Methodology for coordinated redispatching and countertrading for SEE capacity calculation region

in accordance with Article 35 of Commission Regulation (EU) 2015/1222 of 24 July 2015 establishing a guideline on capacity allocation and congestion management

25 July 2019
Whereas

(1) This document sets out the methodology for coordinated redispatching and countertrading in accordance with Article 35 of the Commission Regulation (EU) 2015/1222 of 24 July 2015 establishing a guideline on Capacity Allocation and Congestion Management (hereafter referred to as the ‘CACM Regulation’). This methodology is hereafter referred to as the ‘coordinated redispatching and countertrading methodology’ (‘CRCM’).

(2) The common coordinated RDCT methodology is applicable for the South-east Europe (‘SEE’) capacity calculation region (CCR’).¹

(3) The common coordinated RDCT methodology contributes to the general objectives of the CACM Regulation by taking into account the general principles and goals set in the CACM Regulation. The common coordinated RDCT methodology takes into account the proposal of transmission system operators from the SEE CCR (‘SEE TSOs’) for a day-ahead and intraday capacity calculation methodology in accordance with Article 20 of the CACM Regulation.

(4) Recital (10) of the preamble of the CACM Regulation states that TSOs should ‘use a common set of remedial actions such as countertrading or redispatching to deal with both internal and cross-zonal congestion. In order to facilitate more efficient capacity allocation and to avoid unnecessary curtailments of cross-border capacities, TSOs should coordinate the use of remedial actions in capacity calculation.’

(5) Recital (12) of the CACM Regulation states that ‘TSOs should implement coordinated redispatching of cross-border relevance or countertrading at regional level or above regional level. Redispatching of cross-border relevance or countertrading should be coordinated with redispatching or countertrading internal to the control area.’

(6) Article 35(1) of the CACM Regulation requires that TSOs publicly consult on the common coordinated RDCT methodology in accordance with Article 12 of the CACM Regulation. According to Article 9(9) of the CACM Regulation, TSOs must describe the expected impact of the common coordinated RDCT methodology on the objectives of the CACM Regulation.

(7) Pursuant to Article 3(a) of the CACM Regulation, the common coordinated RDCT methodology promotes effective competition in the generation, trading and supply of electricity by defining a set of harmonised rules for effectively relieving physical congestion at the minimum cost and by applying regional competition and coordination of redispatching and countertrading actions.

(8) Pursuant to Article 3(b) of the CACM Regulation, the common coordinated RDCT methodology ensures an optimal use of the transmission infrastructure by using latest available inputs based on the best possible forecast of transmission systems and market

results, which is then used for the identification of congestions and followed by coordination of redispatching and countertrading actions to address those congestions in the economically most efficient manner.

(9) Pursuant to Article 3(c) of the CACM Regulation, the common coordinated RDCT methodology ensures operational security by applying coordination of redispatching and countertrading actions at regional level, which provides higher certainty that operational security violations are addressed effectively and in efficient manner.

(10) Pursuant to Article 3(d) of the CACM Regulation, the common coordinated RDCT methodology optimises the calculation and allocation of cross-zonal capacity as it defines the rules for coordinated redispatching and countertrading and thereby contributes to the availability and firmness of the cross-zonal capacities since it allows capacity calculation and allocation to take into account the possibility for congestions to be managed with coordinated redispatching and countertrading. This then allows for optimising the calculation and allocation of cross-zonal capacity.

(11) Pursuant to Article 3(e) of the CACM Regulation, the common coordinated RDCT methodology ensures fair and non-discriminatory treatment of TSOs and regulatory authorities, as it treats all TSOs and relevant regulatory authorities on an equal basis as regards the coordination and use of redispatching and countertrading actions as well as the provision of information related to regulatory oversight. On the other hand, the common coordinated RDCT methodology is deemed to have no direct effect on NEMOs and the Agency.

(12) Pursuant to Article 3(f) of the CACM Regulation, the common coordinated RDCT methodology ensures and enhances the transparency and the reliability of information by setting clear requirements on vectors of communication and information to be shared among parties involved in the common coordinated RDCT methodology, as well as measures to monitor the transparency and reliability of such information.

(13) Pursuant to Article 3(g) of the CACM Regulation, the common coordinated RDCT methodology contributes to the efficient long-term operation and development of the electricity transmission system and electricity sector in the Union, by ensuring that redispatching and countertrading actions are applied in a coordinated and efficient manner in order to ensure operational security of the network of the SEE CCR.

(14) Pursuant to Article 3(h) of the CACM Regulation, the common coordinated RDCT methodology may have a negative impact on the achievement of a fair and orderly market and fair and orderly price formation, because redispatching and countertrading actions are not taken into account in the SDAC and SIDC. However, since coordinated application of remedial actions is mandated by the CACM Regulation, such negative effects, if present, should be considered as proportionate as redispatching and countertrading are required to ensure operational security.

(15) Pursuant to Article 3(h) of the CACM Regulation, the common coordinated RDCT methodology is deemed to have no effect on the creation of a level playing field for NEMOs.

(16) Pursuant to Article 3(j) of the CACM Regulation, the common coordinated RDCT methodology contributes to providing non-discriminatory access to cross-zonal capacity as
coordinated redispatching and countertrading facilitates the objective of optimisation and maximisation of cross-zonal capacities.

(17) The common coordinated RDCT methodology anticipates the relevant requirements of Commission Regulation (EU) 2017/1485 of 2 August 2017 establishing a guideline on electricity transmission system operation (hereafter referred to as the ‘SO Regulation’). Relevant requirements relate to (i) the regional coordination of remedial actions, and (ii) the requirement that this regional coordination be consistent with the common coordinated RDCT methodology.

(18) Article 23 of the SO Regulation requires a regional coordination of remedial actions. It specifies that ‘for operational security violations which need to be managed in a coordinated way, a TSO shall design, prepare and activate remedial actions in coordination with other concerned TSOs, following the methodology for the preparation of remedial actions in a coordinated way under Article 76(1)(b) and taking into account the recommendations of a regional security coordinator in accordance with Article 78(4).’ Article 23(2) of the SO Regulation further specifies that: ‘When preparing and activating a remedial action, including redispatching or countertrading pursuant to Articles 23 and 35 of Regulation (EU) 2015/1222, or a procedure of a TSO’s system defence plan which affects other TSOs, the relevant TSO shall assess, in coordination with the TSO concerned, the impact of such remedial action or measure within and outside of its control area, in accordance with Article 75(1), Article 76(1)(b) and Article 78(1), (2) and (4) and shall provide the TSOs concerned with the information about this impact.’

(19) The SO Regulation requires consistency with the common coordinated RDCT methodology. Article 76(1) of the SO Regulation specifies that: ‘The proposal shall respect the methodologies for coordinating operational security analysis developed in accordance with Article 75(1) and complement where necessary the methodologies developed in accordance with Articles 35 and 74 of Regulation (EU) 2015/1222.’ Further, Article 78(1) of the SO Regulation states: ‘Each TSO shall provide the regional security coordinator with all the information and data required to perform the coordinated regional operation security assessment, including at least: …(b) the updated list of possible remedial actions, among the categories listed in Article 22, and their anticipated costs provided in accordance with Article 35 of Regulation (EU) 2015/1222 if a remedial action includes redispatching or countertrading, aimed at contributing to relieve any constraint identified in the region; and …’

(20) The main objective of the common coordinated RDCT methodology is to ensure that operational security on those network elements, which are considered as cross-border relevant, is achieved in the economically most efficient manner. However, this main objective cannot be ensured only with the application of cross-border relevant redispatching and countertrading, since other remedial actions as listed in Article 22 of the SO Regulation may provide more efficient alternatives for ensuring operational security on cross-border relevant network elements. Therefore, the most economically efficient coordination of redispatching and countertrading requires a cost optimisation, which includes not only the cross-border relevant redispatching and countertrading, but also all other cross-border relevant remedial actions available to TSOs. For this reason, this methodology, when referring to the coordination and optimisation of XRs, also takes into account other cross-border relevant remedial actions available to TSOs. In this regard, the definition of the cross-border relevant remedial actions used in this methodology is without prejudice to the possible definition of cross-border relevant remedial actions that may be defined in other terms and conditions or methodologies,
as they may increase the scope of this definition beyond the cross-border relevant redispatching and countertrading.

**Article 1. Subject matter and scope**

1. The common coordinated RDCT methodology as determined in this document shall be considered as the methodology for coordinated redispatching and countertrading in accordance with Article 35 of the CACM Regulation and is applicable for the SEE CCR and to the following TSOs: ADMIE (Greece), ESO EAD (Bulgaria), and Transelectrica (Romania).

**Article 2. Definitions and interpretation**

1. For the purposes of the common coordinated RDCT methodology, the terms used shall have the meaning set forth in Article 2 of Regulation (EU) 2019/943, Article 2 of Commission Regulation (EU) No 543/2013 (hereafter referred to as the ‘Transparency Regulation’), repealing Article 2 of the CACM Regulation and Article 3 of the SO Regulation.

2. In addition, the following definitions shall apply:

   (a) ‘CGM’ is the common grid model as defined in Article 2(2) of the CACM Regulation;

   (b) ‘coordinated operational security analysis’ means an operational security analysis performed by a TSO on a common grid model, in accordance with Article 72(3) and Article 72(4) of the SO Regulation;

   (c) ‘coordinated regional operational security assessment’ means an operational security analysis performed by a RSC on a common grid model, in accordance with Article 78 of the SO Regulation;

   (d) ‘cross-border relevant remedial action’ or ‘XRA’ means a remedial action consisting of redispatching and countertrading identified as cross-border relevant and needs to be applied in a coordinated way;

   (e) ‘cross-border relevant network element’ or ‘XNE’ means a network element identified as cross-border relevant and on which operational security violations need to be managed in a coordinated way;

   (f) ‘cross-border relevant network element with contingency’ or ‘XNEC’ means an XNE associated with a contingency. For the purpose of the common coordinated RDCT methodology, the term XNEC also cover the case where a XNE is used in operational security analysis without a specified contingency;

   (g) ‘IGM’ is the individual grid model as defined in Article 2(1) of the CACM Regulation;

   (h) ‘RSC’ is the regional security coordinator established pursuant to the SO Regulation;
(i) ‘remedial action influence factor’ means a flow deviation on a XNEC resulting from the application of a remedial action or of a set of remedial actions, normalised by the maximum admissible flow of the XNEC;

(j) ‘available XRA’ means the cross-border relevant remedial action that a TSO has declared available for regional coordination;

(k) ‘recommended XRA’ means the cross-border relevant remedial action that RSC has recommended to TSO to be activated pursuant to coordinated regional operational security assessment in accordance with Article 78(4) of the SO Regulation;

(l) ‘planned XRA’ means the recommended XRA for which the TSO has decided to plan its activation;

(m) ‘ordered XRAs’ means the planned XRA for which the TSO has passed the binding order for its activation to the relevant resource provider;

(n) ‘activated XRA’ means the ordered XRA which the resource provider has already activated or which can no longer be cancelled;

(o) ‘preventive remedial action’ means a remedial action that is the result of an operational planning process and needs to be activated prior to the investigated timeframe for compliance with the (N-1) criterion;

(p) ‘curative remedial action’ means a remedial action that is the result of an operational planning process and is activated straight subsequent to the occurrence of the respective contingency for compliance with the (N-1) criterion, taking into account transitory admissible overloads and their accepted duration;

(q) ‘XNE connecting TSO’ means the TSO responsible for the control area where the XNE is located or connected. In case of an interconnector, the TSOs on both sides of the interconnector shall be considered as XNE connecting TSOs;

(r) ‘XRA affected TSO’ means the TSO which is significantly impacted by the activation of the XRA;

(s) ‘XRA connecting TSO’ means the TSO responsible for the control area where the XRA is located or connected. In case of an interconnector, the TSO executing the topological change shall be considered as XRA connecting TSO.

3. In the common coordinated RDCT methodology, unless the context requires otherwise:

(a) the singular indicates the plural and vice versa;

(b) headings are inserted for convenience only and do not affect the interpretation of this proposal; and

(c) any reference to legislation, regulations, directives, orders, instruments, codes shall include any modification, extension or re-enactment of it when in force.
Article 3. Identification of cross-border relevant network elements (XNEs)

1. The cross-border relevant network elements (‘XNEs’) shall be all critical network elements (‘CNEs’) and other network elements of a voltage level equal or above 150 kV, except for those elements for which all TSOs agree that they are not cross-border relevant and may therefore be excluded.

2. The TSOs and the RSC(s) shall establish and update at least on a semi-annual basis the list of XNEs.

3. The RSC shall detail in the semi-annual report pursuant to Article 14 the updated list of XNEs.

Article 4. Identification of cross-border relevant remedial actions (XRAs)

1. An XRA is a redispatching or countertrading action which is identified as having the ability to address congestions on XNECs in an effective and economically efficient way. The TSOs and the RSC(s) shall select and activate XRAs in a coordinated way in accordance with the common coordinated RDCT methodology. An XRA can be a preventive or curative redispatching or countertrading action.

2. The TSOs and the RSC shall establish and update at least on a monthly basis the list of XRAs. For this purpose, each TSO shall provide to the RSC(s) the list of all available redispatching and countertrading actions in its control area and the RSC(s) shall establish whether they are cross-border relevant or not according to the criteria pursuant to paragraphs 4 to 8 of this Article.

3. In order to identify whether a redispatching and countertrading action is an XRA, the TSOs and the RSC(s) shall use a quantitative or qualitative approach.

4. In case of a quantitative approach, the cross-border relevance of redispatching and countertrading actions shall be assessed with the remedial action influence factor. The remedial action influence factor shall be calculated for at least each cross-border relevant network element and each contingency (i.e. each ‘XNEC’) as a simulated flow deviation on a XNEC resulting from the simulated application of a redispatching and countertrading action normalised by the permanent admissible load of the associated XNE.

5. In case of a quantitative approach, at least those redispatching and countertrading actions for which the remedial action influence factors for at least one XNEC is higher than a threshold, defining a significant cross-border impact shall be considered as XRA. This threshold shall be equal to 5%.

6. In case of a qualitative approach, the TSOs, in coordination with the RSC(s), shall qualitatively assess and agree on the cross-border relevance of redispatching and countertrading actions. In case of a disagreement, the TSOs shall apply the quantitative assessment in accordance with paragraphs 4 and 5.

7. In case of a qualitative and quantitative approach, the TSOs, in coordination with the RSC(s), shall define for redispatching and countertrading actions that can be applied in different quantities, the quantity above which these redispatching and countertrading actions become cross-border relevant.
8. In case of qualitative and quantitative approach, the TSOs, in coordination with the RSC(s), shall define for each XRA, the XRA connecting TSOs and the XRA affected TSOs. In case of a quantitative approach, the XRA affected TSOs shall be those TSOs having at least one affected XNEC for which the remedial action influence calculated pursuant to paragraph 4 is higher than the threshold referred to in paragraph 5.

**Article 5. Resources for cross-border relevant remedial actions (XRAs)**

1. For XRAs identified pursuant to Article 4, all TSOs shall use all generation, load and network resources, which are able to modify power flows in the network.

2. For XRAs, the resources of redispatching and countertrading shall be defined for two different services:
   
   (a) increasing the control area balance or nodal injection (e.g. increasing generation or decreasing load); and
   
   (b) decreasing the control area balance or nodal injection (e.g. decreasing generation or increasing load).

3. The TSOs may use the following resources of redispatching or countertrading for the purpose of XRAs:
   
   (a) up and/or down regulation of conventional power plants;
   
   (b) up and/or down regulation of loads (e.g. industry, boiler);
   
   (c) up and/or down regulation of (pump) storage power plants;
   
   (d) up and/or down regulation of battery storages or other storage technologies; and
   
   (e) up and/or down regulation of renewable energy sources, such as wind energy, solar energy, biomass power plants etc.

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

**Article 6. Exchange of information on availability of cross-border relevant remedial actions (XRAs)**

1. Each XRA connecting TSO shall provide to the RSC(s) all the information related to the availability of all XRAs identified pursuant to Article 4 and located in its control area. XRA connecting TSOs shall provide this information for each market time unit and for each coordination procedure separately or together. The RSC(s) shall make this information available to all TSOs.

2. Each TSO is responsible for ensuring operational security of its own transmission system. Accordingly, at any point in time, each XRA connecting TSO is responsible for the decision to share XRAs identified pursuant to Article 4 and located in its control area with the RSC(s) and other TSOs. Accordingly, each XRA connecting TSO shall provide to the RSC(s) all
such XRAcs, except those for which such provision would likely compromise the operational security and the security of supply of its control area. In such cases, the relevant XRA connecting TSO shall communicate and justify any non-provision of XRAcs to the RSC(s) and to all SEE regulatory authorities. The RSC(s) shall monitor those cases in the semi-annual report pursuant to Article 14.

3. The TSOs shall provide to RSC(s) the information on the available XRAcs, including their volumes, after the publication of the results of the day-ahead market. The TSOs shall base the information on the availability of XRAcs on the best forecast of their availability for the coordination procedure. The providers of these resources shall provide best up-to-date forecast of their availability to the XRA connecting TSO.

4. Each TSO shall update the information on the availability of XRAcs, at least in cases of:

   (a) XRAcs which have already been activated;
   (b) changes in the availability of XRA;
   (c) planned outages affecting the XRA; and
   (d) unplanned outages affecting the XRA.

5. For redispatching, the TSOs shall inform the RSC(s) on the volume of available redispatching, together with at least the following information:

   (a) identification of resources and their mapping to nodes in the CGM;
   (b) specific up-to-date upward and downward regulating availabilities;
   (c) operational constraints;
   (d) characteristics of standard products;
   (e) if the resource is offered simultaneously to different CCRs or only to the SEE CCR.

6. For countertrading, the TSOs shall inform each other via the RSC(s) on the volume itself, together with at least the following features:

   (a) bidding zone and location if known;
   (b) product related lead times; and
   (c) characteristics of standard products.

7. When an XRA is identified pursuant to Article 4 as cross-border relevant also in another CCR, the concerned XRA connecting TSO shall provide this information to the RSC(s) and shall decide in which CCR it shall provide such XRA. This decision shall take account of the assumptions on remedial actions considered in capacity calculation methodologies established pursuant to Articles 20 and 21 of the CACM Regulation.
1. The TSOs and the RSC(s) shall share all information required for calculation of the prices or costs of activation of XRAs.

2. In accordance with Article 35(5) of the CACM Regulation, the prices or costs of XRAs shall be based on:
   
   (a) Prices in the relevant electricity markets for the relevant timeframe; or
   
   (b) The costs of XRAs calculated transparently on the basis of incurred costs.

3. Without prejudice to paragraph 7 of this Article, each TSO shall provide to the RSC(s) the exact information on the prices or costs of activating costly XRAs available in its control area such that this information can be effectively used in the coordination and optimisation of XRAs as well as for settlement of these costs.

4. In case TSOs provide to the RSC(s) the information on exact prices or costs of XRAs, these exact prices and costs shall be used both for the purpose of optimising activation of XRAs and for settlement of XRAs.

5. The TSOs shall provide to the RSC(s) the information on the prices or costs of available costly XRA after the publication of the results of the day-ahead market. They shall also define the time window for the validity of these prices or costs.

6. In line with the requirements set by Article 35(5) of the CACM Regulation, the providers of resources for XRAs shall provide the information about prices or costs of XRAs requested by the XRA connecting TSO sufficiently in advance of the deadline by which the XRA connecting TSO needs to submit this information to the RSC(s).

7. If the information on exact prices or costs is not available to TSOs, and if TSOs are unable to require the information on exact prices or costs to be provided by resource providers, the TSOs shall instead provide the best up-to-date estimation of the expected costs incurred per unit volume of activated XRA. The TSOs shall use for this purpose the actual prices or costs taken from the generator units and loads and other available information. In case TSOs provide to the RSC(s) the information on expected prices or costs of XRAs, these prices and costs shall be used for the purpose of optimising activation of XRAs, whereas for settlement of XRAs, the XRA connecting TSO shall provide the information on the realised prices or costs to RSC(s) after the XRAs have been activated.

8. Any TSO or the RSC(s) on behalf of TSO may request from any other TSO any underlying information used to establish expected or realised prices or costs of XRAs, including information pertaining to contracts and agreements with resource providers.

9. In addition, a SEE regulatory authority may request the information referred to in paragraph 8 from the TSO in the concerned Member State, on its own initiative or at the request of another regulatory authority. In the latter case, the concerned SEE regulatory authority shall share this information with the requesting SEE regulatory authority.

10. For the information on prices and costs of XRAs shared between the TSOs, the RSC(s) and the SEE regulatory authorities, the XRA connecting TSO shall define which part of
information is commercially sensitive subject to the agreement on non-disclosure of commercially sensitive information.

11. When the TSOs provide a best up-to-date estimation of the expected costs incurred pursuant to paragraph 7 of this Article, the TSOs and the RSC(s) shall implement a continuous monitoring and evaluation process to minimise the differences between the expected prices or costs of XRA(s) and realised prices or costs of XRA(s) for settlement. In this process, the TSOs and the RSC(s) shall continuously monitor forecast errors of expected costs of XRA(s), and the TSOs shall use this monitoring as an input continuously to improve the associated forecasting methodology.

12. When the TSOs provide a best up-to-date estimation of the expected costs incurred pursuant to paragraph 7 of this Article, XRA connecting TSOs shall proactively and timely report and justify any significant and/or systematic deviation between forecasted and incurred costs of a given XRA to other TSOs and the RSC(s) in situations when such deviation represents more than 10 percent of the initially forecasted cost.

13. Within 18 months after the implementation of the common coordinated RDCT methodology in accordance with Article 15, all TSOs shall develop a proposal for further harmonisation of the prices and costs of XRA(s), and submit it by the same deadline to all SEE regulatory authorities as a proposal for amendment of the common coordinated RDCT methodology in accordance with Article 9(13) of the CACM Regulation. The proposal shall at least include:

   (a) a report compiling all instances of deviations between forecasted and incurred costs pursuant to paragraph 11 above of this Article, detailing, for each instance the difference in forecasted and incurred costs, as well as measures foreseen or implemented to remedy reasons for deviations. For each instance, the report shall highlight the effect of the deviation between forecasted and incurred costs on the XRA optimisation pursuant to Article 10;

   (b) an analysis of the feasibility for amendment of legal or regulatory framework by which TSOs could request from XRA resources a firm commitment on exact prices or costs of XRA(s) ahead of the coordination and optimisation of XRA(s), and thereby remove the option of an up-to-date estimation pursuant to paragraph 7. The analysis shall include the expected impact on XRA resource providers and on TSOs in comparison with the current approach.

**Article 8. Confidentiality of information**

1. For the information on prices and costs of XRA(s) shared between the TSOs, the RSC(s) and the SEE regulatory authorities pursuant to Article 7, the XRA connecting TSO shall define which part of information is commercially sensitive. For such information, the XRA resource provider or the XRA connecting TSO may require that the party with which the information is to be shared sign an agreement on non-disclosure of commercially sensitive information.

2. The TSOs and the RSC(s), when handling commercially sensitive information during the application of the common coordinated RDCT methodology shall treat it as confidential and manage it in accordance with the procedure pursuant to Article 13 of the CACM Regulation.
3. In particular, the TSOs and the RSC(s) shall share information on the prices and costs of XRAs pursuant to Article 7 for purposes of XRA coordination only, including reporting and monitoring obligations defined within the methodology pursuant to Article 74(1) of the CACM Regulation.

Article 9. Timeframes for coordination and application of cross-border relevant remedial actions

1. The coordination of XRAs shall be performed in a single coordination procedure that optimises the activation of XRAs as well as other remedial actions not considered as XRAs in accordance with this methodology but still considered as cross-border relevant. This coordination shall enable the TSOs with the support from the RSC(s) to relieve physical congestions in all market time units of the delivery day.

2. The coordination of XRAs shall be performed in the following timeframes:
   
   (a) the day-ahead coordination procedure;
   
   (b) the intraday coordination procedure; and
   
   (c) the close to real-time coordination procedure (fast activation procedure).

3. The day-ahead and intraday coordination procedure is a regular coordination procedure as defined in Article 10. The close to real-time coordination procedure is called a “fast activation procedure” as defined in Article 12 and aims to address physical congestions suddenly occurring close real-time. The TSOs may apply the fast activation procedure for all market time units, when the TSOs and the RSC(s) cannot coordinate pursuant to the procedure described in Article 10.

4. The process for coordination of XRAs for the day-ahead coordination procedure for all market time units of the delivery day shall start immediately after the day-ahead coordinated operational security analysis referred to in Article 76(1)(a) of the SO Regulation is finalised and physical congestions on the XNECs have been identified by the RSC(s) and the TSOs.

5. The process for coordination of XRAs for the intraday coordination procedure for the remaining market time units of the delivery day shall start immediately after the intraday coordinated regional operational security analysis referred to in Article 76(1)(a) of the SO Regulation is finalised and physical congestions on the XNECs have been identified by the RSC(s) and the TSOs. The intraday coordination procedure may be repeated several times within the period between the day-ahead coordination procedure and real-time.

6. When XRAs recommended by RSC(s) resulting from the coordination procedure may be ordered at a later stage subject to a later coordination procedure, the TSOs and the RSC(s) may decide in a coordinated way to postpone the planning and ordering of such XRAs until the finalisation of the next coordination procedure.

Article 10. Day-ahead and intraday coordination procedure

1. The day-ahead and intraday coordination procedure shall enable the TSOs to address physical congestions on XNECs, identified in accordance with the coordinated operational security analysis referred to in Article 76(1)(a) of the SO Regulation.
2. In all cases in which a physical congestion is detected, TSOs and the RSC(s) shall contact and provide each other with all the information required to have a common view on the physical congestion to be solved.

3. In the day-ahead and intraday coordination procedure, the RSC(s) in coordination with the TSOs shall coordinate the use of all XRAs by performing a regional optimisation of XRAs with the objective to address all congestions on all XNECs with minimum estimated cost for the TSOs. This regional optimisation shall include also other remedial actions not considered as XRAs in accordance with this methodology, but still considered as cross-border relevant.

4. The XRA optimisation performed according to the methodology pursuant to Article 76(1) of the SO Regulation shall be based on the prices or costs provided by the TSOs in accordance with Article 7. For settlement, the exact or realised prices or costs of costly ordered XRAs shall be used. Possible capacity costs shall not be considered for the optimisation and the settlement of XRAs.

5. Subsequently, the RSC(s) shall recommend to the TSOs the activation of identified optimal XRAs. On the basis of the RSC’s recommendation, the XRA connecting TSOs shall then plan XRAs and establish the list of planned XRAs. Based on the list of planned XRAs, the XRA connecting TSOs shall order XRAs and establish the list of ordered XRAs.

6. When the RSC(s) recommends the activation of XRAs in accordance with paragraph 5, the XRA connecting TSO(s) shall, in accordance the relevant Union legislation, plan and activate the recommended remedial action provided that:

   (a) it is expected to be available in the real time;

   (b) and it is not leading to violation of operational security limits, taking into account the violations from not activating the XRAs.

7. When the RSC(s) recommends the activation of XRAs in accordance with paragraph 5, the XRA affected TSO(s) shall, in accordance with relevant Union legislation, agree on the recommended remedial action provided that it is not leading to violation of operational security limits, taking into account the violations from not activating the XRAs.

8. In case the XRA connecting TSO or the XRA affected TSO refuses the RSC’s recommendation, the XRA connecting TSO shall, in accordance with relevant Union legislation, coordinate with the RSC(s) and other SEE TSOs to identify, plan and activate alternative remedial actions.

9. The RSC(s) shall compile all incurred costs of ordered remedial actions pursuant to Article 13.

10. The costs of XRAs shall be shared and settled according to the redispachting and countertrading cost sharing methodology pursuant to Article 74(1) of the CACM Regulation, and common provisions for regional operational security coordination pursuant to Article 76 of the SO Regulation.

11. In the context of the optimisation pursuant to paragraph 3 above of this Article, the RSC(s) shall coordinate with neighbouring RSCs of other CCRs.
Article 11. Activation process for cross-border remedial actions

1. The activation of XRA within the day-ahead and intraday coordination procedure shall be performed in the following sequence:
   
   (a) The RSC(s) shall use the results of coordination and optimisation of XRA and establish a list of recommended XRA for each TSO and submit these lists to the TSOs.
   
   (b) Based on this list of recommended XRA, each TSO shall establish a list of planned XRA taking into account the time constraints for ordering and activation of these XRA.
   
   (c) From the list of planned XRA, the TSOs shall order XRA at the latest possible time taking into account the activation time constraints of the resources and the timing of the next coordinated regional coordinated security assessment.
   
   (d) The TSO shall provide the list of ordered XRA to the RSC(s). In turn, the RSC(s) shall establish the cross-border schedule resulting from the activation of these XRA and provide this information to the TSOs which shall update the cross-border schedule as defined in Article 112 of the SO Regulation.
   
   (e) The TSO shall update in a coordinated manner the available cross-zonal capacities within the intraday or balancing timeframe to take into account the use of these capacities to facilitate cross-border schedules reflecting the activation of XRA.

2. The RSC(s) shall monitor occurrences of uncoordinated XRA activations in the semi-annual report pursuant to Article 14.

3. When relevant, XRA connecting TSOs may launch an additional request for coordination and reconsideration of ordered XRA pursuant to Article 10(8).

4. The RSC(s) shall monitor additional requests for coordination pursuant to paragraph 3 in the semi-annual report pursuant to Article 14.

5. Once the XRA have been ordered and activated by the concerned TSO, these XRA shall be included in the TSOs IGM(s) and CGM in accordance with the requirements of the SO Regulation. Therefore, ordered XRA shall be considered for the next coordinated regional operational security assessment according to the methodologies pursuant to Article 75(1) and Article 76(1) of the SO Regulation.

6. The effect of planned and ordered XRA which have been activated shall be taken into account in the individual grid models for the subsequent intraday capacity calculation processes.

Article 12. Fast activation process for sudden critical situations

1. The fast activation process is defined as a process to relieve physical congestion where the detection of the physical congestion occurs:
(a) between coordinated security analysis cycles and a fast activation of a XRAs is required because it cannot wait for the next coordinated security analysis; and

(b) after the last coordinated security analysis.

2. The fast activation process for coordinated redispatching and countertrading shall also be considered as a fallback where coordination through the RSC(s) is no longer possible due to insufficient time and the regular process described in Article 10 could not be properly applied (e.g. missing data, tools failure).

3. In the fast activation process, the activation of preventive as well as curative XRAs may be applied.

4. In the fast activation process, each TSO may activate XRAs in direct coordination with XRA affected TSO(s) in accordance with the principles for coordination of XRAs described in the methodology pursuant to Article 75(1) of the SO Regulation.

5. The TSO activating XRAs through fast activation process shall provide the RSC(s) the relevant information on which the decision was based. The RSC(s) shall monitor occurrences of fast activation processes and the information provided by the relevant TSOs on those occurrences in the semi-annual report, pursuant to Article 14.

Article 13. Incurred costs

1. The XRA connecting TSOs shall provide all information on incurred costs of ordered XRAs to the RSC(s) and the other TSOs as an input to the cost sharing methodology pursuant to Article 74(1) of the CACM Regulation.

2. The incurred costs shall relate to the relevant timeframe of ordered XRAs. The prices and volumes of ordered XRAs shall be disclosed transparently to all TSOs and the RSC(s). The TSO shall not apply a mark-up on top of the costs charged for the delivery of XRAs generation, load and network resources in its control area. Each TSO shall be financially neutral as a result of the settlement of costs of XRAs.

Article 14. Reporting

1. The RSC(s), with the support of the TSOs where relevant, shall draft and publish a semi-annual report satisfying the reporting obligations set in Article 3(3), Article 6(2), Article 11(2), Article 11(4), and Article 12(5):

(a) According to Article 3(3), the RSC(s) shall report the updated list of XNECs;

(b) According to Article 6(2), the TSOs shall communicate and justify any non-provision of XRAs located in their control area to the RSC(s), which the RSC(s) shall compile in the semi-annual report;

(c) According to Article 11(2), the RSC(s) shall monitor occurrences of uncoordinated XRA activations, which the RSC(s) shall compile in the semi-annual report;
(d) According to Article 11 (4), XRA connecting TSOs shall communicate additional request for coordination to the RSC(s), which the RSC(s) shall compile in the semi-annual report;

(e) According to Article 12(5), the TSO triggering a fast activation process shall provide the RSC(s) the relevant information on which the decision to trigger a fast activation process was based, which the RSC(s) shall compile in the semi-annual report.

2. The RSC shall record and share all necessary data to enable the TSOs to fulfil the obligations regarding Article 13(1) of the Transparency Regulation.

**Article 15. Publication and implementation of the coordinated redischappng and countertrading methodology**

1. The TSOs shall publish the common coordinated RDCT methodology without undue delay after a decision has been taken by the Agency for the Cooperation of Energy Regulators in accordance with 9 (12) of the CACM Regulation.

2. The implementation of the common coordinated RDCT methodology is subject to the development, testing and implementation of the systems required to support the common coordinated RDCT methodology. This includes the software of the RSC(s) to perform the activities, the communication channels among the RSC(s) and TSOs (data exchange of network models) as well as the practical implementation of actions from TSOs.

3. The TSOs shall implement the proposed common coordinated RDCT methodology not later than 12 months after the conditions specified in paragraph 2 are fulfilled, and in any event no later than 1st July 2021.

**Article 16. Language**

1. The reference language for the common coordinated RDCT methodology shall be English.

2. For the avoidance of doubt, where TSOs need to translate the common coordinated RDCT methodology into their national language(s), in the event of inconsistencies between the English version published by TSOs in accordance with Article 9(14) of the CACM Regulation and any version in another language, the relevant TSOs shall be obliged to dispel any inconsistencies by providing a revised translation of the common coordinated RDCT methodology to their relevant national regulatory authorities.