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From:	General Secretariat of the Council
To:	Permanent Representatives Committee
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Subject:	Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on the internal market for electricity (recast) - Analysis of the final compromise text with a view to agreement

1. The sixth and final trilogue on the Regulation on electricity was held on 18 December 2018, and a provisional agreement was reached on the basis of the text as reflected in Annex.

2. The Permanent Representatives Committee is thus invited to:

   - endorse the annexed compromise text as agreed in the trilogue, and
   - mandate the Presidency to inform the European Parliament that, should the European Parliament adopt its position at first reading, in accordance with Article 294 paragraph 3 of the Treaty, in the form set out in the compromise package contained in the Annex to this document (subject to revision by the legal linguists of both institutions), the Council would, in accordance with Article 294, paragraph 4 of the Treaty, approve the European Parliament's position and the act shall be adopted in the wording which corresponds to the European Parliament's position.

PE-CONS No/YY - 2016/0379 (COD)

REGULATION (EU) 2019/...

OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

of ...

on the internal market for electricity

(recast)

(Text with EEA relevance)

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty on the Functioning of the European Union, and in particular Article 194 (2) thereof,

Having regard to the proposal from the European Commission,

After transmission of the draft legislative act to the national parliaments,

Having regard to the opinion of the European Economic and Social Committee,

Having regard to the opinion of the Committee of the Regions,

Acting in accordance with the ordinary legislative procedure,

Whereas:

(1) Regulation (EC) No 714/2009 of the European Parliament and of the Council1 has been substantially amended several times. Since further amendments are to be made, that Regulation should be recast in the interests of clarity.

(2) The Energy Union aims at providing consumers – household and business – ***with safe,*** secure, sustainable, competitive and affordable energy. Historically, the electricity system was dominated by vertically integrated, often publicly owned, monopolies with large centralised nuclear or fossil fuel power plants. The internal market in electricity, which has been progressively implemented since 1999, aims to deliver a real choice for all consumers in the Union, both citizens and businesses, new business opportunities and more cross-border trade, so as to achieve efficiency gains, competitive prices and higher standards of service, and to contribute to security of supply and sustainability. The internal market in electricity has increased competition, in particular at the wholesale level, and cross-border trade. It remains the foundation of an efficient energy market.

1 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 (OJ L 211, 14.8.2009, p. 15).

(3) Europe's energy system is in the middle of its most profound change in decades and the electricity market is at the heart of that change. The common goal to decarbonise the energy system creates new opportunities and challenges for market participants. At the same time, technological developments allow for new forms of consumer participation and cross-border cooperation.

(***3a)*** ***This Regulation is establishing rules to ensure the functioning of the internal energy market while integrating requirements related to the development of renewable forms of energy and environmental policy, in particular specific rules for certain renewable power generating facilities, concerning balancing responsibility, dispatch and redispatch as well as a threshold for CO2 emissions of new generation capacity where it is subject to a capacity mechanism.***

(3b) ***Considering that renewable energy sources from small power generation facilities should be granted priority dispatch either via a specific priority order in the dispatching methodology or via legal or regulatory requirements for market operators to provide this energy on the market. Priority dispatch granted in the system operation services under the same economic conditions should be considered as compliant with this regulation. In any case, priority dispatch should be deemed as compatible with the participation in the electricity market of power generating facilities using renewable energy sources.***

(4) State interventions, often designed in an uncoordinated manner, have led to increasing distortions of the wholesale electricity market, with negative consequences for investments and cross-border trade.

(5) In the past, electricity customers were purely passive, often buying electricity at regulated prices which had no direct relation to the market. In the future, customers need to be enabled to fully participate in the market on equal footing with other market participants ***and be empowered to manage their energy consumption***. To integrate growing shares of renewable energy, the future electricity system should make use of all available sources of flexibility, particularly demand ***side solutions*** and storage***, and of digitalisation through the integration of innovative technologies with the electricity system***. To achieve effective decarbonisation at lowest cost, it also needs to encourage energy efficiency. ***The achievement of the internal energy market through the effective integration of renewable energy can drive investments in the long term and can contribute to delivering the objectives of the Energy Union and the 2030 climate and energy framework.***

(6) More market integration and the change towards a more volatile electricity production requires increased efforts to coordinate national energy policies with neighbours and to use the opportunities of cross-border electricity trade.

(7) Regulatory frameworks have developed, allowing electricity to be traded across the Union. That development has been supported by the adoption of several network codes and guidelines for the integration of the electricity markets. Those network codes and guidelines contain provisions on market rules, system operation and network connection. To ensure full transparency and increase legal certainty, the main principles of market functioning and capacity allocation in the balancing, intraday, day ahead and forward market timeframes should also be adopted pursuant to the ordinary legislative procedure and incorporated in a single act.

(7a) The Balancing Guideline establishes in its Article 13 a process where transmission system operators are able to delegate all or part of their tasks to a third party. The delegating transmission system operators should remain responsible for ensuring compliance with the obligations in this Regulation. Likewise, Member States should be able to assign tasks and obligations to a third party. Such assignment should be limited to tasks and obligations executed at national level (such as imbalance settlement). The limitations to the assignment should not lead to unnecessary changes to the existing national arrangements. However, transmission system operators should remain responsible for the tasks entrusted to them pursuant to Article 40 of the [recast Electricity Directive].

(7b) The Balancing Guideline established in its Articles 18, 30 and 32 that the pricing method for standard and specific products for balancing energy should create positive incentives for market participants in keeping and/or helping to restore the system balance of their imbalance price area, reduce system imbalances and costs for society. Such pricing approach should strive for an economically efficient use of demand response and other balancing resources subject to operational security limits. The pricing method used in the procurement of balancing capacity should strive for an economically efficient use of demand response and other balancing resources subject to operational security limits.

(7c) The integration of balancing energy markets should facilitate the efficient functioning of the intraday market in order to provide the possibility for market participants to balance themselves as close as possible to real time as set with the balancing energy gate closure times defined in Article 24 of the Balancing Guideline. Only the imbalances remaining after the end of the intraday market should be balanced by transmission system operators with the balancing market. The Balancing Guideline foresees in its Article 53 the harmonisation of the imbalance settlement period to 15 minutes in Europe. Such harmonisation should support intraday trading and foster the development of a number of trading products with same delivery windows.

(7d) ***In order to enable transmission system operators to procure and use balancing capacity in an efficient, economic and market-based manner, there is a need to foster market integration. In this regard, the Balancing Guidelines established in its Title IV three methodologies through which transmission system operators may allocate cross-zonal capacity for the exchange of balancing capacity and sharing of reserves, when supported on the basis of a cost-benefit analysis: the co-optimisation process, the market-based allocation process and the allocation based on an economic efficiency analysis. The co-optimisation allocation process should be performed on a day-ahead basis whereas the market-based allocation process could be performed where the contracting is done not more than one week in advance of the provision of the balancing capacity and the allocation based on an economic efficiency analysis where the contracting is done more than one week in advance of the provision of the balancing capacity on the conditions that the volumes allocated are limited and that an assessment is done every year. Once a methodology for the allocation process of cross-zonal capacity is approved by the relevant regulatory authorities, early application of the methodology by two or more transmission system operators could take place to gain experience and allow for a smooth application by more transmission system operators in the future. The application of such a methodology, where existing, should nevertheless be harmonised by all transmission system operators in order to foster market integration.***

(7e) ***The Balancing Guideline establishes in its Title V that the general objective of imbalance settlement is to ensure that balance responsible parties support the system's balance in an efficient way and to incentivise market participants in keeping and/or helping to restore the system balance. To make balancing markets and the overall energy system fit for the integration of increasing shares of variable renewables, imbalance prices should reflect the real-time value of energy. All market participants should be financially responsible for imbalances they cause in the system, representing the difference between the allocated volume and the final position in the market. For demand response aggregators, the allocated volume is made of the energy volume physically activated by the participating consumers' load, based on a defined measurement and baseline methodology.***

(7f) ***The guideline on capacity allocation and congestion management sets out detailed guidelines on cross-zonal capacity allocation and congestion management in the day-ahead and intraday markets, including the requirements for the establishment of common methodologies for determining the volumes of capacity simultaneously available between bidding zones, criteria to assess efficiency and a review process for defining bidding zones. Articles 32 and 34 set out rules on review of bidding zone configuration, Articles 41 and 54 set out harmonised limits on maximum and minimum clearing prices for day-ahead and intraday timeframes, Article 59 sets out rules on intraday cross-zonal gate closure times, whereas Article 74 of the guideline sets out rules on redispatching and countertrading cost sharing methodologies.***

(7g) The guideline on forward capacity allocation sets out detailed rules on cross-zonal capacity allocation in the forward markets, on the establishment of a common methodology to determine long-term cross-zonal capacity, on the establishment of a single allocation platform at European level offering long-term transmission rights, and on the possibility to return long-term transmission rights for subsequent forward capacity allocation or transfer long-term transmission rights between market participants. Article 30 of the guideline sets out rules on forward hedging products.

(7h) The network code on requirements for generators[1] sets out the requirements for grid connection of power-generating facilities, namely synchronous power-generating modules, power park modules and offshore power park modules, to the interconnected system. It, therefore, helps to ensure fair conditions of competition in the internal electricity market, to ensure system security and the integration of renewable electricity sources, and to facilitate Union-wide trade in electricity. Articles 66 and 67 of the network code set out rules for emerging technologies in electricity generation.

[1] *Commission Regulation (EU) 2016/631 of 14 April 2016 establishing a network code on requirements for grid connection of generators.*

(7i) ***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 market liquidity, efficient congestion management and overall market efficiency. When a review of an existing bidding zone configuration is launched by one single regulatory authority or TSO with the approval of its competent regulatory authority, for the bidding zones inside the TSO's control area, if the bidding zone configuration has negligible impact on neighboring TSOs' control areas, including interconnectors, and the review of bidding zone configuration is necessary to improve efficiency, to maximize cross-border trading opportunities or to maintain operational security, the TSO of the relevant control area and the competent regulatory authority should be, respectively, the only TSO and the only regulatory authority participating in the review. The relevant TSO and regulatory authority, respectively, should give the neighboring TSOs prior notice of the review and the results of the review should be published. The launch of a regional bidding zone review may be triggered following the technical report on congestion in line with Article 13 of this Regulation or in accordance with existing procedures defined in the guideline on capacity allocation and congestion management.***

(7j) ***When Regional Coordination Centres perform capacity calculation, they should maximise capacity considering non-costly remedial actions and respecting the operational security limits of TSOs of the Capacity Calculation Region. Where the calculation does not result in capacity equal or above the threshold set out in this Regulation, Regional Coordination Centres should consider all available costly remedial actions to further increase capacity up to the threshold, including redispatching potential within and between the capacity calculation regions, while respecting the operational security limits of TSOs of the Capacity Calculation Region. TSOs should report accurately and transparently on all aspects of capacity calculation pursuant to the obligations in this regulation and should ensure that all information sent to Regional Coordination Centres is accurate and fit for purpose.***

(7k) ***When performing capacity calculation, regional coordination centres shall calculate cross-zonal capacities using data from transmission system operators which respects the operational security limits of their respective control areas. Transmission system operators may decide to deviate from coordinated capacity calculation where its implementation would result in a violation of the operational security limits of network elements in its control area. These deviations should be carefully monitored and transparently reported to prevent abuse and ensure that the volume of interconnection capacity to be made available to market participants is not limited in order to solve congestion inside a bidding zone. Where an action plan is in place, the action plan should take account of deviations and address their cause.***

(8) Core market principles should set out that electricity prices are to be determined through demand and supply. Those prices should signal when electricity is needed, providing market-based incentives for investments into flexibility sources such as flexible generation, interconnection, demand response or storage.

(9) ***While*** decarbonisation of the electricity sector, with renewable energy ***sources*** becoming a major part of the market, is ***one of the goals of the Energy Union,*** it is crucial that the market removes existing barriers to cross-border trade and encourages investments into supporting infrastructure, for example, more flexible generation, interconnection, demand response and storage. To support this shift to variable and distributed generation, and to ensure that energy market principles are the basis for the Union's electricity markets of the future, a renewed focus on short-term markets and scarcity pricing is essential.

(10) Short-term markets will improve liquidity and competition by enabling more resources to participate fully in the market, especially those that are more flexible. Effective scarcity pricing will encourage market participants to ***react to market signals and to*** be available when the market most needs it and ensures that they can recover their costs in the wholesale market. It is therefore critical to ensure that ▌ administrative and implicit price caps are removed to allow scarcity ***pricing***. When fully embedded in the market structure, short-term markets and scarcity pricing will contribute to the removal of other ***market distortive*** measures, such as capacity mechanisms, to ensure security of supply. At the same time, scarcity pricing without price caps on the wholesale market should not jeopardize the possibility for reliable and stable prices for final customers, in particular households***, SMEs and industrial consumers***.

(11) ***Without prejudice to Articles 107, 108 and 109 of the Treaty on the Functioning of the EU,*** derogations to fundamental market principles such as balancing responsibility, market-based dispatch, or ▌ redispatch reduce flexibility signals and act as barriers to the development of solutions such as storage, demand response or aggregation. While derogations are still necessary to avoid unnecessary administrative burden for certain actors, in particular households and SMEs, broad derogations covering entire technologies are not consistent with the ***aim*** of achieving market-based and efficient decarbonisation ***process*** and should thus be replaced by more targeted measures.

(12) The precondition for effective competition in the internal market in electricity is non-discriminatory and transparent ***and adequate*** charges for network use including interconnecting lines in the transmission system. ▌

(12a) Uncoordinated curtailments of interconnector capacities increasingly limit the exchange of electricity between Member States and have become a serious obstacle to the development of a functioning internal market in electricity. The available capacity of interconnectors should therefore be set at the maximum level consistent with the safety standards of secure network operation including respecting the security standard for contingencies (n-1). However, there are some limitations to setting the capacity level in a meshed grid. A clear minimum threshold of available capacity for cross-zonal trade needs to be put in place in order to reduce the effects of loop flows and internal congestions on cross-zonal trade and giving a predictable capacity value for market participants. Where a net transmission capacity or flow-based approach is used, this threshold should determine the minimum share of the capacity of an interconnector or critical network element respecting operational security limits to be used as an input for coordinated capacity calculation under the capacity allocation and congestion management guideline, taking into account contingencies. The remaining share of capacity may be used for reliability margins, loop flows and internal flows. Furthermore, in case of foreseeable problems for ensuring grid security derogations may be accepted for a limited transitional phase and should be accompanied by a methodology and projects providing for a long-term solution.

(13) It is important to avoid distortion of competition resulting from the differing safety, operational and planning standards used by transmission system operators in Member States. Moreover, there should be transparency for market participants concerning available transfer capacities and the security, planning and operational standards that affect the available transfer capacities.

(14) To efficiently steer necessary investments, prices also need to provide signals where electricity is most needed. In a zonal electricity system, correct locational signals require a coherent, objective and reliable determination of bidding zones via a transparent process. In order to ensure efficient operation and planning of the Union electricity network and to provide effective price signals for new generation capacity, demand response or transmission infrastructure, bidding zones should reflect structural congestion. In particular, cross-zonal capacity should not be reduced in order to resolve internal congestion.

(14a) To reflect the divergent principles of optimising bidding zones without jeopardizing liquid markets and grid investments two options should be foreseen to overcome congestions. Member States can choose between a bidding zone split or measures such as grid reinforcement and grid optimisation. The starting point for such a decision should be the identification of long term structural congestions by the transmission system operator or operators of a Member State, by a report by the ENTSO for Electricity on congestion or by a bidding zone review. Member States should try to find a common solution first on how to best address congestions. In that course the Member States might adopt multinational or national action plans to overcome congestions. At the end of the implementation of this action plan, Member States should have a possibility to choose whether to opt for a reconfiguration of the bidding zone(s) or whether to opt for covering remaining congestions with remedial actions for which they bear the costs. In the latter case they shall not be split against their will, as long as the level of minimum capacity benchmark is reached. The minimum level of capacity that should be used in coordinated capacity calculation should be a percentage of the capacity of a critical network element, as defined following the selection process under the guideline on capacity allocation and congestion management, after respecting operational security limits in contingency situation. A Commission decision on the bidding zone configuration should be possible as a measure of last resort and only amend the bidding zone configuration in those Member States which have opted for a split or which have not reached the minimum level of the benchmark. For Member States adopting an action plan to overcome congestions with measures, a phase-in period in the form of a linear trajectory for the opening of interconnectors should apply.

(15) Efficient decarbonisation of the electricity system via market integration requires systematically abolishing barriers to cross-border trade to overcome market fragmentation and to allow Union energy customers to fully benefit from the advantages of integrated electricity markets and competition.

(16) This Regulation should lay down basic principles with regard to tarification and capacity allocation, whilst providing for the adoption of guidelines detailing further relevant principles and methodologies, in order to allow rapid adaptation to changed circumstances.

(17) The management of congestion problems should provide correct economic signals to transmission system operators and market participants and should be based on market mechanisms.

(18) In an open, competitive market, transmission system operators should be compensated for costs incurred as a result of hosting cross-border flows of electricity on their networks by the operators of the transmission systems from which cross-border flows originate and the systems where those flows end.

(19) Payments and receipts resulting from compensation between transmission system operators should be taken into account when setting national network tariffs.

(20) The actual amount payable for cross-border access to the system can vary considerably, depending on the transmission system operator involved and as a result of differences in the structure of the tarification systems applied in Member States. A certain degree of harmonisation is therefore necessary in order to avoid distortions of trade.

(21) There should be rules on the use of revenues flowing from congestion-management procedures, unless the specific nature of the interconnector concerned justifies an exemption from those rules.

(22) To provide for a level playing field between all market participants, network tariffs should be applied in a way which does not discriminate between production connected at the distribution-level with regard to the production connected at the transmission level, either positively or negatively. They should not discriminate against energy storage, and should not create disincentives for participation in demand response or represent an obstacle to improvements in energy efficiency.

(23) In order to increase transparency and comparability in tariff-setting where binding harmonization is not seen as adequate, ***best practice report*** on tariff methodologies should be issued by the European Agency for the Cooperation of Energy Regulators established by [recast of Regulation (EC) No 713/2009 as proposed by COM(2016) 863/2] ("the Agency").

(24) To better ensure optimum investment in the trans-European grid and address the challenge where viable interconnection projects cannot be built for lack of prioritisation at national level, the use of congestion rents should be reconsidered and ***contribute*** to guarantee availability and maintain or increase interconnection capacities.

(25) In order to ensure optimal management of the electricity transmission network and to allow trading and supplying electricity across borders in the Union, a European Network of Transmission System Operators for Electricity (the ENTSO for Electricity), should be established. The tasks of the ENTSO for Electricity should be carried out in compliance with Union's competition rules which remain applicable to the decisions of the ENTSO for Electricity. The tasks of the ENTSO for Electricity should be well-defined and its working method should ensure efficiency, transparency and the representative nature of the ENTSO for Electricity. The network codes prepared by the ENTSO for Electricity are not intended to replace the necessary national network codes for non-cross-border issues. Given that more effective progress may be achieved through an approach at regional level, transmission system operators should set up regional structures within the overall cooperation structure, whilst ensuring that results at regional level are compatible with network codes and non-binding ten-year network development plans at Union level. Member States should promote cooperation and monitor the effectiveness of the network at regional level. Cooperation at regional level should be compatible with progress towards a competitive and efficient internal market in electricity.

(26) A robust medium to long-term Union level resource adequacy assessment should be carried out by the ENTSO for Electricity to provide an objective basis for the assessment of adequacy concerns. The resource adequacy concern that capacity mechanisms address should be based on the EU assessment. ***The EU assessment may be complemented by national assessments.***

(27) The ***methodology for the*** long-term resource adequacy assessment (from 10 year-ahead to year-ahead) set out in this regulation has a different purpose than the seasonal outlooks (six months ahead) as set out in Article 9 [Regulation on risk preparedness as proposed by COM(2016) 862]. Medium- to long-term assessments are mainly used to ***identify adequacy concerns and*** assess the need for capacity mechanisms whereas seasonal outlooks are used to alert to ***short-term*** risks that might occur in the following six months that are likely to result in a significant deterioration of the electricity supply situation. In addition, Regional ***Coordination*** Centres also carry out regional adequacy assessments as defined in European legislation on electricity transmission system operation. These are very short-term adequacy assessments (from weak-ahead to day-ahead) used in the context of system operation.

(28) Prior to introducing capacity mechanisms, Member States should assess regulatory distortions contributing to the related resource adequacy concern. They should be required to adopt measures to eliminate the identified distortions including a timeline for their implementation. Capacity mechanisms should only be introduced ***to address*** the ***adequacy problems*** that cannot be ***solved*** through removing such distortions.

(29) Member States intending to introduce capacity mechanisms should derive resource adequacy targets following a transparent and verifiable process. Member States should have the freedom to set their own desired level of security of supply.

(29a) Pursuant to Article 108 TFEU, the Commission has exclusive competence to assess the compatibility of State aid measures with the internal market which the Member States may put in place. That assessment is carried out on the basis of Article 107(3) TFEU and in accordance with the relevant provisions and guidelines which the Commission may adopt to that effect. This Regulation is without prejudice to the Commission's exclusive competence granted by the TFEU.

(30) ▌Capacity mechanisms already in place should be reviewed in light of ***the provisions of this Regulation***.▌

(31) Detailed rules for facilitating effective cross-border participation in capacity mechanisms ▌should be laid down ***in this Regulation***. Transmission system operators across the borders should facilitate ***the participation of*** interested generators ▌ in capacity mechanisms in other Member States. Therefore, they should calculate capacities up to which cross-border participation would be possible, enable participation and check availabilities. National regulatory authorities should enforce the cross-border rules in the Member States.

(31a) Considering that capacity mechanisms should not overcompensate while ensuring security of supply and in that regard should be constructed so as to ensure that price paid for availability automatically tends to zero when the level of capacity which would be profitable on the energy market without a capacity mechanism is expected to be adequate to meet the level of capacity demanded.

(31b) To support Member States and regions facing social, industrial and economic challenges due to the energy transition, the Commission has set up a coal and carbon-intensive regions initiative. In this context, the Commission will assist Member States including with, where available, targeted financial support to enable a "just transition" in these regions.

(32) In view of differences in national energy systems and technical limitations of existing electricity networks, the best approach to achieving progress in market integration will often be at a regional level. Regional cooperation of transmission system operators should thus be strengthened. In order to ensure efficient cooperation, a new regulatory framework should foresee stronger regional governance and regulatory oversight, including by strengthening the decision-making power of the Agency for cross-border issues. Closer cooperation of Member States could be needed also in crisis situations, to increase security of supply and limit market distortions.

(33) The coordination between transmission system operators at regional level has been formalised with the mandatory participation of transmission system operators in regional security coordinators ▌**.** ***The regional coordination of transmission system operators*** should ***be further developed with an enhanced institutional framework via the establishment of Regional Coordination Centres***. The ***establishment of Regional Coordination Centres*** should take into account existing ***or planned*** regional coordination initiatives and support the increasingly integrated operation of electricity systems across the Union, ensuring their efficient and secure performance. ***For this reason, it is necessary to ensure that the coordination of transmission system operators through Regional Coordination Centres takes place across the EU. Where transmission system operators of a given region are not coordinated yet by an existing or planned Regional Coordination Centre, the transmission system operator of that region should establish or designate a Regional Coordination Centre.***

(34) The geographical scope of ***Regional Coordination Centres*** should allow them to play an effective ***contribution to the*** coordination ***of*** the operations of transmission system operators over ▌ regions ***and lead to enhanced system security and market efficiency. Regional Coordination Centres should have the flexibility to carry out the tasks in the region as best adapted to the nature of the individual tasks entrusted to them***.

(35) ***Regional Coordination Centres should perform tasks*** where their regionalisation brings added value compared to ***tasks*** performed at national level. The ***tasks*** of ***Regional Coordination Centres*** should cover the ***tasks*** carried out by regional security ***coordinators pursuant to the System Operation Guideline***[1] as well as additional system operation, market operation and risk preparedness ***tasks***. The ***tasks*** carried out by ***Regional Coordination Centres*** should exclude real time operation of the electricity system.

(35a) In performing their tasks, regional coordination centres should contribute to the achievement of the 2030 and 2050 objectives set out in the climate and energy policy framework.

(36) ***Regional Coordination Centres*** should primarily act in the interest of system and market operation of the region ▌. Hence, ***Regional Coordination Centres*** should be entrusted with ***the*** powers ***necessary*** to ***coordinate the*** actions to be taken by transmission system operators of the system operation region for certain functions and with an enhanced advisory role for the remaining functions.

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[1] ***Commission Regulation (EU) 2017/1485 of 2 August 2017 establishing a guideline on electricity transmission system operation (OJ L 220, 25.8.2017, p. 1).***

(36a) The human, technical, physical and financial resources of Regional Coordination Centres should not go beyond what is strictly necessary for the fulfilment of its tasks.

(37) ENTSO for Electricity should ensure that the ***activities*** of ***Regional Coordination Centres*** are coordinated across the regions' boundaries.

(38) In order to raise efficiencies in the electricity distribution networks in the Union and ensure close cooperation with transmission system operators and ENTSO for electricity, a European entity of distribution system operators in the Union ("EU DSO entity") should be established. The tasks of the EU DSO entity should be well-defined and its working method should ensure efficiency, transparency and representativeness amongst the Union distribution system operators. The EU DSO Entity should closely cooperate with ENTSO for Electricity on the preparation and implementation of the network codes where applicable and should work on providing guidance on the integration inter alia of distributed generation and storage in distribution networks or other areas which relate to the management of distribution networks. ***The EU DSO entity should also take due consideration of the specificities inherent in distribution systems connected downstream with electricity systems on islands which are not connected with other electricity systems via interconnectors.***

(39) Increased cooperation and coordination among transmission system operators is required to create network codes for providing and managing effective and transparent access to the transmission networks across borders, and to ensure coordinated and sufficiently forward-looking planning and sound technical evolution of the transmission system in the Union , including the creation of interconnection capacities, with due regard to the environment. Those network codes should be in line with framework guidelines, which are non-binding in nature (framework guidelines) and which are developed by the Agency. The Agency should have a role in reviewing, based on matters of fact, draft network codes, including their compliance with the framework guidelines, and it should be enabled to recommend them for adoption by the Commission. The Agency should assess proposed amendments to the network codes and it should be enabled to recommend them for adoption by the Commission. Transmission system operators should operate their networks in accordance with those network codes.

(40) To ensure the smooth functioning of the internal market in electricity, provision should be made for procedures which allow the adoption of decisions and guidelines with regard, inter alia, to tarification and capacity allocation by the Commission whilst ensuring the involvement of Member States' regulatory authorities in that process, where appropriate through their European association. Regulatory authorities, together with other relevant authorities in the Member States, have an important role to play in contributing to the proper functioning of the internal market in electricity.

(41) All market participants have an interest in the work expected of the ENTSO for Electricity. An effective consultation process is therefore essential and existing structures that are set up to facilitate and streamline the consultation process, such as via national regulators or the Agency, should play an important role.

(42) In order to ensure greater transparency regarding the entire electricity transmission network in the Union, the ENTSO for Electricity should draw up, publish and regularly update a non-binding Union-wide ten-year network development plan (Union-wide network development plan). Viable electricity transmission networks and necessary regional interconnections, relevant from a commercial or security of supply point of view, should be included in that network development plan.

(43) Experience with the development and adoption of network codes has shown that it is useful to streamline the development procedure by clarifying that the Agency has the right to revise draft electricity network codes before submitting them to the Commission.

(44) Investments in major new infrastructure should be promoted strongly while ensuring the proper functioning of the internal market in electricity. In order to enhance the positive effect of exempted direct current interconnectors on competition and security of supply, market interest during the project-planning phase should be tested and congestion-management rules should be adopted. Where direct current interconnectors are located in the territory of more than one Member State, the Agency should handle as a last resort the exemption request in order to take better account of its cross-border implications and to facilitate its administrative handling. Moreover, given the exceptional risk profile of constructing those exempt major infrastructure projects, undertakings with supply and production interests should be able to benefit from a temporary derogation from the full unbundling rules for the projects concerned. Exemptions granted under Regulation (EC) No 1228/2003[1] continue to apply until the scheduled expiry date as decided in the granted exemption decision. ***Offshore electricity infrastructure with dual functionality (so-called 'offshore hybrid assets') combining transport of offshore wind energy to shore and interconnectors, should also be eligible for exemption such as under the rules applicable to new direct current interconnectors. Where necessary, the regulatory framework should duly consider the specific situation of these assets to overcome barriers to the realisation of societally cost-efficient offshore hybrid assets.***

1 Regulation (EC) No 1228/2003 of the European Parliament and of the Council of 26 June 2003 on conditions for access to the network for cross-border exchanges in electricity (OJ L 176, 15.7.2003, p. 1).

(45) To enhance trust in the market, its participants need to be sure that those engaging in abusive behaviour can be subject to effective, proportionate and dissuasive penalties. The competent authorities should be given the competence to investigate effectively allegations of market abuse. To that end, it is necessary that competent authorities have access to data that provides information on operational decisions made by supply undertakings. In the electricity market, many relevant decisions are made by the generators, which should keep information in relation thereto available to and easily accessible by the competent authorities for a fixed period of time. The competent authorities should, furthermore, regularly monitor the compliance of the transmission system operators with the rules. Small generators with no real ability to distort the market should be exempt from that obligation.

(46) The Member States and the competent national authorities should be required to provide relevant information to the Commission. Such information should be treated confidentially by the Commission. Where necessary, the Commission should have an opportunity to request relevant information directly from undertakings concerned, provided that the competent national authorities are informed.

(47) Member States should lay down rules on penalties applicable to infringements of the provisions of this Regulation and ensure that they are implemented. Those penalties must be effective, proportionate and dissuasive.

(48) Member States**,** the Energy Community Contracting Parties ***and other third countries which are applying this Regulation or are part of the synchronous grid of Continental Europe*** should closely cooperate on all matters concerning the development of an integrated electricity trading region and should take no measures that endanger the further integration of electricity markets or security of supply of Member States and Contracting Parties.

(48b) At the time of adoption of Regulation 714/2009, only few rules for the internal electricity market existed at EU level. Since then, the EU internal market has become more complex due to the fundamental change the markets are undergoing in particular regarding deployment of variable renewable electricity production. Therefore the Network Codes and Guidelines have become extensively comprehensive addressing both technical and general issues.

(49) In order to ensure the minimum degree of harmonization required for effective market functioning, the power to adopt ***and amend delegated*** acts in accordance with Article 290 of the Treaty on the Functioning of the European Union should be ***conferred*** to the Commission in respect of ***non-essential elements of certain specific*** areas which are fundamental for market integration. These should include ***the adoption and amendment of certain network codes and guidelines where these supplement the Regulation, the*** regional cooperation of transmission system operators and regulatory authorities, ***financial compensations*** between transmission system operators, ▌ as well as the application of exemption provisions for new interconnectors. It is of particular importance that the Commission carry out appropriate consultations during its preparatory work, including at expert level, and that those consultations be conducted in accordance with the principles laid down in the Interinstitutional Agreement on Better Law-Making of 13 April 2016[1]. In particular, to ensure equal participation in the preparation of delegated acts, the European Parliament and the Council receive all documents at the same time as Member States' experts, and their experts systematically have access to meetings of Commission expert groups dealing with the preparation of delegated acts.

(49a) In order to ensure uniform conditions for the implementation of this Regulation, implementing powers in accordance with Article 291 of the Treaty on the Functioning of the European Union should be should be conferred on the Commission. Those powers should be exercised in accordance with Regulation (EU) No 182/2011 of the European Parliament and of the Council of 16 February 2011 laying down the rules and general principles concerning mechanisms for control by the Member States of the Commission's exercise of implementing powers[2]. The examination procedure should be used for the adoption of these implementing acts.

1 OJ L 123, 12.5.2016, p. 1.

2 OJ L 55, 28.2.2011, p. 13.

(50) Since the objective of this Regulation, namely the provision of a harmonised framework for cross-border exchanges of electricity, cannot be sufficiently achieved by the Member States and can therefore be better achieved at Union level, the Union may adopt measures, in accordance with the principle of subsidiarity, as set out in Article 5 of the Treaty on European Union. In accordance with the principle of proportionality, as set out in that Article, this Regulation does not go beyond what is necessary in order to achieve that objective.

(52) For reasons of coherence and legal certainty, no provision in this Regulation should prevent the application of the derogations emerging from [Article 66] of [Electricity Directive].

(53) With regard to balancing markets, efficient and non-distortive price formation in the procurement of balancing capacity and balancing energy requires that balancing capacity does not set the price for balancing energy. This is without prejudice for the dispatching systems using an integrated scheduling process according to the Commission Regulation (EU) 2017/XXXX [Balancing].

HAVE ADOPTED THIS REGULATION:

Chapter I

Subject matter, scope and definitions

Article 1

Subject-matter and scope

This Regulation aims at:

(a) setting the basis for an efficient achievement of the objectives of the European Energy Union and in particular the climate and energy framework for 2030[1] by enabling market signals to be delivered for increased ***efficiency, higher share of renewable energy sources, security of supply,*** flexibility, ***sustainability,*** decarbonisation and innovation;

(b) setting fundamental principles for well-functioning, integrated electricity markets, which allow non-discriminatory market access for all resource providers and electricity customers, empower consumers, enable ***competitiveness on the global market as well as*** demand response***, energy storage*** and energy efficiency, facilitate aggregation of distributed demand and supply, ▌ ***and*** enabling market ***and sectoral*** integration and market-based remuneration of electricity generated from renewable sources;

[1] COM/2014/015 final.

(c) setting fair rules for cross-border exchanges in electricity, thus enhancing competition within the internal market in electricity, taking into account the particular characteristics of national and regional markets. This includes the establishment of a compensation mechanism for cross-border flows of electricity and the setting of harmonised principles on cross-border transmission charges and the allocation of available capacities of interconnections between national transmission systems;

(d) facilitating the emergence of a well-functioning and transparent wholesale market ***contributing to*** a high level of security of supply in electricity. It provides for mechanisms to harmonise the rules for cross-border exchanges in electricity

Article 2

Definitions

1. For the purpose of this Regulation, the definitions contained in Article 2 of Directive [recast of Directive 2009/72/EC as proposed by COM(2016) 864/2], in Article 2 of Regulation (EU) No 1227/2011 of the European Parliament and of the Council[1], in Article 2 of Commission Regulation (EU) No 543/2013[2] and in Article 2 of [Recast Renewable Energies Directive] apply ***with the exception of the definition of 'interconnector' which shall be replaced by the following: 'interconnector' means a transmission line which crosses or spans a border between Member States and which connects the national transmission systems of the Member States.***

2. In addition, the following definitions shall apply:

   (a) 'regulatory authorities' means the regulatory authorities referred to in Article 57(1) of [recast of Directive 2009/72/EC as proposed by COM(2016) 864/2];

   (b) 'cross-border flow' means a physical flow of electricity on a transmission network of a Member State that results from the impact of the activity of producers and/or customers outside that Member State on its transmission network;

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1 Regulation (EU) No 1227/2011 of the European Parliament and of the Council of 25 October 2011 on wholesale energy market integrity and transparency (OJ L 326, 8.12.2011, p. 1).

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

(c) ‘congestion’ means a situation in which all requests from market participants to trade between ***network areas*** cannot be accommodated because they would significantly affect the physical flows on network elements which cannot accommodate those flows;

(d) ‘new interconnector’ means an interconnector not completed by 4 August 2003;

(e) 'structural congestion' means congestion in the transmission system that ***can be unambiguously defined,*** is predictable, is geographically stable over time, and is frequently reoccurring under normal power system conditions;

(f) 'market operator' means an entity that provides a service whereby the offers to sell electricity are matched with bids to buy electricity;

(g) 'nominated electricity market operator' or 'NEMO’ means a market operator designated by the competent authority to perform tasks related to single day-ahead or single intraday coupling;

(h) 'value of lost load' means an estimation in €/MWh, of the maximum electricity price that customers are willing to pay to avoid an outage;

(i) 'balancing' means all actions and processes, in all timelines, through which transmission system operators ensure, in a continuous way, maintenance of the system frequency within a predefined stability range and compliance with the amount of reserves needed with respect to the required quality;

(j) 'balancing energy' means energy used by transmission system operators to perform balancing;

(k) 'balancing service provider' means a market participant providing either or both balancing energy and balancing capacity to transmission system operators;

(l) 'balancing capacity' means a volume of capacity that a balancing service provider has agreed to hold to and in respect to which the balancing service provider has agreed to submit bids for a corresponding volume of balancing energy to the transmission system operator for the duration of the contract;

(m) 'balance responsible party' means a market participant or its chosen representative responsible for its imbalances in the electricity market;

(n) 'imbalance settlement period' means the time unit for which the imbalance of the balance responsible parties is calculated;

(o) 'imbalance price' means the price, be it positive, zero or negative, in each imbalance settlement period for an imbalance in each direction;

(p) 'imbalance price area' means the area in which an imbalance price is calculated;

(q) 'prequalification process' means the process to verify the compliance of a provider of balancing capacity with the requirements set by the transmission system operators;

(r) 'reserve capacity' means the amount of frequency containment reserves, frequency restoration reserves or replacement reserves that needs to be available to the transmission system operator;

(s) 'priority dispatch' means ***in self-dispatch model*** the dispatch of power plants on the basis of criteria different from the economic order of bids and, in central dispatch ***model also from*** network constraints, giving priority to the dispatch of particular generation technologies;

(t) 'capacity calculation region' means the geographic area in which the coordinated capacity calculation is applied;

(u) 'capacity mechanism' means a ***temporary*** measure to ensure the achievement of the ***necessary*** level of ***resource adequacy*** by remunerating resources for their availability not including measures relating to ancillary services ***and congestion management***;

▌

(w) 'high-efficiency cogeneration' means cogeneration meeting the criteria laid down in Annex II of Directive 2012/27/EU of the European Parliament and of the Council1;

(x) 'demonstration project' means a project demonstrating a technology as a first of its kind in the Union and representing a significant innovation that goes well beyond the state of the art;

1 Directive 2012/27/EU of the European Parliament and of the Council of 25 October 2012 on energy efficiency, amending Directives 2009/125/EC and 2010/30/EU and repealing Directives 2004/8/EC and 2006/32/EC (OJ L 315, 14.11.2012, p. 1).

(y) 'market participant' means a natural or legal person, who is generating, buying or selling electricity, demand response or storage services, including the placing of orders to trade, in one or more electricity markets including balancing energy markets;

(z) 'redispatching' means a measure, including curtailment, activated by one or several system operators by altering the generation and/or load pattern in order to change physical flows in the electricity system and relieve a physical congestion or otherwise ensure system security;

(aa) 'countertrading' means a cross zonal exchange initiated by system operators between two bidding zones to relieve physical congestion;

(bb) 'power generating facility' means a facility that converts primary energy into electrical energy and which consists of one or more power generating modules connected to a network;

(cc) 'central dispatching model' means a scheduling and dispatching model where the generation schedules and consumption schedules as well as dispatching of power generating facilities and demand facilities, in reference to dispatchable facilities, are determined by a TSO within the integrated scheduling process;

(dd) 'standard balancing product' means a harmonised balancing product defined by all TSOs for the exchange of balancing services;

(ee) 'specific balancing product' means a product different from a standard product;

(ff) 'delegated operator' means an entity to whom specific tasks or obligations entrusted to a transmission system operator or nominated electricity market operator under this Regulation or any other Regulation, Directive, Network Code or Guideline have been delegated by that transmission system operator or nominated electricity market operator or have been assigned by a Member State or Regulatory Authority;

Chapter II

General rules for the electricity market

Article 3

Principles regarding the operation of electricity markets

1. Member States, national regulatory authorities, transmission system operators, distribution system operators, ▌ market operators ***and delegated operators*** shall ensure that electricity markets are operated in accordance with the following principles:

(a) prices shall be formed based on demand and supply;

(b) ***market rules shall encourage free price formation and avoid*** actions which prevent price formation on the basis of demand and supply ▌;

(ba) market rules shall facilitate the development of more flexible generation, sustainable low carbon generation, and more flexible demand;

(c) customers shall be enabled to benefit from market opportunities and increased competition on retail markets ***and be empowered to act as participant in the energy market and the energy transition***;

(d) market participation of consumers and small businesses shall be enabled by aggregation of generation from multiple generation facilities or load from multiple demand facilities to provide joint offers on the electricity market and be jointly operated in the electricity system, subject to compliance with EU treaty rules on competition;

(e) market rules shall ***enable*** the decarbonisation of ***the electricity system and thus*** the economy **e.g.** by enabling the integration of electricity from renewable energy sources and providing incentives for energy efficiency;

(f) market rules shall deliver appropriate investment incentives for generation, ***in particular long-term investments for a decarbonised and sustainable electricity system, energy*** storage, energy efficiency**,** demand response to meet market needs ***and facilitate fair competition*** and thus ensure security of supply;

(g) barriers to cross-border electricity flows ***between bidding zones or Member States*** and cross-border transactions on electricity markets and related services markets shall be ***progressively removed***;

(h) market rules shall provide for regional cooperation where effective;

(i) ***safe and sustainable*** generation, storage and demand ▌ shall participate on equal footing in the market**, u*nder the requirements provided for in the EU law***;

(j) all producers shall be directly or indirectly responsible for selling the electricity they generate;

(k) market rules shall allow for ***the development of demonstration projects into sustainable, secure and low-carbon energy sources, technologies or system<u>s</u>*** to be realized and used to the benefit of society;

(l) market rules shall enable the efficient dispatch of generation assets***, energy storage*** and demand response;

(m) market rules shall allow for entry and exit of electricity generation***, energy storage*** and electricity supply undertakings based on their assessment of the economic and financial viability of their operations;

(n) ***in order to*** allow market participants ***to be protected*** against price volatility risks on a market basis, and ***mitigate*** uncertainty on future returns on investment, ***long-term hedging opportunities*** shall be tradable on exchanges in a transparent manner ***and long-term supply contracts shall be negotiable over the counter,*** subject to compliance with EU treaty rules on competition. ***Market rules shall facilitate trade of products across the Union. Regulatory changes shall take into account effects on both short-term and long-term forward and futures markets and products.***

(o) market participants have a right to obtain access to the transmission and distribution networks on objective, transparent and non-discriminatory terms.

Article 3a

Just transition

The Commission shall support Member States that put in place a national strategy for the progressive reduction of installed coal and other solid fossil fuel generation and mining capacity through all available means to enable a "just transition" in regions affected by structural change. The Commission shall assist Member States to address the social and economic impacts of the clean energy transition.

The Commission shall work in close partnership with the actors of coal and carbon-intensive regions, facilitate the access to and use of available funds and programmes, and shall encourage the exchange of good practices, including discussions on industrial roadmaps and re-skilling needs.

Article 4

Balance responsibility

1. All market participants ▌ shall be ▌ responsible for ***the*** imbalances they cause in the system. ***To that end, the market participants*** shall either be balance responsible parties or ***contractually*** delegate their responsibility to a balance responsible party of their choice. ***Each balance responsible party shall be financially responsible for its imbalances and strive to be balanced or help the power system to be balanced.***

2. Member States may provide ***derogations*** from ***balance responsibility only in the following cases***:

(a) demonstration projects ***for innovative technologies, subject to approval by the regulatory authority which shall be limited to the time and extent the derogation is necessary for achieving the demonstration purposes***;

(b) ***power generating facilities*** using renewable energy sources ▌ with an installed electricity capacity of less than ***400*** kW;

(c) installations benefitting from support approved by the Commission under Union State aid rules pursuant to Articles 107 to 109 TFEU, and commissioned prior to [OP: entry into force]. Member States may, ***without prejudice to Articles 107 and 108 TFEU***, ***incentivise*** market participants which are fully or partly exempted from balancing responsibility to accept full balancing responsibility ▌.

2a. When a Member State chooses to provide a derogation in accordance with Article 4(2), it shall ensure that the financial responsibilities for imbalances are fulfilled by another party.

3. ***For power generating facilities commissioned after*** 1 January 2026, point (b) of paragraph 2 shall apply only to generating installations using renewable energy sources ▌ with an installed electricity capacity of less than ***200*** kW.

Article 5

Balancing market

2. Balancing markets***, including prequalification processes*** *s*hall be organised in such a way as to:

(a) ensure effective non-discrimination between market participants taking account of the different technical ***needs of the power system and the different technical capabilities of generation sources, energy storage and demand response;***

(aa) ensure a transparent and technologically neutral definition of services and their transparent, market based procurement;

(***b)*** ***ensure non-discriminatory access to all market participants, including electricity generated from variable renewable sources, demand response and energy storage, be it individual or through aggregation;***

(c) respect the need to accommodate increasing shares of variable generation as well as increased demand responsiveness and the advent of new technologies.

3. ***The price of*** balancing energy shall ***not be pre-determined in a contract for*** balancing capacity***.*** Procurement processes shall be transparent while at the same time respecting confidentiality ***in accordance with paragraph 4 of Article 40 of the [recast Electricity Directive]***

4. Balancing markets shall ensure operational security whilst allowing for maximum use and efficient allocation of cross-zonal capacity across timeframes in accordance with Article 15.

5. ▌ The settlement of balancing energy **for s*tandard and specific balancing products shall be based on marginal pricing, pay-as-cleared, unless all national regulatory authorities have approved an alternative pricing method on the basis of joint proposal by all transmission system operators following an analysis demonstrating that an alternative pricing method is more efficient.***

Market participants shall be allowed to bid as close to real time as possible, and ***balancing energy gate closure times shall not be before*** the intraday cross-zonal gate closure time▌ .

Transmission system operator applying a central dispatching model may define additional rules in accordance with the Commission Regulation (EU) 2017/2195.

6. The imbalances shall be settled at a price that reflects the real time value of energy.

6a. Each imbalance price area shall be equal to a bidding zone, except in case of a central dispatching model where an imbalance price area may constitute a part of a bidding zone.

7. The ***dimensioning*** of reserve capacity shall be performed **by *the transmission system operators and shall be facilitated on a*** regional level***.***

8. The procurement of balancing capacity shall be ***performed by the transmission system operators and may b*e** facilitated on a regional level ***and reservation of cross-border capacity to that end may be limited***. The procurement ***of balancing capacity*** shall be ***market-based*** and organised in such a way as to be non-discriminatory between market participants in the prequalification process***, whether market participants participate*** *individually or through aggregation* ***in accordance with paragraph 4 of Article 40 of the [recast Electricity Directive].***

Procurement of balancing capacity shall be based on a primary market unless and to the extent that the national regulatory authority has approved use of other forms of market-based procurement on the grounds of lack of competition in the market for balancing services. Derogations from use of primary markets shall be reviewed every 3 years.

9. The procurement of upward balancing capacity and downward balancing capacity shall be carried out separately***, unless the national regulatory authority approves an exemption from this principle on the basis of the transmission system operator demonstrating that this would result in higher economic efficiency.*** The contracting ***of balancing capacity*** shall be performed for not longer than one day before the provision of the balancing capacity and the contracting period shall have a maximum of one day***, unless and to the extent the national regulatory authority has approved earlier contracting and/or longer contracting periods to ensure security of supply or improve economic efficiency. At least for a minimum of 40 % of the standard products and a minimum of 30 % of all products used for balancing capacity, the contracting of the balancing capacity shall be performed for not longer than one day before the provision of the balancing capacity and the contracting period shall have a maximum of one day. The contracting of the remaining part of the balancing capacity shall be performed for a maximum of one month in advance of the provision of balancing capacity and the contracting period of the remaining part of balancing capacity shall have a maximum period of one month.***

9a. ***On the request of the transmission system operator the regulatory authority may extend the contracting period of the remaining part of balancing capacity referred to in paragraph 9 to a maximum period of twelve months provided that such decision will be limited in time, and the positive effects in terms of lowering of costs for consumers will exceed the negative impacts on the market. After 31 December 2025, contracting periods shall not extend to periods longer than six months. The request shall include:***

(a) ***specification of the time period during which the exemption would apply;***

(b) ***specification of the volume of balancing capacity for which the exemption would apply;***

(c) ***analysis of the impact of such an exemption on the participation of balancing resources; and***

(d) ***justification for the exemption demonstrating that such an exemption would lead to lower costs for consumers.***

9b. ***By 1 January 2028, national regulatory authorities shall report to the Agency and the Commission on the share of contract durations and procurement periods longer than one day***

10. Transmission system operators ***or delegated operators*** shall publish**,** ***as soon as possible but not later than 30 minutes after*** real-time**,** ***the*** information on the current ***system balance*** *o*f their ***scheduling*** areas**,** ***the estimated imbalance prices and*** *the* ***estimated*** balancing energy ***prices***.

11. Transmission system operators may, where standard balancing products are not sufficient to ensure operational security or some balancing resources cannot participate in the balancing market through standard balancing products, propose exemptions from paragraphs 3 and 5 for specific balancing products which are activated locally without exchanging them with other transmission system operators.

Proposals for exemptions shall include a description of measures proposed to minimise the use of specific products subject to economic efficiency, a demonstration that the specific products do not create significant inefficiencies and distortions in the balancing market within and outside the scheduling area as well as, where applicable, the rules and information for the process for converting the balancing energy bids from specific products into balancing energy bids from standard products.

Exemptions for specific balancing products shall be subject to approval by the national regulatory authority.

Article 6

Day-ahead and intraday markets

1. Transmission system operators and nominated electricity market operators shall jointly organise the management of the integrated day-ahead and intraday markets based on market coupling as set out in Regulation (EU) 2015/1222. Transmission system operators and nominated electricity market operators shall cooperate at Union level or, where more appropriate, on a regional basis in order to maximise the efficiency and effectiveness of Union electricity day-ahead and intraday trading. The obligation to cooperate shall be without prejudice to the application of the provisions of Union competition law. In their functions relating to electricity trading, transmission system operators and nominated ***electricity*** market operators shall be subject to regulatory oversight by regulators and the Agency pursuant to Article 59 of [recast of Directive 2009/72/EC as proposed by COM(2016) 864/2] and Articles 4 and 9 of [recast of Regulation (EC) No 713/2009 as proposed by COM(2016) 863/2].

2. Day-ahead and intraday markets shall

(a) be organised in such a way as to be non-discriminatory;

(b) maximise the ability of ***all*** market participants to ***manage*** imbalances;

(c) maximise the opportunities for ***all*** market participants to participate in ***cross-zonal*** trade as close as possible to real time across all bidding zones;

(d) provide prices that reflect market fundamentals**,** ***including the real time value of energy*****,** and that market participants can rely on when agreeing on longer-term hedging products;

(e) ensure operational security whilst allowing for maximum use of transmission capacity;

(f) be transparent while at the same time respecting confidentiality ***and ensuring trading occurs in an anonymous manner****;*

▌

(h) make no distinction between trades made within a bidding zone and across bidding zones***; and***

(i*)* ***be organised in such a way as to ensure that all markets participants are able to access the market individually or through aggregation.***

▌

Article 7

Trade on day-ahead and intraday markets

1. ***Nominated electricity market*** operators shall allow market participants to trade energy as close to real time as possible and at least up to the intraday cross-zonal gate closure time .

2. ***Nominated electricity market*** operators shall provide market participants with the opportunity to trade in energy in time intervals at least as short as the imbalance settlement period in both day-ahead and intraday markets.

3. ***Nominated electricity market*** operators shall provide products for trading in day-ahead and intraday markets which are sufficiently small in size, with minimum bid sizes of ***500 Kilowatt or less*****,** to allow for the effective participation of demand-side response, energy storage and small-scale renewables ***including directly by customers.***

4. By 1 January ***2021***, the imbalance settlement period shall be 15 minutes in all ***scheduling*** areas ***unless regulatory authorities have granted a derogation or an exemption. Derogations may only be granted until 1 January 2025. When an exemption has been granted, by all national regulatory authorities of a synchronous area, the imbalance settlement period shall be no greater than 30 minutes by 2025.***

Article 8

Forward markets

1. In line with Regulation (EU) 2016/1719, transmission system operators shall issue long-term transmission rights or have equivalent measures in place to allow for market participants, ***including*** owners of generation facilities using renewable energy sources, to hedge price risks across bidding zone borders***, unless an assessment of the forward market performed by the competent regulatory authorities on the bidding zone borders shows sufficient hedging opportunities in the concerned bidding zones*.**

2. Long-term transmission rights shall be allocated in a transparent, market based and non-discriminatory manner through a single allocation platform. ▌

3. Subject to compliance with treaty rules on competition, market operators shall be free to develop forward hedging products including for the long-term to provide market participants, ***including*** owners of generation facilities using renewable energy sources, with appropriate possibilities to hedge financial risks from price fluctuations. Member States shall not restrict such hedging activity to trades within a Member State or bidding zone.

Article 9

Technical bidding limits

1. There shall be no maximum ***and*** no minimum limit of the wholesale electricity price ▌. This provision shall apply, inter alia, to bidding and clearing in all timeframes and include balancing energy and imbalance prices. ***This is without prejudice to the technical price limits which may be applied in the balancing timeframe* and *in the day-ahead and intraday timeframes as set out in the following paragraph*.**

2. ***Nominated electricity*** market operators may apply ***harmonised*** limits on maximum ***and minimum*** clearing prices for day-ahead and intraday timeframes ▌. ***These limits shall be sufficiently high so as not to unnecessarily restrict trade, be harmonised for the common market area and take into account the maximum value of lost load. Nominated market operators shall implement a transparent mechanism to adjust automatically the technical bidding limits in due time in the event that the set limits are expected to be reached. The adjusted higher limits shall remain applicable until further increases under this mechanism are required.***

3. Transmission system operators shall not take any measures with the aim of changing the wholesale prices. ▌

4. ***National regulatory authorities or other competent authorities designated by*** Member States shall identify policies and measures applied within their territory that could contribute to indirectly restrict ***wholesale*** price formation, including limiting bids relating to the activation of balancing energy, capacity mechanisms, measures by the transmission system operators, measures intended to challenge market results or to prevent abuse of dominant positions or inefficiently defined bidding zones.

5. Where a **n*ational regulatory authority or other competent authority designated by a*** Member State has identified a policy or measure which could serve to restrict price formation it shall take all appropriate actions to eliminate or, if not possible, mitigate the impact on bidding behaviour. Member States shall provide a report to the Commission by [OP: *six months after entry into force*] detailing the measures and actions they have taken or intend to take.

Article 10

Value of lost load

1. By [OP: one year after entry into force] ***where required for setting a reliability standard in accordance with Article 20 national regulatory authorities or other competent authorities designated by*** Member States shall establish a single estimate of the Value of Lost Load (VoLL) for their territory ▌. That estimate shall be made ▌ publically available. ***National regulatory authorities or other competent authorities designated by*** Member States may establish different ***estimates*** per bidding zone if they have several bidding zones in their territory. ***In case a bidding zone consists of territories of more than one Member State, the concerned Member States shall establish a single VoLL for that bidding zone.*** In establishing VoLL, ***national regulatory authorities or other competent authorities designated by*** Member States shall apply the methodology developed pursuant to Article 19(5).

2. Member States shall update their estimate at least every five years ***or earlier when a significant change is observed***.

Article 11

Dispatching of generation and demand response

1. Dispatching of power generation facilities and demand response shall be non-discriminatory***, transparent*** and, ***unless otherwise provided under Article 11(2) to Article 11(4),*** market based ▌.

2. ***Without prejudice to Articles 107 to 109 TFEU Member States shall ensure that when dispatching electricity generating installations, transmission system operators shall give priority to generating installations using renewable energy sources in so far as the secure operation of the national electricity system permits and based on transparent and non-discriminatory criteria and up*** to the following extent:

   (a) ***power generating facility*** using renewable energy sources ▌ with an installed electricity capacity of less than ***400*** kW; or

   (b) demonstration projects for innovative technologies***, subject to approval by the regulatory authority which shall be limited to the time and extent the derogation is necessary for achieving the demonstration purposes***.

2a. A Member State may decide not to apply priority dispatch pursuant to paragraph 2(a) to additional power generating facilities with a start of operation at least 6 months after the decision, or to apply a lower capacity threshold than set out under paragraph (2)(a), subject to the following conditions:

(a) its well functioning intraday, wholesale and balancing markets are fully accessible to all market players in accordance with the provisions of this Regulation;

(b) curtailment rules and congestion management are transparent to all market parties;

(c) the national contribution of the Member States towards the Union's binding overall target for share of energy from renewable sources pursuant to Article 3(2) of [Directive 2009/28/EC as proposed by COM(2016) 767] and Article 4(a)(2) of the [Governance Regulation] is at least equal to the corresponding result of the formula set out in Annex II of the [Governance Regulation] and the Member State's share of energy from renewable sources is not below its reference points pursuant to Article 4(a)(2) [Governance Regulation]; or alternatively, the Member State's renewables share in gross final electricity consumption is at least 50%.

(d) the Member State has notified the planned derogation setting out in detail how the conditions set out under (a) to (c) are fulfilled to the Commission; and

(e) the Member State has published the planned derogation including the detailed reasoning, taking due account of the protection of commercially sensitive information where required.

Any derogation shall avoid retroactive changes for installations already benefiting from priority dispatch, notwithstanding any agreement between a Member State and an installation on a voluntary basis.

Without prejudice to Articles 107 to 109 TFEU, Member States may provide incentives to installations eligible for priority dispatch to voluntarily give up priority dispatch.

2b. Without prejudice to Articles 107 to 109 TFEU, Member States may provide for priority dispatch for electricity generated in power generating facility using high-efficiency cogeneration with an installed electricity capacity of less than 400 kW.

3a ***For power generating facility commissioned as*** from 1 January 2026, point (a) of paragraph 2 shall apply only to ***power*** generating ***facilitie***s using renewable energy sources ▌ with an installed electricity capacity of less than ***200*** kW ▌ .

4. ***Without prejudice to contracts concluded before [entry into force of the legislation], power*** generating ***facility*** using renewable energy sources or high efficiency cogeneration which have been commissioned prior to [OP: entry into force] and have, when commissioned, been subject to priority dispatch under Article 15(5) of Directive 2012/27/EU of the European Parliament and of the Council or Article 16(2) of Directive 2009/28/EC of the European Parliament and of the Council[1] shall ***continue to benefit from*** priority dispatch. Priority dispatch shall no longer be applicable from the date where the ***power*** generating ***facility*** is subject to significant modifications, which shall be the case at least where a new connection agreement is required or the generation capacity is increased.

5. Priority dispatch shall not endanger the secure operation of the electricity system, shall not be used as a justification for curtailment of cross-border capacities beyond what is provided for in Article 14 and shall be based on transparent and non-discriminatory criteria.

1 Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC (OJ L 140, 5.6.2009, p. 16).

Article 12

Redispatching ▌

1. ▌ Redispatching of generation and redispatching of demand response shall be based on objective, transparent and non-discriminatory criteria. ***It shall be open to all generation technologies, storage and demand response, including operators located in other Member States unless technically not feasible.***

2. The resources ▌ redispatched shall be selected amongst generation, ***storage*** or demand facilities ▌ using market-based mechanisms and be financially compensated. ***Balancing energy bids used for redispatching shall not set the balancing energy price.***

2a. Non-market-based ▌ redispatching of generation ***, energy storage and*** demand response ***may*** only be used ***subject to the following conditions:***

(a) no market-based alternative is available, **or**

(b) all available market-based resources have been used***;*** or

(c) the number of generation***, energy storage*** or demand ***response*** facilities available in the area where suitable generation***, energy storage*** or demand ***response*** facilities for the provision of the service are located is too low to ensure effective competition***; or***

(d) the current grid situation leads to congestion in such a regular and predictable way that market-based redispatch would lead to regular strategic bidding which would increase the level of internal congestion and the Member State concerned has adopted an action plan to address this congestions or ensures that minimum available capacity for cross-zonal trade is in accordance with Article 14 (7).

3. The responsible system operators shall report at least once per year to the competent regulatory authority***, which shall be transmitted to the Agency, on:***

(a) the level of development and effectiveness of market-based curtailment or redispatching mechanisms for generation, energy storage and demand response facilities;

(b) the reasons, volumes in MWh and type of generation source subject to redispatching;

(c) the measures taken to reduce the need for ***the*** curtailment or downward redispatching ***of generating installations using renewable energy sources or high-efficiency cogeneration*** in the future ***including investments in digitalisation of the grid infrastructure and in services that increase flexibility.***

The competent regulatory authority shall publish a summary of the data referred to in points (a) to (c) together with recommendations for improvement where necessary.

4. Subject to requirements relating to the maintenance of the reliability and safety of the grid, based on transparent and non-discriminatory criteria defined by the competent national authorities, transmission system operators and distribution system operators shall:

(a) guarantee the capability of transmission and distribution networks to transmit electricity produced from renewable energy sources or high-efficiency cogeneration with minimum possible ▌ redispatching. That shall not prevent network planning from taking into account limited ▌ redispatching where ***they can demonstrate in a transparent way that*** this is shown to be more economically efficient and**,** does not exceed 5 % of ***the annual generated electricity in installations*** using renewable energy sources ***and which are directly connected to their respective grid, unless otherwise provided by a Member State in which electricity from power generating facility using renewable energy sources or high-efficiency cogeneration represents more than 50 % of annual gross final consumption of electricity****;*

(b) take appropriate grid and market-related operational measures in order to minimise the downward ▌ redispatching of electricity produced from renewable energy sources or high-efficiency cogeneration.

(ba) ensure that their networks are sufficiently flexible such that they are in a position to manage them.

5. Where non-market-based downward redispatching ▌ is used, the following principles shall apply:

(a) ***power*** generating ***facilities*** using renewable energy sources shall only be subject to downward redispatching ▌ if no other alternative exists or if other solutions would result in ***significantly*** disproportionate costs or ***severe*** risks to network security

(b) ***electricity generated in a*** high-efficiency cogeneration ***process*** shall only be subject to downward redispatching ▌ if, other than ▌ downward redispatching of ***power*** generating ***facilities*** using renewable energy sources, no other alternative exists or if other solutions would result in disproportionate costs or ***severe*** risks to network security;

(c) self-generated electricity from generating installations using renewable energy sources or high-efficiency cogeneration which is not fed into the transmission or distribution network shall not be curtailed unless no other solution would resolve network security issues;

(d) downward redispatching ▌ under ***points*** (a) to (c)shall be duly and transparently justified. The justification shall be included in the report under paragraph 3.

6. Where non-market based ▌ redispatching is used, it shall be subject to financial compensation by the system operator requesting the▌ redispatching to the ***operator*** of the ▌ redispatched generation, ***energy storage*** or demand ***response*** facility ***except in the case of generators accepting connection agreement in which firm delivery of energy is not guaranteed.*** Financial compensation at least be equal to the highest of the following elements **or *a combination of them if applying one of the elements would lead to an unjustifiably low or unjustifiably high compensation***:

(a) additional operating cost caused by the ▌ redispatching, such as additional fuel costs in case of upward redispatching, or backup heat provision in case of downward redispatching or curtailment of ***power*** generating ***facility*** using high-efficiency cogeneration;

(b) ▌ Net revenues from the sale of electricity on the day-ahead market that the generating, ***energy*** storage or demand ***response*** facility would have generated without the ▌ redispatching request. Where financial support is granted to generating, ***storage*** or demand ***response*** facilities based on the electricity volume generated or consumed, lost financial support shall be deemed part of the net revenues.

Chapter III

Network access and congestion management

Section 1

Capacity allocation

Article 13

Bidding zone review

1. ***Member States shall take all appropriate measures to address congestions.*** Bidding zone borders shall be based on long-term, structural congestions in the transmission network ▌. ***Bidding zones shall not contain such structural congestions unless they have no impact, or, as a temporary exemption their impact on neighbouring bidding zones is mitigated through the use of remedial actions and they do not lead to reductions of cross zonal trading capacity in accordance with the requirements of Article 14.*** The configuration of bidding zones in the Union shall be designed in such a way as to maximise economic efficiency and ***in order to maximise*** cross-border trading opportunities while maintaining security of supply ***with due respect to the provisions in Article 14***.

2. Every three years, the ENTSO for Electricity shall report on structural congestion and other major physical congestion between and within bidding zones, including location and frequency of such congestion in accordance with the capacity allocation and congestion management guideline adopted on the basis of Article 18 of Regulation (EU) 714/2009 and an assessment of whether the cross-zonal trade capacity reached the minimum threshold pursuant to Article 14.

3. In order to ensure an optimal bidding zone ***configuration***, a bidding zone review shall be carried out. That review shall ***identify all structural congestion and*** include analysis of ***different configurations*** of bidding zones in a coordinated manner with the involvement of affected stakeholders from all ***relevant*** Member States, following the process in accordance with ***the capacity allocation and congestion management guideline adopted on the basis of Article 18 of Regulation (EU) 714/2009***. ***Current bidding zones shall be assessed based on their ability to create a reliable market environment, including for flexible generation and load capacity, which is crucial for avoiding grid bottlenecks, balancing electricity demand and supply, securing the long-term security of investments in network infrastructure.***

In this article and in article 13a, relevant Member States, transmission system operators or national regulatory authorities refer to those Member States, transmission system operators or national regulatory authorities participating in the review of the bidding zone configuration and also those in the same capacity calculation region pursuant to the capacity allocation and congestion management guideline adopted on the basis of Article 18 of Regulation (EU) 714/2009.

4. By [3 months after the entry into force of this Regulation] all relevant transmission system operators shall submit a proposal for the methodology and assumptions that will be used in the review process as well as the alternative bidding zone configurations considered to the relevant national regulatory authorities for approval. The relevant national regulatory authorities shall come to a unanimous decision on the proposal within [3 months]. In case they do not agree within this time frame, the Agency shall ***within three months decide on*** the methodology and assumptions ▌ as well as the alternative bidding zone configurations considered. ***The methodology shall be based on structural congestions which are not expected to be overcome within the next three years, taking due account of tangible progress on infrastructure development projects, that are expected to be realised within the next three years.***

5. ***Based on the methodology and assumptions approved pursuant to paragraph 3,*** the transmission system operators participating in the bidding zone review shall submit a ***joint*** proposal to the ***relevant Member States or designated competent authorities of the relevant Member States whether to amend or maintain the bidding zone configuration no later than 12 months after approval of the methodology pursuant to paragraph 4. Other Member States, Energy Community Contracting Parties or other third countries sharing the same synchronous area with any Member State may submit comments***. ▌

6. Where structural congestion has been identified in the report pursuant to paragraph 2 or by one or more transmission system operators in their control areas in a report approved by the respective national regulatory authority or authorities the respective Member State in cooperation with their transmission system operators shall decide, within 6 months, to either define national or multinational action plans pursuant to Article 13a, or to review their bidding zone configuration. The decision shall be immediately notified to the Commission and the Agency.

7. For those Member States that have opted for a proposal to amend the bidding zone configuration, the relevant Member States shall come to a unanimous decision within 6 months after the notification pursuant to paragraph 4 Other Member States may submit comments to the relevant Member States who should take account of these comments when coming to their decision. The decision shall be justified and notified to the Commission and the Agency. Should the relevant Member States fail to come to a unanimous decision within the allowed timeframe, they shall immediately notify the Commission. As a measure of last resort, the Commission after consultation with the Agency shall adopt a decision whether to amend or maintain the bidding zone configuration in and between those Member States by six months after receiving such a notification.

8. ***Member States and*** the Commission shall consult relevant stakeholders ***before adopting a decision*** under this Article ▌.

9. ***Any*** decision ***adopted according to this Article*** shall specify the date of implementation of a change. That implementation date shall balance the need for expediency with practical considerations, including forward trade of electricity. The ***decision*** may define appropriate transitional arrangements ▌.

10. Where further bidding zone reviews are launched under ***the capacity allocation and congestion management guideline adopted on the basis of Article 18 of Regulation (EU) 714/2009 this Article shall apply.***

Article 13a

Action plans

1. Following a decision pursuant to Article 13(6), the respective Member State or States shall develop action plans in cooperation with their national regulatory authority. These action plans shall contain a concrete timetable for adopting measures to reduce the structural congestions identified within the period of [no later than [4] years after the decision pursuant to Article 13(6).

2. Irrespective of the concrete progress of the action plan, Member States shall ensure that without prejudice to derogation under Article 14(7b), the cross-border trade capacities are increased every year up to the benchmark level calculated in accordance with Article 14(7), which is to be achieved by the end of 2025. The yearly increase shall be achieved by means of a linear trajectory. The starting of this trajectory shall be either the capacity allocated at this border in the year before adoption of the roadmap or the average of the three last years before the adoption of the roadmap, whatever is higher. For the period when a Member State is implementing an action plan, the Member State shall ensure that the capacity made available for cross-zonal trade to be compliant with Article 14(7) is at least equal to the values of the trajectory, including by use of remedial actions in the capacity calculation region.

3. Costs of remedial actions required to follow the trajectory or make available cross-zonal capacity at the borders concerned by the action plan shall be borne by the Member State or Member States implementing the action plan.

4. Yearly during the implementation of the action plan and within six months after the expiry of the action plan, the relevant transmission system operators shall assess whether the available cross-border capacity has reached the linear trajectory or, as of the end of 2025, the minimum level outlined in Article 14(7) for the period of the last 12 months and report to relevant national regulatory authorities and the Agency. Before drafting the report, each transmission system operator shall send its contribution to the report, including all relevant data, to its national regulatory authority for approval.

5. For those Member States for which the assessment following paragraph 4 demonstrates that a transmission system operator has not been compliant with the linear trajectory the relevant Member States shall come to a unanimous decision within 6 months from receiving the assessment referred in paragraph 4 on whether to maintain or amend the bidding zone configuration. Other Member States may submit comments to the relevant Member States who should take account of these comments when coming to their decision. The decision shall be justified and notified to the Commission and the Agency. Should the relevant Member States fail to come to a unanimous decision within the allowed timeframe, they shall immediately notify the Commission. As a measure of last resort, the Commission after consultation with the Agency and the relevant stakeholders shall adopt a decision whether to amend or maintain the bidding zone configuration in and between those Member States, by six months after receiving of such a notification.

6. Six months before the expiry of the action plan, Member States shall decide whether to amend their bidding zone to address remaining congestions or whether to address remaining internal congestions with remedial actions for which they shall cover the costs.

7. Where a structural congestion has been identified pursuant to paragraph 4 but no action plan was defined within 6 months, the relevant transmission system operators shall within twelve months after a structural congestion has been identified assess whether the available cross-border capacity has reached the minimum level outlined in Article 14(7) for the period of the last 12 months and report to relevant national regulatory authorities and the Agency. Before drafting the report, each transmission system operator shall send its contribution to the report, including all relevant data, to its national regulatory authority for approval. For those Member States for which the assessment demonstrates that a transmission system operator has not been compliant with the minimum level, decision-making process in paragraph 5 applies.

Article 14

General principles of capacity allocation and congestion management

1. Network congestion problems shall be addressed with non-discriminatory market-based solutions which give efficient economic signals to the market participants and transmission system operators involved. Network congestion problems shall be solved with non-transaction based methods, i.e. methods that do not involve a selection between the contracts of individual market participants. When taking operational measures to ensure that its transmission system remains in the normal state, the transmission system operator shall take into account the effect of those measures on neighbouring control areas and coordinate such measures with other affected transmission system operators as provided for in Regulation (EU) 1222/2015.

2. Transaction curtailment procedures shall only be used in emergency situations where the transmission system operator must act in an expeditious manner and re-dispatching or countertrading is not possible. Any such procedure shall be applied in a non-discriminatory manner. Except in cases of force majeure, market participants who have been allocated capacity shall be compensated for any curtailment.

2a. Regional coordination centres shall perform coordinated capacity calculation as provided for in article 34(1)(a) in accordance with paragraphs 3 and 7 pursuant to the process set out in Article 38(1).

They shall calculate cross-zonal capacities respecting operational security limits using data from transmission system operators including the technical availability of remedial actions, except load shedding. Where regional coordination centres conclude that all available remedial actions in the capacity calculation region or between capacity calculation regions are not sufficient to reach the threshold in Article 14(7) while respecting operational security limits, they may, as a measure of last resort, set out coordinated actions reducing the cross-zonal capacities accordingly. Transmission system operators may only deviate from coordinated actions in respect of coordinated capacity calculation and coordinated security analysis in accordance with Article 38(2).

Every three months, the regional coordination centres shall report to the relevant national regulatory authorities and the Agency on reductions and deviations pursuant to this paragraph and shall assess the incidences and make recommendations, if needed, on how to avoid such deviations in the future. If the Agency concludes that the prerequisites for a deviation pursuant to this paragraph were not fulfilled or are of a structural nature, the Agency shall submit an opinion to the relevant national regulatory authorities and the Commission. The relevant national regulatory authorities shall take appropriate action against transmission system operators or regional coordination centres pursuant to articles 59 or 62 of the [recast Electricity Directive] if the prerequisites for a deviation pursuant to this paragraph were not fulfilled.

Deviations of a structural nature shall be addressed in the action plan pursuant to Article 13(6) or in an update of an already existing action plan.

3. The maximum ***level of*** capacity of the interconnections and/or the transmission networks ***affected by*** cross-border ***capacity*** shall be made available to market participants, complying with safety standards of secure network operation. Counter-trading and redispatch, including cross-border redispatch, shall be used to maximise available capacities ***to reach the minimum levels pursuant to paragraph 7 and a coordinated and non-discriminatory process for cross-border remedial actions shall be applied to enable this, following the implementation of a re-dispatching and counter-trading cost sharing methodology***.

4. Capacity shall be allocated only by means of explicit capacity auctions or implicit auctions including both capacity and energy. Both methods may coexist on the same interconnection. For intra-day trade continuous trading shall be used, which may be complemented by auctions.

5. ***In case of congestion*****,** the ***valid*** highest value bids ***for network capacity***, whether implicit or explicit, ***offering the highest value for the (scarce) transmission capacity*** in a given timeframe, shall be successful. Other than in the case of new interconnectors which benefit from an exemption under Article 7 of Regulation (EC) No 1228/2003, Article 17 Regulation 714/2009 or Article 59, establishing reserve prices in capacity-allocation methods shall not be allowed.

6. Capacity shall be freely tradable on a secondary basis, provided that the transmission system operator is informed sufficiently in advance. Where a transmission system operator refuses any secondary trade (transaction), this shall be clearly and transparently communicated and explained to all the market participants by that transmission system operator and notified to the regulatory authority.

7. Transmission system operators shall not limit the volume of interconnection capacity to be made available to ▌ market participants in order to solve congestion inside their own ***bidding zone or as a means of managing flows resulting from transaction internal to bidding zones.***

7.a Without prejudice to the application of the derogations under paragraphs 2a and 7b and to the application of article 13a(2), this paragraph shall be considered to be complied with if the following minimum levels of available capacity for cross-zonal trade are reached:

(i) For borders using a coordinated net transmission capacity approach, the minimum level shall be 70% of the capacity respecting operational security limits taking into account contingencies, as determined according to the capacity allocation and congestion management guideline adopted on the basis of Article 18 of the Regulation 714/2009;

(ii) For borders using a flow-based approach, the minimum level shall be a margin set in the capacity calculation process as available for flows induced by cross-zonal exchange. The margin shall be 70% of the capacity respecting operational security limits of internal and cross-zonal critical network elements and taking into account contingencies, as determined according to the capacity allocation and congestion management guideline adopted on the basis of Article 18 of the Regulation 714/2009.

The total amount of 30% can be used for the reliability margins, loop flows and internal flows on each critical network element.

7b. Upon request by ▌ transmission system ***operators of a capacity calculation region***, the relevant regulatory ***authorities*** may grant a derogation from ***paragraph 7 for foreseeable reasons*** where it is necessary for maintaining operational security ▌ . Such a derogation, which may not relate to curtailment of already allocated capacities pursuant to paragraph ***2***, shall be limited ***to one year at a time, or up to maximum two years with a significantly decreasing level of the derogation each year, be*** strictly limited to what is necessary, and avoid discrimination between internal and cross-zonal exchanges. Before granting a derogation, the relevant regulatory authority shall consult the regulatory authorities of other Member States forming part of an affected capacity calculation region. In case a regulatory authority disagrees with the proposed derogation, the Agency shall decide on the derogation pursuant to Article 6(8)(a) [recast of Regulation (EC) No 713/2009 as proposed by COM(2016) 863/2]. The justification and reasons for the derogation shall be published. Where a derogation is granted, the relevant transmission system operators shall develop and publish a methodology and projects that shall provide a long-term solution to the issue that the derogation seeks to address. The derogation shall expire when the time limit is reached or, once the solution is applied, whichever is earlier.

8. Market participants shall inform the transmission system operators concerned a reasonable time in advance of the relevant operational period whether they intend to use allocated capacity. Any allocated capacity that will not be used shall be reattributed to the market, in an open, transparent and non-discriminatory manner.

9. Transmission system operators shall, as far as technically possible, net the capacity requirements of any power flows in opposite direction over the congested interconnection line in order to use that line to its maximum capacity. Having full regard to network security, transactions that relieve the congestion shall never be denied.

10. The financial consequences of failure to honour obligations associated with the allocation of capacity shall be attributed to those who are responsible for such a failure. Where market participants fail to use the capacity that they have committed to use, or, in the case of explicitly auctioned capacity, fail to trade on a secondary basis or give the capacity back in due time, they shall lose the rights to such capacity and pay a cost-reflective charge. Any cost-reflective charges for the non-use of capacity shall be justified and proportionate. If a transmission system operator does not fulfil its obligation, it shall be liable to compensate the market participant for the loss of capacity rights. Consequential losses shall not be taken into account for that purpose. The key concepts and methods for the determination of liabilities that accrue upon failure to honour obligations shall be set out in advance in respect of the financial consequences, and shall be subject to review by the relevant national regulatory authority or authorities.

11. When allocating costs of remedial actions between transmission system operators, national regulatory authorities shall analyse to what extent flows resulting from transactions internal to bidding zones contribute to the congestion between two bidding zones observed, and allocate the costs based on the contribution to the congestion, to the transmission system operators of the bidding zones creating such flows except for costs induced by flows resulting from transactions internal to bidding zones that are below the level that could be expected without structural congestion in a bidding zone.

This level shall be jointly defined by all transmission system operators of a capacity calculation region for each respective bidding zone border and shall subsequently be approved by all national regulatory authorities of the capacity calculation region.

Article 15

Allocation of cross-zonal capacity across timeframes

1. Transmission system operators shall recalculate available cross-zonal capacity at least after day-ahead and after intraday cross-zonal gate closure times. Transmission system operators shall allocate the available cross-zonal capacity plus any remaining cross-zonal capacity not previously allocated and any cross-zonal capacity released by physical transmission right holders from previous allocations in the next cross-zonal capacity allocation process.

1a. Transmission system operators shall define an appropriate structure for the allocation of cross-zonal capacity across timeframes, including day-ahead, intraday and balancing. Such an allocation structure shall be subject to review by the respective regulatory authorities. In drawing up their proposal, the TSOs shall take into account:

(a) the characteristics of the markets;

(b) the operational condition, such as the implications of netting firmly declared schedules;

(c) the level of harmonisation of the percentages and timeframes adopted for the different cross-zonal capacity allocation mechanisms in place.

2. When cross-zonal capacity is available after the intraday cross-zonal gate closure time, transmission system operators shall use the cross-zonal capacity for the exchange of balancing energy or for operating the imbalance netting process.

3. ***Where cross-zonal capacity is allocated for the exchange of balancing capacity or sharing of reserves pursuant to Article 5(8),*** transmission system operators shall use the methodologies developed in network codes and guidelines on balancing ▌**.**

4. Transmission system operators shall not increase the reliability margin calculated pursuant to Regulation (EU) 2015/1222 due to the exchange of balancing capacity or sharing of reserves.

Section 2

Network charges and congestion income

Article 16

Charges for access to networks***, use of networks and reinforcement***

1. Charges applied by network operators for access to networks, including charges for connection to the networks, charges for use of networks, and, where applicable, charges for related network reinforcements, shall be ***cost-reflective,*** transparent, take into account the need for network security and flexibility and reflect actual costs incurred insofar as they correspond to those of an efficient and structurally comparable network operator and are applied in a non-discriminatory manner. ***These charges shall not include unrelated costs supporting unrelated policy objectives. Without prejudice to Article 15(1) and (6) and the criteria in Annex XI of Directive 2012/27/EU the method used to develop the network charges*** *shall* ***neutrally support overall system efficiency in the long run through price signals to consumers and producers and in particular*** be applied in a way which does not discriminate between production connected at the distribution level and production connected at the transmission level, either positively or negatively. They shall not discriminate ***either positively or negatively*** against energy storage ***and aggregation*** and shall not create disincentives ***for self-generation, self-consumption and*** for participation in demand response. Without prejudice to paragraph 3, those charges shall not be distance-related.

2. Tariff ***methodologies*** shall ***provide*** appropriate incentives ***and reflect fixed costs of*** transmission and distribution system operators over both the short and long term, to increase efficiencies, including energy efficiency, foster market integration***,*** ▌ security of supply, and support ***efficient*** investments, ***the related research activities and facilitate innovation in the consumer's interest in areas such as digitalisation, flexibility services and interconnection***.

3. Where appropriate, the level of the tariffs applied to producers and/or consumers shall provide locational signals at Union level, and take into account the amount of network losses and congestion caused, and investment costs for infrastructure.

4. When setting the charges for network access, the following shall be taken into account:

   (a) payments and receipts resulting from the inter-transmission system operator compensation mechanism;

   (b) actual payments made and received as well as payments expected for future periods of time, estimated on the basis of past periods.

5. Setting the charges for network access under this Article shall be without prejudice to charges resulting from congestion management referred to in Article 14.

6. There shall be no specific network charge on individual transactions for ***cross-zonal*** trade of electricity

7. Distribution tariffs shall ***be cost-reflective taking into account the*** use of the distribution network by system users including active customers, ***may contain network connection capacity elements*** and may be differentiated based on system users' consumption or generation profiles. Where Member States have implemented the deployment of smart metering systems, time differentiated network tariffs ***shall be considered by national regulatory authorities when fixing or approving transmission and distribution tariffs or their methodologies in line with article 59(6) of the [Electricity Directive] and, where appropriate, may be introduced,*** reflecting the use of the network, in a transparent**, *cost efficient*** and foreseeable way for the consumer.

8. ***Distribution tariff methodologies*** shall provide incentives to distribution system operators ▌ for the ***most cost-efficient*** operation and development of their networks ***including through the procurement of services***. For that purpose regulatory authorities shall recognise as eligible and include ▌ relevant costs in distribution tariffs and ***may*** introduce performance targets in order to incentivise distribution system operators to raise efficiencies, including ***through*** energy efficiency, ***flexibility and the development of smart grids and intelligent metering systems,*** in their networks

9. By [OP: please add specific date – three months after entry into force] **to *mitigate the risk of market fragmentation*** the Agency shall provide a ***best practice report*** on ▌ transmission and distribution tariff methodologies ***while leaving sufficient room to take national specificities into account***. That ***best practice report*** shall address at least:

(a) the ratio of tariffs applied to producers and to consumers;

(b) the costs to be recovered by tariffs;

(c) time differentiated network tariffs;

(d) locational signals;

(e) the relationship between transmission and distribution tariffs, ;

(f) methods to ensure transparency in the setting and structure of tariffs;

(g) groups of network users subject to tariffs ***including, where applicable, their characteristics, forms of consumption, and any*** tariff exemptions.

(h) losses in high, medium and low-voltage grids;

The Agency shall update its report at least once every two years.

10. ***Regulatory authorities shall take the best practice report duly into consideration when approving or fixing transmission or distribution tariffs or their methodologies in accordance with Article 59(6)(a) of [recast of Directive 2009/72/EC as proposed by COM(2016) 864/2]***

▌

Article 17

Congestion income

1. Congestion-management procedures associated with a pre-specified timeframe may generate revenue only in the event of congestion which arises for that timeframe, except in the case of new interconnectors which benefit from an exemption under Article 7 of Regulation (EC) No 1228/2003, Article 17 of Regulation (EC) No 714/2009 or Article 59. The procedure for the distribution of those revenues shall be subject to review by the regulatory authorities and shall neither distort the allocation process in favour of any party requesting capacity or energy nor provide a disincentive to reduce congestion.

2. Any revenues resulting from the allocation of interconnection capacity shall be used ***as a priority*** for the following purposes:

   (a) guaranteeing the actual availability of the allocated capacity ***including firmness compensation; or***

   (b) maintaining or increasing interconnection capacities through ***optimisation of the usage of existing interconnectors by coordinated remedial actions, where applicable; or covering costs resulting from*** network investments ***relevant to reduce interconnector congestion.***

2a. Where the priority objectives *set out in* ***paragraph 2 are adequately fulfilled, the revenues may be used as income to be taken into*** *account* ***by the national regulatory authorities when approving the methodology for calculating network tariffs and/or fixing network tariffs. The residual revenues shall be placed on a separate internal account line until such time as it can be spent on the purposes set out in paragraph 2.***

3. The use of revenues in accordance with points (a) ***or*** (b) of paragraph 2 shall be subject to a methodology proposed ***by the transmission system operators after consultation of regulatory authorities and relevant stakeholders and approved by the Agency. The transmission system operators shall submit the proposal to the Agency by [OP: 12 months after entry into force] and the Agency shall decide on it within six months.***

The Agency may ***request transmission system operators to*** update the methodology***. The Agency*** shall approve the updated methodology not later than six months from its submission

▌

The methodology shall detail as a minimum the conditions under which the revenues can be used for ▌ paragraph 2 and the conditions under which, and for how long, they may be placed on a separate internal account line for future use on those purposes.

3b. Transmission system operators shall clearly establish beforehand how any congestion income will be used, and report on the actual use of that income. On an annual basis, and by ***1 March*** each year, the national regulatory authorities shall ***inform the Agency and*** publish a report setting out the amount of revenue collected for the 12-month period ending on ***31 December*** of the ***previous calendar*** year and how that revenue was used ***pursuant to paragraph 2***, including the specific projects the income has been used for the amount placed on a separate account line***, or the amount that has been used when calculating network tariffs***, together with verification that that use complies with this Regulation ***and the methodology developed pursuant to paragraph 3. Where some of the congestion revenues are used when calculating network tariffs, the report shall set out how the TSOs fulfilled the priority objectives in paragraph 2 where applicable***.

Chapter IV

Resource adequacy

Article 18

Resource adequacy

1. Member States shall monitor resource adequacy within their territory based on the European resource adequacy assessment pursuant to Article 19. ***For the purposes of complementing the European resource adequacy assessment, Member States may in addition perform national resource adequacy assessments pursuant to Article 19a.***

2. Where the European ***or the national*** resource adequacy assessment identifies a resource adequacy concern Member States shall identify any regulatory distortions ***and/or market failures*** that caused or contributed to the emergence of the concern.

3. Member States ***with identified adequacy concerns*** shall publish ***an implementation plan with*** a timeline for adopting measures to eliminate any identified regulatory distortions ***and/or market failures as a part of the State Aid process***. When addressing resource adequacy concerns***, the*** Member States shall in particular ***take into account the principles set out in Article 3 and consider:***

   (a) removing regulatory distortions;

   (b) remove price caps in accordance with article 9;

   (c) introduce a shortage pricing ***function for balancing energy as referred in Article 44(3) of Regulation 2017/2195;***

(d) ***increase*** interconnection ***and internal grid capacity with a view to reaching at least their interconnection targets as referred in Article 4(d)(1) of the Governance Regulation;***

(e) ***enable self-generation***, energy storage, demand side measures and energy efficiency ***by adopting measures to eliminate any identified regulatory distortions***;

(f) ***ensure cost-efficient and market-based procurement of balancing and ancillary services;***

(g) ***remove regulated prices where required by Article 5 of Directive (EU) ... [recast of Directive 2009/72/EC as proposed by COM(2016) 864/2].***

3a. ***The Member States shall submit the implementation plan to the Commission for review.***

3 b. ***The Commission shall provide an opinion, within four months of receipt of the implementation plan, whether the measures are sufficient to eliminate the regulatory distortions and/or market failures and may invite the Member State to amend the implementation plan accordingly.***

3c. ***The Member State shall monitor the application of the implementation plan and shall publish the results in an annual report.***

3d. ***The Member State shall submit the report under 3c to the Commission annually.***

The Commission shall provide an opinion whether the reforms have been sufficiently implemented and the resource adequacy concern has been resolved.

3e. ***Member States shall continue to adhere to the implementation plan after the adequacy concern has been resolved.***

Article 18 a

General principles for capacity mechanisms

1. To eliminate residual adequacy concerns, Member States may, as a last resort and while implementing the measures pursuant to Article 18(3) and to Union State aid rules, introduce capacity mechanisms.

2. Before introducing capacity mechanisms, Member States shall conduct a comprehensive study of their possible effects on the neighbouring Member States by consulting, at least, its electrically connected neighbouring Member States and the stakeholders of those Member States.

2aa. Member States shall assess whether a capacity mechanism in the form of strategic reserve can address the adequacy concerns. Where this is not the case, Member States may implement a different type of capacity mechanism.

2a. Member States shall not introduce capacity mechanisms where both the European and the national adequacy assessments, or in the absence of a national adequacy assessment, the European adequacy assessment have not identified a resource adequacy concern.

3. Member States shall not introduce capacity mechanisms before the implementation plan as referred to in Article 18(3) has not received an opinion by the Commission as referred to in Article 18(3b).

5. Where a Member State applies a capacity mechanism, it shall review that mechanism and shall provide that no new contracts are concluded under that mechanism where both the European and the national adequacy assessment, or in the absence of a national adequacy assessment, the European adequacy assessment have not identified a resource adequacy concern or the implementation plan as referred to in Article 18(3) has not received an opinion by the Commission as referred to in Article 18(3b).

6. When designing capacity mechanisms Member States shall include a provision allowing for an efficient administrative phase-out of the capacity mechanism in case no new contracts are concluded under paragraph 5 during 3 consecutive years.

6. Capacity mechanisms shall be temporary. They shall be approved by the Commission for no longer than 10 years. They shall be phased out or the amount of the committed capacities shall be reduced based on the implementation plan pursuant to Article 18(3). Member States shall continue the application of the implementation plan after the introduction of the capacity mechanism.

Article 18 b (new)

Design principles for capacity mechanisms

1. Any capacity mechanism shall:

(a) be temporary.

(a) not create undue market distortions and not limit cross-zonal trade;

(b) not go beyond what is necessary to address the adequacy concern;

(c) select capacity providers by means of a transparent, non-discriminatory and competitive process;

(e) provide incentives for capacity providers to be available in times of expected system stress;

(f) ensure that the remuneration is determined through the competitive process;

(g) set out the required technical conditions for the participation of capacity providers in advance of the selection process;

(h) be open to participation of all resources, including storage and demand side management that are capable of providing the required technical performance;

(i) apply appropriate penalties to capacity providers when not available in the event of system stress;

2. Design principles for strategic reserves

(a) When a capacity mechanism is designed as a strategic reserve, resources in the strategic reserve shall only be dispatched in case transmission system operators are likely to exhaust their balancing resources to establish an equilibrium between demand and supply.

This requirement is without prejudice to activating resources ahead of actual dispatch in order to respect their ramping constraints and operating requirements. The output of the strategic reserve during activation shall not be attributed to balance groups through wholesale markets or shall not change their imbalances.

(b) During imbalance settlement periods where resources in the strategic reserve were dispatched imbalances in the market shall be settled at least at the value of lost load /at a value higher than the intraday technical price limit as referred in Article 9(1) of this Regulation, whichever higher.

(c) The output of the strategic reserve following dispatch shall be attributed to balance responsible parties through the imbalance settlement mechanism.

(d) The resources taking part in the strategic reserve shall not get remunerated through wholesale electricity markets or balancing markets.

(e) The resources in the strategic reserve shall be held outside of the market at least for the duration of the contractual period.

3. In addition to the requirements laid down in paragraph 1, capacity mechanisms other than strategic reserves shall:

(a) be constructed so as to ensure that the price paid for availability automatically tends to zero when the level of capacity supplied is expected to be adequate to meet the level of capacity demanded;

(b) remunerate the participating resources merely for their availability and ensure that the remuneration does not affect decisions of the capacity provider whether or not to generate;

(c) ensure that capacity obligations are transferable between eligible capacity providers.

4. Capacity mechanisms shall apply the following requirements regarding CO2 emission limits:

(a) Generation capacity emitting more than 550 gr CO2 of fossil fuel origin per kWh of electricity that started commercial production after [OP: date of entry into force] shall not be committed or receive payments or commitments for future payments under a capacity mechanism as of entry into force at the latest;

(b) Generation capacity emitting more than 550 gr CO2 of fossil fuel origin per kWh of electricity and more than 350 kg CO2 of fossil fuel origin on average per year per installed kWe that started commercial production before [OP: date of entry into force] shall not be committed or receive payments or commitments for future payments under a capacity mechanism as of 1 July 2025 at the latest;

(c) The emission limit of 550 gr CO2 of fossil fuel origin per kWh of electricity and the limit of 350kg CO2 of fossil fuel origin on average per year per installed kW shall be calculated based on the design efficiency of the generation unit meaning the net efficiency at nominal capacity under relevant ISO conditions.

The Agency shall publish an opinion providing technical guidance related to the calculation of the values referred in the first subparagraph by no later than six months after entry into force of this Regulation.

5. Member States applying capacity mechanisms on [OP: entry into force of this Regulation] shall adapt their mechanisms to comply with Chapter 4 of this Regulation without prejudice to commitments or contracts, concluded before 31 December 2019.

Article 19

European resource adequacy assessment

1. The European resource adequacy assessment shall ***determine resource adequacy concerns by assessing*** the overall adequacy of the electricity system to supply current and projected demands for electricity ***for every single year within in the Union, within the relevant Member States in the region, for each Member State and down to each bidding zone where relevant,*** for a ten-year period from the date of that assessment ▌ .

1a. The European resource assessment shall be conducted by the ENTSO for Electricity.

2. By [OP: six months after entry into force of this Regulation], the ENTSO for Electricity shall submit to the ***Electricity Coordination Group and the*** Agency a draft methodology for the European resource adequacy assessment based on the principles provided for in paragraph 4.

3. Transmission system operators shall provide the ENTSO for Electricity with the data it needs to carry out ▌ the European resource adequacy assessment.

The ENTSO for Electricity shall carry out the assessment every year. ***Generators and other market participants shall provide transmission system operators with data regarding expected utilization of the generation resources, considering the availability of primary resources and appropriate scenarios of projected demand and supply.***

4. The European resource adequacy assessment shall be based on a ***transparent*** methodology which shall ***make possible*** that the assessment:

(a) is carried out on ***each respective*** bidding zone level covering at least all Member States;

(b) is based on appropriate ***central reference*** scenarios of projected demand and supply including an economic assessment of the likelihood of retirement, ***mothballing,*** new-build of generation assets and measures to reach energy efficiency ***and electricity interconnection*** targets and appropriate sensitivities on ***extreme weather events, hydrological conditions,*** wholesale prices and carbon price developments;

(ba) contains separate scenarios reflecting the different likeliness of the generation adequacy concerns which the different types of capacity mechanisms are designed to address;

(c) appropriately takes account of the contribution of all resources including existing and future generation, energy storage, ***sectoral integration,*** demand response, and import and export possibilities and their contribution to flexible system operation;

(d) anticipates the likely impact of the measures referred in Article 18(3);

(e) includes ***variants*** without ***and where applicable with*** existing or planned capacity mechanisms;

(f) is based on a market model using, where applicable, the flow-based approach;

(g) applies probabilistic calculations;

(ga) applies a single modelling tool;

(h) applies at least the following indicators ***referred to in Article 20***:

– "expected energy not served", and

– "loss of load expectation";

(i) identifies the sources of possible resource adequacy concerns, in particular whether it is a network or a resource constraint, or both;

(ia) respects real network development;

(j) ensures that national characteristics of generation, demand flexibility and storage, the availability of primary resources and the level of interconnection are properly taken into consideration;

5. By [OP: six months after entry into force of this Regulation], the ENTSO for Electricity shall submit to the Agency a draft methodology for calculating:

(a) the value of lost load;

(b) the "cost of new entry" for generation, or demand response; and

(c) the reliability standard ***referred to in Article 20***.

5a. The methodology shall be based on a transparent, objective and verifiable criteria.

6. The proposals under paragraphs 2 and 5 ***for the draft methodology, the scenarios, sensitivities and assumptions on which they are based,*** and the results of the European resource adequacy assessment under paragraph 3 shall be subject to prior consultation ***with Member States, the Electricity Coordination Group and relevant stakeholders*** and approval by the Agency under the procedure set out in Article 22.

Article 19a

National resource adequacy assessments

1. National resource adequacy assessment shall have a regional scope and shall be based on the methodology referred in Article 19(2) in particular provisions provided in paragraph 4 (b) to (j).

The national resource adequacy assessments shall contain the reference central scenarios as referred to in Article 19(4)(b).

National resource adequacy assessments, may in addition provide additional, sensitivities to the ones referred in Article 19(4)(b). When applying additional sensitivities national resource adequacy assessments can:

(a) make assumptions taking into account particularities of national power demand and supply,

(b) use complementary tools and consistent recent data to the ones used by the ENTSO for Electricity for the European resource adequacy assessment.

In addition, national resource adequacy assessment, when assessing foreign contribution to the security of supply of the bidding zones they cover, shall apply the values for foreign contribution subject to provisions of Article 21.

2. National resource adequacy assessments and, where applicable, the European resource adequacy assessment and the opinion of the Agency pursuant to paragraph 3 of this article shall be made publicly available.

3. Where the national resource adequacy assessment identifies a concern with regards to a bidding zone and the European resource adequacy assessment has not identified a concern with regards to the same bidding zone, the body governing the national resource adequacy assessment shall include within its national resource adequacy assessment report, a reasoning on the occurring divergence between the two resource adequacy assessments including details of the sensitivities used and the underlying assumptions. Member States shall publish this report and forward it to the Agency.

Within two months from the date of the submission of the report the Agency shall provide an opinion on whether the discrepancies between the national and the European assessment are justified.

The body governing the national resource adequacy assessment shall take due account of the Agency's opinion, and where necessary amend its final assessment. Where it decides not to take fully into account the Agency's opinion, it shall publish a report with a detailed reasoning.

Article 20

Reliability standard

1. When applying capacity mechanisms Member States shall have a reliability standard in place***. A reliability standard shall indicate the necessary*** level of security of supply ***of the Member State*** in a transparent manner. ***In the case of cross-border bidding zones, such reliability standards shall be established jointly by the relevant authorities.***

2. ***Upon the proposal by the National Regulatory Authorities,*** the reliability standard shall be set by the ***Member State or a competent authority designated by the Member State*** based on the methodology pursuant to Article 19(5).

3. The reliability standard shall be calculated using ***at least*** the value of lost load and the cost of new entry over a given timeframe ***and be expressed as "expected energy not served" and the "loss of load expectation".***

4. ***When applying capacity mechanisms*** the parameters determining the amount of capacity procured in the capacity mechanism shall be approved by the ***Member State or another competent authority designated by the Member States based on the proposal by the National Regulatory Authorities***.

Article 21

Cross-border participation in capacity mechanisms

1. Mechanisms other than strategic reserves ***and where technically feasible, strategic reserves,*** shall be open to direct ***cross-border*** participation of capacity providers located in another Member State ***pursuant to the provisions of this Article***.

2. Member States shall ensure that foreign capacity capable of providing equivalent technical performance to domestic capacities has the opportunity to participate in the same competitive process as domestic capacity. ***In the case of capacity mechanisms in operation as of the [date of entry into force], Member States may allow direct participation in the same competitive process of interconnectors as foreign capacity for a maximum of four years after [entry into force] or two years following the approval of the methodologies referred to in paragraph 10 of this Article, whatever happens earlier.***

Member States may require foreign capacity to be located in a Member State with a direct network connection between that Member State and the Member State applying the mechanism.

3. Member States shall not restrict capacity which is located in their territory from participating in capacity mechanisms of other Member States.

4. Cross-border participation in ▌ capacity mechanisms shall not change, alter or otherwise impact cross-zonal schedules and physical flows between Member States which shall be determined solely by the outcome of capacity allocation pursuant to Article 14.

5. Capacity providers shall be able to participate in ***multiple capacity mechanisms***.

In case capacity providers participate in more than one mechanism for the same delivery period, they shall participate up to the expected availability of interconnection and the likely concurrence of system stress between the system where the mechanism is applied and the system in which the foreign capacity is located according to the methodology in paragraph 10a.

5a. Capacity providers shall be subject to non-availability payments in case of non-availability.

In case capacity providers participate in more than one mechanism for the same delivery period, they shall be subject to multiple non-availability payments when they are unable to fulfil multiple commitments.

6. ***For the purposes of providing a recommendation to TSOs regional coordination centres established pursuant to Article 32 shall annually calculate the maximum entry capacity available for the participation of foreign capacity. This calculation shall take*** into account the expected availability of interconnection and the likely concurrence of system stress between the system where the mechanism is applied and the system in which the foreign capacity is located. A calculation is required for each bidding zone border.

TSOs shall annually set the maximum entry capacity available for the participation of foreign capacity based on the recommendation of the Regional Coordination Centre.

7. Member States shall ensure that the entry capacity referred to in paragraph 6 is allocated to eligible capacity providers in a transparent, non-discriminatory and market-based manner.

8. If ***there are capacity mechanisms open for cross-border participation in two neighbouring Member States, any revenues*** arising through the allocation referred to in paragraph 7 shall accrue to transmission system operators and be shared between them according to the methodology referred in point (b) of paragraph 10 ***or a common methodology approved by both relevant regulatory authorities. If the neighbouring Member State is not applying a capacity mechanism or is applying a capacity mechanism which is not open to cross border participation, the share of revenues shall be approved by the competent national authority of the Member State where the capacity mechanism is implemented after seeking the opinion of the regulatory authorities of the neighbouring Member States.*** Transmission system operators shall use such revenues for the purposes set out in Article 17(2).

9. The transmission system operator where the foreign capacity is located shall:

(a) establish whether interested capacity providers can provide the technical performance as required by the capacity mechanism in which the capacity provider intends to participate and register the capacity provider in the registry as eligible capacity providers.

(b) carry out availability checks ▌***;***

(c) be notified by the respective capacity provider without delay about its participation in foreign capacity mechanism;

(d) notify to the transmission system operator in the Member State applying the capacity mechanism the information received under paragraph 9a to 9c.

10. By [OP: twelve months after entry into force of this Regulation] the ENTSO for Electricity shall submit to the Agency:

(a) a methodology for calculating the maximum entry capacity for cross-border participation as referred to in paragraph 6;

(b) a methodology for sharing the revenues referred to in paragraph 8;

(c) common rules to carry out availability checks referred to in point (b) of paragraph 9;

(d) common rules to determine when a non-availability payment is due;

(e) terms of the operation of the registry as referred to in point (a) of paragraph 9;

(f) common rules to identify capacity eligible to participate as referred to in point (a) of paragraph 9.

The proposal shall be subject to prior consultation and approval by the Agency under the procedure set out in Article 22.

11. The ***national regulatory authorities concerned*** shall verify whether the capacities have been calculated in line with the methodology as referred to in point (a) of paragraph 10.

12. National regulatory authorities shall ensure that cross-border participation in capacity mechanisms is organised in an effective and non-discriminatory manner. They shall in particular provide for adequate administrative arrangements for the enforcement of non-availability payments across borders.

13. Allocated capacities as referred to in paragraph 7 shall be transferable between eligible capacity providers. Eligible capacity providers shall notify any transfer to the registry as referred to in point (a) of paragraph 9.

14. No later than [OP: two years after the entry into force of this Regulation] the ENTSO for Electricity shall set up and operate the registry as referred to in point (a) of paragraph 9. The registry shall be open to all eligible capacity providers, the systems applying the mechanisms and their transmission system operators.

Article 22

Approval procedure

1. Where reference is made to this Article, the procedure set out in paragraphs 2 to 4 shall be applicable to the approval of a proposal submitted by the ENTSO for Electricity.

2. Prior to submitting the proposal, the ENTSO for Electricity shall conduct a consultation process involving all relevant stakeholders, ▌ regulatory authorities and other national authorities ***and shall take the results of a consultation process duly into consideration***.

3. Within three months from the date of receipt, the Agency shall either approve the proposal or amend it. In the latter case, the Agency shall consult the ENTSO for Electricity before adopting the amended proposal. The adopted proposal shall be published on the Agency's website at the latest three months after the date of receipt of the proposed documents.

4. The Agency may request changes to the approved proposal at any time. Within six months from the request, the ENTSO for Electricity shall submit to the Agency a draft of the proposed changes. Within a period of three months from the date of receipt of the draft, the Agency shall amend or approve the changes and publish it on its website.

▌

Chapter V

Transmission system operation

Article 25

European network of transmission system operators for electricity

1. Transmission system operators shall cooperate at Union level through the ENTSO for Electricity, in order to promote the completion and functioning of the internal market in electricity and ***cross zonal*** trade and to ensure the optimal management, coordinated operation and sound technical evolution of the European elecricity transmission network.

2. In performing its functions under EU law, the ENTSO for Electricity shall act ***in the interest of a well functioning and integrated Internal Electricity market*** and shall contribute to the efficient and sustainable achievement of the objectives set out in the policy framework for climate and energy covering the period from 2020 to 2030, in particular by contributing to the efficient integration of electricity generated from renewable energy sources and to increases in energy efficiency ***while maintaining system security. The ENTSO for Electricity shall have adequate human and financial resources to carry out its duties*.**

Article 26

Establishment of the ENTSO for Electricity

1. The transmission system operators for electricity shall submit to the Commission and to the Agency the draft statutes, a list of members and draft rules of procedure, including the rules of procedures on the consultation of other stakeholders, of the ENTSO for Electricity to be established.

2. Within two months of the day of the receipt, the Agency, after formally consulting the organisations representing all stakeholders, in particular the system users, including customers, shall provide an opinion to the Commission on the draft statutes, list of members and draft rules of procedure.

3. The Commission shall deliver an opinion on the draft statutes, list of members and draft rules of procedures taking into account the opinion of the Agency provided for in paragraph 2 and within three months of the day of the receipt of the opinion of the Agency.

4. Within three months of the day of receipt of the Commission's favourable opinion, the transmission system operators shall establish the ENTSO for Electricity and adopt and publish its statutes and rules of procedure.

5. The documents referred to in paragraph 1 shall be submitted to the Commission and to the Agency in case of changes thereof or upon reasoned request of the Commission or of the Agency. The Agency and the Commission shall deliver an opinion in accordance with paragraphs 2 to 4.

Article 27

Tasks of the ENTSO for Electricity

1. The ENTSO for Electricity shall :

(a) elaborate network codes in the areas set out in Article 55(1) with a view to achieving the objectives set out in Article 25 .

(b) adopt and publish a non-binding Union -wide ten-year network development plan, (Union -wide network development plan), every two years;

(c) prepare and adopt proposals related to the European resource adequacy assessment pursuant to Article ***19*** and for the technical specifications for cross-border participation in capacity mechanisms pursuant to Article 21(10);

(d) adopt recommendations relating to the coordination of technical cooperation between Union and third-country transmission system operators;

(e) adopt a framework for the cooperation and coordination between ***Regional Coordination Centres;***

(f) adopt a proposal defining the system operation region **in a*ccordance with the provisions of Article 33***;

(fa) cooperate with distribution system operators and the EU DSO entity;

(fb) promote the digitalisation of transmission networks including deployment of smart grids, efficient real time data acquisition and intelligent metering systems;

(g) adopt common network operation tools to ensure coordination of network operation in normal and emergency conditions, including a common incident classification scale, and research plans, including the deployment of these plans through an efficient research programme. These tools shall specify inter alia:

(i) the information, including appropriate day ahead, intra-day and real-time information, useful for improving operational coordination, as well as the optimal frequency for the collection and sharing of such information;

(ii) the technological platform for the exchange of information in real time and where appropriate, the technological platforms for the collection, processing and transmission of the other information referred to in point (i), as well as for the implementation of the procedures capable of increasing operational coordination between transmission system operators with a view to such coordination becoming Union-wide;

(iii) how transmission system operators make available the operational information to other transmission system operators or any entity duly mandated to support them to achieve operational coordination, and to the Agency; and

(iv) that transmission system operators designate a contact point in charge of answering inquiries from other transmission system operators or from any entity duly mandated as referred to in point (iii), or from the Agency concerning such information.

(h) adopt an annual work programme;

(ha) contribute to the establishment of interoperability requirements and non-discriminatory and transparent procedures for accessing data as provided for in Article 24 of the [Electricity Directive];

(i) adopt an annual report;

(j) carry out and adopt seasonal adequacy outlooks pursuant to Article 9(2) [Regulation on risk preparedness as proposed by COM(2016) 862] ;

(jb) promote cyber security and data protection in cooperation with relevant authorities and regulated entities;

(j c) take into account the development of demand response in fulfilling its tasks.

2. The ENTSO for Electricity shall report to the Agency on shortcomings identified regarding the establishment and performance of ***Regional Coordination Centres.***

3. The ENTSO for Electricity shall publish the minutes of its Assembly, Board and Committees meetings and provide the public with regular information on its decision-making and activities.

4. The annual work programme referred to in (h) of paragraph 1 shall contain a list and description of the network codes to be prepared, a plan on coordination of operation of the network, and research and development activities, to be realised in that year, and an indicative calendar.

5. The ENTSO for Electricity shall make available all information required by the Agency to fulfil its tasks under Article 29(1). Transmission system operators shall make available all information required for the ENTSO for Electricity to fulfil its task under sentence 1.

6. Upon request of the Commission, the ENTSO for Electricity shall give its views to the Commission on the adoption of the guidelines as laid down in Article 57.

Article 28

Consultations

1. While preparing the proposals pursuant to the tasks referred to in Article 27(1), the ENTSO for Electricity shall conduct an extensive consultation process, at an early stage and ***structured in a way to enable accommodating stakeholder comments before final adoption and*** in an open and transparent manner, involving all relevant stakeholders, and, in particular, the organisations representing all stakeholders, in accordance with the rules of procedure referred to in Article 26 . That consultation shall also involve national regulatory authorities and other national authorities, supply and generation undertakings, system users including customers, distribution system operators, including relevant industry associations, technical bodies and stakeholder platforms. It shall aim at identifying the views and proposals of all relevant parties during the decision-making process.

2. All documents and minutes of meetings related to the consultations referred to in paragraph 1 shall be made public.

3. Before adopting the proposals pursuant to Article 27(1) the ENTSO for Electricity shall indicate how the observations received during the consultation have been taken into consideration. It shall provide reasons where observations have not been taken into account.

Article 29

Monitoring by the Agency

1. The Agency shall monitor the execution of the tasks referred to in Article 27(1), (2) and (3) of the ENTSO for Electricity and report to the Commission.

The Agency shall monitor the implementation by the ENTSO for Electricity of network codes elaborated under Article 55(14). Where the ENTSO for Electricity has failed to implement such network codes, the Agency shall request the ENTSO for Electricity to provide a duly reasoned explanation as to why it has failed to do so. The Agency shall inform the Commission of that explanation and provide its opinion thereon.

The Agency shall monitor and analyse the implementation of the network codes and the guidelines adopted by the Commission as laid down in Article 54(1), and their effect on the harmonisation of applicable rules aimed at facilitating market integration as well as on non-discrimination, effective competition and the efficient functioning of the market, and report to the Commission.

2. The ENTSO for Electricity shall submit the draft Union-wide network development plan, the draft annual work programme, including the information regarding the consultation process, and the other documents referred to in Article 27(1) to the Agency for its opinion.

Within two months from the day of receipt, the Agency shall provide a duly reasoned opinion as well as recommendations to the ENTSO for Electricity and to the Commission where it considers that the draft annual work programme or the draft Union -wide network development plan submitted by the ENTSO for Electricity do not contribute to non-discrimination, effective competition, the efficient functioning of the market or a sufficient level of cross-border interconnection open to third-party access.

Article 30

Costs

The costs related to the activities of the ENTSO for Electricity referred to in Articles 25 to 29 and 54 to 57 of this Regulation, and in Article 11 of Regulation (EU) No 347/2013 shall be borne by the transmission system operators and shall be taken into account in the calculation of tariffs. Regulatory authorities shall approve those costs only if they are reasonable and appropriate.

Article 31

Regional cooperation of transmission system operators

1. Transmission system operators shall establish regional cooperation within the ENTSO for Electricity to contribute to the activities referred to in Article 27(1), (2) and (3). In particular, they shall publish a regional investment plan every two years, and may take investment decisions based on that regional investment plan. The ENTSO for Electricity shall promote cooperation between transmission system operators at regional level ensuring interoperability, communication and monitoring of regional performance in those areas which are not yet harmonised at Union level.

2. Transmission system operators shall promote operational arrangements in order to ensure the optimum management of the network and shall promote the development of energy exchanges, the coordinated allocation of cross-border capacity through non-discriminatory market-based solutions, paying due attention to the specific merits of implicit auctions for short-term allocations, and the integration of balancing and reserve power mechanisms.

3. For the purposes of achieving the goals set in paragraphs 1 and 2 of this Article, the geographical area covered by each regional cooperation structure may be defined by the Commission, taking into account existing regional cooperation structures. Each Member State shall be allowed to promote cooperation in more than one geographical area. The Commission is empowered to adopt delegated acts in accordance with Article 63 concerning the geographical area covered by each regional cooperation structure. For that purpose, the Commission shall consult ***the regulatory authorities,*** the Agency and the ENTSO for Electricity. ***The decisions referred to in this paragraph are without prejudice to Article 33.***

Article 32

Establishment and mission of ***Regional Coordination Centres***

1. By [OP: twelve months after entry into force], all transmission system operators ***of a system operation region shall submit to the respective regulatory authorities a proposal for the establishment of Regional Coordination Centres in accordance with the criteria set out in this chapter***.

The regulatory authorities of the ***system operation*** region ***shall review and approve the proposal.***

The proposal shall at least include the following elements:

(***a***) ***the Member State where the seat of the Regional Coordination Centres will be (located and the participating TSOs;***

(b) the organisational, financial and operational arrangements necessary to ensure the efficient, secure and reliable operation of the interconnected transmission system;

(c) an implementation plan for the entry into operation of the Regional Coordination Centres;

(d) the statutes and rules of procedure of Regional Coordination Centres;

(e) a description of cooperative processes in accordance with Article 35;

(f) a description of the arrangements concerning the liability of Regional Coordination Centres in accordance with Article 44;

(***g***) ***where two Regional Coordination Centres are maintained on a rotational basis, a description of the arrangements to provide clear responsibilities and procedures on the execution of their tasks.***

1a. ***Following the approval by national regulatory authorities of the proposal in paragraph 1, Regional Coordination Centres shall replace Regional Security Coordinators established pursuant to the System Operation Guideline adopted on the basis of Article 18 of Regulation 714/2009 and enter into operation by 1 July 2022.***

2. ***Regional Coordination Centres*** shall be organised in a legal form as referred to in ***Annex II*** of Directive ***(EU) 2017/1132*** of the European Parliament and of the Council.[1]

2a. ***In performing its tasks under Union law, the Regional Coordination Centres shall act independently from individual national interests and from the interests of transmission system operators.***

3. ***Regional Coordination Centres*** shall complement the role of transmission system operators by performing ***the tasks*** of regional relevance ***assigned to them in accordance with Article 34. Transmission system operators shall be responsible for managing electricity flows and ensuring a secure, reliable and efficient electricity system in accordance with Article 40 of the Directive (EU) [recast of Directive 2009/72/EC as proposed by COM(2016) 864/2].***

[1] ***Directive (EU) 2017/1132 of the European Parliament and of the Council of 14 June 2017 relating to certain aspects of company law (OJ L 169, 30.6.2017, p. 46).***

Article 33

Geographical scope of ***Regional Coordination Centres***

1. By [OP: six months after entry into force of this Regulation] the ENTSO for Electricity shall submit to the Agency a proposal ***specifying which transmission system operators, bidding zones, bidding zone borders, capacity calculation regions and outage coordination regions are covered by each of the system operation regions. The proposal shall take into account the grid topology, including the degree of interconnection and of interdependency of the power system in terms of flows and the size of the region which shall cover at least one capacity calculation region.***

1a. The transmission system operators of a system operation region shall adhere to the Regional Coordination Centre established in that region. Exceptionally, where the control area of a transmission system operator is part of multiple different synchronous areas, the transmission system operator may be coordinated by two Regional Coordination Centres. For the bidding zone borders adjacent to system operation regions, the proposal in paragraph 1 shall specify how the coordination between Regional Coordination Centres for these borders is to take place. For the Continental Europe synchronous area, where the activities of two Regional Coordination Centres may overlap in a system operation region, the TSOs of that system operation region shall decide to either designate a single Regional Coordination Centre in that region or that the two Regional Coordination Centres perform some or all of the tasks of regional relevance in the entire system operation region on a rotational basis and other tasks by a single designated Regional Coordination Centre.

2. Within three months of receipt ***of the proposal in paragraph 1***, the Agency shall either approve the proposal defining the system operation regions or propose amendments. In the latter case, the Agency shall consult the ENTSO for Electricity before adopting the amendments. The adopted proposal shall be published on the Agency's website.

2a. The concerned transmission system operators may submit a proposal to the Agency for the amendment of system operation regions defined pursuant to paragraph 1. The process in paragraph 2 shall apply.

Article 34

Tasks of ***Regional Coordination Centres***

1. Each ***Regional Coordination Centre*** shall perform ***at least*** all the following ***tasks of regional relevance*** in the ***entire*** system operation region where it is established ▌, set out in more detail in Annex I:

(a) coordinated capacity calculation ***in accordance with the methodologies developed pursuant to the Capacity Allocation and Congestion Management Guideline adopted on the basis of Article 18 of Regulation 714/2009***;

(b) coordinated security analysis ***in accordance with the methodologies developed pursuant to the System Operation Guideline adopted on the basis of Article 18 of Regulation 714/2009***;

(c) creation of common ***grid*** models ***in accordance with the methodologies and procedures developed pursuant to the System Operation Guideline adopted on the basis of Article 18 of Regulation 714/2009***;

(d) ***support the*** consistency assessment of transmission system operators' defense plans and restoration plans ***in accordance with the procedure set out in the Emergency and Restoration Network Code adopted on the basis of Article 6 of Regulation 714/2009***;

(da) regional week ahead to at least day-ahead system adequacy forecasts and preparation of risk reducing actions in accordance with the methodology set out in Article 8 of Regulation (EU) [Regulation on risk preparedness as proposed by COM(2016)862] and the procedures set out in the System Operation Guideline adopted on the basis of Article 18 of Regulation 714/2009;

(db) regional outage planning coordination in accordance with the procedures set out in the System Operation Guideline adopted on the basis of Article 18 of Regulation 714/2009;

(dc) training and certification of staff working for Regional Coordination Centres;

(e) ***support the*** coordination and optimization of regional restoration ***as requested by transmission system operators***;

(f) post-operation and post-disturbances analysis and reporting;

(g) regional sizing of reserve capacity;

(h) facilitate the regional procurement of balancing capacity;

▌

▌

(k) ***support transmission system operators, at their request, in the optimization of inter- transmission system operators settlements*** ;

▌

(m) ***tasks related to the*** identification of regional crisis scenarios ***if and to the extent they are delegated to the regional coordination centres pursuant*** to Article 6(1) of [Regulation on risk preparedness as proposed by COM(2016) 862] ▌ ;

▌

▌

(p) tasks related to the seasonal adequacy outlooks if and to the extent they are delegated to the regional ***coordination*** centres pursuant to Article 9(2) of [Regulation on risk preparedness as proposed by COM(2016) 862];

(q) calculate ***the value for*** the maximum entry capacity available for the participation of foreign capacity in capacity mechanisms ***for the purposes of issuing a recommendation*** pursuant to Article 21(6).

(qa) tasks related to support transmission system operators in the identification of needs for new transmission capacity, for upgrade of existing transmission capacity or their alternatives, to be submitted to the regional groups established pursuant to Regulation (EU) 347/2013 and included in the ten-year network development plan referred to in Article 51 of the Directive (EU) ... [recast of Directive 2009/72/EC as proposed by COM(2016) 864/2].

2. ***Upon proposal by the European Commission or Member States, the Electricity Cross-Border Committee set up pursuant to Article 62(1) shall issue an opinion on the assignation of new advisory tasks to regional coordination centres. Where the Electricity Cross-Border Committee issues a favourable opinion on the assignation of new advisory tasks, the Regional Coordination Centres shall execute those tasks on the basis of a proposal developed by ENTSO-E and approved by the Agency in accordance with the procedure set out in Article 22.***

3. Transmission system operators shall provide their ***Regional Coordination Centres*** with the information necessary to carry out its tasks.

4. ***Regional Coordination Centres*** shall provide transmission system operators of the system operation region with all the information necessary to implement the ***coordinated actions*** and recommendations proposed by the ***Regional Coordination Centres***.

For the tasks set out in this Article and not already covered by the ***relevant network codes or guidelines, the ENTSO for Electricity shall develop a proposal in accordance with the procedure set out in Article 22. Regional coordination centres shall execute those functions on the basis of a proposal that has been approved by the Agency***

Article 35

Cooperation within regional operational centres ***and between Regional Coordination Centres***

1. The day-to-day ***coordination within and between Regional Coordination Centres*** shall be managed through cooperative ***processes amongst the transmission system operators of the region, including arrangements for coordination between Regional Coordination Centres where relevant.*** The ***cooperative*** process shall be based on:

(a) working arrangements to address planning and operational aspects ***relevant for the tasks referred to in Article 34***;

(b) a procedure for ***sharing analysis and*** consulting ***Regional Coordination Centres' proposals with*** the transmission system operators of the system operation region ***and relevant stakeholders, in an efficient and inclusive manner,*** in the exercise of ***the*** operational duties and tasks, in accordance with Article 37 ***and with other Regional Coordination Centres***;

(c) a procedure for the adoption of ***coordinated action***s and recommendations in accordance with Article 38;

Article 36

Working arrangements

1. ***Regional Coordination Centres*** shall develop working arrangements ***that are efficient, inclusive, transparent and facilitate consensus,*** to address planning and operational aspects related to the ***tasks*** to be performed, taking into account, in particular, the specificities and requirements of those ***tasks*** as specified in Annex I. ***Regional Coordination Centres shall also develop a process for any revision of these working arrangements.***

2. ***Regional Coordination Centres*** shall ensure that the working arrangements contain rules for the notification of parties concerned.

Article 37

Consultation procedure

1. ***Regional Coordination Centres*** shall develop a procedure to organise, in the exercise of their daily operational duties and tasks, the appropriate and regular consultation of transmission system operators ***of the system operation region, other Regional Coordination Centres*** and of relevant stakeholders. In order to ensure that regulatory issues can be addressed, regulatory authorities shall be involved when required.

2. ***Regional Coordination Centres shall consult the Member States of the system operation region and, where there is a regional forum, their regional forums on matters of political relevance excluding the day-to-day activities of Regional Coordination Centres and the implementation of their tasks. The Regional Coordination Centres shall take due account of the recommendations given by the Member States and where applicable, by their regional forums.***

Article 37a

Transparency

1. Regional Coordination Centres shall organise a process for stakeholder involvement and organise regular meetings with stakeholders to discuss matters relating to the efficient, secure and reliable operation of the interconnected system as well as to identify shortcomings and propose improvements;

2. ENTSO for Electricity and Regional Coordination Centres shall operate in full transparency towards stakeholders and the general public. All relevant documentation shall be published on the website of ENTSO-E and of the respective Regional Coordination Centre.

Article 38

Adoption of decisions ***and revision of coordinated actions*** and recommendations

1. ***The transmission system operators of a system operation region*** shall develop a procedure for the adoption ***and revision*** of ***coordinated actions*** and recommendations ***put forward by Regional Coordination Centres in accordance with the criteria set out in paragraphs 2 to 4***.

2. ***Regional Coordination Centres*** shall ***issue coordinated actions*** addressed to the transmission system operators in respect of the ***tasks*** referred to in points (a), (b) ▌ of Article 34(1). Transmission system operators shall implement the ***coordinated actions except where the implementation of the coordinated actions would result in a violation of the operational security limits defined by each transmission system operator in accordance with the System Operation Guideline adopted on the basis of Article 18 of Regulation 714/2009***.

Where a transmission system operator decides not to implement a coordinated action for the reasons set out in this paragraph, it shall transparently report the detailed reasons to the Regional Coordination Centre and the transmission system operators of the system operation region without undue delay. In such cases, the Regional Coordination Centre shall assess the impact on the other transmission system operators of the system operation region and may propose a different set of coordinated actions subject to the procedure in this paragraph.

3. ***Regional Coordination Centres*** shall ***issue*** recommendations addressed to the transmission system operators for the ***tasks listed*** in ▌ Article 34(1) ***which are not referred to in paragraph 2 of this Article***.

Where a transmission system operator decides to deviate from the recommendation, the transmission system operator shall submit a justification to the Regional Coordination Centres and to the other transmission system operators of the system operation region.

4. ***The revision of coordinated actions or a recommendation shall be triggered at the request of one or more of the transmission system operators of the system operation region. Following the revision of the coordinated action or recommendation, regional coordination centres shall confirm or modify the measure.***

5. Where the measure subject to revision is a ***coordinated action*** in accordance with Article 38(2), the request for revision shall not suspend the ***coordinated action*** except in cases ***where the implementation of the coordinated action would result in a violation of the operational security limits defined by each transmission system operator in accordance with the System Operation Guideline adopted on the basis of Article 18 of Regulation 714/2009***.

6. ***Upon proposal of a Member States or the Commission and following consultation with the Electricity Cross-Border Committee set up pursuant to Article 62(1), the Member States of a system operation region*** may jointly decide to ***grant the competence to issue coordinated actions to their Regional Coordination Centre*** for one or more of the ***tasks*** provided for in Article 34(1) other than those referred to in paragraph 2 of this Article.

Article 40

Management board of ***Regional Coordination Centres***

1. In order to adopt measures related to their governance and to monitor their performance, the ***Regional Coordination Centres*** shall establish a management board.

2. The management board shall be composed of members representing ***all*** the transmission system operators ***that participate in the respective Regional Coordination Centres***.

3. The management board shall be responsible for:

   (a) drafting and endorsing the statutes and rules of procedure of the ***Regional Coordination Centres***;

   (b) deciding upon and implementing the organisational structure;

   (c) preparing and endorsing the annual budget;

   (d) developing and endorsing the cooperative ▌ processes in accordance with Article 35.

4. The competences of the management board shall exclude those that are related to the day-to-day activities of ***Regional Coordination Centres*** and the performance of its ***tasks***.

Article 41

Organisational structure

1. ***The transmission system operators of a system operation region*** shall set up ***the organisational*** structure ***of Regional Coordination Centres*** that supports ***the safety of their tasks***.

Their organisational structure shall specify:

(a) the authority, duties and responsibilities of the ▌ personnel;

(b) the relationship and reporting lines between different parts and processes of the organisation.

2. ***Regional Coordination Centres*** may set up regional desks to address ***sub-regional*** specificities or back-up ***regional coordination centres*** for the efficient and reliable exercise of their ***tasks where proven to be strictly necessary***.

Article 42

Equipment and staff

Regional Coordination Centres shall be equipped with all the human, technical, physical and financial resources necessary for fulfilling their obligations under this Regulation and carrying out their ***tasks independently and impartially***.

Article 43

Monitoring and reporting

1. ***Regional Coordination Centres*** shall establish a process for the continuous monitoring of at least:

   (a) their operational performance;

   (b) the ***coordinated actions*** and recommendations issued ***the degree of implementation of the coordinated actions and recommendations by the transmission system operators*** and the outcome achieved;

   (c) the effectiveness and efficiency of each of the ***tasks*** for which they are responsible ***and, where applicable, the rotation of the tasks***.

▌

3. ***Regional Coordination Centres*** shall establish their costs in a transparent manner and report them to the Agency and to the regulatory authorities of the system operation region.

4. ***Regional Coordination Centres*** shall submit an annual report ***containing relevant monitoring data pursuant to paragraph 1 of this Article and information on*** their performance to ENTSO for Electricity, the Agency, the regulatory authorities of the system operation region and the Electricity Coordination Group established pursuant to Article 1 of Commission Decision 2012/C 353/02[1].

1 Commission Decision of 15 November 2012 setting up the Electricity Coordination Group (OJ C 353, 17.11.2012, p.2).

5. ***Regional Coordination Centres*** shall report shortcomings identified in the monitoring process under paragraph 1 to ENTSO for electricity, the regulatory authorities of the system operation region, the Agency and the competent authorities of Member States responsible for the prevention and management of crisis situations. ***Following this report, the relevant regulatory authorities of the system operation region may propose to the Regional Coordination Centres measures to address the shortcomings.***

5a. Without prejudice to the principle of confidentiality and the need to preserve security and commercially sensitive information Regional Coordination Centres shall make public the reports referred to in paragraphs 4 and 5.

Article 44

Liability

In the proposal for the establishment of Regional Coordination Centres in accordance with Article 32, the transmission system operators of the system operation region shall take the necessary steps to cover liability related to the execution of their tasks ▌. The method employed to provide the cover shall take into account the legal status of the ***Regional Coordination Centres*** and the level of commercial insurance cover available.

Article 45

Ten-year network development plan

1. The Union -wide network development plan referred to under Article 27(1)(b) shall include the modelling of the integrated network, scenario development and an assessment of the resilience of the system.

The Union -wide network development plan shall, in particular:

(a) build on national investment plans, taking into account regional investment plans as referred to in Article 12(1), and, if appropriate, Union aspects of network planning as set out in Regulation (EU) No 347/2013 of the European Parliament and of the Council 1; it shall be subject to a cost-benefit analysis using the methodology established as set out in Article 11 of that Regulation;

(b) regarding cross-border interconnections, also build on the reasonable needs of different system users and integrate long-term commitments from investors referred to in Articles 44 and 51 of [recast of Directive 2009/72/EC as proposed by COM(2016) 864/2]; and

(c) identify investment gaps, notably with respect to cross-border capacities.

In regard to point (c), a review of barriers to the increase of cross-border capacity of the network arising from different approval procedures or practices may be annexed to the Union–wide network development plan.

1 Regulation (EU) No 347/2013 of the European Parliament and of the Council of 17 April 2013 on guidelines for trans-European energy infrastructure (OJ L 115, 25.4.2013, p. 39).

2. The Agency shall provide an opinion on the national ten-year network development plans to assess their consistency with the Union–wide network development plan. If the Agency identifies inconsistencies between a national ten-year network development plan and the Union–wide network development plan, it shall recommend amending the national ten-year network development plan or the Union–wide network development plan as appropriate. If such national ten-year network development plan is elaborated in accordance with Article 51 of [recast of Directive 2009/72/EC as proposed by COM(2016) 864/2], the Agency shall recommend that the competent national regulatory authority amend the national ten-year network development plan in accordance with Article 51(7) of that Directive and inform the Commission thereof.

Article 46

Inter-transmission system operator compensation mechanism

1. Transmission system operators shall receive compensation for costs incurred as a result of hosting cross-border flows of electricity on their networks.

2. The compensation referred to in paragraph 1 shall be paid by the operators of national transmission systems from which cross-border flows originate and the systems where those flows end.

3. Compensation payments shall be made on a regular basis with regard to a given period of time in the past. Ex-post adjustments of compensation paid shall be made where necessary, to reflect costs actually incurred.

   The first period of time for which compensation payments shall be made shall be determined in the guidelines referred to in Article 57.

4. The Commission shall adopt delegated acts in accordance with Article 63 concerning the amounts of compensation payments payable.

5. The magnitude of cross-border flows hosted and the magnitude of cross-border flows designated as originating and/or ending in national transmission systems shall be determined on the basis of the physical flows of electricity actually measured during a given period of time.

6. The costs incurred as a result of hosting cross-border flows shall be established on the basis of the forward-looking long-run average incremental costs, taking into account losses, investment in new infrastructure, and an appropriate proportion of the cost of existing infrastructure, in so far as such infrastructure is used for the transmission of cross-border flows, in particular taking into account the need to guarantee security of supply. When establishing the costs incurred, recognised standard-costing methodologies shall be used. Benefits that a network incurs as a result of hosting cross-border flows shall be taken into account to reduce the compensation received.

7. For the purpose of the inter-transmission system operator compensation mechanism only, where transmission networks of two or more Member States form part, in whole or in part, of a single control block, the control block as a whole shall be considered as forming part of the transmission network of one of the Member States concerned, in order to avoid flows within control blocks being considered as cross-border flows under Article 2(2)(b) and giving rise to compensation payments under paragraph 1 of this Article . The regulatory authorities of the Member States concerned may decide which of the Member States concerned shall be that of which the control block as a whole is to be considered to form part.

Article 47

Provision of information

1. Transmission system operators shall put in place coordination and information exchange mechanisms to ensure the security of the networks in the context of congestion management.

2. The safety, operational and planning standards used by transmission system operators shall be made public. The information published shall include a general scheme for the calculation of the total transfer capacity and the transmission reliability margin based upon the electrical and physical features of the network. Such schemes shall be subject to the approval of the regulatory authorities.

3. Transmission system operators shall publish estimates of available transfer capacity for each day, indicating any available transfer capacity already reserved. Those publications shall be made at specified intervals before the day of transport and shall include, in any event, week-ahead and month-ahead estimates, as well as a quantitative indication of the expected reliability of the available capacity.

4. Transmission system operators shall publish relevant data on aggregated forecast and actual demand, on availability and actual use of generation and load assets, on availability and use of the networks and interconnections, on balancing power and reserve capacity ***and on the availability of flexibility***. For availability and actual use of small generation and load units, aggregated estimate data may be used.

5. The market participants concerned shall provide the transmission system operators with the relevant data.

6. Generation undertakings which own or operate generation assets, where at least one generation asset has an installed capacity of at least 250 MW, or which have a portfolio comprising at least 400 MW of generation assets, shall keep at the disposal of the national regulatory authority, the national competition authority and the Commission, for five years all hourly data per plant that is necessary to verify all operational dispatching decisions and the bidding behaviour at power exchanges, interconnection auctions, reserve markets and over-the-counter-markets. The per-plant and per hour information to be stored shall include, but shall not be limited to, data on available generation capacity and committed reserves, including allocation of those committed reserves on a per-plant level, at the times the bidding is carried out and when production takes place.

7. Transmission system operators shall exchange regularly a set of sufficiently accurate network and load flow data in order to enable load flow calculations for each transmission system operator in their relevant area. The same set of data shall be made available to the regulatory authorities and to the Commission ***and Member States*** upon request. The regulatory authorities, ***Member States*** and the Commission shall treat that set of data confidentially, and shall ensure that confidential treatment is also given by any consultant carrying out analytical work on their request, on the basis of those data.

Article 48

Certification of transmission system operators

1. The Commission shall examine any notification of a decision on the certification of a transmission system operator as laid down in Article 52(6) of [recast of Directive 2009/72/EC as proposed by COM(2016) 864/2] as soon as it is received. Within two months of the day of receipt of such notification, the Commission shall deliver its opinion to the relevant national regulatory authority as to its compatibility with Article 52(2) or Article 53 and Article 43 of [recast of Directive 2009/72/EC as proposed by COM(2016) 864/2].

When preparing the opinion referred to in the first subparagraph, the Commission may request the Agency to provide its opinion on the national regulatory authority's decision. In such a case, the two-month period referred to in the first subparagraph shall be extended by two further months.

In the absence of an opinion by the Commission within the periods referred to in the first and second subparagraphs, the Commission shall be deemed not to raise objections to the regulatory authority's decision.

2. Within two months of receiving an opinion of the Commission, the national regulatory authority shall adopt its final decision regarding the certification of the transmission system operator, taking the utmost account of that opinion. The regulatory authority's decision and the Commission's opinion shall be published together.

3. At any time during the procedure, regulatory authorities and/or the Commission may request from a transmission system operator and/or an undertaking performing any of the functions of generation or supply any information relevant to the fulfilment of their tasks under this Article.

4. Regulatory authorities and the Commission shall preserve the confidentiality of commercially sensitive information.

5. Where the Commission has received notification of the certification of a transmission system operator under Article 43(9) of [recast of Directive 2009/72/EC as proposed by COM(2016) 864/2], the Commission shall take a decision relating to certification. The regulatory authority shall comply with the Commission decision.

Chapter VI

Distribution system operation

Article 49

European entity for distribution system operators

1. Distribution system operators ▌ shall cooperate at Union level through a European Entity for Distribution system operators ("EU DSO entity"), in order to promote the completion and functioning of the internal market in electricity, and to promote optimal management and a coordinated operation of distribution and transmission systems. Distribution system operators who wish to participate in the EU DSO entity shall ***have the right to*** become registered members of the entity.

Registered members may participate in the EU DSO entity directly or be represented by the national association designated by the Member State or by an Union level association.

1a. Distribution system operators are entitled to associate themselves through the establishment of the EU DSO entity. The EU DSO entity shall fulfil the tasks and procedures foreseen by this Regulation in accordance with Article 51. As an expert entity working for the common European interest, it shall not represent particular interest nor seek to influence the decision making process to defend certain interests.

1b. Members of the EU DSO entity shall be subject to registration and payment of a fair and proportionate membership fee according to the number of connected customers.

Article 50

Establishment of the EU DSO entity ▌

-1. EU DSO entity shall consist of, at least, a General Assembly, Board of Directors, Strategic Advisor Group, Expert Groups and a Secretary General.

1. ***Within*** [OP: twelve months after entry into force], the distribution system operators ▌ shall submit to the Commission and to the Agency the draft statutes ***in accordance with Article 50a including a code of conduct***, a list of registered members, the draft rules of procedure, including the rules of procedures on the consultation with ENTSO for Electricity and other stakeholders and the financing rules, of the EU DSO entity to be established.

The draft rules of procedure of the EU DSO entity shall ensure balanced representation of all participating DSOs.

2. Within two months of receipt, the Agency, after formally consulting the organisations representing all stakeholders, in particular distribution system users, shall provide an opinion to the Commission on the draft statutes, the list of members and the draft rules of procedure.

3. The Commission shall deliver an opinion on the draft statutes, the list of members and the draft rules of procedure taking into account the opinion of the Agency provided for in paragraph 2, within three months of receipt of the opinion of the Agency.

4. Within three months of the day of receipt of the Commission's positive opinion, the distribution system operators shall establish the EU DSO entity and adopt and publish its statutes and rules of procedure.

5. The documents referred to in paragraph 1 shall be submitted to the Commission and to the Agency in case of changes thereof or upon their reasoned request. The Agency and the Commission shall deliver an opinion in line with the process set out in paragraphs 2 to 4.

6. The costs related to the activities of the EU DSO entity shall be borne by distribution system operators who are registered members and shall be taken into account in the calculation of tariffs. Regulatory authorities shall approve those costs only if they are reasonable and proportionate.

Article 50a

Principal rules and procedures for the EU DSO entity for electricity

1. The statutes of the EU DSO entity adopted in accordance with Article 50 shall safeguard the following principles:

(a) participation in the works of the EU DSO entity is limited to registered members with the possibility of delegation within the membership;

(b) strategic decisions regarding the activities of the EU DSO entity as well as policy guidelines for the Board of Directors are adopted by the General Assembly;

(c) decisions of the General Assembly are adopted according with the following rules:

- *when 65% of the votes attributed to the members of the General Assembly are reached;*
- *whereby each member disposes of a number of votes proportional to the respective number of customers; and*
- *the final outcome is supported by at least 55% of the members of the General Assembly;*

(d) decisions of the General Assembly are blocked according with the following rules:

- *when 35% of the votes attributed to the members of the General Assembly are reached;*
- *whereby each member disposes of a number of votes proportional to the respective number of customers; and*
- *the final outcome is supported by at least 25% of the members of the General Assembly;*

(e) the Board of Directors is elected by the General Assembly for a mandate of maximum 4 years;

(f) the Board of Directors nominates the President and the three Vice-Presidents among its members;

(g) DSO-TSO cooperation pursuant to Articles 52 and 53 is led by the Board of Directors;

(h) decisions of the Board of Directors are adopted by simple majority of 15 votes;

(i) based on proposal by the Board of Directors, the Secretary General is appointed by the General Assembly among its members for a four years mandate, renewable once;

(j) based on proposal by the Board of Directors, Expert Groups are appointed by the General Assembly whereby each group shall not exceed 30 members with the possibility of 1/3 coming from outside the membership. In addition, 'one country' expert group shall be established and consist of exactly one DSO representative from each Member State.

2. Procedures adopted by the EU DSO entity shall safeguard the fair and proportionate treatment of its members and reflect the diverse geographical and economic structure of its membership. In particular, the procedures shall foresee that:

(a) the Board of Directors is composed by the President of the Board and 27 members' representatives, of which:

- *9 are representatives of members with more than 1 million grid users;*
- *9 are representatives of members with more than 100,000 and less than 1 million grid users; and*
- *9 are representatives of members with less than 100,000 grid users;*

(b) representatives of existing DSO associations may participate as observers to the meetings of the Board of Directors;

(c) the Board of Directors may not consist of more than 3 representatives of members based in the same Member State or the same industrial group;

(d) each Vice-President of the Board has to be nominated among representatives of members in each category described in paragraph (a) above;

(e) representatives of members based in one Member State or the same industrial group may not constitute the majority of the Expert Group participants;

(f) the Board of Directors shall establish a Strategic Advisory group that provides its opinion to the Board of Directors and the Expert Groups and consists of representatives of the European DSO associations and representatives of those Member States which are not represented in the Board of Directors.

Article 51

Tasks of the EU DSO entity

1. The tasks of the EU DSO entity shall be the following:

(a) ***promoting*** operation and planning of distribution networks ***in cooperation with operation and planning of transmission networks***;

(b) ***facilitating the*** integration of renewable energy resources, distributed generation and other resources embedded in the distribution network such as energy storage;

(c) ***facilitating*** demand ***side flexibility and*** response ***and distribution grid users' access to markets***;

(d) ***contributing to the*** digitalisation of distribution ***systems*** including deployment of smart grids and intelligent metering systems;

(e) ***supporting the development of*** data management, cyber security and data protection ***in cooperation with relevant authorities and regulated entities***;

(f) ***participating*** in the elaboration of network codes ***which are relevant to the operation and planning of distribution grids and the coordinated operation of the transmission and distribution networks*** pursuant to Article 55.

2. In addition the EU DSO entity shall:

(a) cooperate with ENTSO for electricity on the monitoring of implementation of the network codes and guidelines which are relevant to the operation and planning of distribution grids and the coordinated operation of the transmission and distribution networks and which are adopted pursuant to this Regulation;

(b) cooperate with ENTSO for electricity and adopt best practices on the coordinated operation and planning of transmission and distribution systems including issues such as exchange of data between operators and coordination of distributed energy resources;

(c) work on identifying best practices on the areas identified in paragraph 1 and for the introduction of energy efficiency improvements in the distribution network;

(d) adopt an annual work programme and an annual report;

(e) operate in full compliance with competition rules ***and ensure neutrality***.

Article 52

Consultations in the network code development process

1. While ***participating in the elaboration of new*** network codes pursuant to Article 55, the EU DSO entity shall conduct an extensive consultation process, at an early stage and in an open and transparent manner, involving all relevant stakeholders, and, in particular, the organisations representing all stakeholders, in accordance with the rules of procedure referred to in Article 50. That consultation shall also involve national regulatory authorities and other national authorities, supply and generation undertakings, system users including customers, ▌ technical bodies and stakeholder platforms. It shall aim at identifying the views and proposals of all relevant parties during the decision-making process.

2. All documents and minutes of meetings related to the consultations referred to in paragraph 1 shall be made public.

3. The EU DSO entity shall take into consideration the views provided during the consultations. Before adopting proposals for network codes referred to in Article 55 the EU DSO entity shall indicate how the observations received during the consultation have been taken into consideration. It shall provide reasons where observations have not been taken into account.

Article 53

Cooperation between distribution system operators and transmission system operators

1. Distribution system operators ***and transmission system operators*** shall cooperate with ***each other*** in planning and operating their networks. In particular, transmission and distribution system operators shall exchange all necessary information and data regarding, the performance of generation assets and demand side response, the daily operation of their networks and the long-term planning of network investments, with the view to ensure the cost-efficient, secure and reliable development and operation of their networks.

2. Transmission and distribution system operators shall cooperate ***with each other*** in order to achieve coordinated access to resources such as distributed generation, energy storage or demand response that may support particular needs of both the distribution system and the transmission system.

Chapter VII

Network codes and guidelines

Article 54

Adoption of network codes and guidelines

1. The Commission may, subject to the empowerments in Articles 55 ***to*** 57, adopt ***implementing or delegated*** acts. Such ▌ acts can either be adopted as network codes on the basis of text proposals developed by the ENTSO for Electricity, or, where so decided in the priority list pursuant to Article 55 paragraph 2, by the EU DSO entity ***where relevant in mutual cooperation with the ENTSO for Electricity*** and the Agency pursuant to the procedure in Article 55***,*** or as guidelines pursuant to the procedure in Article 57.

2. The network codes and guidelines shall

(a) ensure that they provide the minimum degree of harmonisation required to achieve the aims of this Regulation;

(b) take into account, where appropriate, regional specificities;

(c) not go beyond what is necessary for that purpose; and

(d) be without prejudice to the Member States' right to establish national network codes which do not affect ***cross zonal*** trade.

Article 55

Establishment of network codes

1. The Commission is empowered to adopt ***implementing acts in order to ensure uniform conditions for the implementation of this Regulation by establishing*** network codes in the following areas:

(a) network security and reliability rules including rules for technical transmission reserve capacity for operational network security ***as well as interoperability rules implementing Articles 31 to 44 and 53 of this Regulation and Article 40 of [Recast electricity Directive], including system states, remedial actions and operational security limits, voltage control and reactive power management, short-circuit current management, power flow management, contingency analysis and handling, protection equipment and schemes, data exchange, compliance, training, operational planning and security analysis, regional operational security coordination, outage coordination, availability plans of relevant assets, adequacy analysis, ancillary services, scheduling, and operational planning data environments;***

▌

(g) capacity-allocation and congestion-management rules ***implementing Article 6 [Recast electricity Directive] and Articles 6, 7 to 9, 12 to 15 and 32 to 34,*** including ***day ahead, intraday and forward capacity calculation methodologies and processes, grid models, bidding zone configuration, redispatching and countertrading, trading algorithms, single day-ahead and intraday coupling, firmness of allocated cross-zonal capacity, congestion income distribution, cross-zonal transmission risk hedging, nomination procedures, and capacity allocation and congestion management cost recovery***;

(h) rules for trading related to technical and operational provision of network access services and system balancing ***implementing Articles 4, 5 and 15, including network-related reserve power rules, including functions and responsibilities, platforms for the exchange of balancing energy, gate closure times, requirements for standard and specific products, procurement of balancing services, allocation of cross-zonal capacity for the exchange of balancing services or sharing of reserves, settlement of balancing energy, settlement of exchanges of energy between system operators, imbalance settlement and settlement of balancing capacity, load frequency control, frequency quality defining and target parameters, frequency containment reserves, frequency restoration reserves, replacement reserves, exchange and sharing of reserves, cross-border activation processes of reserves, time-control processes and transparency of information;***

▌

(m) rules for non-discriminatory, transparent provision of non-frequency ancillary services, ***implementing Articles 36, 40 and 54 [Recast electricity Directive],*** including steady state voltage control, inertia, fast reactive current injection, ***inertia for grid stability, short circuit current,*** black-start capability ***and island operation capability***;

(n) ***rules on*** demand response, including aggregation, energy storage, and demand curtailment rules ***implementing Articles 17, 31, 32, 36, 40 and 54 [Recast electricity Directive] as well as Article 53***;

These implementing acts shall be adopted in accordance with the examination procedure referred to in Article 62(2).

1.a The Commission is empowered to adopt delegated acts supplementing this Regulation in accordance with Article 63 concerning the establishment of network codes in the following areas:

(a) network connection rules including connection of transmission-connected demand facilities, transmission-connected distribution facilities and distribution systems, connection of demand units used to provide demand response, requirements for grid connection of generators, requirements for high-voltage direct current grid connection, requirements for direct current-connected power park modules and remote-end high-voltage direct current converter stations, and operational notification procedures for grid connection;

(b) data exchange, settlement and transparency rules including in particular transfer capacities for relevant time horizons, estimates and actual values on the allocation and use of transfer capacities, forecast and actual demand of facilities and aggregation thereof including unavailability of facilities, forecast and actual generation of generation units and aggregation thereof including unavailability of units, availability and use of networks, congestion management measures and balancing market data. Rules should include ways in which the information is published, the timing of publication, the entities responsible for handling;

(c) third-party access rules;

(d) operational emergency and restauration procedures in an emergency including system defence plans, restoration plans, market interactions, information exchange and communication and tools and facilities;

(e) sector-specific rules for cyber security aspects of cross-border electricity flows, on common minimum requirements, planning, monitoring, reporting and crisis management.

2. The Commission shall, after consulting the Agency, the ENTSO for Electricity***, the EU DSO Entity*** and the other relevant stakeholders, establish a priority list every three years, identifying the areas set out in paragraph 1 to be included in the development of network codes. If the subject-matter of the network code is directly related to the operation of the distribution system and ***not primarily*** relevant for the transmission system, the Commission may require the EU DSO entity ***in cooperation with*** the ENTSO for Electricity to convene a drafting committee and submit a proposal for a network code to the agency.

3. The Commission shall request the Agency to submit to it within a reasonable period of time not exceeding six months a non-binding framework guideline (framework guideline) setting out clear and objective principles for the development of network codes relating to the areas identified in the priority list. The request of the Commission may include conditions which the framework guideline shall address. Each framework guideline shall contribute to market integration, non-discrimination, effective competition, and the efficient functioning of the market. Upon a reasoned request from the Agency, the Commission may extend that period.

4. The Agency shall formally consult the ENTSO for Electricity, the EU DSO entity, and the other relevant stakeholders in regard to the framework guideline, during a period of no less than two months, in an open and transparent manner.

5. The Agency shall submit a non-binding framework guideline to the Commission where requested to do so under paragraph 3. The Agency shall review the non-binding framework guideline and re-submit it to the Commission where requested to do so under paragraph 6.

6. If the Commission considers that the framework guideline does not contribute to market integration, non-discrimination, effective competition and the efficient functioning of the market, it may request the Agency to review the framework guideline within a reasonable period of time and re-submit it to the Commission.

7. If the Agency fails to submit or re-submit a framework guideline within the period set by the Commission under paragraphs 3 or 6, the Commission shall elaborate the framework guideline in question.

8. The Commission shall request the ENTSO for Electricity or, where so decided in the priority list pursuant to paragraph 2, the EU DSO entity ***in co-operation with the ENTSO*** for Electricity, to submit a proposal for a network code which is in line with the relevant framework guideline, to the Agency within a reasonable period of time not exceeding 12 months.

9. The ENTSO for Electricity, or where so decided in the priority list pursuant to paragraph 2, the EU DSO entity, shall convene a drafting committee to support it in the network code development process. The drafting committee shall consist of representatives of the ENTSO for Electricity, the Agency, ***where appropriate of*** the EU DSO entity, where appropriate of nominated electricity market operators and a limited number of the main affected stakeholders. The ENTSO for Electricity or where so decided in the priority list pursuant to paragraph 2 the EU DSO entity, ***in co-operation with the ENTSO for Electricity*** shall elaborate proposals for network codes in the areas referred to in paragraph 1 upon a request addressed to it by the Commission in accordance with paragraph 8.

10. The Agency shall revise the network code and ensure that the network code is in line with the relevant framework guideline and contributes to market integration, non-discrimination, effective competition, and the efficient functioning of the market and , submit the revised network code to the Commission within six months of the day of the receipt of the proposal . In the proposal submitted to the Commission, the Agency shall take into account the views provided by all involved parties during the drafting of the proposal led by the ENTSO for Electricity or the EU DSO entity and shall formally consult the relevant stakeholders on the version to be submitted to the Commission.

11. Where the ENTSO for Electricity or the EU DSO entity have failed to develop a network code within the period of time set by the Commission under paragraph 8, the Commission may request the Agency to prepare a draft network code on the basis of the relevant framework guideline. The Agency may launch a further consultation in the course of preparing a draft network code under this paragraph. The Agency shall submit a draft network code prepared under this paragraph to the Commission and may recommend that it be adopted.

12. The Commission may adopt, on its own initiative, where the ENTSO for Electricity or the EU DSO entity have failed to develop a network code, or the Agency has failed to develop a draft network code as referred to in paragraph 11 of this Article, or upon recommendation of the Agency under paragraph 10 of this Article, one or more network codes in the areas listed in paragraph 1.

13. Where the Commission proposes to adopt a network code on its own initiative, the Commission shall consult the Agency, the ENTSO for Electricity and all relevant stakeholders in regard to the draft network code during a period of no less than two months.

14. This Article shall be without prejudice to the Commission's right to adopt and amend the guidelines as laid down in Article 57. It shall be without prejudice to the possibility for the ENTSO for Electricity to develop non-binding guidance in the areas set out in paragraph 1 where this does not relate to areas covered by a request addressed to it by the Commission. This guidance shall be submitted to the Agency for an opinion. This opinion shall be taken duly into account by the ENTSO for Electricity.

Article 56

Amendments of network codes

1. The Commission is empowered to ***amend the*** network codes ***within the areas listed in Article 55(1) and Article 55(1a) and*** following the ***respective*** procedure under Article 55. Amendments can also be proposed by the Agency under the procedure set out in paragraphs 2 to ***3*** of this Article.

2. Draft amendments to any network code adopted under Article 55 may be proposed to the Agency by persons who are likely to have an interest in that network code, including the ENTSO for Electricity, the EU DSO entity, ***regulatory authorities, distribution and*** transmission system operators, system users and consumers. The Agency may also propose amendments on its own initiative.

3. The Agency may make reasoned proposals for amendments to the Commission, explaining how such proposals are consistent with the objectives of the network codes set out in Article 55(2). Where it deems an amendment proposal admissible and on amendments on its own initiative, the Agency shall consult all stakeholders in accordance with Article 15 [recast of Regulation (EC) No 713/2009 as proposed by COM(2016) 863/2].

Article 57

Guidelines

1. The Commission ***is empowered to*** adopt binding guidelines in the areas listed below.

2. The Commission ***is empowered to*** adopt***, depending on the respective empowerment, as*** delegated ***or implementing acts guidelines*** in the areas where such acts could also be developed under the network code procedure pursuant to Article 55 (1) ***and Article 55(1a)***.

3. ***The Commission is empowered to adopt*** guidelines ▌ relating to the inter-transmission system operator compensation mechanism ***as delegated acts in accordance with Article 63***. They shall specify, in accordance with the principles set out in Articles 46 and 16:

   (a) details of the procedure for determining which transmission system operators are liable to pay compensation for cross-border flows including as regards the split between the operators of national transmission systems from which cross-border flows originate and the systems where those flows end, in accordance with Article 46(2);

   (b) details of the payment procedure to be followed, including the determination of the first period for which compensation is to be paid, in accordance with the second subparagraph of Article 46(3);

   (c) details of methodologies for determining the cross-border flows hosted for which compensation is to be paid under Article 46, in terms of both quantity and type of flows, and the designation of the magnitudes of such flows as originating and/or ending in transmission systems of individual Member States, in accordance with Article 46(5);

(d) details of the methodology for determining the costs and benefits incurred as a result of hosting cross-border flows, in accordance with Article 46(6);

(e) details of the treatment in the context of the inter-transmission system operator compensation mechanism of electricity flows originating or ending in countries outside the European Economic Area; and

(f) the participation of national systems which are interconnected through direct current lines, in accordance with Article 46.

▌

5. Where appropriate, guidelines providing the minimum degree of harmonisation required to achieve the aim of this Regulation may also specify:

(a) details of rules for the trading of electricity ***implementing Article 6 [Recast electricity Directive] and Articles 4 to 9, 12 to 15 and 32 to 34***;

(b) details of investment incentive rules for interconnector capacity including locational signals ***implementing Article 17***;

The examination procedure referred to in Article 62(2) shall be used for the adoption of guidelines pursuant to points (a) and (b).

6. The Commission may adopt guidelines on the implementation of operational coordination between transmission system operators at Union level. Those guidelines shall be consistent with and build upon the network codes referred to in Article 55 of this Regulation and build upon the adopted specifications referred to in Article 27(1)(g) of this Regulation. When adopting those guidelines, the Commission shall take into account differing regional and national operational requirements.

Those guidelines shall be adopted in accordance with the examination procedure referred to in Article 62(2).

7. When adopting or amending guidelines, the Commission shall consult the Agency, the ENTSO for Electricity***, the EU DSO Entity*** and other stakeholders where relevant.

Article 58

Right of Member States to provide for more detailed measures

This Regulation shall be without prejudice to the rights of Member States to maintain or introduce measures that contain more detailed provisions than those set out in this Regulation, in the guidelines referred to in Article 57 or in the network codes referred to in Article 55, provided those measures ***are compatible with*** Union legislation.

By 1 July 2025 the Commission shall assess the existing implementing acts containing network codes and guidelines in order to evaluate which of their elements could be usefully enshrined in legislative acts of the Union concerning the internal electricity market and how the empowerments for network codes and guidelines pursuant to Articles 55 and 57 could be revised. The Commission shall submit a detailed report of its assessment to the European Parliament and the Council.

Based on that report the Commission shall, where appropriate, submit legislative proposals following up on its assessment until 31 December 2026.

Chapter VIII

Final provisions

Article 59

New interconnectors

1. New direct current interconnectors may, upon request, be exempted, for a limited period of time, from the provisions of Article 17(2) of this Regulation and Articles 6, 43 59(6) and 60(1) of [recast of Directive 2009/72/EC as proposed by COM(2016) 864/2] under the following conditions:

(a) the investment must enhance competition in electricity supply;

(b) the level of risk attached to the investment is such that the investment would not take place unless an exemption is granted;

(c) the interconnector must be owned by a natural or legal person which is separate at least in terms of its legal form from the system operators in whose systems that interconnector will be built;

(d) charges are levied on users of that interconnector;

(e) since the partial market opening referred to in Article 19 of Directive 96/92/EC of the European Parliament and of the Council 1, no part of the capital or operating costs of the interconnector has been recovered from any component of charges made for the use of transmission or distribution systems linked by the interconnector; and

(f) the exemption must not be to the detriment of competition or the effective functioning of the internal market in electricity, or the efficient functioning of the regulated system to which the interconnector is linked.

1 Directive 96/92/EC of the European Parliament and of the Council of 19 December 1996 concerning common rules for the internal market in electricity (OJ L 27, 30.1.1997, p. 20).

2. Paragraph 1 shall also apply, in exceptional cases, to alternating current interconnectors provided that the costs and risks of the investment in question are particularly high when compared with the costs and risks normally incurred when connecting two neighbouring national transmission systems by an alternating current interconnector.

3. Paragraph 1 shall also apply to significant increases of capacity in existing interconnectors.

4. The decision on the exemption under paragraphs 1, 2 and 3 shall be taken on a case-by-case basis by the regulatory authorities of the Member States concerned. An exemption may cover all or part of the capacity of the new interconnector, or of the existing interconnector with significantly increased capacity.

Within two months from the date on which the request for exemption was received by the last of the regulatory authorities concerned, the Agency may submit an advisory opinion to those regulatory authorities which could provide a basis for their decision.

In deciding to grant an exemption, consideration shall be given, on a case-by-case basis, to the need to impose conditions regarding the duration of the exemption and non-discriminatory access to the interconnector. When deciding those conditions, account shall, in particular, be taken of additional capacity to be built or the modification of existing capacity, the time-frame of the project and national circumstances.

Before granting an exemption, the regulatory authorities of the Member States concerned shall decide upon the rules and mechanisms for management and allocation of capacity. Congestion-management rules shall include the obligation to offer unused capacity on the market and users of the facility shall be entitled to trade their contracted capacities on the secondary market. In the assessment of the criteria referred to in points (a), (b) and (f) of paragraph 1, the results of the capacity-allocation procedure shall be taken into account.

Where all the regulatory authorities concerned have reached agreement on the exemption decision within six months, they shall inform the Agency of that decision.

The exemption decision, including any conditions referred to in the second subparagraph of this paragraph, shall be duly reasoned and published.

5. The decision referred to in paragraph 4 shall be taken by the Agency:

(a) where all the regulatory authorities concerned have not been able to reach an agreement within six months from the date the exemption was requested before the last of those regulatory authorities; or

(b) upon a joint request from the regulatory authorities concerned.

Before taking such a decision, the Agency shall consult the regulatory authorities concerned and the applicants.

6. Notwithstanding paragraphs 4 and 5, Member States may provide for the regulatory authority or the Agency, as the case may be, to submit, for formal decision, to the relevant body in the Member State, its opinion on the request for an exemption. That opinion shall be published together with the decision.

7. A copy of every request for exemption shall be transmitted for information without delay by the regulatory authorities to the Agency and to the Commission on receipt. The decision shall be notified, without delay, by the regulatory authorities concerned or by the Agency (notifying bodies), to the Commission, together with all the relevant information with respect to the decision. That information may be submitted to the Commission in aggregate form, enabling the Commission to reach a well-founded decision. In particular, the information shall contain:

(a) the detailed reasons on the basis of which the exemption was granted or refused, including the financial information justifying the need for the exemption;

(b) the analysis undertaken of the effect on competition and the effective functioning of the internal market in electricity resulting from the grant of the exemption;

(c) the reasons for the time period and the share of the total capacity of the interconnector in question for which the exemption is granted; and

(d) the result of the consultation of the regulatory authorities concerned.

8. Within a period of 50 working days from the day following receipt of notification under paragraph 7, the Commission may take a decision requesting the notifying bodies to amend or withdraw the decision to grant an exemption. That period of 50 working days may be extended by an additional period of 50 working days where further information is sought by the Commission. That additional period shall begin on the day following receipt of the complete information. The initial period may also be extended by consent of both the Commission and the notifying bodies.

When the requested information is not provided within the period set out in the request, the notification shall be deemed to be withdrawn unless, before the expiry of that period, either the period is extended by consent of both the Commission and the notifying bodies, or the notifying bodies, in a duly reasoned statement, inform the Commission that they consider the notification to be complete.

The notifying bodies shall comply with a Commission decision to amend or withdraw the exemption decision within one month and shall inform the Commission accordingly.

The Commission shall preserve the confidentiality of commercially sensitive information.

The Commission's approval of an exemption decision shall expire two years after the date of its adoption in the event that construction of the interconnector has not yet started by that date, and five years after the date of its adoption if the interconnector has not become operational by that date, unless the Commission decides , on the basis of a reasoned request by the notifying bodies, that any delay is due to major obstacles beyond the control of the person to whom the exemption has been granted.

9. Where the regulatory authorities of the Member States concerned decide to modify a decision under paragraph 1, they shall notify this decision without delay to the Commission, together with all the relevant information with respect to the decision. Paragraphs 1 to 8 shall apply to this notified decision, taking into account the particularities of the existing exemption.

10. The Commission may, upon request or on its own initiative, reopen the proceedings:

(a) where, taking due consideration of legitimate expectations by the parties and of the economic balance achieved in the original exemption decision, there has been a material change in any of the facts on which the decision was based;

(b) where the undertakings concerned act contrary to their commitments; or

(c) where the decision was based on incomplete, incorrect or misleading information provided by the parties.

11. The Commission is empowered to adopt delegated acts in accordance with Article 63 concerning the adoption of guidelines for the application of the conditions laid down in paragraph 1 of this Article and to set out the procedure to be followed for the application of paragraphs 4, 7, 8, 9 and 10 of this Article.

Article 59a

Derogations

1. Member States may apply for derogations from the relevant provisions of Articles 3, 5, 6 (1), 7 (1) and (4), 8 to 10, 13 to 15, 17 to 22, 23 (1), (2), (4) (5) and (5a), 24, 32 to 44 and 48 in the following cases:

(a) the Member State can demonstrate that there are substantial problems for the operation of their small isolated and connected systems. In this case, the derogation shall be limited in time and subject to conditions aiming at increased competition and integration with the internal market.

(b) for outermost regions within the meaning of Article 349 of TFEU, that cannot be interconnected with the European energy market for evident physical reasons. In this case, the derogation is not limited in time.

In both cases, the derogation shall be subject to conditions aimed at ensuring that the derogation does not hamper the transition towards renewable energies, increased flexibility, storage, electro-mobility and demand response.

When granting a derogation, the Commission shall reflect in its decision to which extent the derogations must take into account the application of the network codes and guidelines.

If a derogation is granted, the Commission shall inform the Member States of those applications before taking a decision, taking into account respect for confidentiality.

2. Articles 3, 4, 5, 6 (1), (2)(c), (2)(h), 7 to 10, 12 to 15, 17 to 22, 23 (1), (2), (5) and (5a), 23(4)(b), 24, 31(2), (3), 32 to 44, 46 and 48 shall not apply to Cyprus until its transmission system becomes connected to other Member States' transmission systems via interconnections.

If the transmission system of Cyprus is not connected to other Member States' transmission systems via interconnections by 1 January 2026, Cyprus shall assess the need for derogation from those provisions and may submit a request for continued derogation to the Commission. The Commission shall assess whether the application of the respective provisions risks causing substantial problems for the operation of the electricity system in Cyprus or whether their application in Cyprus is expected to provide benefits to market functioning. On the basis of this assessment, the Commission shall issue a reasoned decision on full or partial prolongation of the derogation which shall be published in the Official Journal of the European Union.

3. The provisions of the Regulation shall not affect the application of the derogations pursuant to the [Electricity Directive].

4. In relation to the attainment of the 2030 interconnection target, as stipulated under the [Governance Regulation], the electricity link between Malta and Italy shall be duly taken into account.

Article 60

Provision of information and confidentiality

1. Member States and the regulatory authorities shall, on request, provide to the Commission all information necessary for the purposes of enforcing the provisions of this Regulation.

   The Commission shall fix a reasonable time limit within which the information is to be provided, taking into account the complexity of the information required and the urgency with which the information is needed.

2. If the Member State or the regulatory authority concerned does not provide the information referred to in paragraph 1 within the given time-limit pursuant to paragraph 1 the Commission may request all information necessary for the purpose of enforcing the provisions of this Regulation directly from the undertakings concerned.

   When sending a request for information to an undertaking, the Commission shall at the same time forward a copy of the request to the regulatory authorities of the Member State in whose territory the seat of the undertaking is situated.

3. In its request for information under paragraph 1, the Commission shall state the legal basis of the request, the time-limit within which the information is to be provided, the purpose of the request, and the penalties provided for in Article 61(2) for supplying incorrect, incomplete or misleading information. The Commission shall fix a reasonable time-limit taking into account the complexity of the information required and the urgency with which the information is needed.

4. The owners of the undertakings or their representatives and, in the case of legal persons, the persons authorised to represent them by law or by their instrument of incorporation, shall supply the information requested. Where lawyers duly authorised so to act supply the information on behalf of their clients, the client shall remain fully responsible in the event that the information supplied is incomplete, incorrect or misleading.

5. Where an undertaking does not provide the information requested within the time-limit fixed by the Commission or supplies incomplete information, the Commission may by decision require the information to be provided. That decision shall specify what information is required and fix an appropriate time-limit within which it is to be supplied. It shall indicate the penalties provided for in Article 61(2). It shall also indicate the right to have the decision reviewed by the Court of Justice of the European Union.

The Commission shall, at the same time, send a copy of its decision to the regulatory authorities of the Member State within the territory of which the person is resident or the seat of the undertaking is situated.

6. The information referred to in paragraphs 1 and 2 shall be used only for the purposes of enforcing the provisions of this Regulation.

The Commission shall not disclose information of the kind covered by the obligation of professional secrecy which is acquired pursuant to this Regulation.

Article 61

Penalties

1. Without prejudice to paragraph 2, the Member States shall lay down rules on penalties applicable to infringements of the provisions of this Regulation , the network codes adopted pursuant to Article 55, and the guidelines adopted pursuant to Article 57 and shall take all measures necessary to ensure that those provisions are implemented. The penalties provided for must be effective, proportionate and dissuasive.

2. The Commission may, by decision, impose on undertakings fines not exceeding 1 % of the total turnover in the preceding business year where, intentionally or negligently, they supply incorrect, incomplete or misleading information in response to a request made pursuant to Article 60(3) or fail to supply information within the time-limit fixed by a decision adopted pursuant to the first subparagraph of Article 60(5). In setting the amount of a fine, the Commission shall have regard to the gravity of the failure to comply with the requirements of the first subparagraph.

3. Penalties provided for pursuant to paragraph 1 and decisions taken pursuant to paragraph 2 shall not be of a criminal law nature.

Article 62

Committee procedure

1. The Commission shall be assisted by the committee set up by Article 68 of [recast of Directive 2009/72/EC as proposed by COM(2016) 864/2].

2. Where reference is made to this paragraph, Article 5 of Regulation (EU) No 182/2011 of the European Parliament and of the Council[1] shall apply.

[1] Regulation (EU) No 182/2011 of the European Parliament and of the Council of 16 February 2011 laying down the rules and general principles concerning mechanisms for control by Member States of the Commission's exercise of implementing powers (OJ L 55, 28.2.2011, p. 13).

Article 63

Exercise of the delegation

1. The power to adopt delegated acts is conferred on the Commission subject to the conditions laid down in this Article.

2. The power to adopt delegated acts referred to in Article 31(3), Article 46(4), Article ***55(1a)***, Article ***57(2)*** and Article 59(11) shall be conferred on the Commission ***until 31 December 2028*** from the [OP: please insert the date of entry into force]. ***The Commission shall draw up a report in respect of the delegation of power not later than nine months before the end of this period and, if applicable, before the end of subsequent periods. The delegation of power shall be tacitly extended for periods of 8 years, unless the European Parliament or the Council opposes such extension not later than three months before the end of each period.***

3. The delegation of power referred to in Article 31(3), Article 46(4), Article ***55(1a)***, Article ***57(2***) and Article 59(11) may be revoked at any time by the European Parliament or by the Council. A decision to revoke shall put an end to the delegation of power specified in that decision. It shall take effect on the day following the publication of the decision in the Official Journal of the European Union or at a later date specified therein. It shall not affect the validity of any delegated act already in force.

4. Before adopting a delegated act, the Commission shall consult experts designated by each Member State in accordance with the principles laid down in the Interinstitutional Agreement on Better Law-Making of 13 April 2016.

5. As soon as it adopts a delegated act, the Commission shall notify it simultaneously to the European Parliament and to the Council.

6. A delegated act adopted pursuant to Article 31(3), Article 46(4), Article ***55(1a)***, Article ***57(2)*** and Article 59(11) shall enter into force only if no objection has been expressed either by the European Parliament or by the Council within a period of two months of notification of that act to the European Parliament and the Council or if, before the expiry of that period, the European Parliament and the Council have both informed the Commission that they will not object. That period shall be extended by two months at the initiative of the European Parliament or of the Council.

Article 64

Repeal

Regulation (EC) No 714/2009 is repealed. References to the repealed Regulation shall be construed as references to this Regulation and shall be read in accordance with the correlation table in Annex II.

Article 65

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.

It shall apply from 1 January 2020.

Articles 13 and 58a of this Regulation shall apply with effect from the date of entry into force of this Regulation.

For the purpose of implementing Article 13, Article 14 of this Regulation shall apply with effect from the date of entry into force of this Regulation.

For the purpose of reviewing this Regulation no later than by the end of 2030, the Commission shall, where appropriate, submit a proposal.

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

Done at Brussels,

For the European Parliament	For the Council
The President	The President

ANNEX I

TASKS OF REGIONAL COORDINATION CENTRES

1. Coordinated capacity calculation

1.1 Regional ***Coordination Centres*** shall perform ***the*** coordinated calculation of cross zonal capacities.

1.2. Coordinated capacity calculation shall be performed ▌ for **th*e day-ahead and intraday timeframes.***

1.2a Coordinated capacity calculation shall be performed on the basis of the methodologies developed pursuant to the Guideline on capacity allocation and congestion management adopted on the basis of Article 18 of Regulation 714/2009

1.3 Coordinated capacity calculation shall be performed based on a common ***grid*** model in accordance with point ***3*.**

1.4 Coordinated capacity calculation shall ensure ***an*** efficient congestion management in accordance with the principles of congestion management defined in this Regulation.

2. Coordinated security analysis

2.1. Regional ***Coordination Centres*** shall perform coordinated security analysis aiming at ensuring secure system operation.

2.2 Security analysis shall be performed for all operational planning timeframes, ***between the year-ahead and intraday timeframes,*** using the common ***grid*** models.

2.2a ***Coordinated security analysis shall be performed on the basis of the methodologies developed pursuant to the System Operation Guideline adopted on the basis of Article 18 of Regulation 714/2009.***

2.3 Regional ***Coordination Centres*** shall share the results of the coordinated security analysis with at least the transmission system operators of the system operation region.

2.4 When as a result of the coordinated security analysis a Regional ***Coordination Centre*** detects a possible constraint, it shall design remedial actions maximizing ***effectivenes and*** economic efficiency.

3. Creation of common grid models

3.1 Regional ***Coordination Centres*** shall set up efficient processes for the creation of a common ***grid*** model for each operational planning timeframe ***between the year-ahead and intraday timeframes***.

3.2 Transmission system operators shall appoint one regional ***security coordinator*** to build the ***Union-wide*** common ***grid models***

3.2a ***Common grid models shall be performed in accordance with the methodologies developed pursuant to the System Operation Guideline and the capacity allocation and congestion management guideline adopted on the basis of Article 18 of Regulation 714/2009.]***

3.3 Common ***grid*** models shall include relevant data for efficient operational planning and capacity calculation in all operational planning timeframes ***between the year-ahead and intraday timeframes***.

3.4 Common ***grid*** models shall be made available to all Regional ***Coordination Centres***, transmission system operators, ENTSO for Electricity and the Agency, upon its request.

4. Support to the consistency assessment of transmission system operators' defense plans and restoration plans

4.1a Regional Coordination Centres shall support the transmission system operators of the system operation region in carrying out the consistency assessment of transmission system operators' defense plans and restoration plans pursuant to the procedures set out in [ ] the network code on electricity emergency and restoration adopted in accordance with Article 6 of Regulation 714/2009].

4.1. All transmission system operators shall agree on a threshold above which the impact of actions of one or more transmission system operators in the emergency, blackout or restoration states is considered significant for other transmission system operators synchronously or non- synchronously interconnected.

▌

4.3 In providing support to the transmission system operators, the Regional ***Coordination Centre*** shall:

(a) identify potential incompatibilities;

(b) propose mitigation actions.

4.4 Transmission system operators shall ***assess and*** take into account the proposed mitigation actions.

5. Support the coordination and optimization of regional restoration

5.2 Each relevant regional ***security coordinator*** shall ***support the transmission system operators appointed as*** frequency leaders and the resynchronisation leaders **p*ursuant to the network code on emergency and restoration adopted in accordance with Article 7 of Regulation 714/2009]to improve*** the efficiency and effectiveness of system restoration. **T*he transmission system operators of the system operation region shall define the role of the Regional Coordination Centre relating to the support to the coordination and optimisation of regional restoration.***

5.3. Transmission system operators ***may*** request assistance from Regional ***Coordination Centres*** if their system is in a blackout or restoration state.

5.4. Regional security coordinators shall be equipped with the close to real time supervisory control and data acquisition systems with the observability defined by applying the threshold defined in accordance with point 4.1.

6. Post-operation and post-disturbances analysis and reporting.

6.1 Regional ***Coordination Centres*** shall investigate and prepare a report on any incident above the threshold defined in accordance with point 4.1. The regulatory authorities of the system operation region and the Agency may be involved in the investigation upon their request. The report shall contain recommendations aiming at preventing similar incidents in future.

6.2 The report shall be ***published***. The Agency may issue recommendations aiming at preventing similar incidents in future.

7. Regional sizing of reserve capacity

7.1. Regional ***Coordination Centres*** shall ***calculate*** the reserve capacity requirements for the system operation region. The determination of reserve capacity requirements shall

(a) pursue the general objective to maintain operational security in the most cost effective manner;

(b) be performed at the day-ahead and/or intraday timeframe;

(c) ***calculate*** the overall amount of required reserve capacity for the system operation region;

(d) define minimum reserve capacity requirements for each type of reserve capacity;

(e) take into account possible substitutions between different types of reserve capacity with the aim to minimise the costs of procurement;

(f) set out the necessary requirements for the geographical distribution of required reserve capacity, if any.

8. Facilitation of the regional procurement of balancing capacity

8.1 ***Regional Coordination Centres*** shall support the transmission system operators of the system operation region in determining the amount of balancing capacity that needs to be procured. The determination of the amount of balancing capacity shall

(a) be performed at the day-ahead and/or intraday timeframe;

(b) take into account possible substitutions between different types of reserve capacity with the aim to minimise the costs of procurement;

(c) take into account the volumes of required reserve capacity that are expected to be provided by balancing energy bids, which are not submitted based on a contract for balancing capacity.

8.2. Regional operational centres shall support the transmission system operators of the system operation region in procuring the required amount of balancing capacity determined in accordance with point 8.1. The procurement of balancing capacity shall:

(a) be performed at the day-ahead and/or intraday timeframe;

(b) take into account possible substitutions between different types of reserve capacity with the aim to minimise the costs of procurement.

9. ***Week-ahead to to at least day-ahead*** regional system adequacy ***assessments*** and preparation of risk reducing actions.

9.1 Regional ***Coordination Centres*** shall perform week ahead to **t*o at least day-ahead*** regional adequacy assessments ***in accordance with the procedures set out in Article 81 of Commission Regulation 2017/1485 establishing a guideline on electricity system operation and on the basis of the methodology developed pursuant Article 8 of [Risk preparedness Regulation].***

9.2 Regional ***Coordination Centres*** shall base the ***short-term regional*** adequacy assessments on the information provided by the transmission system operators of system operation region with the aim of detecting situations where a lack of adequacy is expected in any of the control areas or at regional level. Regional ***Coordination Centres*** shall take into account possible cross-zonal exchanges and operational security limits in all ***relevant*** operational planning timeframes.

9.3 When performing a regional ***system*** adequacy assessment, each Regional ***Coordination Centre*** shall coordinate with other Regional ***Coordination Centres*** to:

(a) verify the underlying assumptions and forecasts;

(b) detect possible cross-regional lack of adequacy situations.

9.4 Each Regional ***Coordination Centre*** shall deliver the results of the regional generation adequacy assessments together with the actions it proposes to reduce risks of lack of adequacy to the transmission system operators of the system operation region and to other Regional ***Coordination Centres***.

10. Regional outage planning coordination

10.1 Each Regional ***Coordination Centre*** shall perform ***regional*** outage coordination **in** ***accordance with the procedures set out in the System Operation Guideline adopted on the basis of Article 18 of Regulation 714/2009*** in order to monitor the availability status of the relevant assets and coordinate their availability plans to ensure the operational security of the transmission system, while maximizing the capacity of the interconnectors and/or the transmission systems affecting cross-zonal flows.

10.2 Each Regional ***Coordination Centre*** shall maintain a single list of relevant grid elements, power generating modules and demand facilities of the system operation region and make it available on the ENTSO for Electricity operational planning data environment.

10.3 Each Regional ***Coordination Centre*** shall carry out the following activities related to outage coordination in the system operation region:

(a) assess outage planning compatibility using all transmission system operators' year-ahead availability plans;

(b) provide the transmission system operators of the system operation region with a list of detected planning incompatibilities and the solutions it proposes to solve the incompatibilities.

11. Optimization of inter-transmission system operators compensation mechanisms

11.1 ***The transmission system operators of the system operation region may jointly decide to receive support from the Regional Coordination Centre*** in administering the financial flows related to inter-transmission system operators settlements involving more than two transmission system operators, such as redispatching costs, congestion income, unintentional deviations or reserve procurement costs.

12. Training and certification *of staff working for Regional Coordination Centres*

12.1. Regional ***Coordination Centres*** shall prepare and execute training and certification programs focusing on regional system operation for the personnel working ***for Regional Coordination Centres*.**

12.2 The training programs shall cover all the relevant components of system operation, ***where the Regional Coordination Centre performs tasks*** including scenarios of regional crisis.

13. Identification of regional electricity crisis scenarios

13.1 If ***the*** ENTSO for Electricity delegates this function, ***Regional Coordination Centres*** shall identify regional crisis scenarios in accordance with the criteria set out in Article 6(1) of [Risk Preparedness Regulation as proposed by COM(2016) 862].

The identification of regional crisis scenarios shall be performed in accordance with the methodology set out in Article 5 of the [Risk Preparedness Regulation]

13.2 ***Regional Coordination Centres*** shall ***support the competent authorities of each system operation region upon their request in the preparation and carrying out of biennial*** crisis simulation ***in accordance with*** Article 12(3) of [Risk Preparedness Regulation as proposed by COM(2016) 862].

13a. Identification of needs for new transmission capacity, for upgrade of existing transmission capacity or their alternatives.

13b. Regional Coordination Centres shall support transmission system operators in the identification of needs for new transmission capacity, for an upgrading of existing transmission capacity or for their alternatives, to be submitted to the regional groups established pursuant to Regulation (EU) No 347/2013 and to be included in the ten-year network development plan referred to in Article 51 of [recast of Directive 2009/72/EC as proposed by COM(2016) 864/2].

14. Calculation of the maximum entry capacity available for the participation of foreign capacity in capacity mechanisms.

14.1 Regional security coordinators shall support TSO in calculating the maximum entry capacity available for the participation of foreign capacity in capacity mechanisms taking into account the expected availability of interconnection and the likely concurrence of system stress between the system where the mechanism is applied and the system in which the foreign capacity is located.

14.2 The calculation shall be performed in accordance with the methodology set out in Article 21(10)(a) of this Regulation.

14.3 Regional security coordinators shall provide a calculation for each bidding zone border covered by the system operation region.

15. Preparation of seasonal outlooks

15.1 If the ENTSO for Electricity delegates this function pursuant to Article 9 of [Risk preparedness Regulation], Regional Coordination Centres shall carry out regional seasonal adequacy outlooks.

15.2 The preparation of seasonal outlooks shall be carried out on the basis of the methodology developed pursuant to Article 8 of [Risk preparedness Regulation].

ANNEX II

Correlation Table

Regulation (EC) No 714/2009	This Regulation
-	Article 1 (a)
-	Article 1 (b)
Article 1 (a)	Article 1 (c)
Article 1 (b)	Article 1 (d)
Article 2 (1)	Article 2 (1)
Article 2 (2) (a)	Article 2 (2) (a)
Article 2 (2) (b)	Article 2 (2) (b)
Article 2 (2) (c)	Article 2 (2) (c)
Article 2 (2) (d)	-
Article 2 (2) (e)	-
Article 2 (2) (f)	-
Article 2 (2) (g)	Article 2 (2) (d)
-	Article 2 (2) (e) to (x)
-	Article 3
-	Article 4
-	Article 5

-	Article 6
-	Article 7
-	Article 8
-	Article 9
-	Article 10
-	Article 11
-	Article 12
-	Article 13
Article 16 (1) to (3)	Article 14 (1) to (3)
-	Article 14 (4) to (7)
Article 16 (4) to (5)	Article 14 (8) to (9)
-	Article 14 (10)
-	Article 15
Article 14 (1)	Article 16 (1)
-	Article 16 (2)
Article 14 (2) to (5)	Article 16 (3) to (6)
-	Article 16 (7) to (11)
-	Article 17 (1)
Article 16 (6)	Article 17 (2)
-	Article 17 (3) and (4)
-	Article 18

Article 8 (4)	Article 19 (1)
-	Article 19 (2) to (6)
-	Article 20
-	Article 21
-	Article 22
-	Article 23
-	Article 24
Article 4	Article 25 (1)
-	Article 25 (2)
Article 5	Article 26 (1) to (4)
-	Article 26 (5)
Article 8 (2) (first sentence)	Article 27 (1) (a)
Article 8 (3) (b)	Article 27 (1) (b)
-	Article 27 (1) (c)
Article 8 (3) (c)	Article 27 (1) (d)
-	Article 27 (1) (e) and (f)
Article 8 (3) (a)	Article 27 (1) (g)
Article 8 (3) (d)	Article 27 (1) (h)
Article 8 (3) (e)	Article 27 (1) (i)
-	Article 27 (2) and (3)
Article 8 (5)	Article 27 (4)

Article 8 (9)	Article 27 (5)
Article 10	Article 28
Article 9	Article 29
Article 11	Article 30
Article 12	Article 31
-	Article 32
-	Article 33
-	Article 34
-	Article 35
-	Article 36
-	Article 37
-	Article 38
-	Article 39
-	Article 40
-	Article 41
-	Article 42
-	Article 43
-	Article 44
Article 8 (10)	Article 45
Article 13	Article 46
Article 2 (2) (final sub-paragraph)	Article 46 (7)

Article 15	Article 47 (1) to (6)
Annex I point 5.10	Article 47 (7)
Article 3	Article 48
-	Article 49
-	Article 50
-	Article 51
-	Article 52
-	Article 53
-	Article 54
Article 8 (6)	Article 55 (1) (a-l)
-	Article 55 (1) (m-p)
Article 6 (1)	Article 55 (2)
Article 6 (2)	Article 55 (3)
Article 6 (3)	Article 55 (4)
-	Article 55 (5)
Article 6 (4)	Article 55 (6)
Article 6 (5)	Article 55 (7)
Article 6 (6)	Article 55 (8)
Article 8 (1)	Article 55 (9)
Article 6 (7)	-
Article 6 (8)	-

Article 6 (9) to (12)	Article 55 (10) to (14)
Article 8 (2)	Article 55 (14)
-	Article 56 (1)
Article 7 (1)	Article 56 (2)
Article 7 (2)	Article 56 (3)
Article 7 (3)	Article 56 (4)
Article 7 (4)	Article 56 (5)
-	Article 57 (1)
-	Article 57 (2)
Article 18 (1)	Article 57 (3)
Article 18 (2)	Article 57 (4)
Article 18 (3)	Article 57 (5)
Article 18 (4)	-
Article 18 (4a)	Article 57 (6)
Article 18 (5)	Article 57 (7)
Article 19	-
Article 21	Article 58
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-	Article 63
Article 25	Article 64
Article 26	Article 65