
Methodology for application of Coordinated Redispatching and Countertrading in SWE Region in accordance with Article 35(1) of Commission Regulation (EU) 2015/1222 of 24 July 2015

November 2018

SWE TSOs proposal for the Methodology for application of Coordinated Redispatching and Countertrading in accordance with Article 35(1) of Commission Regulation (EU) 2015/1222 of 24 July 2015 establishing a guideline on capacity allocation and congestion management.

SWE TSOs response to the Request for Amendment (RfA) received from SWE NRAs on 12th September 2018

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RTE, REE and REN are taking into account the following,

Whereas

- (1) Commission Regulation (EU) 2015/1222 establishes a guideline on capacity allocation and congestion management (hereinafter referred to as the “**CACM Regulation**”), which entered into force on 14 August 2015.
- (2) This document is the common Methodology for coordinated redispatching and countertrading (hereafter referred to as “**SWE RDCT Methodology**”) developed by RTE, REE and REN as the Transmission System Operators (hereafter referred to as “**SWE TSOs**”) of the SWE Capacity Calculation Region (hereafter referred to as “**SWE Region**”) in accordance with the CACM Regulation. This Methodology is required by Article 35 of the CACM Regulation.
- (3) The SWE RDCT Methodology shall also meet the requirements of Commission Regulation (EU) 2017/1485 establishing a guideline on System Operation (“ hereinafter referred to as “**SO Regulation**”)
- (4) Coordinated Countertrading is by definition limited to relieve physical constraints by means of a cross zonal exchange agreed by system operators between two bidding zones. SWE TSOs may also agree on other cross-zonal exchange procedure for reasons other than relieving physical constraints. Such arrangements are not within the scope of this SWE RDCT Methodology.

RTE, REE and REN are therefore hereby agree as follows:

General Provisions

Article 1

Subject matter and scope

The document, as determined in this SWE Coordinated Redispatching and Countertrading Methodology, is the common procedure for all Transmission System Operators of the SWE Region in accordance with Article 35 of the CACM Regulation.

In a first step, SWE RDCT Methodology is focused on the Coordinated Countertrading Process. Coordinated Redispatching process will be included once finished the current analysis and identified the interest of its application in the SWE Region.

Article 2

Definitions and interpretation

1. For the purposes of the SWE RDCT Methodology, the terms used shall have the meaning given to them in Article 2 of Regulation (EC) 714/2009, Article 2 of Regulation (EC) 543/2013, Article 2 of the CACM Regulation and Article 3 of SO Regulation.
2. In addition, the following definitions and acronyms shall apply:
 - a. 'DA MC' or 'Day-ahead Market Coupling' means the Single Day Ahead Market Coupling as defined in the CACM Regulation.
 - b. 'Requesting TSO' means the TSO responsible for the real time operation of its Control Area and directly involved in Coordinated Countertrading Processes and which initiates the Coordinated Countertrading process
 - c. 'Assisting TSO' means the TSO responsible for the real time operation of its Control Area and directly involved in Coordinated Countertrading Processes and which participates with the Requesting TSO in the Coordinated Countertrading process.
 - d. 'Participating TSOs' means the Requesting and the Assisting TSO.
 - e. 'SWE RSC' means the Regional Security Coordinator as defined in the SO Regulation and operating in the SWE CCR.
 - f. 'RSC Coordination Deadline' means the deadline establishing the limit time for RSC performing operational security coordination analysis. This deadline will be defined in the methodology required by Article 76 of SO Regulation.

3. In this SWE RDCT Methodology, unless the context requires otherwise:
 - a. the singular indicates the plural and vice versa;
 - b. headings are inserted for convenience only and do not affect the interpretation of this RDCT Methodology; and
 - c. any reference to legislation, regulations, directives, orders, instruments, codes or any other enactment shall include any modification, extension or re-enactment of it when in force.

Article 3

Application of this Methodology

1. This SWE RDCT Methodology applies solely to the coordinated countertrading procedures for the bidding zone borders in the SWE Region in accordance with Article 35 of CACM Regulation.
2. Coordinated Countertrading operational procedures will be established for each bidding zone border in the SWE Region between relevant TSOs.
3. The SWE RSC of the SWE Region must apply the common provisions for regional operational security coordination in accordance with the Article 76 of SO Regulation which has to take into account this Methodology.

Coordinated countertrading process

Article 4

General principles for Countertrading

1. Countertrading is by definition coordinated, at least between the two TSOs involved into the cross-zonal exchange. In accordance with Article 76 of the SO Regulation, in this SWE RDCT Methodology RSC participation is considered in its operation security coordination function, when applicable, according to RSC Coordination Deadline.
2. The general principles of countertrading consist of the following aspects:
 - a. exchange of available countertrading volume and associated estimated pricing;
 - b. detection;
 - c. coordination;
 - d. activation of the countertrading;
 - e. reporting;
 - f. total cost calculation;
 - g. cost sharing & Settlement.

Details of the aspects as set out in point (a), (b), (c) and (d) above are detailed in Articles 6, 7, 8, 9, 10, 11 and 12. The Cost Sharing & Settlement aspect as set out in point (e) to (g) above is detailed in the separated methodology in accordance with Article 74 of CACM Regulation

3. Countertrading is a Remedial Action that shall be activated following the criteria defined in the Article 21 of SO Regulation, Countertrading is a cross-border relevant remedial action as it is implemented to solve efficiently a physical constraint on critical network elements as defined in the methodology of the Articles 20 and 21 of CACM Regulation.
4. The SWE RSC shall assess, when relevant, the impact of countertrading in other CCR's considered by the Requesting TSO on the control areas of all SWE TSOs and could provide relevant information to TSOs as specified in Article 8 of this Methodology.
5. The Requesting TSO shall always provide the justification of requiring the application of Countertrading.

Article 5

Timeframes for Countertrading

1. The countertrading process can be initiated by a Requesting TSO after the detection of a physical constraint, as described in Article 8 and after both the publication of available volumes and prices as

specified in Article 6 and 7 and of Day-ahead Market Coupling results or its fallback and until one hour before real-time.

2. After one hour before real-time, a fast activation process for sudden critical situation as described in Article 13 shall be followed.

Article 6

Volume information availability and exchange of data

1. Each of the Participating TSOs shall inform the other Participating TSO on indicative and non-firm volumes available for countertrading, in each direction after the publication of the results of the DA MC and according to the timings of the coordinated security analysis performed in accordance with the methodology of the Article 76 of SO Regulation. This exchange of information will also be made available to the SWE RSC.
2. The exchanged information on volumes shall account for legal obligation of each TSO regarding the Balancing Reserves and ensuring to stay in a normal state and not endangering the security of supply.
3. The exchanged information on volumes will not be binding but an indication, on best effort basis, that represents a view of the available volume that could be countertraded in case of a need for activation of the Countertrading Process, in order to solve physical constraint only.
4. Each of the Participating TSOs shall inform the other Participating TSO how the volume is calculated and updated.
5. Volume information exchange procedures are border-specific and will be described bilaterally between the two Participating TSOs in the Countertrading procedures as specified in Article 3(2).

Article 7

Price information exchange

1. Each of the Participating TSOs shall inform the other Participating TSO indicative and non-firm prices associated to the volumes available for countertrading, after the publication of the results of the DA MC and within the coordinated security analysis performed in accordance with the methodology of the Article 76 of SO Regulation. This exchange of information will also be made available to the SWE RSC.
2. Each of the Participating TSOs shall inform the other how the price is updated. This exchange of information will also be made available to the SWE RSC.
In accordance with art 35(5) of CACM Regulation, the actual prices of the volumes activated for countertrading shall be based on the incurred cost of countertrading resources available to the Participating TSOs at that moment in time. TSOs will use their best estimation for the upward (for importing countertrading) and downward (for exporting countertrading) imbalance prices. The price

estimation procedures are TSO specific and will be described in the Application procedures as specified Article 13(2).

3. The estimation of imbalance prices will be made in a transparent way. The price information exchange procedures are border specific and will be described bilaterally between the two Participating TSOs in the Coordinated Countertrading procedures as specified Article 3(2).

Article 8 Detection

1. The physical constraint can be detected by either a SWE TSO or the SWE RSC on its behalf during a local or a coordinated operational security analysis.
2. All involved parties at this stage must contact and provide each other with all the information needed to have a common view on the physical constraint to be solved.
3. The SWE RSC shall, accordingly to Art 78 of SO Regulation, recommend to the relevant SWE TSO the most effective and economically efficient remedial actions identified in accordance with Art 76 of SO Regulation. This recommendation for remedial actions shall be accompanied by explanations, taking into account the availability of non-costly remedial actions.
4. At this stage, the Requesting TSO and the Assisting TSO shall be identified.
5. Where there is sufficient time between the detection of the physical constraint and the deadline for activation of countertrading, the Participating TSOs shall update regularly the security assessment in order to confirm the physical constraint and the estimated needed volume of countertrading. Participating TSOs will also provide this information to the SWE RSC.

Article 9 Coordination

1. The coordination process will be initiated by the Requesting TSO.
2. When initiating the process, the Requesting TSO will contact the Assisting TSO and the SWE RSC and will specify the countertrading request characteristics. Participating TSOs will also provide this information to the SWE RSC.
3. Countertrading characteristics should at least contain the following elements:
 - a. The congested network element,
 - b. The direction of the countertrading,
 - c. The countertrading Period,
 - d. The estimated needed countertrading volume information for the Countertrading Period based on the current market situation

4. Simultaneously
 - a. The Assisting TSO must confirm the feasibility of the required countertrading within the duration for the Countertrading Period;
 - b. SWE RSC will perform, when applicable according to the RSC Coordination Deadline, a Security Assessment on the impact of the Countertrading Action in the SWE Region.
5. Any relevant impact of a Countertrading action between Participating TSOs on a third TSO's control area (from SWE or another CCR) must be communicated to all impacted TSOs.
6. If a relevant impact is detected on other TSO's control areas, the SWE RSC shall collect the feedback from those TSOs and share them with the Participating TSOs.
7. Once the Assisting TSO confirms the availability of all or of a part of the volume, the Participating TSOs jointly decide to effectively perform the Countertrading Action, taking also into account the analysis from the SWE RSC, when applicable according to the RSC Coordination Deadline.
8. In case of rejection of the request, the Assisting TSO must provide a justification to the Requesting TSO and the SWE RSC. The SWE RSC could recommend another effective and economically efficient remedial action as long as the timeframe allows it. If the RSC Coordination Deadline, defined in the SO Regulation, is reached, the TSOs shall go through fast activation process.
9. In case of two Countertrading requests with overlapping Countertrading Period between two Participating TSOs, the RSC could analyse and advice on the volume and the direction of the countertrading. Final decision will always be jointly taken by Participating TSOs.

Article 10

Activation of Countertrading

1. The Countertrading Volume and period will be matched and verified among both Participating TSOs
2. Activation of countertrading shall be performed as close as possible to real time -from one hour to fifteen minutes before the electric supply -in order to limit the impact on the market and it will be maintained for the minimum necessary time.
3. The exact matching process is border-dependant and is described in the Coordinated Countertrading Procedures
4. The Participating TSOs will
 - a. Select the countertrading actions
 - b. Update their Individual Grid Models (IGM)

5. The selection of the Countertrading Actions in each control area is the responsibility of each Participating TSO, based on operational security and economic efficiency. These Countertrading Actions could be composed of activation of available generation units and loads and/or be composed of activation of cross-border exchange of energy in accordance with the appropriate mechanisms, markets or agreements applicable to its control area and the other CCRs to which this TSO belongs.
6. The selection process of the countertrading actions in each control area shall be described in a transparent way in the Coordinated Countertrading procedure of Participating TSOs as specified in Article 13(2).

Article 11

Total cost calculation

1. In accordance with Article 35 (5) of CACM Regulation, the total cost of countertrading will be determined transparently by summing the incomes/costs of each TSO involved in the countertrading action. These incomes/costs shall be based on the incurred incomes/costs obtained/borne by the Participating TSOs when activating Countertrading Actions for actual upward and downward imbalances prices. Calculation of incomes/costs shall be described in the Countertrading procedures of Participating TSOs, as specified in Article 13(2).

Article 12

Fast activation process

1. A sudden physical constraint is a physical constraint that has not been detected during any of the previous coordinated security analysis in accordance with Art 76 of SO Regulation. A fast Countertrading process is defined as a Countertrading process where the detection of the physical constraint occurs after one hour before real time. It is a last resort action as the coordination is limited.
2. The identification of the physical constraint is based on the IGM of one or both Participating TSOs as the last coordinated security analysis using the last Common Grid Model (CGM) did not show physical constraint.
3. The Requesting TSO must contact the Assisting TSO and provide it with information on the requested volume and period and, if possible, the reason for the request.
4. The Assisting TSO can refuse the request if the activation of the Countertrading causes a physical constraint in its control area or if it leads to situations outside the operational security limits.
5. Ex-post, the Requesting TSO must provide the SWE RSC with the last IGM on which the decision was made, in order RSC to manage the most accurate information of the CGM for subsequent grid analysis.

6. Ex-post, the Participating TSOs must provide each other with the information on the costs and incomes incurred by the Countertrading Actions

Miscellaneous

Article 13

Publication of the SWE RDCT Methodology and Application Procedures

1. The TSOs shall publish the SWE RDCT Methodology without undue delay after all SWE National Regulatory Authorities (SWE NRAs) have approved the SWE RDCT Methodology or a decision has been taken by the Agency for the Cooperation of Energy Regulators in accordance with Article 9(10), Article 9(11) and 9(12) of the CACM Regulation.
2. Each TSO shall prepare and present for approval to its respective NRA the Application Procedures of this Methodology that will include the criteria to determine volumes, prices, markets and exchanging mechanisms associated to the application of this Methodology, according to Articles 6(5), 7(3), 10(3), 10(5), 10(7) and 11(1). SWE NRAs shall be informed about any change occurred in these procedures.

Article 14

Implementation of SWE RDCT Methodology

1. The implementation planning of this SWE RDCT methodology is subject to:
 - a. Regulatory approval of this SWE RDCT Methodology by the relevant SWE National Regulatory Authority.
 - b. Regulatory approval of the coordinated redispatching and countertrading cost sharing methodology proposal of the SWE CCR by the SWE National Regulatory Authorities.
 - c. Regulatory approval of the SWE Capacity calculation methodology by the SWE regulatory authorities and its implementation
 - d. Regulatory approval of the SWE methodology for regional operational security coordination under Article 76 of the SO Regulation by the SWE National Regulatory Authorities and its implementation.
2. In accordance with Article 35(3) of CACM Regulation, by 26 months after the regulatory approval of capacity calculation regions the SWE TSOs will develop a report assessing the progressive implementation, coordination and harmonisation of those Countertrading and Coordinated Redispatching process and arrangements.

Article 15

Language

1. The reference language for this SWE RDCT Methodology shall be English. For the avoidance of doubt, where TSOs need to translate this SWE RDCT Methodology 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 CACM Regulation and any version in another language, the relevant TSOs shall be obliged to dispel any inconsistencies by providing a revised translation of this SWE RDCT Methodology to their relevant national regulatory authorities.

Article 16 **Amendment of this Methodology**

Amendments of this Methodology shall be managed according to the process established in Articles 9(12) and 9(13) of the CACM Regulation.

Article 17 Confidential treatment of information

1. The information and data handled during RDCT process is sensitive, and should on this basis be treated as confidential. As a result all information gathered, analysis performed and other data available to the involved Parties are deemed confidential and shall be managed in accordance with Article 13 of CACM and procedure to ensure its protection.
2. The information provided by generation units and loads or any other relevant costs for calculating the countertrading cost shall be shared between the relevant TSOs for countertrading purposes only, including reporting and monitoring obligations defined within the methodology of Article 74 of CACM Regulation
3. The parties will prepare ad hoc non-disclosure agreements.