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NON-PAPER OF ALL CORE REGULATORY AUTHORITIES

ON

**The CORE CCR TSOs' common methodology for
regional operational security coordination in
accordance with Article 76 of Commission
Regulation (EU) 2017/1485 of 2 August 2017**

“Core ROSC Methodology”

25 May 2020

1. INTRODUCTION AND LEGAL CONTEXT

This document describes views of Core Regulatory Authorities (hereafter Core NRAs) on a working RCC (Regional Coordination Committee) level on the Core Transmission System Operators' (hereafter Core TSOs) proposal for regional operational security coordination and organization for regional operational security coordination (hereafter ROSC proposal) pursuant to Article 76(1) of Regulation (EU) 2017/1485 of 2 August 2017 (hereafter SO GL).

The SO GL foresees the definition of a methodology for the regional operational security coordination that shall, where necessary, complement the methodologies developed in accordance with Articles 35 and 74 (hereafter RDCT methodologies) of Regulation (EU) 2015/1222 of 24 July 2015 (hereafter CACM Regulation). The Regulation (EU) 2019/943 of 5 June 2019 on the internal market for electricity strengthens the obligation for a regional operational security analysis by requesting the use of remedial actions to ensure minimum capacities. The related provisions are comforted by Article 16(4) that states: *"A coordinated and non-discriminatory process for cross-border remedial actions shall be applied to enable such [capacity] maximization"*.

The legal provisions that lay at the basis of this proposal for regional operational security coordination are Article 4, 6, 21, 23, 75, 76, 77 and 78 of SO GL as well as Article 35 and 74 of CACM Regulation. Articles 4, 76 and 77 of SO GL directly deal with the requirements of the proposal whereas the remaining Articles shall be considered along with the implementation of the ROSC proposal.

This non-paper shall provide important remarks of Core NRAs for an adoption of the ROSC proposal by ACER pursuant to Article 6(8) of the SO GL. This paper is intended to provide Core NRAs' information and opinions as support for the decision of ACER.

2. THE PROPOSAL FOR ROSC METHODOLOGY

Article 76(1) of SO GL requires that by three months after approval of the methodology for coordinated operational security analysis (hereafter CSAM) pursuant to Article 75(1) of SO GL the ROSC proposal will be developed. ACER issued its decision on CSAM on 21 June 2019. Following a request from all Core TSOs, the European Commission took note of the proposed delay and granted a submission of the ROSC methodology by six months after ACER's decision on CSAM. Consequently, the legal deadline for submitting the proposal on ROSC was 21 December 2019.

In line with Article 6(6) of the SO GL, the proposal must include a proposed timeline for its implementation and a description of the expected impact on the objectives of the SO GL.

The ROSC proposal was subject to public consultation between 23 September and 24 October 2019. Core NRAs provided a shadow opinion on the draft Core TSOs' proposals on 24 October 2019.

The date at which the last Core Regulatory Authority received the ROSC proposal was 31 January 2020. Consequently, a Core NRA decision is required by 31 July 2020. During the RCC meeting on 14 April 2020, Core NRAs took a decision for an active referral of the ROSC proposal to ACER.

Core NRAs agree that the ROSC proposal and the RDCT methodologies are interlinked and describe complementary processes. For instance, the methodology following Article 35 of the CACM Regulation and the ROSC methodology both describe the coordination of redispatching and countertrading. Network elements which are eligible for cost sharing according to Article 74 of the CACM Regulation must also be defined within the ROSC methodology. Core NRAs acknowledge the utmost importance of harmonization and consistency between these methodologies. It was therefore agreed, that such consistency would be best addressed in case the methodologies were dealt with together. Apart from that, Core NRAs largely appreciate the quality of the TSO proposal on ROSC. They still have comments which are included in the following section of this paper.

The ACER decisions on the pending RDCT methodologies are foreseen by 27 September 2020 and a resubmission of CSAM is expected by 18 December 2020 in order to complete the identification and definition of overlapping zones, network elements and remedial actions.

3. CORE NRAS' POSITION

Core NRAs expect the ROSC proposal to be detailed, consistent and fully compliant with the SO GL, in that sense also fulfilling all requirements and objectives of the relevant regulations. Considering the ongoing discussions in interfering processes, this non-paper tries to highlight the aspects of the methodology that are satisfying and well designed. Core NRAs main difficulty deals with the topic of cross-border relevance but additional points for potential improvement are also identified in the following section. Anyhow, this non-paper does not claim completeness.

A decision by ACER shall increase the overall quality of the methodology and ensure consistency with the overall European legislation. To support ACER on this, Core NRAs provide firstly common recommendations to which all Core NRAs jointly agree and secondly diverging opinions where no unanimity could be reached.

Core NRAs jointly agree

First, Core NRAs would like to highlight that the ROSC methodology constitutes a good proposal of generally high quality. The process leading to the submission included frequent interactions between the drafting team on TSO side and the representatives of regulatory authorities. This highly appreciated interaction might also have led to the fact that many points of the shadow opinion have been taken into account. Therefore, Core NRAs agree with the principles of the methodology, which should rather be complemented than questioned.

Classification secured and scanned elements

The relevance and impact of this Core ROSC proposal is stressed by the fact that it is considered as some sort of a role model for other CCRs. In fact, this foreseen alignment and harmonization of different regional methodologies immensely simplifies the required inter-CCR coordination. This inter-CCR coordination is an integral part of the resubmission on coordinated regional operational security analysis (CROSA) that is due by the end of 2020.

In general, Core NRAs support the presented concept of secured and scanned elements and welcome the harmonized definitions used across CCRs as proposed by ENTSO-E. Article 5 of the ROSC proposal defines the criteria for secured elements. On these elements, operational security limit violations will be managed in a coordinated way and at least on a subset, cost sharing will apply. Secured elements are elements with a voltage level higher than or equal to 220 kV, threshold defined in accordance with article 15(1) of CSAM. The mandatory set of secured elements includes all Core critical network elements (CNEs) as defined in the day-ahead and intraday capacity calculation methodology in accordance with Article 21 of CACM Regulation as well as the cross-border relevant network elements (XNEs) in accordance with the RDCT methodologies. More clarity on these elements can only be obtained through a decision on Article 35 CACM Regulation and the subsequent submission of the secured elements for Core as proposed in this ROSC proposal. The scanned elements, as defined in Article 6 of the ROSC proposal, represent a set of network elements that are monitored in order to prevent new or worsened operational security limit violations. Core NRAs understand that secured elements help to reduce the complexity of the optimization by restraining the domain for the congestion management and, at the same time, ensure the feasibility of the computed optimization.

Core NRAs would welcome aligned procedures for setting constraints on scanned elements, e.g. concerning acceptable overloads, to ensure a feasible and sufficient optimization result. The process for defining constraints as well as the exclusion and inclusion of scanned elements should be described in the ROSC proposal.

Core NRAs are not able to foresee and predict the final set of secured and scanned elements and it seems to be difficult to achieve a transparent and coherent process for the inclusion and exclusion of such elements, since only the connected TSOs have all required information on the subordinate voltage levels.

Timings for CROSA

Core NRAs welcome the specifications on the day-ahead and intraday CROSA as well as the update on the common grid model, following the shadow opinion. In Article 3(1)(a) the relevant articles within the ROSC proposal are identified. Concerning frequencies and timings there is a reference to the relevant articles of CSAM. The description of the process consisting of preparation, coordination and validation, including the update on the individual grid models, is deemed rather general, but sufficient for Core NRAs. The timing of the CROSAs should be coherent with the recomputation of the ID ATC values.

Classification of remedial actions

An essential precondition for a meaningful and efficient optimization is the availability of remedial actions for the CROSA. In particular, the access to remedial actions with cross-border relevance will influence the results of the optimization. The assessment of the cross-border relevance of remedial actions shall be conducted qualitatively or quantitatively following Article 11 and 12 of the ROSC proposal. Core NRAs are in favor of a qualitative approach for the assessment of cross-border relevance as well as the identification of the affected TSOs. The quantitative assessment follows the requirements pursuant to Article 15 of CSAM. Therefore, a threshold of 5% for the significance level of cross-border impact constitutes a default solution.

Core NRAs would like to raise the awareness to this critical assessment and stress the importance of a harmonized and coherent approach. Further alignment and an agreement on a quantitative approach would have facilitated a transparent and consistent assessment. In addition, the request of a more frequent update of the list of cross-border relevant remedial actions (XRAs), as stated in the shadow opinion, has not been fulfilled. For Core NRAs it remains unclear, how the qualitative assessment is conducted and how resulting evaluations can be representative for the varying situations within an entire year.

In addition, Article 2 (3)(b) of the ROSC proposal mentions constraints on remedial actions, which can arise due to technical, operational, procedural or legal reasons, but does not define this further. These constraints will affect the outcome of the analysis due to possible restrictions of available remedial actions. The outcome of the optimization is subject to these potential constraints for remedial actions or sets of remedial actions that can be individually defined. Core NRAs are aware that a variety of constraints, e.g. due to timings, technical limitations or sheer quantity, apply. NRAs acknowledge that the precise definition of these constraints is an essential part of the configuration and finalization of the optimization function. However, Core NRAs would have welcomed further details on these procedures.

Since the regional security analysis is one of the core processes and ensures operational system security in the end, there are multiple dependencies and interfaces with other processes and methodologies. Therefore, processes which run in parallel to the CROSA process and ROSC process and rely on their input require clearly defined interfaces, terms and conditions. Core NRAs welcome the clarifications on the exchange of data. This ensures that all processes are provided with the latest information e.g. concerning updates on individual grid models and availability of remedial actions and the calculation of intraday capacities.

Principles for the optimization

Furthermore, Articles 23–30 of this proposal state the principles of the remedial action optimization. In parallel to the definition of constraints on remedial actions, these principles, like cost efficiency, balance, effectivity and robustness will only be clear after the calibration of the model. Core NRAs acknowledge that a more specific definition is hardly possible at this point in time. Nevertheless, Core NRAs are highly interested in receiving more information on these principles when available especially since effectiveness of relieving measures and cost efficiency are at least to some extent conflicting objectives. The classification of remedial actions that simply refers to Article 22 SO GL is deemed sufficient.

Article 22 of SO GL also defines the curtailment of already allocated cross-zonal capacity as a category of remedial actions but the costs for curtailment are not yet described in this proposal and the only costs mentioned are those according to Article 74 CACM where Core TSOs refer to. As these measures could imply further agreements and are rather used in last resort cases, Core NRAs would like to know in

which conditions and how the curtailment of already allocated capacity as well as load shedding will be implemented in the optimization process.

Core NRAs do not jointly agree

Cross-border relevance

The majority of Core NRAs considers the requirement to determine the cross-border relevance of congestions pursuant to Article 76(2) SO GL as being not fulfilled. The ROSC proposal does not define cross-border relevant network elements that are considered to be at least a subset of the secured elements which fall under the cost sharing. Since this definition has neither been defined and approved according to Article 35 CACM Regulation nor been complemented in the ROSC proposal, these Core NRAs do not feel able to approve the current proposal. Besides, Article 15(2) of CSAM requests the definition of rules and/or criteria to establish cross-border relevant network elements within the regional ROSC proposals.

Some NRAs state that the definition should be in respect to Regulation (EU) 2019/943 and more explicitly Article 16(13). As stated in the Non-Paper for the RDCT methodologies, Core NRAs have diverging positions concerning the cross-border relevance of network elements. The positions vary from a narrow scope (network elements between bidding zones) over an alignment with the critical network elements according to the capacity calculation up to a broader scope of all jointly optimized network elements.

Some NRAs consider the requirement to determine the cross-border relevance of congestions pursuant to Article 76(2) SO GL fulfilled by the definition of a voltage level in the ROSC proposal and the pending definition in the RDCT methodologies.

One NRA considers that Article 76(2) of SO GL implies that cross-border relevant congestion is the congestion which appears after TSOs have solved non-cross-border relevant congestion, i.e. congestion that would appear in the absence of energy exchanges between control areas.

Operation and cooperation of RSCs

In principle, it is acknowledged that there are difficulties to provide further and more explicit details on the operation and cooperation of RSCs. The ongoing processes and outstanding definitions lead to this situation where the contractual framework is postponed. Nevertheless, some Core NRAs would like to point out that a description of an effective coordination and decision making process to resolve conflicting positions among RSCs is missing. Insofar as conflicting positions bear a potential risk for the system security, clear arbitration processes should be in place.

Some NRAs deem that requirements deriving from Article 77 SO GL will be fulfilled by the proposal on Regional Coordination Centers according to Regulation (EU) 2019/943 Article 35 and a potential amendment of the ROSC.

Monitoring and implementation

Core NRAs acknowledge that a precise definition of the monitoring and reporting requirements is deemed difficult at this point in time and that the overall objective of transparency would profit from further alignment and coordination with other reporting requirements. In order to deal with these uncertainties, Core TSOs have stated to submit an amendment by 12 months after the approval of the ROSC proposal. Nevertheless, the majority of Core NRAs would have welcomed to receive general guidelines and principles already in this proposal. Consequently, Core NRAs expect to be involved and consulted in the foreseen process to specify the details on the reporting requirements. It is worth mentioning that a framework should be dedicated to ensure that the forecasted volumes and prices for remedial actions are relevant and reliable.

Some NRAs would like to highlight that it is not clear which functionalities and procedures will already be established in the interim solution and which are foreseen in the target solution. Consequently, it is not possible to assess to which extent the interim solution provides an efficient cross-border optimization.

Some NRAs would like to have full transparency on the loading of the lines involved in the RAO-process throughout all time frames: from D2CF over DACF (before and after RAO) and IDCF and up to the real time snapshots. Statistical analyses of the deviations between the forecasts in the different time frames should be calculated by TSOs. A common maximum threshold of uncertainty should be established according to SO GL Art. 75(6) and a feedback loop for continuous improvement is to be made (SO GL Art. 70(5) and 70(6)).

At least one NRA thinks full transparency is needed on the definition of Fmax for all secured elements and that a harmonized approach (seasonal limits or preferably DLR) is needed to avoid discrimination.

Rules for exceptional situations

Some Core NRAs would like to point out, that the requirements pursuant to Article 23(4) and 23(6) of CSAM have not been fulfilled. According to these requirements, the ROSC proposal needs to define rules for exceptional situations in the intraday and day-ahead regional operational security analysis. These particular rules and processes to be applied in the intraday and day-ahead CROSA have not been defined in this ROSC proposal.