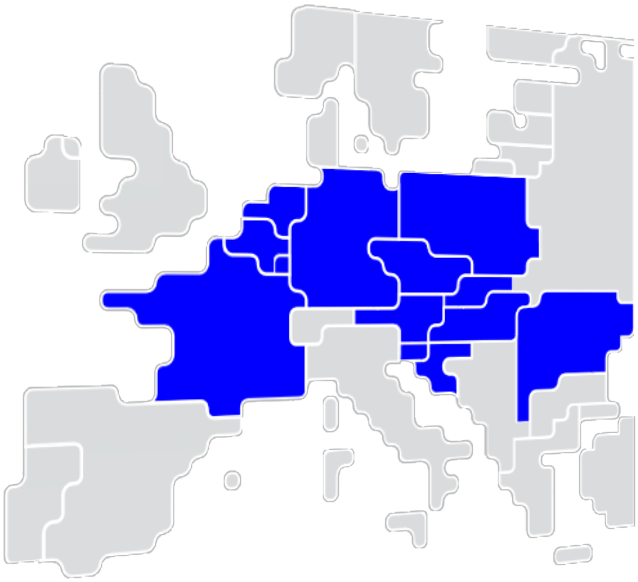
Consultation Report on Core ROSC Methodology

19 December 2019



CONTENT

GLOSSARY

All definitions and abbreviations of the Core ROSC Methodology apply accordingly.

1. INTRODUCTION

This document is the consultation report for the Core TSOs common methodology for regional operational security coordination in accordance with Article 76 of Commission Regulation (EU) 2017/1485 of 2 August 2017 (hereafter referred to as "Core ROSC Methodology").

Core TSOs would like to thank all participants of the public consultation for their interest in the Core ROSC Methodology.

Via the ENTSO-E Consultation Platform, the public consultation document for the Core TSOs common methodology for regional operational security coordination was available to Core stakeholders from the 23rd of September 2019 until the 24th of October 2019. In total, 2 stakeholders submitted their responses in time. The response of the stakeholders was identitical and therefore only one response is attached in the annex.

Since the public consultation results should be processed in an anonymised manner, the identity of the respondents is not disclosed in this consultation report. Please note that all responses were, however, shared with the Core National Regulatory Authorities (NRAs) in a non-anonymised manner.

Main views and recurring comments have been summarized in this report. The Core TSOs wish to clarify that the content of this document is intended to summarize the results obtained in the public consultation. The Core TSOs did their best to reply to all comments and concerns.

2. RECEIVED RESPONSES

In this chapter, a summary is provided of all stakeholder responses received via the ENTSO-E Consultation Platform. All contributions can be found in the Annex. All responses are structured in a table showing the stakeholder response, the number of stakeholders asking for a specific adaptation, the action taken by Core TSOs and in addition a Core TSOs answer to the stakeholders' response.

When stated "reject" in this Consultation Report it means Core TSOs have discussed the comment but no update has been made to the Core ROSC Methodology, in certain cases additional explanation has been added to the Explanatory Note. When stated "accept" it means Core TSOs have made an update to the Core ROSC Methodology in line with the comment of stakeholders.

2.1. General Feedback

The following general feedback was received:

Stakeholder response		Number of stakeholder requesting	Action taken	Core TSOs' answer
1	Stakeholders questioned if and how a consistency is ensured between the remedial action optimization embedded in the capacity calculations (cf. Articles 10 and 16/17 of the Core day-ahead and intraday capacity calculation methodologies annexed to ACER's decision 02/2019) and the remedial action optimization performed during the CROSAs.	2	Additional explanation provided. See Core TSOs' answer	Core TSOs respond the consistency is ensured since TSOs have to provide for the CROSA the RAs already agreed during CC for the same timeframes. Art 18 of CSAM and Art 16(2) of Core ROSC tackle this.
2	Stakeholders commented Core TSOs should also explain how they ensure that the RD & CT volumes taken into account for the validation phase of the day-ahead capacity calculation, in D-2, are consistent	2	Additional explanation provided. See Core TSOs' answer	Core TSOs respond due to the fact, that in DA CC the market outcome and direction is not known, the potential of costly RAs in the validation phase of the DA CC can only be estimated. For DA and ID CROSA this potential can be much

	with the actual available RD & CT volumes after the day-ahead market coupling.			better forecasted. To use outdated potential for CROSA just to be consistent with the DA CC would not make sense. The question seems to more refer to the forecast quality of the forecast tools used for the individual and coordinated validation phase in CC.

2.2. Specific Feedback

The following feedback on specific articles was received:

2.2.1. Article 2 Definitions and interpretation

Stakeholder response		Number of stakeholder requesting	Action taken	Core TSOs' answer
3	Stakeholders commented the “RSA” mentioned (but not defined) in Article 2(1)(j) seems to refer to the same concept as the “CSA” mentioned in Article 2(1)(h), used in the CSAM methodology but not in the present one.	2	Accepted. See Core TSOs' answer	Core TSOs agree the CSA and RSA are not expressing the same meaning as CSA refers to Coordinated security assessment while RSA refers to the Regional security analysis. The difference is that CSA include the coordination of RA while RSA only considers load flow and contingency analysis. As CSA is not used in the document, and to avoid confusion, "CSA" was deleted.
4	Stakeholders commented the “constraints” introduced in Article 2(3) mix together the concept of network constraints referring to the congestions to be solved by the remedial actions, and the concept of optimization constraints which are inputs to the optimization problem.	2	Accepted. See Core TSOs' answer	Core TSOs agree with Stakeholders but it clarifies that those constraints are from different origins. Core TSOs have taken the comment into account and improved the clarity of the wording.
5	Stakeholders commented a part of the definition is missing in Article 2(2)(e).	2	Accepted. See Core TSOs' answer	Core TSOs agree with Stakeholders and this has been improved.
6	Stakeholders noted that the absence of description of the criteria for considering that a remedial action is shared or not is not consistent with Article 10 of the draft Core RD & CT methodology, which states that “the decision on which resources are shared for the optimisation at which time should be made by the responsible Core TSO(s). The terms and conditions will be described in the methodology pursuant to Article 76(1) of SO guideline”.	2	Accepted. See Core TSOs' answer	Core TSOs agree with Stakeholders but it is impossible to define an exhaustive list of requirements/provisions. Core ROSC Methodology has been improved to specify in Title 3 that, when submitting the list of RAs for the XRA assessment, each TSO shall at the same time identify which RA is non-shared, conditionally shared with the related conditions and justification.

2.2.2. Title 2 Regional Operational Security Coordination

Stakeholder response		Number of stakeholder requesting	Action taken	Core TSOs' answer
7	Stakeholders would welcome the confirmation of the following: -the CROSAs are a specific type of RSAs/CSAs, performed by RSCs after each of the day-ahead and intraday auctions that allocate the calculated cross-zonal capacities, in order to optimize the remedial actions aimed at ensuring the firmness of the allocated capacities once	2	Accepted. See Core TSOs' answer	Core TSOs respond RSA is performed on an hourly basis for all remaining hour of the day and only consist in the provision of latest IGMs, which includes agreed RAs by the CROSA, merging to CGMs, load flow and contingency analysis. There is no optimisation and no coordination related to RSA

	the market results and the associated schedules are known; - additional intraday RSAs/CSAs are performed at a higher frequency (each hour) by each Core TSO, according to harmonized principles and with the support of RSCs, as described in Articles 23 and 24 of the CSAM methodology. They do not include an optimization process but aim at checking that, taking into account the remedial actions agreed during the CROSAs, the security of the grid is still ensured given the evolution of the conditions (update of market schedules / renewable generation and consumption forecasts, unforeseen outages of generation facilities or network elements…).			CROSA is the full regional coordination process that will aim at identifying most effective and efficient RAs to solve flow violation on Secured elements. So, on top of the RSA steps, this also includes exchanges of RAs, their optimisation and coordination. The timings of CROSA are for the moment linked to the CSA methodology and CGM methodology and are optimized in order to allow results of this coordination to be available for the auctions timings.

2.2.3. Article 5 Secured elements

Stakeholder response		Number of stakeholder requesting	Action taken	Core TSOs' answer
8	Stakeholders commented as regards the scope of the remedial action optimization, Stakeholders are concerned by the exclusion of certain cross-border relevant network elements from the list of secured elements in Article 5 (without any periodic reassessment foreseen), and of certain technically available cross-border remedial actions that can be declared as non-shared or conditionally shared by TSOs pursuant to Article 16, on a basis that is not described and seems somehow arbitrary. In Stakeholders' view, these restrictions entail the risk of an underuse of the whole potential, in terms of welfare maximization, of a coordinated approach for remedial action optimization. (See Article 16.)	2	Partially accepted. See Core TSOs' answer	Core TSOs respond Secured elements or Core XNEs are elements on which operational security violations during CROSA process have to be managed in coordinated way. CSAM requires to define XNEs as all elements above a certain voltage level, with an option to define rules of excluding them. Article 5.4 provides such rules. Additional exclusion of elements form secured elements list is only possible upon common agreement among TSOs (Article 5.5). On the other hand, if a remedial action is XRA will be assessed either qualitatively or quantitatively in accordance with Article 11 and Article 12. In case of quantitative assessment each TSO shall provide a list of elements on which the influence of RA shall be assessed. According the CSAM this shall be done for at least all XNEC. Concerning the declaration of non-shared or conditionally shared RA see the Core TSOs answer to Article 16.

2.2.4. Article 8 Cross-border relevant network elements

Stakeholder response		Number of stakeholder requesting	Action taken	Core TSOs' answer
9	Stakeholders commented the concept of "secured element" seems to be redundant with the one of "XNE", as emphasized in Article 8(1).	2	Rejected. See Core TSOs' answer	Core TSOs respond indeed the concept is redundant for Core CCR. There is a definition in the CSAM of XNEs. However the determination of XNEs from each CCR can differ depending for example on the voltage level and the exclusion rules. TSOs need a common Cross-CCR wording to identify the elements that have to be secured by the CROSA. The wording "secured element" has been proposed by ENTSO-E and used in

				the Core ROSC. For the Core ROSC, XNE equals secured elements.

2.2.5. Article 12 Quantitative assessment of XRAs

Stakeholder response		Number of stakeholder requesting	Action taken	Core TSOs' answer
10	Stakeholders would appreciate details regarding the computation of the remedial action influence factors mentioned in Article 12. In particular, will remedial actions be assessed individually (and in that case, how do TSOs simulate the action ensuring that the global remedial action is balanced? Through the use of a common slack node, or through a pro-rata approach as described in Annex I of the RAOC methodology (ACER decision 08/2019)?), or will all possible combinations of balanced remedial actions be assessed? Stakeholders warn that, in the first case, the result may be very dependent on the chosen methodological choice, and that in the second one, the number of possible combinations may make the assessment hardly tractable.	2	Rejected. See Core TSOs' answer	Core TSOs will take the comment of Stakeholders into account and provide additional explanation in the Explanatory Note. In the Core ROSC Methodology however only the reference is made to Article 15 (4) CSAM.

2.2.6. Article 15 Preparation and updates of IGMs by Core TSOs

Stakeholder response		Number of stakeholder requesting	Action taken	Core TSOs' answer
11	Stakeholders noted to adapt Article 15(4), RD & CT does not influence “network topology”. Would rather say “network state”;	2	Rejected. See Core TSOs' answer	Core TSOs respond in order to avoid confusion with system state. Core TSOs consider that network topology is a better wording.

2.2.7. Article 16 Preparation and update of remedial actions by Core TSOs

Stakeholder response		Number of stakeholder requesting	Action taken	Core TSOs' answer
12	Stakeholders commented as regards the scope of the remedial action optimization, Stakeholders are concerned by the exclusion of certain cross-border relevant network elements from the list of secured elements in Article 5 (without any periodic reassessment foreseen), and of certain technically available cross-border remedial actions that can be declared as non-shared or conditionally shared by TSOs pursuant to Article 16, on a basis that is not described and seems somehow arbitrary. In Stakeholders’ view, these restrictions entail the risk of an underuse of the whole potential, in terms of welfare maximization, of a coordinated approach for remedial action optimization. (See Article 5.)	2	Partially accepted. See Core TSOs' answer	Core TSOs respond concerning the exclusion of cross border relevant network elements see Core TSOs answer to Article 5. Concerning non-shared/conditionally shared RAs, it is impossible to define an exhaustive list of requirements/provisions. Methodology is improved to specify in Title 3 that, when submitting the list of RAs for the XRA assessment, each TSO shall at the same time identify which RA is non-shared or conditionally shared with the related conditions and justification.

2.2.8. Article 19 Preparation and update of remedial actions by Core TSOs

Stakeholder response		Number of stakeholder requesting	Action taken	Core TSOs' answer

13	Stakeholders think that Article 19 is only applicable for the intraday CROSAs, since a remedial action cannot be “Agreed” (in the sense of this ROSC methodology) ahead of the first CROSA performed in day-ahead.	2	Accepted. See Core TSOs' answer	Core TSOs have deleted day-ahead.

2.2.9. Chapter 2 Coordination

Stakeholder response		Number of stakeholder requesting	Action taken	Core TSOs' answer
14	Stakeholder would like Core TSOs to explain how the impact of countertrading is simulated, given that the location of activated resources is in general not known in this case. Is the methodology based on GSKs as for capacity calculations and, if yes, how are they calculated? Besides, TSOs should explain how they intend to forecast the countertrading costs in case countertrading is implemented through the intraday markets.	2	Rejected. See Core TSOs' answer	Core TSOs respond today, countertrading can be simulated with GSK as for capacity calculation for the TSOs using countertrading but as there are different GSKs (linear, proportional to Pmax, limited to Pmax etc..) and different ways to perform countertrading depending on the TSOs, the exact way to simulate the impact of countertrading and to forecast the countertrading costs will be tackled during the implementation phase.

2.2.10. Article 21 General provisions of coordination process

Stakeholder response		Number of stakeholder requesting	Action taken	Core TSOs' answer
15	In Article 21(2), Stakeholders would welcome more explanations on the reasons why two coordination runs are needed in day-ahead.	2	Rejected. See Core TSOs' answer	Core TSOs respond a coordination run consists of the following four steps: - CGM building - Power flow and security Analysis - Remedial Action Optimization - Inter-CCR/intra-CCR coordination. This is a requirement of the CSAM. The day-ahead CROSA includes two of those coordination runs and the minimum three ID CROSA include at least one coordination run. Two runs are needed in day-ahead so that the impact of every RA identified during the first run can be assessed during the 2nd run not only on lower voltage levels within Core TSOs but also by the other CCRs and non-Core TSOs.

2.2.11. Article 23 Optimisation of remedial actions

Stakeholder response		Number of stakeholder requesting	Action taken	Core TSOs' answer
16	Stakeholder would like Core TSOs to explain the exact definition of the direct costs mentioned in Articles 23 and 27.	2	Accepted. See Core TSOs' answer	Core TSOs have made an update to Articles 23 and 27. The direct costs are defined in the article 16 of RD&CT Methodology as "incurred costs" and further clarified in article 4 of the Cost Sharing methodology "Eligible Cost". For consistency, the wording of article 23 has been updated and "direct costs"

				are now "incurred costs" They consist of : i. in case of countertrading, the incurred costs to solve congestions, consisting out of costs and revenues for activated countertrading resources as described in the article 6 of Core RD and CT Methodology; ii. in case of redispatching, the incurred costs to solve congestions, consisting of costs and revenues for upward and downward regulated energy, provided individually for each upward or downward activation as described in the article 11 of Core RD and CT Methodology.

2.2.12. Article 27 Minimise incurred costs

Stakeholder response		Number of stakeholder requesting	Action taken	Core TSOs' answer
17	Stakeholder would like Core TSOs to explain the exact definition of the direct costs mentioned in Articles 23 and 27.	2	Accepted. See Core TSOs' answer	See Core TSOs answer to Article 23 of this document.

2.2.13. Article 29 RA effectivity

Stakeholder response		Number of stakeholder requesting	Action taken	Core TSOs' answer
18	Stakeholders request Core TSOs to explain what is exactly meant by the fact that the remedial actions' effectivity shall be "balanced with their direct costs". Stakeholders consider that the main driver for the optimization should remain the overall system cost minimization (which implicitly takes into account the efficiency of the remedial actions when considering the volume to be activated), and that this optimization should not be unduly restricted by additional constraints added by TSOs in a discretionary way.	2	Rejected. See Core TSOs' answer	Core TSOs respond the objective to minimize the total cost of costly remedial action will lead to the fact that, at identical sensitivity, a less costly RA shall always be preferred to one with higher costs. But using low effective RAs to solve far away congestions might also have side effects in term of grid stress and reduction of available means close to their activation. The exact ratio between cost and sensitivity might have to be tuned in order to avoid over-used of far and less sensitive remedial action just to provide limited gain in the incurred costs. The main driver of the optimisation, as part of the CROSA process, is security of supply by finding the most optimal set of RAs taking into account their effectivity and efficiency.
19	Stakeholders request Core TSOs to explain what is exactly meant, in Article 29, by the fact that remedial actions cannot be chosen "for the purpose of increasing market welfare".	2	Accepted. See Core TSOs' answer	Core TSOs respond the sentence has been removed from Core ROSC methodology since it was not compliant with Article 16 of REGULATION (EU) 2019/943.
20	Stakeholders request Core TSOs to explain which are the criteria to decide that some operational security limits violations can remain unsolved at the end of the optimization process, as stated in Articles 29(4) and 34(2), and how they are then supposed to be handled.	2	Rejected. See Core TSOs' answer	See Core TSOs answer to Article 34 of this document.

2.2.14. Article 30 Robustness

Stakeholder response		Number of stakeholder requesting	Action taken	Core TSOs' answer
21	Stakeholders would like more explanations on the concrete implications of Article 30(1). In particular, how is it compatible with the requirement that “each TSO shall not include any reliability margin to its operational security limits or in the coordinated operational security analysis”, stated in Articles 23(1)(a) and 24(3)(a) of the CSAM methodology?	2	Rejected. See Core TSOs' answer	Core TSOs refer to the Explanatory Note where examples are provided how Article 30(1) can be tackled.
22	Stakeholders commented in Article 30(2), the wording should be adapted to reflect the fact that the targeted phenomenon is an uncertainty increase and not a reduction of the thermal limits of the XNEs (indeed, the events referred to do not reduce these thermal limits, they might even increase them, e.g. in case of a wind front).	2	Partially accepted. See Core TSOs' answer.	Core TSOs respond the wording has been changed to " In case of exceptional situations, such as but not limited to unpredictable arrival of a wind front, snowfall on PV modules, where the accuracy of one or more of the forecasts variables included in the IGMs is insufficient to allow the correct identification of operational security limit violations, Core TSOs shall have right **to change** thermal limits of their XNEs in regional day-ahead or intraday processes in accordance with articles 23 (4) and 24 (4) of CSAM".

2.2.15. Article 31 Coordination of RAs

Stakeholder response		Number of stakeholder requesting	Action taken	Core TSOs' answer
23	The term “validated” in Article 31(1)(3) seems to be equivalent to “Agreed”; if this is indeed the case, the same term should be used.	2	Accepted. See Core TSOs' answer	Core TSOs have updated the Article 31 accordingly.

2.2.16. Article 34 Outcome of validation

Stakeholder response		Number of stakeholder requesting	Action taken	Core TSOs' answer
24	Explain which are the criteria to decide that some operational security limits violations can remain unsolved at the end of the optimization process, as stated in Articles 29(4) and 34(2), and how they are then supposed to be handled.	2	Rejected. See Core TSOs' answer	Core TSOs are of the opinion there is no criteria, it is just a reality that could happen and if it does, TSOs have to provide more RA in the 2nd coordination run (for example cancellation of planned outage) or look into other CCRs' RA or go to Fast Activation Process.
25	Define the "interim process".	2	Accepted. See Core TSOs' answer	Core TSOs respond by “interim process”, the Fast activation process according to Article 37 is meant. To clarify the issue, Fast activation process term has been inserted into the Article instead.

2.2.17. Title 5 Sharing of costs of remedial actions

Stakeholder response		Number of stakeholder requesting	Action taken	Core TSOs' answer
26	Stakeholders are not able to give any informed opinion on this topic, and notably not able to assess whether the cost	2	Additional explanation provided. See	Core TSOs have not defined additional rules for cost sharing in the ROSC methodology. Core TSOs will apply the rules for cost sharing in accordance with the Cost Sharing

	sharing principles stated in SOGL Articles 76(1)(b)(v) and 76(2) are fulfilled or not. Stakeholders urge Core TSOs to find an agreement on the cost sharing principles and, if not possible in due time, to put in place interim provisions that enable the implementation of the coordinated RD & CT without delay.		Core TSOs' answer	Methodology (according to CACM Art. 74).

2.2.18. Article 39 Reporting

Stakeholder response		Number of stakeholder requesting	Action taken	Core TSOs' answer
27	Stakeholders suggest that the optimization algorithm, once developed, is shared with market parties in open source, so that they can understand in detail how it works. Core TSOSs should also guarantee the transparency on the XNEs that have required the activation of cross-border relevant remedial actions and on the corresponding volumes of remedial actions	2	Partially accepted. See Core TSOs' answer	Core TSOs will amend Article 39 to provide more details on the monitoring. Core TSOs will not provide optimization algorithm, once developed, in the Core ROSC Methodology.

2.2.19. Article 40 Implementation

Stakeholder response		Number of stakeholder requesting	Action taken	Core TSOs' answer
28	In case the “ideal algorithm” cannot be developed quickly enough, TSOs could envisage to resort, as an interim solution, to simpler but easy-to-implement solutions: this could include the identification ex ante, based on historical data, of the coordinated remedial actions which are most likely to be cost-efficient to solve a congestion on a given XNE, and to make a more extensive use of counter-trading when appropriate.	2	Accepted. See Core TSOs' answer	Core TSOs added in Core ROSC Methodology explicitly the required amendment. The amendment foreseen in 12 months will describe the provisions for the interim solution. The stepwise approach considering the interim solution shall be developed and implemented in an estimated timeframe of 24 months after approval of Core ROSC Methodology.

ANNEX

Stakeholder responses	
1.	Core TSOs' consultation on a common methodology for regional operational security coordination Stakeholder's answer 24 octobre 2019 Stakeholder welcomes the opportunity to provide comments on the Core TSOs' draft methodology for regional operational security coordination in accordance with Article 76 of the System Operation Guideline (SOGL). Given the complexity of the interlinkages and overlaps between this article, Articles 35 and 74 of CACM, and Article 75 of SOGL, Stakeholder would however have appreciated an explanatory document providing explanations on how TSOs conceive the global picture of coordinated security analyses, capacity calculations, remedial action optimization and activation, and cost sharing. From a formal point of view, Stakeholder finds that the proposed methodology is frequently confusing, and regrets that Core TSOs do not pay more attention to clarifying the terms used (some of them being sometimes very close to one another but referring to different concepts, such as "XNE"/"XBRNE", the latter being not defined and stemming from a version of the draft Core RD & CT methodology which has not been consulted) and using a uniform wording, e.g.: • - the "RSA" mentioned (but not defined) in Article 2(1)(j) seems to refer to the same concept as the "CSA" mentioned in Article 2(1)(h), used in the CSAM methodology but not in the present one; • - the concept of "secured element" seems to be redundant with the one of "XNE", as emphasized in Article 8(1); • - the term "validated" in Article 31(1)(3) seems to be equivalent to "Agreed"; if this is indeed the case, the same term should be used; • - the "constraints" introduced in Article 2(3) mix together the concept of network constraints referring to the congestions to be solved by the remedial actions, and the concept of optimization constraints which are inputs to the optimization problem. On a side note, a part of the definition is missing in Article 2(2)(e). Stakeholder's understanding of the aforementioned global picture, given the information provided in Article 3 and 4, is that: ○ - the CROSAs are a specific type of RSAs/CSAs, performed by RSCs after each of the day-ahead and intraday auctions that allocate the calculated cross-zonal capacities, in order to optimize the remedial actions aimed at ensuring the firmness of the allocated capacities once the market results and the associated schedules are known; ○ - additional intraday RSAs/CSAs are performed at a higher frequency (each hour) by each Core TSO, according to harmonized principles and with the support of RSCs, as described in Articles 23 and 24 of the CSAM methodology. They do not include an optimization process but aim at checking that, taking into account the remedial actions agreed during the CROSAs, the security of the grid is still ensured given the evolution of the conditions (update of market schedules / renewable generation and consumption forecasts, unforeseen outages of generation facilities or network elements...). Stakeholder would welcome the confirmation that this vision is correct. Besides, in case it is, Stakeholder wonders if and how a consistency in ensured between the remedial action optimization embedded in the capacity calculations (cf. Articles 10 and 16/17 of the Core day-ahead and intraday capacity calculation methodologies annexed to ACER's decision

	02/2019) and the remedial action optimization performed during the CROSAs. Core TSOs should also explain how they ensure that the RD & CT volumes taken into account for the validation phase of the day-ahead capacity calculation, in D-2, are consistent with the actual available RD & CT volumes after the day-ahead market coupling. As regards the scope of the remedial action optimization, Stakeholder is concerned by the exclusion of certain cross-border relevant network elements from the list of secured elements in Article 5 (without any periodic reassessment foreseen), and of certain technically available cross-border remedial actions that can be declared as non-shared or conditionally shared by TSOs pursuant to Article 16, on a basis that is not described and seems somehow arbitrary. In Stakeholder's view, these restrictions entail the risk of an underuse of the whole potential, in terms of welfare maximization, of a coordinated approach for remedial action optimization. In this respect, Stakeholder recalls that the CSAM methodology, as decided by ACER in its decision 07/2019, states in its Article 17(1) that "in day-ahead or intraday operational planning, all TSOs, in coordination with the RSC(s) of a CCR, shall manage in a coordinated way operational security violations on all cross-border relevant network elements with contingency considering all cross- border relevant remedial actions". Stakeholder also notes that the absence of description of the criteria for considering that a remedial action is shared or not is not consistent with Article 10 of the draft Core RD & CT methodology, which states that "the decision on which resources are shared for the optimisation at which time should be made by the responsible Core TSO(s). The terms and conditions will be described in the methodology pursuant to Article 76(1) of SO guideline". On the assessment of the cross-border relevance of remedial actions, Stakeholder would appreciate details regarding the computation of the remedial action influence factors mentioned in Article 12. In particular, will remedial actions be assessed individually (and in that case, how do TSOs simulate the action ensuring that the global remedial action is balanced? Through the use of a common slack node, or through a pro-rata approach as described in Annex I of the RAOC methodology (ACER decision 08/2019)?), or will all possible combinations of balanced remedial actions be assessed? Stakeholder warns that, in the first case, the result may be very dependent on the chosen methodological choice, and that in the second one, the number of possible combinations may make the assessment hardly tractable... On the optimization process itself, Stakeholder would like Core TSOs to explain in a more detailed way: • the exact definition of the direct costs mentioned in Articles 23 and 27. • how the impact of countertrading is simulated, given that the location of activated resources is in general not known in this case. Is the methodology based on GSKs as for capacity calculations and, if yes, how are they calculated? Besides, TSOs should explain how they intend to forecast the countertrading costs in case countertrading is implemented through the intraday markets. • what is exactly meant, in Article 29, by the fact that the remedial actions' effectivity shall be "balanced with their direct costs". Stakeholder considers that the main driver for the optimization should remain the overall system cost minimization (which implicitly takes into account the efficiency of the remedial actions when considering the volume to be activated), and that this optimization should not be unduly restricted by additional constraints added by TSOs in a discretionary way. Therefore, Core TSOs should explain more clearly the envisaged trade-off, and give a justification for it (taking into account that the remedial action activation will to our knowledge be largely automatized, and can thus accommodate a high number of small actions if necessary). • what is exactly meant, in Article 29, by the fact that remedial actions cannot be chosen "for the purpose of increasing market welfare"; • which are the criteria to decide that some operational security limits violations can remain unsolved at the end of the optimization process, as stated in Articles 29(4) and 34(2), and how they are then supposed to be handled (by each concerned TSO on a

	national basis / during subsequent CROSAs? The “interim process” referred to in Article 34(2) also has to be defined). In light of the complexity of the envisaged remedial action selection optimization process, Stakeholder would like to underline that the implementation of the coordinated RD & CT should not be delayed because of the time required to develop and test a too complex optimization algorithm. In case the “ideal algorithm” cannot be developed quickly enough, TSOs could envisage to resort, as an interim solution, to simpler but easy-to- implement solutions: this could include the identification ex ante, based on historical data, of the coordinated remedial actions which are most likely to be cost-efficient to solve a congestion on a given XNE, and to make a more extensive use of counter-trading when appropriate . Concerning the handling of uncertainties, Stakeholder would like more explanations on the concrete implications of Article 30(1). In particular, how is it compatible with the requirement that “each TSO shall not include any reliability margin to its operational security limits or in the coordinated operational security analysis”, stated in Articles 23(1)(a) and 24(3)(a) of the CSAM methodology? Stakeholder appreciates the transparency commitments of Core TSOs contained in Article 39, but consider that Core TSOs could and should go beyond the mere legal requirements. In particular, Stakeholder suggests that the optimization algorithm, once developed, is shared with market parties in open source, so that they can understand in detail how it works. Core TSOSs should also guarantee the transparency on the XNEs that have required the activation of cross-border relevant remedial actions and on the corresponding volumes of remedial actions. As regards remedial action cost sharing between TSOs, Stakeholder acknowledges that market participants are not primarily concerned by this matter; however, they are indirectly concerned, since Core TSOs consistently make the implementation of the coordinated RD & CT (in application of CACM Article 35 and SOGL Article 76) conditional to the approval of the associated cost sharing. As the present methodology does not bring any new element in application of SOGL Article 76(1)(b)(v) and only refers, in its Articles 8 and 38, to the cost sharing methodology pursuant to CACM Article 74 (which is not subject to public consultation), Stakeholder is not able to give any informed opinion on this topic, and notably not able to assess whether the cost sharing principles stated in SOGL Articles 76(1)(b)(v) and 76(2) are fulfilled or not. In any case, Stakeholder recalls that the implementation of the coordinated RD & CT is of major importance for the market, in particular in the context of the implementation of the 70% threshold foreseen in Article 16(8) of the new Electricity Regulation 2019/943, and that it cannot be delayed for any reason. Stakeholder therefore urges Core TSOs to find an agreement on the cost sharing principles and, if not possible in due time, to put in place interim provisions that enable the implementation of the coordinated RD & CT without delay. Finally, Stakeholder would like to mention a few minor points to be clarified in the proposed methodology: • in Article 15(4), RD & CT does not influence “network topology”. Would rather say “network state”; • Stakeholder thinks that Article 19 is only applicable for the intraday CROSAs, since a remedial action cannot be “Agreed” (in the sense of this ROSC methodology) ahead of the first CROSA performed in day-ahead; • in Article 21(2), Stakeholder would welcome more explanations on the reasons why two coordination runs are needed in day-ahead;

	• in Article 30(2), the wording should be adapted to reflect the fact that the targeted phenomenon is an uncertainty increase and not a reduction of the thermal limits of the XNEs (indeed, the events referred to do not reduce these thermal limits, they might even increase them, e.g. in case of a wind front). [1] For example, to ease the selection of the most efficient remedial actions for a given critical network element, TSOs could perform an offline pre-screening of the remedial action influence factor of a large set of redispatching units across each bidding zone, to be compared with the remedial action influence factor of the same volume of countertrading in the same bidding zone. If the difference remains systematically below a given threshold (e.g. 5%), then it might not be necessary to test every single redispatching action in the corresponding bidding zone, as countertrading (which is easier to activate) could deliver as efficiently as any of the redispatching units while providing also more consistent market price signals.