

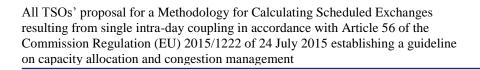
European Network of Transmission System Operators for Electricity

# All TSOs' proposal for a Methodology for Calculating Scheduled Exchanges resulting from single intra-day coupling in accordance with Article 56 of the Commission Regulation (EU) 2015/1222 of 24 July 2015 establishing a guideline on capacity allocation and congestion management

02/11/2017

### DISCLAIMER

This document is released on behalf of the all transmission system operators ("TSOs") only for the purposes of the public consultation on the all TSOs' proposal of a methodology for calculating Scheduled Exchanges resulting from single intraday coupling in accordance with Article 56 of the Commission Regulation (EU) No 2015/1222 of 24 July 2015 establishing a guideline on capacity allocation and congestion management ("Regulation 2015/1222"). This version of the Scheduled Exchange Calculation Methodology does not in any case represent a firm, binding or definitive TSOs' position on the content.





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TSOs which intend to calculate Scheduled Exchanges resulting from single intraday coupling, taking into account the following,

## Whereas

- This document is a common proposal developed by the Transmission System Operators (hereafter referred to as "TSOs"), which intend to calculate Scheduled Exchanges resulting from single intraday coupling. The document provides a high-level methodology for calculating Scheduled Exchanges resulting from the single intraday coupling ("hereafter referred to as "ID Scheduled Exchanges Calculation Methodology") in accordance with Article 56 of Commission Regulation (EU) 2015/1222 establishing a guideline on Capacity Allocation and Congestion Management (hereafter referred to as "Regulation 2015/1222"). This proposal is hereafter referred to as "ID Scheduled Exchanges Calculation Methodology Proposal".
- 2. The ID Scheduled Exchanges Calculation Methodology Proposal, in line with Article 56 of Regulation 2015/1222, accommodates situations where there are more than one Nominated Electricity Market Operator (hereafter referred to as "NEMO") designated and/or offering intraday trading services in a particular geographic area. In addition, according to Article 4(1) of Regulation 2015/1222, multiple NEMOs can be designated to perform single intraday coupling in a Member State. For each NEMO, a NEMO Trading Hub shall be defined. Where multiple NEMOs operate within a geographic area, there shall be multiple NEMO Trading Hubs within that geographic area.
- 3. The ID Scheduled Exchanges Calculation Methodology Proposal takes into account the general principles, goals and other methodologies reflected in Regulation 2015/1222. The goal of Regulation 2015/1222 is the coordination and harmonisation of capacity calculation and allocation in the day-ahead and intraday cross-border markets.
- 4. The ID Scheduled Exchanges Calculation Methodology Proposal recognises that there are two options available for the production of Scheduled Exchanges:
  - i. The Single Intraday Coupling Solution<sup>1</sup>, will produce allocated capacities in the form of allocated flows on relevant Bidding Zone borders. These allocated capacities shall be validated by particular TSOs and used as the Scheduled Exchanges resulting from the single intraday coupling for that market time unit
  - ii. Alternatively, net positions of Bidding Zones, Scheduling Areas and NEMO Trading Hubs, allocated capacities in the form of allocated flows into and out of individual relevant DC network elements (operated in DC mode) and allocated capacities in the form of allocated flows on relevant Bidding Zone borders (difference in flows in/out reflecting losses where applicable) shall be produced as an output of the intraday market coupling. These net positions and allocated capacities shall be used as an input into the Scheduled Exchange calculation by the Scheduled Exchange Calculator.

<sup>&</sup>lt;sup>1</sup> Implementation of Cross Border Intraday Solution for single intraday coupling is the aim of project XBID subject to Market Coupling Operator Plan approval



This ID Scheduled Exchanges Calculation Methodology Proposal provides the common methodology framework for the production of Scheduled Exchanges by the Scheduled Exchange Calculator. According to Article 56 of the Regulation 2015/1222, this is a methodology for those TSOs which intend to calculate scheduled exchanges resulting from single intraday coupling. According to Article 2(32), a 'scheduled exchange' means an electricity transfer scheduled between geographic areas, for each market time unit and for a given direction. This ID Scheduled Exchanges Calculation Methodology Proposal also provides for the calculation of Scheduled Exchanges per NEMO Trading Hub. While a NEMO Trading Hub cannot be interpreted as a geographic area, the calculation of Scheduled Exchanges per NEMO Trading Hub is essential in order to accommodate multi-NEMO arrangements within Bidding Zones and Scheduling Areas.

- 5. The ID Scheduled Exchanges Calculation Methodology shall serve as a common high level calculation methodology to be applied by the Scheduled Exchange Calculator who shall be responsible for the calculation of Scheduled Exchanges resulting from single intraday coupling as per Article 61 of Regulation 2015/1222.
- 6. The ID Scheduled Exchanges Calculation Methodology Proposal shall consider situations where the Bidding Zone is equal to the Scheduling Area, as well as where there are multiple Scheduling Areas within a Bidding Zone.
- 7. Net positions and prices are fixed by the results from the single intraday coupling. Furthermore, cross zonal capacities and allocation constraints have already been taken into account by the continuous trading matching algorithm. Cross zonal capacities and allocation constraints shall therefore not be impacted by the calculated scheduled exchanges nor the 'Scheduling Restrictions'.

'Scheduling Restrictions' may include:

- i. Prioritisation Path: the prioritisation of a given path among all possible paths to transfer a net position from a source area to a sink area;
- ii. Shortest Path: the minimisation of a number of areas involved in transferring a net position from a source area to a sink area;
- iii. Intuitiveness: the requirement that net positions are always transferred from low price areas to high price areas.
- 8. According to Article 9(9) of Regulation 2015/1222, the proposed timescale for the implementation of the proposed ID Scheduled Exchanges Calculation Methodology shall be included and can be found in Article 8 of the ID Scheduled Exchanges Calculation Methodology Proposal.
- 9. The Congestion Income Distribution Methodology provided according to Article 73 of the Regulation 2015/1222, notes that when calculating the Congestion Income per Bidding Zone border, Scheduled Exchanges may be required as an input. Where the Single Intraday Coupling Solution produces scheduling information in the form of Scheduled Exchanges, these Scheduled Exchanges shall be used as an input.



- 10. The implementation of ID Scheduled Exchanges Calculation Methodology could use the solutions developed for algorithm proposal in accordance with Article 37, arrangements developed in accordance with Article 57 for more than one NEMO within a bidding zone and arrangements developed for clearing and settlement between central counter parties and shipping agents in accordance with Article 77. Thus the implementation should happen in co-operation with NEMOs applying common solutions to ensure consistency and alignment in flow calculations.
- 11. According to Article 9(9) of Regulation 2015/1222, the expected impact of the proposed ID Scheduled Exchanges Calculation Methodology, on the objectives of Regulation 2015/1222, shall be described.
  - Article 3(a) of Regulation 2015/1222 aims at promoting effective competition in the generation, trading and supply of electricity.
    - The ID Scheduled Exchanges Calculation Methodology, as it is derived from the results of single intraday coupling, does not impact on competition in the generation, trading and supply of electricity.
  - Article 3(b) of Regulation 2015/1222 aims at ensuring optimal use of the transmission infrastructure.
    - The Scheduled Exchanges resulting from the ID Scheduled Exchanges Calculation Methodology are derived from the results of the single intraday market coupling i.e they are based upon:
      - Net positions of Bidding Zones, Scheduling Areas and NEMO Trading Hubs;
      - Allocated capacities in the form of allocated flows, into and out of individual relevant DC Network Elements and on relevant Bidding Zone borders (difference in flows in/out reflecting losses where applicable)
  - Article 3(c) of Regulation 2015/1222 aims at ensuring operational security.
    - The ID Scheduled Exchanges Calculation Methodology is carried out by the Scheduled Exchange Calculator following receipt of the outputs itemised within the list of information required from relevant NEMOs as outlined in Article 3 of this ID Scheduled Exchanges Calculation Methodology. This list of information provided by the relevant NEMOs to the Scheduled Exchange Calculator shall result from completion of the single intraday market coupling session where all constraints defined by TSOs in order to maintain operational security shall be duly respected. The ID Scheduled Exchanges Calculation Methodology shall be initiated post single intraday coupling and shall have no influence on operational security under Regulation 2015/1222.
  - Article 3(d) of Regulation 2015/1222 aims at optimising the calculation and allocation of cross zonal capacity.
    - Scheduled Exchanges resulting from single intraday coupling shall not modify, but only duly reflect the results of the single intraday market coupling session.



- Article 3(e) of Regulation 2015/1222 aims at ensuring fair and non-discriminatory treatment of TSOs, NEMOs, the Agency, regulatory authorities and market participants.
  - The ID Scheduled Exchanges Calculation Methodology shall be fair, transparent and based on the results of single intraday coupling. Additionally, where required under certain market settlement regimes, the calculation may be performed at NEMO Trading Hub level, in order to allow the reconciliation of Scheduled Exchanges per NEMO and therefore facilitating multi-NEMO scenarios in such contexts.
- Article 3(f) of Regulation 2015/1222 aims at ensuring and enhancing the transparency and reliability of information.
  - The ID Scheduled Exchanges Calculation Methodology comprises a step-wise, topdown approach (from Bidding Zone, to Scheduling Area, to NEMO Trading Hub) for the calculation of Scheduled Exchanges which ensures and enhances the transparency and reliability of the ID Scheduled Exchanges Calculation Methodology.
- Article 3(g) of Regulation 2015/1222 aims at contributing to the efficient long-term operation and development of the electricity transmission system and electricity sector in the Union.
  - The ID Scheduled Exchanges Calculation Methodology shows clear cross-Network Code thinking in order to contribute to the efficient development of a single intraday electricity market in Europe. The ID Scheduled Exchanges Calculation Methodology, through its construction facilitates the efficient long-term operation and development of the European transmission system.
- Article 3(h) of Regulation 2015/1222 aims at respecting the need for a fair and orderly market and fair and orderly price formation.
  - The ID Scheduled Exchanges Calculation Methodology does not interfere with or compromise a fair and orderly market and price formation as it has no influence on the results of single intraday coupling.
- Article 3(i) of Regulation 2015/1222 aims at creating a level playing field for NEMOs.
  - The ID Scheduled Exchanges Calculation Methodology creates a level playing field for NEMOs as it has no influence on the results of single intraday coupling. Additionally, the ID Scheduled Exchanges Calculation Methodology supports scenarios where there are multiple NEMOs within a Bidding Zone or Scheduling Area.
- Article 3(j) of Regulation 2015/1222 aims at providing non-discriminatory access to crosszonal capacity.
  - The ID Scheduled Exchanges Calculation Methodology does not interfere with the provision nor allocation of cross-zonal capacity.



# SUBMIT THE FOLLOWING ID SCHEDULED EXCHANGES CALCULATION METHODOLOGY TO ALL RELEVANT REGULATORY AUTHORITIES:

# **Article 1 - Subject matter and scope**

The ID Scheduled Exchanges Calculation Methodology, as determined in this ID Scheduled Exchanges Calculation Methodology Proposal shall be considered as the common proposal of all TSOs, for those TSOs which intend to calculate Scheduled Exchanges resulting from single intraday coupling, in accordance with Article 56 of Regulation 2015/1222. The outputs of the applied ID Scheduled Exchanges Calculation Methodology shall be:

- a) Calculation of Bilateral Scheduled Exchanges between Bidding Zones
- b) Calculation of Bilateral Scheduled Exchanges between Scheduling Areas
- c) Calculation of Bilateral Scheduled Exchanges between NEMO Trading Hubs

The scope of the ID Scheduled Exchanges Calculation Methodology does not extend to the assignment of roles and responsibilities to specific parties. Neither does the scope attempt to provide a governance framework for specific roles or responsibilities. These aspects shall be defined by the TSOs, where required, and in accordance with Article 8(2g) of Regulation 2015/1222.

This ID Scheduled Exchanges Calculation Methodology shall apply to TSOs which intend to calculate Scheduled Exchanges resulting from single intraday coupling using the allocated flows calculated by the intra-day coupling algorithm or setting scheduled exchanges calculator.

### **Article 2 - Definitions and interpretation**

- For the purposes of this ID Scheduled Exchanges Calculation Methodology, terms used shall have the meaning of the definitions included in Article 2 of Regulation 2015/1222, Article 3 of Regulation (EU) 2017/1485, Commission Regulations (EU) 543/2013 and (EU) 1227/2011. In addition, the following definitions shall apply:
  - a) 'NEMO Trading Hub' shall be defined as 'a combination of a NEMO and a scheduling area (where applicable scheduling area is a bidding zone)'.
  - b) 'Scheduling Restrictions' shall be defined as restrictions applied by the Scheduled Exchange Calculator in order to calculate Scheduled Exchanges resulting from market coupling, in such a way that the results are unique and do not impact on the market coupling results. These restrictions may include prioritisation path, shortest path or intuitiveness
  - c) 'Relevant NEMOs' shall be defined as 'NEMOs responsible for the market coupling operator function'.
  - d) 'Bilateral Scheduled Exchanges' shall be defined as 'Scheduled Exchanges between one Bidding Zone, Scheduling Area or NEMO Trading Hub and another neighbouring Bidding Zone, Scheduling Area or NEMO Trading Hub'.



- e) 'Neighbouring Scheduling Areas / Bidding Zones' shall be defined as 'a Scheduling Area or Bidding Zone directly connected to another Scheduling Area / Bidding Zone via at least one AC or DC interconnector'.
- f) 'Neighbouring NEMO Trading Hub' shall be defined as 'a NEMO Trading Hub connected to another NEMO Trading Hub, either as part of the same Scheduling Area or Bidding Zone, or as part of a Neighbouring Scheduling Area or Bidding Zone'.
- 2. The term 'Scheduled Exchange' is defined within Article 2 of Regulation 2015/1222. For the purposes of the ID Scheduled Exchanges Calculation Methodology Proposal, the term 'geographic areas' is interpreted as meaning both Scheduling Area, as defined by this ID Scheduled Exchanges Calculation Methodology Proposal and Bidding Zone, as defined in Commission Regulations (EU) 543/2013. It is acknowledged that the NEMO Trading Hub is not equal to a geographic area, but characterized by location within the specific geographic area such as Bidding Zone and Scheduling Area. The notion of 'NEMO Trading Hub' is required in order to ensure proper functioning of post market coupling processes under market settlement regimes where multiple NEMOs are active in a Bidding Zone or Scheduling Area in accordance with the requirements contained within Article 57 of Regulation 2015/1222.
- 3. In this ID Scheduled Exchanges Calculation Methodology Proposal, unless the context requires otherwise:
  - a) the table of contents and headings are inserted for convenience only and do not affect the interpretation of this methodology for the calculation of Scheduled Exchanges from single intraday coupling proposal; and
  - b) any reference to legislation, regulations, directive, order, instrument, code or any other enactment shall include any modification, extension or re-enactment of it then in force.

# **Article 3 - List of Information Required from Relevant NEMOs**

The Relevant NEMOs shall provide the following information, resulting from the single intraday market coupling algorithm to the Scheduled Exchange Calculator and all TSOs, for each market time unit, in order to perform the ID Scheduled Exchanges Calculation:

- Rounded and unrounded net position per Scheduling Area;
- Rounded and unrounded net position per Bidding Zone;
- Rounded and unrounded net position per NEMO Trading Hub;
- Allocated capacities, in the form of allocated flows into and out of individual relevant DC network elements (difference in flows in/out reflecting losses where applicable);
- Allocated capacities, in the form of allocated flows on relevant Bidding Zone borders (flows in/out reflecting losses where applicable)<sup>2</sup>

<sup>&</sup>lt;sup>2</sup> Requirement valid irrespective of capacity calculation approach applied, i.e. Coordinated Net Transmission Capacity' or Flow-based.



The receipt of this information is essential in order for the Scheduled Exchange Calculator to perform the calculation of Scheduled Exchanges.

# **Article 4 - Scheduled Exchange Calculator**

TSOs which intend to calculate Scheduled Exchanges setting the Scheduled Exchange Calculator shall establish the Scheduled Exchange Calculator.

The Scheduled Exchange Calculator role shall evolve in line with single intraday market coupling moving stepwise towards pan-European level.

The ID Scheduled Exchanges Calculation shall be initiated upon receipt of the items included within the list of requirements from relevant NEMOs, pursuant to Article 3.

The Scheduled Exchange Calculator shall receive the list of information outlined in Article 3 of this ID Scheduled Exchanges Calculation Methodology Proposal by 5 minutes after intraday cross-zonal gate closure.

The Scheduled Exchange Calculator shall notify the results of the ID Scheduled Exchanges Calculation to relevant NEMOs, central counter parties, shipping agents and TSOs within 3 minutes after delivery of the information listed in Article 3 by the relevant NEMOs. TSOs will use these results for their scheduling process on each border, when applicable. TSOs of a given bidding zone or scheduling area border that don't apply the same option have to agree on specific arrangement for their scheduling process. The results of the Scheduled Exchange Calculator shall be (for each market time unit):

• Bilateral Scheduled Exchanges per DC network element, per Scheduling Area border, per Bidding Zone border and between NEMO Trading Hubs;

### **Article 5 – General Principles for Calculation of Scheduled Exchanges**

This common methodology describes the two options foreseen by TSOs for the calculation of scheduled exchanges:

1. Setting Scheduled Exchange Calculator:

The Scheduled Exchange Calculator shall, on request of TSOs which intend to calculate Scheduled Exchanges, calculate the Scheduled Exchanges on the relevant Bidding Zone or Scheduling Areas borders and between NEMO Trading Hubs according to the following principles:

- Scheduled Exchanges already validated by TSOs using the allocated flows calculated by the intraday coupling algorithm on relevant Bidding Zone shall not be impacted by the ID Scheduled Exchanges Calculation.
- A Bilateral Scheduled Exchange for a given DC network element, Scheduling Area border, Bidding Zone border, or between NEMO Trading Hubs shall only be calculated by the designated Scheduled Exchange Calculator.
- The calculation of Scheduled Exchanges shall be carried out by the Scheduled Exchange Calculator such that the constraints described in Article 5, Article 6 and Article 7 of this ID Scheduled Exchanges Calculation Methodology proposal are respected. Where relevant, Scheduled Exchange



Calculator shall coordinate to ensure that the specific implementation of the methodology they apply respectively fulfils this principle.

- The ID Scheduled Exchanges Calculation as described in Article 6 and Article 7 shall respect the net position of the Scheduling Area, Bidding Zone and NEMO Trading Hub and allocated capacities, both in the form of allocated flows on DC network elements (operated in DC mode) and in the form of allocated flows on relevant Bidding Zone borders (difference in flows in/out reflecting losses where applicable) resulting from the single intraday coupling. However, for cross border HVDC cables within an area applying Flow Based and where the impact of an exchange over the HVDC cable is considered during Flow Based Allocation, the Scheduled Exchanges over the respective Bidding Zone Border may differ from the allocated flow over the interconnector. This allows, if configured as such, a calculation based only on net positions of the Scheduling Area, Bidding Zone and NEMO Trading Hub, a set of constraints and allocated capacities in the form of allocated flows on relevant Bidding Zone borders (as for other AC interconnectors).
- Scheduled Exchanges across a Bidding Zone border, where one Bidding Zone has multiple Scheduling Areas, shall be consistent i.e. the Scheduled Exchanges shall be calculated by a designated Scheduled Exchange Calculator and the sum of the Scheduled Exchanges on the Scheduling Area borders corresponding to this Bidding Zone border shall equal the Scheduled Exchange on this Bidding Zone border.
- When applicable, the relevant TSOs which intend to calculate Scheduled Exchanges resulting from single intraday coupling shall identify to the Scheduled Exchange Calculator all relevant constraints considered for allocation and possible additional 'Scheduling Restrictions'. Any additional 'Scheduling Restrictions' shall be justified by the relevant TSOs and communicated in a transparent way to relevant stakeholders.
- 2. Using the allocated flows calculated by the intra-day coupling algorithm:

In this case, TSOs shall use the allocated capacities in the form of allocated flows received from the relevant NEMOs as stipulated under Article 3 of this ID Scheduled Exchanges Calculation Methodology and calculated in accordance with Article 37 of Regulation 2015/1222

# Article 6 - Methodology for calculating Scheduled Exchanges between Scheduling Areas, Bidding Zones and NEMO Trading Hubs resulting from single intraday coupling

The Scheduled Exchange Calculator shall, on request of the relevant TSOs which calculate Scheduled Exchanges by setting the Scheduled Exchange Calculator, calculate the Scheduled Exchanges according to the calculation set forth below. This calculation shall respect the 'Scheduling Restrictions' defined in Article 5 and shall be performed per market time unit:

1. The Scheduled Exchange Calculator shall calculate respective schedules from the available input for each Bidding Zone, Scheduling Area and NEMO Trading Hub as defined by Article 3. The 'SEC Net Position within a CCR' shall equal the total volume of Scheduled Exchanges on relevant borders for which the Scheduled Exchange Calculator shall calculate the Scheduled Exchanges. The calculation shall respect and be compliant with the Scheduled Exchanges already validated by relevant TSOs using the allocated flows calculated by the intra-day coupling algorithm.



- 2. The Scheduled Exchange Calculator shall calculate the Bilateral Scheduled Exchanges between the Bidding Zones duly respecting defined 'Scheduling Restrictions'.
- 3. The calculation of the Bilateral Scheduled Exchanges between Scheduling Areas of the CCR shall follow the principles described in Article 7.2
- 4. The calculation of Bilateral Scheduled Exchanges between NEMO Trading Hubs of the CCR shall follow the principles described in Article 7.3
- 5. Scheduled Exchanges shall always be calculated for a specific direction i.e. scheduled exchange from / to.

# **Article 7 Calculation of Scheduled Exchanges**

The ID Scheduled Exchanges Calculation Methodology, in accordance with Article 56 of Regulation 2015/1222, shall be based on a step-wise ID Scheduled Exchanges Calculation as described in Article 6.

# Article 7.1 Calculation of Scheduled Exchanges between Bidding Zones

Scheduled Exchange Calculator shall calculate the Scheduled Exchanges between the Bidding Zones based on Bidding Zone Net Positions provided by NEMOs according to Article 3 for those TSOs which calculate Scheduled Exchanges by setting the Scheduled Exchange Calculator. This calculation shall optimise the Scheduled Exchanges between the Bidding Zones respecting the Scheduling Restrictions defined per respective CCR.

The calculation problem shall be defined in such a way that congestion income distribution as described in the Congestion Income Distribution Methodology provided according to Article 73 of the Regulation 2015/1222 is not impacted. When considering the Coordinated Net Transmission Capacity Approach, where a price difference exists between two Bidding Zones, all the capacity available for market coupling on the Bidding Zone Border has been fully utilised. Hence, if there is a price difference between two Bidding Zones, within a CCR applying Coordinated Net Transmission Capacity Approach, then the Scheduled Exchanges shall be equal to the allocated flows on respective border.

The optimisation applied for calculation of the Scheduled Exchanges shall aim to minimise the Scheduled Exchanges between the involved Bidding Zones. For this minimisation, the Scheduled Exchanges within the CCR for which TSOs intend to calculate Scheduled Exchanges ( $BSE_{calc}$ ) shall be used as a set of variables to minimise the target function while respecting the defined constraints, Scheduling Restrictions and the Scheduled Exchanges already validated by TSOs using the allocated flows calculated by the intraday coupling algorithm<sup>3</sup>.

### minimise Target Function ( $BSE_{calc}$ ), so that $BSE_{calc}$ respects the constraints

For this target function, the Scheduled Exchanges shall be multiplied by a set of linear and quadratic cost coefficients.



# $Target Function(BSE_{calc}) = \sum (|BSE_{calc}| * Linear Cost Coefficient + BSE_{calc}^{2} * Quadratic Cost Coefficient)$

The summation takes into account all Scheduled Exchanges within the CCR for which TSOs intend to calculate Scheduled Exchanges setting Scheduled Exchange Calculator ( $BSE_{calc}$ ). The definition of the cost coefficients used in the target function should be dependent on the Scheduling Restrictions defined within the CCR e.g. the application of the prioritisation path would mean that the cost coefficients for certain Bidding Zone Borders differ from the others so that the rules imposed by the CCRs are met by the target function. Furthermore, the linear cost coefficients could be set to one and the quadratic cost coefficients could be set to zero so that only the total sum of Scheduled Exchanges, for which the TSO intend to perform the calculation, is minimised.

The calculated  $BSE_{calc}$  shall be consistent with the Bidding Zone Net Positions provided by NEMOs according to Article 3.

# Article 7.2 Calculation of Scheduled Exchanges between Scheduling Areas

In case Scheduling Areas are equal to The Bidding Zones, Scheduled Exchanges between two Bidding Zones are equal to the Scheduled Exchanges between two Scheduling Areas.

- If there is more than one Scheduling Area within a Bidding Zone then:
  - a. The Scheduled Exchange Calculator shall calculate the Scheduled Exchanges between the Scheduling Areas of the CCR using the Scheduling Area Net Positions provided according to Article 3. For calculation of scheduled exchanges the same optimisation approach shall be applied as for the Bilateral Exchanges between Bidding Zones with additional requirement described in point b.
  - b. If there are multiple Scheduling Areas on one (or both) side(s) of the Bidding Zone Border, then the Scheduled Exchanges between the Scheduling Areas, over the Bidding Zone Border, shall be attributed to each Scheduling Area Border proportionally to the installed thermal capacity of the interconnections.

## Article 7.3 Calculation of Scheduled Exchanges between NEMO Trading Hubs

After the calculation of the Scheduled Exchanges between Bidding Zones and Scheduling Areas within the CCR, the Scheduled Exchanges between the NEMO Trading Hubs, where appropriate, can be calculated. Calculated Scheduled Exchanges between the NEMO Trading Hubs shall respect Scheduled Exchanges between Bidding Zones and Scheduling Areas

# Article 8 - Publication and implementation of the ID Scheduled Exchanges Calculation Methodology Proposal

The TSOs shall publish the ID Scheduled Exchanges Calculation Methodology Proposal without undue delay after all NRAs have approved the proposal or a decision has been taken by the Agency for the Cooperation of Energy Regulators in accordance with Article 9(11) and 9(12) of the CACM Regulation.



The TSOs shall implement the ID Scheduled Exchanges Calculation Methodology Proposal when the intraday market coupling operator function developed in accordance with Article 7(3) of the CACM Regulation and, where relevant, arrangements concerning more than one NEMO in accordance with Article 57 of the CACM regulation are implemented on a bidding zone and its borders.

# **Article 9 - Language**

The reference language for this ID Scheduled Exchanges Calculation Methodology Proposal shall be English. For the avoidance of doubt, where TSOs need to translate this ID Scheduled Exchanges Calculation Methodology Proposal into their national language(s), in the event of inconsistencies between the English version published by TSOs in accordance with Article 9(14) of the Regulation 2015/1222 and any version in another language, the relevant TSOs shall be obliged to dispel any inconsistencies by providing a revised translation of this ID Scheduled Exchanges Calculation Methodology Proposal to their relevant national regulatory authorities.

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