# Consultation Report on Channel ROSC Methodology

21 December 2019

# CONTENT

1. Introduction ..... 3

2. Received Responses ..... 3
2.1. General Feedback ..... 3
2.2. Specific Feedback ..... 4
2.2.1. Article 2 Definitions and interpretation ..... 4
2.2.2. Title 2 ..... 4
2.2.3. Article 5 Secured elements ..... 5
2.2.4. Article 8 Cross-border relevant network elements ..... 5
2.2.5. Article 12 Quantitative assessment of XRAs ..... 6
2.2.6. Article 15 Preparation and updates of IGMs by Channel TSOs ..... 6
2.2.7. Article 16 Preparation and update of remedial actions by Channel TSOs ..... 6
2.2.8. Article 19 Preparation and update of remedial actions by Channel TSOs ..... 6
2.2.9. Chapter 2 Coordination ..... 7
2.2.10. Article 21 General provisions of coordination process ..... 7
2.2.11. Article 23 Optimisation of remedial actions ..... **Error! Bookmark not defined.**
2.2.12. Article 27 Minimise incurred costs ..... **Error! Bookmark not defined.**
2.2.13. Article 29 RA effectivity ..... 7
2.2.14. Article 30 Robustness ..... 8
2.2.15. Article 31 Coordination of RAs ..... 8
2.2.16. Article 34 Outcome of validation ..... 9
2.2.17. Title 5 ..... **Error! Bookmark not defined.**
2.2.18. Article 39 Reporting ..... 9
2.2.19. Article 40 Implementation ..... 9

**GLOSSARY**

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

# 1. INTRODUCTION

This document is the consultation report for the Channel TSOs common methodology for regional operational security coordination in accordance with Article 76 of Commission Regulation (EU) 2017/1485 of 2 August 2017.

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

Via the ENTSO-E Consultation Platform, the public consultation document for the the Channel TSOs common methodology for regional operational security coordination was available to Channel stakeholders from the 4rd of October 2019 until the 4th of November 2019. In total, 1 stakeholder submitted his response in time.

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 Channel National Regulatory Authorities (NRAs) in a non-anonymised manner.

Main views and recurring comments have been summarized in this report. The Channel TSOs wish to clarify that the content of this document is intended to summarize the results obtained in the public consultation. The Channel 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 Channel TSOs and in addition a Channel TSOs answer to the stakeholders' response.

When stated "reject" in this Consultation Report it means Channel TSOs have discussed the comment but no update has been made to the Channel ROSC Methodology, in certain cases additional explanation has been added to the Explanatory Note. When stated "accept" it means Channel TSOs have made an update to the Channel 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 | Channel TSOs' answer |
|---|---|---|---|---|
| 1. | Stakeholders questioned 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 Channel day-ahead and intraday capacity calculation methodologies annexed to ACER's decision 02/2019) and the remedial action optimization performed during the CROSAs. | 1 | See Channel TSOs' answer | Channel 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 Channel ROSC tackle this. |
| 2 | Stakeholders commented Channel TSOs should also better explain the link between the ROSC methodology and the methodology for coordinated RD&CT pursuant to CACM Article 35 in the Channel region. | 1 | See Channel TSOs' answer | Channel TSOs respond that the methodology for coordinated RD&CT pursuant to CACM Article 35 in the Channel region defines how the Channel TSOs shall determine the available volume and cost of RD&CT that could be applied through Channel interconnector during the different |

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| | | | | time frame of CSA. This methodology also defines how the detection, coordination and activation of these RD & CT means will be done in the interim period starting from 2020 and till the implementation of the Channel ROSc methodology |

## 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 | Channel 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. | 1 | Accept. See Channel TSOs' answer | Channel 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 includes the coordination of RA while RSA only considers load flow and contigency 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. | 1 | Accept. See Channel TSOs' answer | Channel TSOs agree, but it clarifies that those constraints are from different origins. Channel TSOs have taken the comment into account and improved the clarity of the wording in the Methodology. |
| 5. | Stakeholders commented a part of the definition is missing in Article 2(2)(e). | 1 | Accept. See Channel TSOs' answer | Channel TSOs agree, this has been improved. |

### 2.2.2. Title 2

| Stakeholder response | | Number of stakeholder requesting | Action taken | Channel TSOs' answer |
|---|---|---|---|---|
| 6 | Stakeholders would welcome the confirmation of the following:<br><br>-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;<br><br>- additional intraday RSAs/CSAs are performed at a higher frequency (each hour) by each Channel 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 | 1 | Accept. See Channel TSOs' answer | Channel TSOs respond RSA is performed on a 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<br><br>CROSA is the full regional coordination process that will aim at identifying most effective and efficicent 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.<br><br>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. |

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| | the conditions (update of market schedules / renewable generation and consumption forecasts, unforeseen outages of generation facilities or network elements…). | | | |

### 2.2.3. Article 5 Secured elements

| Stakeholder response | | Number of stakeholder requesting | Action taken | Channel TSOs' answer |
|---|---|---|---|---|
| 7. | Stakeholders commented as regards the scope of the remedial action optimization, they 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.<br><br>(See Article 16.) | 1 | Partially accepted. See Channel TSOs' answer | Channel TSOs respond Secured elements or Channel 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 certain voltage level, with option to define rules of excluding them. Article 5.4. provide 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 an 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.<br><br>Concerning the declaration of non-shared or conditionally shared RA, Channel TSOs agree with stakeholder but it is impossible to define an exhaustive list of requirements/provisions. Channel 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, conditionnally shared with the related conditions and justification. |

### 2.2.4. Article 8 Cross-border relevant network elements

| Stakeholder response | | Number of stakeholder requesting | Action taken | Channel TSOs' answer |
|---|---|---|---|---|
| 8. | Stakeholders commented the concept of "secured element" seems to be redundant with the one of "XNE", as emphasized in Article 8(1). | 1 | Reject. See Channel TSOs' answer | Channel TSOs respond indeed the concept is redundant for Channel 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 Channel ROSC. For the Channel ROSC, XNE equals secured elements. |

### 2.2.5. Article 12 Quantitative assessment of XRAs

| Stakeholder response | | Number of stakeholder requesting | Action taken | Channel TSOs' answer |
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| 9. | 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? The MPP 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. | 1 | Reject. See Channel TSOs' answer | Channel TSOs will take the comment of stakeholders into account and provide additional explanation in the Explanatory Note. In the Channel ROSC Methodology however only the reference is made to Article 15 (4) CSAM. |

### 2.2.6. Article 15 Preparation and updates of IGMs by Channel TSOs

| Stakeholder response | | Number of stakeholder requesting | Action taken | Channel TSOs' answer |
|---|---|---|---|---|
| 10 | Stakeholders noted to adapt Article 15(4), RD & CT does not influence “network topology”. Would rather say “network state”; | 1 | Reject. See Channel TSOs' answer | Channel TSOs respond in order to avoid confusion with system state, Channel TSOs consider that network topology is a better wording. |

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

| Stakeholder response | | Number of stakeholder requesting | Action taken | Channel TSOs' answer |
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| 11 | Stakeholders commented as regards the scope of the remedial action optimization, the MPP 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 MPP’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.<br><br>(See Article 5.) | 1 | Partially accepted. See Channel TSOs' answer | Channel TSOs respond concerning the exclusion of cross border relevant network elements see Channel TSOs answer to Article 5.<br><br>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 conditionnaly shared with the related conditions and justification. |

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

| Stakeholder response | | Number of stakeholder requesting | Action taken | Channel TSOs' answer |
|---|---|---|---|---|
| 12 | 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) | 1 | Accept. See Channel TSOs' answer | Channel TSOs have deleted day-ahead. |

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| | ahead of the first CROSA performed in day-ahead. | | | |

### 2.2.9. Chapter 2 Coordination

| Stakeholder response | | Number of stakeholder requesting | Action taken | Channel TSOs' answer |
|---|---|---|---|---|
| 13 | Stakeholder would like Channel 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. | 1 | Reject. See Channel TSOs' answer | Channel 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, proportionnal 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 | Channel TSOs' answer |
|---|---|---|---|---|
| 14 | In Article 21(2), Stakeholders would welcome more explanations on the reasons why two coordination runs are needed in day-ahead. | 1 | Reject. See Channel TSOs' answer | Channel TSOs respond a coordination run consists of the following four steps:<br>- CGM building<br>- Power flow and security Analysis<br>- Remedial Action Optimization<br>- Inter-CCR/intra-CCR coordination.<br>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 Channel TSOs but also by the other CCRs and non-Channel TSOs. |

### 2.2.11. Article 29 RA effectivity

| Stakeholder response | Number of stakeholder requesting | Action taken | Channel TSOs' answer |
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| 15 | Stakeholders request Channel TSOs to explain what is exactly meant by the fact that the remedial actions' effectivity shall be "balanced with their direct costs". The MPP 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. | 1 | Reject. See Channel TSOs' answer | Channel 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.<br><br>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. |
| 16 | Stakeholders request Channel 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. | 1 | Reject. See Channel TSOs' answer | See Channel TSOs answer to Article 34. |

### 2.2.12. Article 30 Robustness

| Stakeholder response | | Number of stakeholder requesting | Action taken | Channel TSOs' answer |
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| 17 | 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? | 1 | Reject. See Channel TSOs' answer | Channel TSOs refer to the Explanatory Note where examples are provided how Article 30(1) can be tackled. |
| 18 | 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). | 1 | Partially accepted. See Channel TSOs' answer. | Channel 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, Channel 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". |

### 2.2.13. Article 31 Coordination of RAs

| Stakeholder response | Number of stakeholder requesting | Action taken | Channel TSOs' answer |
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| 19 | 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. | 1 | Accept. See Channel TSOs' answer | Channel TSOs have updated the Article 31 accordingly. |

### 2.2.14. Article 34 Outcome of validation

| Stakeholder response | | Number of stakeholder requesting | Action taken | Channel TSOs' answer |
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| 20 | 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. | 1 | Reject. See Channel TSOs' answer | Channel 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. |
| 21 | Define the "interim process". | 1 | Accept. See Channel TSOs' answer | Channel TSOs respond by “interim process”, the Fast activation process according to Article 37 is meant. To clarify the issue, Fast activation process term have been inserted into the Article instead. |

### 2.2.15. Article 39 Reporting

| Stakeholder response | | Number of stakeholder requesting | Action taken | Channel TSOs' answer |
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| 22 | 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. Channel TSOs 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 | 1 | Partially accepted. See Channel TSOs' answer | Channel TSOs will amend Article 39 to provide more details on the monitoring.<br>Channel TSOs will not provide optimization algorihm, once developed, in the Channel ROSC Methodology. |

### 2.2.16. Article 40 Implementation

| Stakeholder response | | Number of stakeholder requesting | Action taken | Channel TSOs' answer |
|---|---|---|---|---|
| 23 | In light of the complexity of the envisaged optimization process, the MPP would like to underline that the implementation of the coordinated costly remedial action optimization should not be delayed because of the time required to develop and test a too complex optimization algorithm. Indeed, a quick implementation is of major importance for the market, in particular in the context of the application of the 70% threshold foreseen in Article 16(8) of the new Electricity Regulation 2019/943. | 1 | Partially accepted. See Channel TSOs' answer | Channel TSOs added in Channel ROSC Methodology explicitly the required amendment. The amendment foreseen in 12 months will describe the provisions for the interim solution.<br>The stepwise approach considering the interim solution shall be developed and implemented in an estimated timeframe of 24 months after approval of Channel ROSC Methodology. |