

**“SHADOW OPINION” OF ALL REGULATORY
AUTHORITIES COORDINATED THROUGH THE
CACM TF**

ON

**ALL TSOs’ DRAFT PROPOSALS FOR
CALCULATING SCHEDULED EXCHANGES RESULTING
FROM SINGLE DAY-AHEAD AND INTRADAY
COUPLINGS (SCH EXC)**

4 December 2017

DISCLAIMER: This document presents a shadow opinion of all Regulatory Authorities, coordinated through the CACM TF of ACER, on all TSOs’ draft proposals for the SCH EXC. This document does not represent a formal individual view of all Regulatory Authorities or an opinion of the Agency on the SCH EXC, and is without prejudice to individual decisions of all Regulatory Authorities or any opinion of the Agency on the formal all TSO proposals for the SCH EXC.

I. Introduction and legal context

Article 43(1) of Regulation 2015/1222¹ requires that by 16 months after the entry into force of this Regulation TSOs which intend to calculate scheduled exchanges resulting from day-ahead coupling shall develop a proposal for a common methodology for this calculation (SCH EXC).

Article 56(1) of the CACM Guideline requires that by 16 months after the entry into force of this Regulation TSOs which intend to calculate scheduled exchanges resulting from intraday coupling shall develop a proposal for a common methodology for this calculation (SCH EXC).

According to Article 9(7)(d) of the CACM Guideline these proposals must be subject to the approval of all Regulatory Authorities (NRAs) of the concerned region.

In line with Article 9(9) of the CACM Guideline the proposal must include a proposed timescale for its implementation and a description of the expected impact on the objectives of the CACM Guideline.

These Articles provide that, by 16 months after the entry into force of the CACM Regulation, i.e. by 14 December 2016, TSOs which intend to calculate scheduled exchanges shall develop a proposal for a common methodology for this calculation. Some NRAs subsequently received these methodologies for calculating scheduled exchanges resulting from single day-ahead and intraday coupling on 14 December 2016.

Following the submission of the methodologies, a letter was then sent by ACER on behalf of all NRAs to the European Commission on 14 March 2017 to ask for an interpretation on whether all TSOs, including those who did not submit the methodologies on 14 December 2016, should develop and submit for NRA approval a common methodology to calculate scheduled exchanges or not.

In its response of 1 June 2017, the European Commission stated that it is up to the NRAs to decide whether it is more efficient to involve all TSOs in the development of the scheduled exchanges methodologies or not. Thus, all NRAs have agreed that all TSOs should submit a common methodology for both day-ahead and intraday. In a letter dated 22 September 2017, all NRAs then requested all TSOs to submit a common methodology by 31 December 2017.

This document represents a 'shadow opinion' of all NRAs, coordinated through the CACM TF of ACER, on the all TSOs' draft SCH EXC proposals. This document does not represent a formal individual view of all NRAs or an opinion of the Agency on the SCH EXC, and is without prejudice to individual decisions of all NRAs or any opinion of the Agency on the formal all TSOs' proposals for the SCH EXC. Therefore, when the draft opinion refers to "all NRAs", this represents a coordinated view of NRAs as coordinated through the CACM TF of ACER in order to provide feedback to the all TSOs' draft proposal and to flag any concerns at this stage in order to support a smooth process for developing the final all TSOs' proposal.

II. All TSOs' proposals

This shadow opinion reacts to the draft all TSOs' proposals publically consulted between 3 November 2017 and 3 December 2017, as provided by Article 12 of the CACM Guideline.

III. All NRAs' shadow opinion

¹ "Commission Regulation (EU) 2015/1222 of 24 July 2015 establishing a guideline on capacity allocation and congestion management", hence referred to as "CACM Guideline".

It is the view of all NRAs that the SCH EXC methodologies should be consistent with the specific requirements set out in Article 43 and 56 of the CACM Guideline.

Objectives of the CACM Guideline

As a reminder, the general objectives laid out in Article 3 of the CACM Guideline are repeated:

- (a) **Promoting effective competition in the generation, trading and supply of electricity;**
- (b) **Ensuring optimal use of the transmission infrastructure;**
- (c) **Ensuring operational security;**
- (d) *Optimizing the calculation and allocation of cross-zonal capacity;*
- (e) **Ensuring fair and non-discriminatory treatment of TSOs, NEMOs, the Agency, regulatory authorities and market participants;**
- (f) *Ensuring and enhancing the transparency and reliability of information;*
- (g) **Contributing to the efficient long-term operation and development of the electricity transmission system and electricity sector in the Union;**
- (h) *Respecting the need for a fair and orderly market and fair and orderly price formation;*
- (i) **Creating a level playing field for NEMOs;**
- (j) *Providing non-discriminatory access to cross-zonal capacity*

All proposals must include a description of the expected impact on the objectives of the CACM Guideline. The objectives which all NRAs consider most strongly impacted by the SCH EXC are listed in **bold**. All NRAs consider these objectives relate to the need for scheduled exchanges not to affect the results of the day-ahead and intraday single couplings while allowing the scheduling between scheduling areas and between bidding zones for the TSOs. Scheduled exchanges should also enable the operation of multiple NEMOs within the same bidding zone.

Specific requirements

Day-ahead coupling

Article 43(2) of the CACM Guideline requires that *“the methodology shall describe the calculation and shall list the information which shall be provided by the relevant NEMOs to the scheduled exchange calculator established in accordance with Article 8(2)(g) and the time limits for delivering this information. The time limit for delivering information shall be no later than 15.30 market time day-ahead.”*

Article 43(3) requires that *“the calculation shall be based on net positions for each market time unit.”*

Article 8(2)(g) states that TSOs shall, *“where required, establish scheduled exchange calculators for calculating and publishing scheduled exchanges on borders between bidding zones in accordance with Articles 49 and 56.”*

Article 49 precises the calculation of scheduled exchanges resulting from single day-ahead coupling:

1. *“Each scheduled exchange calculator shall calculate scheduled exchanges between bidding zones for each market time unit in accordance with the methodology established in Article 43.”*
2. *“Each scheduled exchange calculator shall notify relevant NEMOs, central counter parties, shipping agents and TSOs of the agreed scheduled exchanges.”*

Intraday coupling

Article 56(2) of the CACM Guideline requires that *“the methodology shall describe the calculation and, where required, shall list the information which the relevant NEMOs shall provide to the scheduled exchange calculator and the time limits for delivering this information.”*

Article 56(3) requires that “the calculation of scheduled exchanges shall be based on net positions as specified in Article 52(1)(b).”

Article 52(1)(b) specifies that “All NEMO, as part of their MCO function, shall ensure the continuous trading matching algorithm produces at least “a single net position for each bidding zone and market time unit within the intraday market.”

Article 61 precises the calculation of scheduled exchanges resulting from single intraday coupling:

1. “Each scheduled exchange calculator shall calculate scheduled exchanges between bidding zones for each market time unit in accordance with the methodology established in Article 56.”
2. “Each scheduled exchange calculator shall notify relevant NEMOs, central counter parties, shipping agents, and TSOs of the agreed scheduled exchanges.”

Comments of all Regulatory Authorities on the draft proposals for day-ahead and intraday

On the format

All NRAs ask all TSOs to be extra careful of the wording when drafting the final proposals, as there are still typos in the proposals and the usage of defined terms (with capital letters) is not consistent. The structure of some articles should also be simplified (e.g. Article 4 and 7) to ensure the proposals are easy to understand.

On the content

Whereas

Whereas (1): This is a proposal on how to calculate scheduled exchanges of **all** TSOs but then only used by those, who intend to calculate scheduled exchanges. Furthermore, this proposal should not be “high-level methodology” but “the methodology”, that defines everything needed in order to enable TSOs to calculate scheduled exchanges. This should also be reflected in Whereas (5).

All NRAs ask all TSOs to further explain what is a prioritisation path and what rules could be used to determine the priority of a path (whereas 7). As a general remark, all scheduling constraints must be clearly explained and their treatment during the optimisation must be described (see Article 7 below) in this proposal.

All NRAs do not consider it relevant to mention that the Congestion Income Distribution methodology notes that Scheduled Exchanges may be required as an input as the CIDM is out of the scope of this methodology (whereas 9). All relevant downstream uses for Scheduled Exchanges should be included in an Explanatory note, however (see further below).

Article 2 – Definitions and interpretation

All NRAs request all TSOs to clarify the definition 2 (c) “relevant NEMOs” is unclear as, by definition, all NEMOs are responsible for the market coupling operator function.

All NRAs request all TSOs to provide a definition for 2 (a) “NEMO trading hub” consistent with the one provided by the NEMOs on the all NEMOs proposal for the algorithm development according to Article 37 of CACM.

All NRAs request all TSOs to make reference to SO GL with regards to the definition of “scheduling area”.

Article 3 – List of information required from relevant NEMOs

All NRAs request all TSOs to clarify the status of the information they ask from the NEMOs. Indeed, according to CACM, the only mandatory information that algorithm shall provide is the net position and the price per bidding zone. In the case TSOs request more data from NEMOs than CACM requires, TSOs should explain which arrangements they would put in place in order to obtain the cooperation of the NEMOs. In the case NEMOs agree to provide the additional data, as it is foreseen in the current algorithm proposal yet to be approved by all NRAs, TSOs should clarify what would be the status of the collaboration between TSOs and NEMOs (e.g. a delegation of task according to Article 81 of CACM).

All TSOs should also clarify who will provide the information to the Scheduled Exchange Calculator and all TSOs.

Regarding the provision establishing the determination of net positions per scheduling area by the NEMOs as foreseen in the proposal, there are some doubts that they can be fulfilled for all the scheduling areas and all the TSOs. As an example, there is no NEMO hub active in Luxembourg (market participants nominate in the Amprion zone to deliver Luxembourg), and as such NEMOs cannot determine the net position of the scheduling area of the Luxembourgish TSO Creos. The exchanges between the two scheduling areas are carried out between BRPs of Amprion and Creos as described in the corresponding Multi NEMO Arrangement for the bidding zone DE/AT/LU. Therefore, all NRAs ask all TSOs to elaborate on this and come with a proposal that applies to situations where there are several scheduling areas within one bidding zone while there is no active NEMO hub for at least one of those scheduling areas.

Article 4 – Scheduled exchange calculator

All NRAs ask all TSOs to clarify the process to set up scheduled exchange calculators and to add the relevant references to CACM (e.g. Article 8.2(g)).

All NRAs ask all TSOs also to clarify the scope of a scheduled exchange calculator's responsibility in terms of tasks and area of operation.

All NRAs wonder why the TSOs are setting two different deadlines, 13:00 and 15:30, in the proposal, as both are compliant with CACM.

All NRAs ask all TSOs to clarify the sentence "The Scheduled Exchange Calculator role shall evolve in line with single day-ahead market coupling moving stepwise towards pan-European level."

All NRAs ask all TSOs to clarify the sentence "TSOs of a given BZ border or scheduling area border that do not apply the same option as defined in article 5 have to agree on specific arrangement for their scheduling process" as it seems as if other scheduled exchange calculation can occur than the one described in the proposal, which is not acceptable.

All NRAs also ask all TSOs to clarify what are the "bilateral scheduled exchanges" in comparison with the "scheduled exchanges".

Article 5 – General principles for calculation of scheduled exchanges

All NRAs request all TSOs to clearly state in the proposal which TSO will use which option at the relevant level (by capacity calculation region, by border, etc.).

As a general remark, article 5 of the proposal lacks clarity and should be widely reworded. TSOs should in particular clearly separate the different cases (bidding zone, HVDC cable, etc.) and clarify all aspects related to scheduled exchange calculator

All NRAs request all TSOs to clarify what would be the additional scheduling constraints and/or restrictions used by the TSOs and the justification to do so as for now it does not seem justified.

All NRAs also ask all TSOs to clarify what is the "designated scheduled exchanges calculator" in comparison with the "scheduled exchanges calculator".

Article 6 – Methodology for calculating scheduled exchanges between scheduling areas, bidding zones and NEMO trading hubs resulting from single day-ahead/intraday coupling

All NRAs are of the opinion that the methodologies proposed by all TSOs do not describe the calculation but only principles that the calculation should be in line with. Therefore, TSOs shall further develop the methodologies to include a proper description of the calculation, including further detail on the mathematical equations used.

In particular, all NRAs request all TSOs to clarify what are the scheduling constraints and how they are taken into account in the calculation of scheduled exchanges.

Article 7 – Calculation of scheduled exchanges

Article 7.1 - Calculation of scheduled exchanges between bidding zones

All NRAs request all TSOs to clarify the aim of the calculation and to explain the link with the cost coefficient. All parameters in the equations shall at best be clearly defined or at least TSOs shall indicate how they will determine them. All TSOs shall also clearly define the perimeter of the calculation (the whole Europe, per CCR or per bidding zone border) and any sub-parameters for each level of calculation. All NRAs also request TSOs to clearly describe the whole optimization problem, including the treatment of all the possible scheduling constraints and /or restrictions.

All NRAs ask all TSOs to explain why the scheduling restrictions are defined per bidding zone border at the day-ahead timeframe and per CCR at the intraday timeframe.

All NRAs ask all TSOs to include in the target function the 'indices of summation', including the 'lower bounds of summation' and the 'upper bounds of summation' and subindices of variables.

In any case a close coordination with NEMOs shall be mandatory to ensure consistency of all terms and definitions used in the methods of CACM GL. This for example concerns the NEMO Algorithm proposal that refers to Scheduled Flows in relation to Schedule Exchanges.

Article 7.2 - Calculation of scheduled exchanges between scheduling areas

All NRAs request all TSOs to clarify the aim of the calculation and to explain the link with the cost coefficient. All parameters in the equations shall at best be clearly defined or at least TSOs shall indicate how they will determine them.

Here again, the net position per scheduling area parameter should be revised in relation with the comment made in article 3.

Article 7.3 - Calculation of scheduled exchanges between NEMO trading hubs

All NRAs request all TSOs to indicate how scheduled exchanges between NEMO trading hubs will be calculated.

Article 8 – Publication and implementation of the DA/ID scheduled exchanges calculation methodology proposal

All NRAs ask all TSOs to clarify the implementation timeline and provide greater detail on how the methodology will be implemented and Scheduled Exchange Calculators will be set up (see also comments on Article 4). The potential links between the SCH EXC methodology and the implementations of the capacity calculation methodologies, the algorithm methodology and the multi NEMO arrangements should be detailed. In addition, the paragraph on publication is not needed as it repeats CACM.

Addition of an explanatory note

Formally an explanatory note does not form part of the proposal all NRAs need to approve. However, for the sake of clarity, all NRAs will welcome that the final proposals are accompanied by an explanatory note.

In particular, all NRAs consider it currently unclear from the proposal what the purpose of scheduled exchange calculations are and what scheduled exchanges are used for. This should be clarified and interfaces with processes or entities making use of scheduled exchanges shall be described. It would be also useful if TSOs described the current situation regarding the calculation of scheduled exchanges across Europe and put this state of play into the Explanatory Note.

Conclusions

All NRAs are of the opinion that the content of the proposals should be further developed.

All NRAs welcome the description of the two options to calculate scheduled exchanges. However, all NRAs would expect that the methodologies include a proper description of the calculation of scheduled exchanges for both day-ahead and intraday. When reading the proposals, it shall be clear which TSO will use which option and how the scheduled exchanges will be calculated between given bidding zones / scheduling area / NEMO trading hubs. All NRAs cannot accept that only equations with undefined parameters are described.

All NRAs also request all TSOs to clarify the status of the information to be provided by the NEMOs as it goes beyond the CACM requirements.

More generally, all NRAs welcome further discussion with TSOs/ENTSO-E to understand the draft proposals, in particular with respect to the feedback provided in this shadow opinion. As all NRAs ask for the introduction of a description of the calculation, all NRAs would also welcome that another draft of the proposals is communicated to NRAs before the official CACM Guideline submission deadline, at the very least regarding these specific parts of the corresponding methodologies.