costs of merging the comes from coordinated or individual grid models.validation (in the latter case specifying the TSOs applying the reduction);

(c) <u>All TSOs in each case the reasons are violation of thermal limits</u>, 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;

7:<u>2. The</u> capacity calculation <u>methodology pursuant to</u> Article 26region shall bear the costs of establishing and operating the coordinated capacity calculators may provide further requirements for reporting on capacity validation.

3. Any costs incurred by market participants in meeting the requirements of this Regulation shall be borne by those market participants.

Article 79

Costs of ensuring firmness

The costs of ensuring firmness in accordance with Articles 70(2) and 71 shall be borne by the relevant TSOs, to the extent possible in accordance with Article 16(6)(a) of Regulation (EC) No 714/2009. These costs shall include the costs from compensation mechanisms associated with ensuring the firmness of cross zonal capacities as well as the costs of redispatching, countertrading and imbalance associated with compensating market participants.

Article 80

Cost sharing between NEMOs and TSOs in different Member States





1. All relevant NEMOs and TSOs shall provide a yearly report to the regulatory authorities in which the costs of establishing, amending and operating single day ahead and intraday coupling are explained in detail. This report shall be published by the Agency taking due account of sensitive commercial information. Costs directly related to single day ahead and intraday coupling shall be clearly and separately identified and auditable. The report shall also provide full details of contributions made to NEMO costs by TSOs in accordance with Article 76(2).

2. The costs referred to in paragraph 1 shall be broken down into:

(a) common costs resulting from coordinated activities of all NEMOs or TSOs participating in the single day ahead and intraday coupling;

(b) regional costs resulting from activities of NEMOs or TSOs cooperating in a certain region;

(c) national costs resulting from activities of the NEMOs or TSOs in that Member State.

3. Common costs referred to in paragraph 2(a) shall be shared among the TSOs and NEMOs in the Member States and third countries participating in the single day ahead and intraday coupling. To calculate the amount to be paid by the TSOs and NEMOs in each Member State and, if applicable, third countries, one eighth of the common cost shall be divided equally between each Member State and third country, five eighths shall be divided between each Member State and third country proportionally to their consumption, and two eighths shall be divided equally between the participating NEMOs. To take into account changes in the common costs shall be regularly adapted.

4. NEMOs and TSOs cooperating in a certain region shall jointly agree on a proposal for the sharing of regional costs in accordance with paragraph 2(b). The proposal shall then be individually approved by the competent national authorities of each of the Member States in the region. NEMOs and TSOs cooperating in a certain region may alternatively use the cost sharing arrangements set out in paragraph 3.

5. The cost sharing principles shall apply to costs incurred from the entry into force of this Regulation. This is without prejudice to existing solutions used for the development of single day ahead and intraday coupling and costs incurred prior to the entry into force of this Regulation shall be shared among the NEMOs and TSOs based on the existing agreements governing such solutions.

TITLE IV

DELEGATION OF TASKS AND MONITORING



CHAPTER 2

IMPLEMENTATION MONITORING

Article 22. Article 64. Article 82

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

1. The entity or entities performing the MCO functions shall be monitored by the <u>ACER</u> and regulatory authorities or relevant authoritiesshall monitor the functioning and performance of the territory where they are located. Othersingle day-ahead and intraday coupling. All regulatory authorities or relevant authorities, and the Agency, in coordination with ACER, shall monitor the compliance of the MCO in accordance with Article 13contribute to the monitoring where adequate. The <u>ACER and</u> regulatory authorities or relevant authorities and the MCO functions shall fully cooperate and shall provide each other access to all necessary information for other regulatory authorities and the Agency in order to ensure proper monitoring of single day ahead and intraday coupling in accordance with Article 38and functioning of Directive 2009/72/EC.

1. <u>2. Monitoring of the implementation of the single day-ahead and intraday coupling by</u> <u>ENTSO for Electricity in accordance with Article 8(8) of Regulation (EC) No 714/2009 shall in</u> <u>particular cover the following matters:61 of Electricity Directive (EU) 2019/944.</u>

- (a) progress and potential problems with the implementation of single day ahead and intraday coupling, including the choice of different available options in each country;
- (b) preparing the report on capacity calculation and allocation in accordance with Article 31(1);
- (c) the efficiency of current bidding zone configuration in coordination with the Agency in accordance with Article 34;
- (d) the effectiveness of the operation of the price coupling algorithm and of the continuous trading matching algorithm in cooperation with NEMOs in accordance with Article 37(6);
- (e) the effectiveness of the criterion concerning the estimation of the value of lost load, in accordance with Articles 41(1) and 54(1); and
- (f) the review of the methodology for calculating scheduled exchanges resulting from single day ahead coupling in accordance with Article 43(4).

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



2. 4. The Agency <u>ACER</u>, 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 the <u>Agency ACER</u> in accordance with Articles $\frac{8(9)}{9(430(5))}$ of Regulation (EC) No <u>714/2009</u>. <u>EU</u>) 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 the <u>Agency ACER</u>.

3. <u>5. AllEach</u> TSOs shall submit to ENTSO for Electricity the information required to perform the tasks in accordance with <u>paragraph 2paragraphs 2 and 4.</u>

4. <u>6. NEMOs The MCO, the joint decision making body, each NEMO</u>, market participants and other relevant organisations delegated entities regarding single day-ahead and intraday coupling shall, at the joint request of the Agency <u>ACER</u> and the ENTSO for Electricity, submit to the ENTSO for Electricity the information required for monitoring in accordance with paragraph 22 and 4_{72} except for information already obtained by the regulatory authorities, the Agency <u>ACER</u> or the ENTSO for Electricity in the context of their respective implementation monitoring tasks.

TITLE ¥<u>VII</u>

TRANSITIONALAND FINAL PROVISIONS

Article 23. Article 65. Article 83

Transitional provisions for Ireland and Northern Ireland

1. Except for Articles 4, 5 and 6 and participation in the development of terms and conditions or methodologies, for which the respective deadlines shall apply, the requirements of this Regulation shall not apply in Ireland and Northern Ireland until 31 December 2017.

1. 2.—From the date of the entry into force of this Regulation until 31 December 2017, Ireland and Northern Ireland shall implement preparatory transitional arrangements. Those transitional arrangements all TSOs and all NEMOs shall:

(a) facilitate the transition to full implementation of develop and full compliance with 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 include all necessary preparatory measures for full implementation the requirements for ensuring the continuity of and full compliance 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;

(a)(b) develop and submit for approval no later than twelve months after entry into force of this Regulation, by 31 December 2017;:





(b) guarantee a reasonable degree of integration with the marketsproducts that can be accommodated in adjacent jurisdictions;

(c) provide for at least:

i. (i) allocation of interconnector capacity in an explicit the single dayahead auction and in at least two implicit intraday coupling process in accordance with Article 39.1auctions;

ii. the algorithm methodology in accordance with Article 41.1 (ii) joint nomination of interconnection capacity and energy at ;

the day-ahead market time frame;

ii. <u>(iii)</u> application of the 'Use It Or Lose It' or 'Use It Or Sell It' principle, as specified timings and procedures in accordance with Article 42.1 point 2.5 of Annex I to Regulation (EC) No 714/2009, to capacity not used at the day ahead market time frame.;

the intraday timings and procedures in accordance with Article 43.1 (d) ensure fair and non discriminatory pricing of interconnector capacity in the implicit intraday auctions;

iv. (e) put in place fair, transparent;

develop and non discriminatory compensation mechanisms for ensuring firmness;

(b)(c) (f) set out a detailed roadmap, approved by the regulatory authorities for Ireland and Northern Ireland, with milestones for achieving full implementation of and compliance with submit for approval no later than eighteen months after entry into force of this Regulation;

the common methodologies for the calculation of scheduled exchanges in accordance with Article 44.1 (g) be subject to a consultation process, involving all relevant parties and give the utmost consideration to the consultation's outcome;

i. (h) be justified;

the methodology on the basis of a cost benefit analysis;

(i) not unduly affect other jurisdictions.

i.<u>ii.</u> <u>3.</u> Regulatory authorities for Ireland and Northern Ireland shall provide to the Agency at least quarterly, or upon the Agency's request, any publication of information <u>in accordance with</u> Article 8.1required for assessing the transitional arrangements for the electricity market on the island of Ireland and the progress towards achieving full implementation of and compliance with this Regulation.;

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.



Recommendation No 02/2021

Article 24. 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.



<u>ANNEX</u>

CORRELATION TABLE

Commission Regulation (EU) 2015/1222 (CACM Regulation)	Amended CACM RegulationAmendment new TITLE#.CH#Article#	
Article 1	Ī	Article 1
Article 2	Ī	Article 2
Article 3	Ī	Article 3
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