Channel Capacity Calculation Region TSOs' proposal for the methodology for 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

16 March 2018

Table of Contents

All Transmission System Operators of the Channel Capacity Calculation Region, 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, including its annexes, is a common proposal developed by all Transmission System Operators (hereafter referred to as "TSOs") of the Channel Capacity Calculation Region as defined in accordance with Article 15 of CACM Regulation (hereafter referred to as "Channel Region") regarding the proposal for the methodology for Coordinated Redispatching and Countertrading (hereafter referred to as "RD and CT Methodology") in accordance with the CACM Regulation. This proposal is required by Article 35(1) of the CACM Regulation. The RD and CT Methodology was consulted from 1 December 2017 until 12 January 2018 in accordance with Article 12 of CACM Regulation.

(3) The TSOs of the Channel Region (hereafter referred to as "Channel TSOs") aim at ensuring consistency with Coordinated Redispatching and Countertrading methodologies of other Capacity Calculation Regions in which same bidding zones are concerned whilst acknowledging the specific characteristics of the interconnectors within the Channel Region.

(4) This proposal takes into account the TSOs' proposal for a day-ahead and intraday capacity calculation methodology (hereinafter referred to as the "Channel DA and ID CC Methodology") in accordance with Article 20 of the CACM Regulation and submitted to the NRAs of the Channel Region for approval on 15 September 2017.

(5) In the context of this proposal, the definition of 'Channel RSCs' as defined in the Article 2 of this RD and CT Methodology is important and has the meaning of the Regional Security Coordinator as defined into the Commission Regulation (EU) 2017/1485 of 2 August 2017 establishing a guideline on electricity transmission system operation (hereinafter referred to as the "SO GL Regulation").

(6) Changing the flow over an HVDC interconnector in the Channel Region for Redispatching and Countertrading purposes results in an imbalanced situation in the control areas to which the interconnector is connected (since the HVDC interconnector is between two different Synchronous Areas). Therefore bids must be activated at both ends of the HVDC interconnector in order to restore the balance (locally or cross-border). By doing so the TSOs need nevertheless to consider local physical congestion issues for selecting the bids.

(7) This RD and CT Methodology contributes to and does not in any way hinder the achievement of the objectives of Article 3 of the CACM Regulation. In particular this RD and CT Methodology:

a. Establishes a common and coordinated process for the Redispatching and Countertrading by defining a set of harmonised rules for congestion management and as such serves the objective of promoting effective competition in the generation, trading and supply of electricity in accordance with Article 3(a) of the CACM Regulation;

b. Contributes to the objective of ensuring optimal use of the transmission infrastructure in accordance with Article 3 (b) of the CACM Regulation by using last available inputs based on the best possible forecast of transmission systems and market results at the time of each security analysis, updated in a timely manner, for the detection of Coordinated Redispatching and Countertrading needs.

c. Contributes to the objective of ensuring operational security in accordance with Article 3 (c) of the CACM Regulation by coordinating the Coordinated Redispatching and Countertrading at regional level to ensure its reliability;

d. Contributes to the objective of optimising the calculation and allocation of cross-zonal capacity in accordance with Article 3 (d) of the CACM Regulation by integrating the timings of the Coordinated Redispatching and Countertrading process into the timings of the different Capacity Calculation process steps.

(8) The scope of the RD and CT Methodology is limited to relieve physical congestions by means of a cross zonal exchange initiated by system operators between two bidding zones.

SUBMIT THE FOLLOWING PROPOSAL TO ALL NATIONAL REGULATORY AUTHORITIES OF THE CHANNEL REGION:

TITLE 1
General Provisions

Article 1
Subject matter

1. This RD and CT Methodology is the common proposal of all TSOs of the Channel Region in accordance with Article 35 of the CACM Regulation.

Article 2
Definitions and interpretation

1. For the purposes of the RD and CT Methodology, the terms used shall have the meaning given to them in:
    a. Article 2 of the CACM Regulation; and
    b. Article 3 of SO GL Regulation.
2. In addition, the following definitions shall apply:
    a. 'Requesting TSO' means the Channel TSO responsible for the real time operation of their control area and directly involved in Coordinated Redispatching or Countertrading processes and who requests the Coordinated Redispatching or Countertrading process to relieve physical congestion in its control area;
    b. 'Assisting TSO' means the Channel TSO responsible for the real time operation of their control area and participates with the Requesting TSO in Coordinated Redispatching or Countertrading;
    c. 'Facilitating TSO' means the Channel TSO(s) responsible for the real time operation of the interconnector(s) linking the control area of the Requesting TSO and the control area of the Assisting TSO and on which the flow is to be modified as a result of Coordinated Redispatching or Countertrading;
    d. 'Participating TSOs' means the Requesting TSO, the Assisting TSO and the Facilitating TSO;
    e. 'Interconnector Countertrading and Redispatching Time Unit' (ICRTU) means the minimum duration of an Activation Period. The ICRTU value is determined by the TSO(s) operating the interconnector on the basis of technical and market constraints and following consultation with the TSO(s) responsible for the real time operation of the control areas connected by the interconnector;
    f. 'Nomination Platform' means the relevant system(s) used by Participating TSOs to manage the nominations on an interconnector asset of a Facilitating TSO;
    g. 'Interconnector Countertrading Deadline' means the deadline for instructing the interconnector with the Countertrading. This deadline is interconnector dependent, determined by the TSO(s) operating the interconnector following consultation with

the TSO(s) responsible for the real time operation of the control areas connected by the interconnector and represents the time before the effective delivery of energy on the interconnector, needed to transform the aggregated commercial and Countertrading nominations into interconnector reference program;

h. 'RSC Coordination Deadline' means the latest moment in time when the Channel RSCs are able to perform the coordination for coordinated Redispatching or Countertrading and the operational security assessment. After this deadline, the coordination process could exceptionally be done between Channel TSOs without the participation of Channel RSCs. This deadline depends of the methodology for the preparation of remedial actions managed in a coordinate way in accordance with Article 76(1)(b) of SO GL Regulation;

i. 'Activation Period' means the period of time during which coordinated Redispatching and Countertrading is activated. The duration of the period must be an entire multiple of the ICRTU;

j. 'RD and CT Actions' means the measures initiated by the Requesting TSO and Assisting TSO in order to compensate the change of physical flow on the interconnector resulting from the coordinated Redispatching or Countertrading process and restore the balance in their respective control area; and

k. 'Channel RSCs' means the Regional Security Coordinators operating in the Channel Region.

l. 'Coordinated Security Analysis' means the service provided by RSCs to identify risks of operational security limit violations and to determine, propose and coordinate the most efficient remedial actions with relevant TSOs and adjacent RSCs.

3. In this RD and CT Methodology, the following acronyms are used:

   a. 'AAC' means 'Already Allocated Capacity';

   b. 'CCC' means the 'Coordinated Capacity Calculator;

   c. CNTC' means 'Coordinated Net Transmission Capacity;

   d. 'SDAC' means the 'Single Day-Ahead Coupling';

   e. 'SIDC' means the 'Single Intraday Coupling';

   f. 'IGM' means the 'Individual Grid Model'; and

   g. 'CCR' means the 'Capacity Calculation Region'.

   h. 'CSA' means the 'Coordinated Security Analysis'

4. In this RD and CT 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 RD and CT 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
Scope

1. The scope of this RD and CT Methodology is limited to the Coordinated Redispatching and Countertrading on bidding zone borders of the Channel Region in accordance with Article 35 of CACM Regulation.
2. Coordinated Redispatching and Countertrading in the Channel Region are a set of Remedial Actions that must been considered as one package:
   a. Change of flow on the Interconnector of a bidding zone border of the Channel Region which significantly contributes to the relieving effect of the physical congestions. This change of flow has to be coordinated in all conditions;
   b. RD and CT Actions in the Bidding Zone of the Assisting TSO which might be coordinated if there is a cross-border impact;
   c. RD and CT Actions in the Bidding Zone of the Requesting TSO, localized in case of Redispatching and not localized in case of Countertrading, which might be coordinated if there is a cross-border impact.
3. Coordinated Redispatching and Countertrading in the Channel Region consist of the following aspects:
   a. volume information and availability exchange and price information exchange;
   b. detection;
   c. coordination;
   d. selection of RD and CT Actions;
   e. activation of RD and CT Actions and update of nomination on the Channel Interconnector;
   f. total cost calculation;
   g. reporting; and
   h. cost sharing and settlement.

   The cost sharing and settlement aspect as set out in points (f), (g) and (h) above are detailed in the separated methodology in accordance with Article 74 of CACM Regulation.
4. In order to implement this RD and CT Methodology, border-specific Coordinated Redispatching and Countertrading operational procedures (hereafter referred to as "RD and CT Procedures") will be established during the implementation phase between relevant TSOs of each bidding zone border in the Channel Region. These RD and CT Procedures shall comply with the rules and principles laid out in this Channel RD and CT Methodology.

5. As soon as possible, as described in Article 16.1 of this Channel RD and CT Methodology, the Channel RSCs of the Channel Region must apply the common provisions for regional operational security coordination in accordance with the Article 76 of SO GL Regulation.

TITLE 2
Coordinated Redispatching and Countertrading

Article 4
General principles for Coordinated Redispatching and Countertrading

1. All bidding zone borders of the Channel Region consist of HVDC Interconnectors between Great Britain (GB) and Continental Europe Synchronous Areas. Redispatching or Countertrading on Channel Region bidding zone borders are implemented by means of change of the physical flow over the interconnector assets owned by the Facilitating TSO, which results in a change in offtake or injection at the connection point of the interconnectors. This has as a consequence that:
    a. in case of a change of interconnector physical flow, an imbalance occurs in both the control areas of the Requesting and Assisting TSOs. This imbalance is to be resolved by RD and CT Actions to restore the balance;
    b. the RD and CT Actions initiated by the Requesting TSO have no impact on the flows in the control area of the Assisting TSOs and vice versa;
    c. in case of Redispatching, the RD and CT Actions have a precisely defined location in the control area of the Requesting TSO, in order to contribute to the relieving effect on the physical congestion;
    d. in case of Countertrading, the RD and CT Actions has no specific location;
    e. volumes of Countertrading or Redispatching refer to the volumes of RD and CT Actions activated by the Requesting TSO and the Assisting TSO; and
    f. costs of Countertrading or Redispatching refer to the directly related costs incurred by the Requesting TSO and the Assisting TSO for the RD and CT Actions activation and the directly related costs incurred by Facilitating TSOs for changing the flow over the interconnector.
2. All Countertrading and Redispatching referred to in this RD and CT Methodology are cross-border relevant by their nature because of their application on an Interconnector of the bidding zone borders of the Channel region, and therefore the change of flow on the Interconnectors shall always be coordinated.
3. A coordinated Redispatching and Countertrading remedial action that does not follow the description of the Article 3 (2) of this RD and CT methodology falls outside of this Channel RD and CT Methodology and have to be handled in the coordinated Redispatching and Countertrading methodologies developed in accordance with Article 35(1) of the CACM Regulation by the relevant CCR.
4. Coordinated Redispatching and Countertrading is coordinated between the TSOs of the Channel Region in accordance with Article 9 and Article 10. In this RD and CT Methodology, this coordination is further ensured by the role played by the Channel RSCs in the coordinated Redispatching and Countertrading, in accordance with Article 76 of the SO GL Regulation.

5. Coordinated Redispatching and Countertrading are Remedial Actions proposed by the RSC, following the criteria defined in the Article 21 of SO GL Regulation, unless in exceptional cases where coordinated RD and CT is decided in period 4 as defined in Article 5.
6. The cost sharing principles described in the Channel RD and CT Cost Sharing Methodology apply to Coordinated Redispatching and Countertrading on Interconnectors of bidding zone borders of the Channel Region applied in the frame on this RDCT Channel Methodology. Those are Remedial Actions of cross border relevance.
7. The Channel RSCs shall assess the impact of Redispatching and Countertrading on the control areas of the TSOs, in accordance with Article 76 of SO GL Regulation.
8. The Requesting TSO shall, upon request by the Assisting TSO, provide the justification of the need for applying Coordinated Redispatching and Countertrading.
9. The Requesting TSO can only perform Coordinated Countertrading and Redispatching remedial actions over interconnectors connected to its own control area.

Article 5
Timeframes for Coordinated Redispatching and Countertrading

1. The Coordinated Redispatching and Countertrading process can be initiated by a Requesting TSO after the results of SDAC or, when applicable, regional fall back solutions in accordance with Article 44 of the CACM Regulation.
2. Coordinated Redispatching and Countertrading shall be instructed to the Facilitating TSO before the Interconnector Countertrading Deadline specified in the annex.
3. Four different timeframes should be considered for Coordinated Redispatching and Countertrading, :
    a. Period 1 is considered in case of Coordinated Redispatching and Countertrading activation between the start time mentioned in Article 5(1) and the deadline for the "*Input Data Gathering"* phase of the Intraday Capacity Calculation of the Intraday Capacity Calculation;
    b. Period 2 is considered in case of Coordinated Redispatching and Countertrading activation between the "*Input Data Gathering"* and the "*Validation"* phase of the Intraday Capacity Calculation;
    c. Period 3 is considered in case of Coordinated Redispatching and Countertrading activation after the "*Validation*" phase of the Intraday Capacity Calculation and before the RSC Coordination Deadline; and
    d. Period 4 is considered in case of Coordinated Redispatching and Countertrading activation after the RSC Coordination Deadline and before the Interconnector Countertrading Deadline.

Article 6
Volume information availability and exchange

1. Each of the Channel TSOs who have their control area linked by one or several interconnector(s) within the Channel Region will inform each other on indicative and non-firm volumes available for coordinated Redispatching and Countertrading, in each direction, after the publication of the results of the SDAC. This exchange of information will also be made available to the Channel RSCs.
2. The exchanged information on volumes shall take into account any legal obligation of each TSO regarding the Reserve Capacity and ensuring to stay within the operational security limits.
3. The exact timing for exchanging the volumes for each border is described in the border specific RD and CT Procedures.
4. This shared volume is not binding and is a best endeavours estimate of the available volume that could be available for coordinated Redispatching and Countertrading to solve physical congestion only. Requesting and Assisting TSOs shall inform each other how the volume is calculated and updated.
5. Volume information exchange procedure is border-specific and will be described bilaterally between the two relevant Requesting and Assisting TSOs in the RD and CT Procedure.
6. Facilitating TSOs shall inform the relevant TSOs as soon as reasonably practicable of any unavailability of the interconnector asset (planned or unplanned) for the coordinated Redispatching and Countertrading process.

Article 7
Price information exchange

1. Each of the Channel TSOs who have their control area linked by one or several interconnector(s) within the Channel Region will communicate to each other indicative estimation of prices associated to the volumes available for coordinated Redispatching and Countertrading, after the publication of the results of the SDAC. This exchange of information will also be made available to the Channel RSCs.
2. In accordance with Article 35(5) of CACM Regulation, prices of the volumes available for Coordinated Redispatching and Countertrading shall be based either on:
    a. prices in the relevant electricity markets for the relevant time-frame; or
    b. the cost of resources available for the Coordinated Redispatching and Countertrading action at that moment in time.
3. The price information exchange procedure is border-specific and will be described bilaterally between the two relevant Requesting and Assisting TSOs in the RD and CT Procedure.

Article 8
Detection

1. The Coordinated Redispatching and Countertrading process can be initiated in one of the timeframes defined in Article 5 of this RD and CT Methodology after the detection of a physical congestion in the control area of a Channel TSO.
2. The physical congestion can be detected by either a Channel TSO or a Channel RSC on behalf of Channel TSOs when performing the CSA service. The Channel TSO who operates the control area where the physical congestion is detected will be considered the Requesting TSO for the purposes of this RD and CT Methodology.
3. In each case where physical congestion is detected, 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 congestion to be solved.
4. The Channel RSCs shall, according to Article 78 of SO GL Regulation, recommend to the relevant Channel TSO effective and economically efficient remedial actions to solve the identified physical congestion, based on the available price and volume information. This recommendation for remedial actions shall be accompanied by explanations as to its rationale.
5. In case of several interconnectors on the same border, the selection of one or several interconnectors on which the flow will be modified will be done by the Requesting and Assisting TSOs or the Channel RSCs on their behalf, based on the location of the physical congestion, operational security and economic efficiency (i.e. losses).
6. In case of two coordinated Redispatching and Countertrading requests with overlapping Activation Period between two Participating TSOs, the RSC should analyse and advice on the volume and the direction of the coordinated Redispatching or Countertrading. The final decision will always be taken jointly by the Requesting and the Assisting TSO.
7. If the proposed Remedial Action is a Countertrading on a Channel Interconnector, the Requesting TSO can propose to specify the localization of the RD and CT Actions if this one contributes to the relieving effect of the physical congestion, transforming the proposed Countertrading into Redispatching. This extra contribution to the relieving effect on the physical congestion shall, as consequence, have a positive effect on the needed volume of change of flow on the interconnector initially estimated by the RSC, which will be lower, as well as the RD and CT Actions to be provided by the Assisting TSOs.
8. In accordance with Article 78 of SO GL Regulation, the relevant Channel TSOs shall jointly decide whether to initiate the recommended remedial action. In the case where the recommended remedial action is a Coordinated Redispatching or Countertrading on a border of the Channel Region, the coordination process will be initiated in accordance with Article 9 of this RD and CT Methodology. Where the relevant TSO decides not to initiate the recommended remedial action, a justification for this decision shall be provided to the Channel RSCs.

Article 9
Coordination

1. The coordination process will be initiated by the Requesting TSO or by the Channel RSCs where the Channel RSCs have originally detected the constraint.
2. The Requesting TSO will provide the Assisting TSO, the Facilitating TSO(s) and the Channel RSCs with the Coordinated Redispatching or Countertrading characteristics based on the information collected during the detection phase.
3. Coordinated Redispatching or Countertrading characteristics should at least contain the following elements:
    a. The interconnector identification(s);
    b. The direction of the modification of flow on the interconnector ;
    c. The Activation Period;
    d. The estimated needed modification of flow volume and RD and CT Actions volume information for the Activation Period, based on the current market situation.
4. The Assisting TSO must confirm the feasibility of the required coordinated Redispatching and Countertrading for the duration of the Activation Period.
5. The Channel RSCs shall perform, if needed, a new CSA to analyse the impact of the Redispatching or Countertrading on all Channel TSOs, and verify the actual need of Coordinated Redispatching or Countertrading, in function of the last agreed Coordinated Redispatching and Countertrading characteristics between Participating TSO, taking into account the possible location of RD and CT actions in the Requesting TSOs control area in case of Redispatching.
6. Any significant impact detected by a Participating TSO or a Channel RSC on other Channel TSO's control area must be communicated to all impacted Channel TSOs and followed-up by the Channel RSCs who shall collect the feedback from those Channel TSOs and share them with the Participating TSOs.
7. If a Participating TSO or a Channel RSC detects a significant impact on the flows of another Channel TSO's control area, these Channel TSOs will be consulted in the decision described in the Article 9(8). In the case where this impact will create a physical congestion in its control area, this Channel TSO will be considered as Assisting TSO in the decision described in the Article 9(8) and 9(9) of this Channel RD and CT Methodology.
8. If the Participating TSOs confirm the feasibility of the Coordinated Redispatching and Countertrading, the Requesting TSO and the Assisting TSO shall jointly decide to effectively perform the Coordinated Redispatching and Countertrading, taking into account the analysis from the Channel RSCs, the grid situations of each Participating TSO's control area and the potential interconnector(s) constraints.
9. The Participating TSO that rejects the request must provide a justification to the other Participating TSOs. The justification can only be based on the following events:

a. no volume available for RD and CT Actions;

b. new physical congestion created by the countertrading;

c. condition as changed since the decision done during the detection phase; and/or

d. adequacy issues.

Article 10
Fast coordination

1. In the exceptional case that a need for Coordinated Redispatching and Countertrading is only detected during Period 4, then the detection and coordination processes described in Articles 8 and 9 of the RD and CT Methodology is limited to the Participating TSOs without the Channel RSCs, with the aim to solve the physical congestion at the basis of said request.
2. If the Participating TSOs detect a risk of significant impact on the control area of other Channel TSOs, they will be contacted by the Requesting TSO to be part of the fast coordination process.

Article 11
Activation of Coordinated Redispatching and Countertrading

1. The volumes and Activation Period will be matched between the Requesting and Assisting TSO.
2. The exact matching process and the reference point for the nomination is border-dependant and is described in the RD and CT Procedures.
3. During the Period 1, the Participating TSOs will:
    a. ensure that the Nomination Platform is instructed with the Coordinated Redispatching and Countertrading nomination on the Interconnector; and
    b. update their IGM. Those IGM will serve as input for the intraday capacity calculation.
4. During the Period 2, the Participating TSOs will:
    a. ensure that the Nomination Platform is instructed with the Coordinated Redispatching and Countertrading nomination on the Interconnector;
    b. update their IGM, if relevant;
    c. if applicable, reject the NTC value proposed by the Channel DA and ID CC Methodology and provide a justification to CCC and propose a new NTC value that solves the physical congestion.
5. During the Period 3 and 4, the Participating TSO will:
    a. reduce NTC of interconnector in the case where SIDC is still open for the concerned Activation Period;
    b. ensure that the Nomination Platform is instructed with the Coordinated Redispatching and Countertrading nomination on the Interconnector; and
    c. update their IGM, if relevant.
6. The Participating TSOs responsible for the actions in Article 11(3), 11(4) and 11(5) will be defined in the relevant RD and CT Procedures.
7. The Coordinated Redispatching and Countertrading nomination on the Interconnector will be netted with the existing market nominations on the Nomination Platform.
8. While the Activation Period can be any multiple of the ICRTU, all changes to cross-border NTC values will have a minimum duration of the smallest cross-border allocation product available on that border for the relevant timeframe.
9. The relevant TSO systems will be notified by the Nomination Platform with updated data.

Article 12
Selection of RD and CT Actions

1. Changing the flow over an Interconnector of the Channel Region, for Redispatching and Countertrading purposes, results in an imbalanced situation in the control areas to which the interconnector is connected since this Interconnector connects two different synchronous areas. Therefore RD and CT Actions must be activated at both ends of the Interconnector in order to restore the balance.
2. The selection of the RD and CT Actions in each control area is the responsibility of the TSO operating each control area.
3. The RD and CT Actions is only triggered by the change of flow initiated on a Channel Interconnector.
4. In accordance with Article 35(3) of CACM Regulation, the RD and CT Actions may be composed of
    a. activation of available generation units and loads (or the negation of planned activation of available generation units or loads which are complimentary to the change of interconnector physical flow), in accordance with the appropriate mechanisms, relevant markets and agreements applicable to its control area. As long as these local RD and CT Actions compensate the effect of the Redispatching or Countertrading in each control area, while ensuring the local operational security, they shall be firstly used; and
    b. activation of cross-border exchanges of energy with neighbouring bidding zone through interconnector attributed to bidding zone borders not included in the Channel Region, in accordance with the appropriate mechanisms, relevant markets or agreements applicable specifically to these bidding zone borders.
5. The exact list of RD and CT Actions is border specific and will be described in the bilateral RD and CT Procedures.
6. TSOs should activate the most economically efficient RD and CT Actions amongst the resources available for RD and CT Actions. TSOs shall also consider local physical congestion issues and operational security constraints when performing the selection of RD and CT Actions.
7. The description of the available RD and CT Actions and the selection process of these RD and CT Actions in each control area should be described in a transparent way in compliance with the principles described in this RD and CT Methodology in the relevant RD and CT Procedures.

TITLE 3
Miscellaneous

Article 13
Publication

1. The TSOs shall publish the RD and CT Methodology without undue delay after all national regulatory authorities have approved the RD and CT Methodology in accordance with Article 9 of the CACM Regulation.

Article 14
Confidentiality of information

1. All data will be considered as confidential records and treated as such, unless publication is required by an applicable reporting obligation. It is understood that the information and data handled during the coordinated Redispatching and Countertrading 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 will only be available for the TSOs members in the restricted part of the common tools and platforms, unless required to be published by applicable reporting obligation by implementation date of this Channel RD and CT Methodology.
2. The parties will prepare ad hoc confidentiality agreements. The corresponding data and information shall be managed and labelled by the TSOs members in accordance with this policy and procedure to ensure its protection.

Article 15
Cancellation of Coordinated Redispatching and Countertrading nominations

1. In the case of curtailment of commercial nominations, the Facilitating TSO will first cancel, if relevant and in coordination with the Participating TSOs, the existing Coordinated Redispatching and Countertrading nominations before curtailing the commercial nominations.
2. In the case of a capacity shortage (such as an unplanned outage) where the Facilitating TSO is unable to physically flow the requested energy volume due to a technical issue then the Facilitating TSO will first cancel, if relevant and in coordination with the Participating TSOs, the existing Coordinated Redispatching and Countertrading nominations before taking the needed actions to mitigate this technical issue while assuring the firmness of other existing commercial nominations.
3. In the case of unplanned outage or unexpected change of the forecasted production or load pattern in the control area of the Requesting TSO or Assisting where the Requesting TSO or Participating TSO is unable to provide the planned RD and CT Actions needed to compensate the Coordinated Redispatching and Countertrading, Participating TSOs could jointly decide to cancel a part or the totality of the existing Countertrading nominations.

Article 16
Implementation

1. The implementation of this RD and CT Methodology is subject to:
    a. Regulatory approval of this RD and CT in accordance with Article 9 of the CACM Regulation;
    b. Regulatory approval of Redispatching and Countertrading Cost Sharing Methodology required by Article 74 of the CACM Regulation in accordance with Article 9 of the CACM Regulation;
    c. Regulatory approval of Common Coordinated Capacity Calculation Methodology required by Article 20 of the CACM Regulation in accordance with Article 9 of the CACM Regulation; and
    d. Development and implementation of the systems required to support the RD and CT Methodology.
    e. Regulatory approval of the all TSO's proposal for a methodology for coordinating operational security analysis in accordance with Article 75(1) of SO GL Regulation.
    f. Regulatory approval of the proposal for common provisions for regional operational security coordination in the Channel Region in accordance with Article 76(1) of SO GL Regulation, and organisation, development and implementation of CSA services in the Channel Region by Channel RSCs.
2. Due to the dependencies described above, this RD and CT Methodology will be implemented no later than 12 months after the approval of this methodology except in case of delay in the dependencies specified in Article 16(1)(e) and Article 16(1)(f) where a transitional phase could be added in the implementation of this methodology.
3. Channel TSOs will, if possible, endeavour to implement this RD and CT Methodology as soon as possible before the 26 months after the regulatory approval of capacity calculation region, in order to develop the report assessing the progressive coordination and harmonisation of coordinated Redispatching and Countertrading mechanisms and agreements and including proposals required by Article 35(3) of the CACM Regulation.

Article 17
Language

1. The reference language for this common capacity calculation Proposal shall be English. For the avoidance of doubt, where TSOs need to translate this RD and CT 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 RD and CT Methodology to their relevant national regulatory authorities.

Annex

Border	**FR-GB**	**NL-GB**	**BE-GB**
ICRTU	30 minutes	15 minutes; with a minimum duration of 60 minutes	15 minutes
Interconnector Countertrading Deadline	30 minutes before delivery	30 minutes before delivery	30 minutes before delivery

Consultation Report of the Channel CCR TSO's proposal for the Coordinated Redispatching and Countertrading Methodology 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

16 March 2018

1. Introduction

Article 35(1) of the Commission Regulation (EU) 2015/1222 of 24 July 2015 establishing a guideline on capacity allocation and congestion management (hereafter referred to as "CACM Regulation") requires that within 16 months after the regulatory approval on capacity calculation regions (hereafter referred to as "CCR") referred to in Article 15, all the TSOs in each capacity calculation region shall develop a proposal for a common methodology for coordinated Redispatching and Countertrading. This proposal shall be subject to public consultation in accordance with Article 12 of CACM Regulation.

All Channel CCR TSOs (hereafter referred to as "Channel TSOs") submitted, by 16 March 2018, to Channel NRAs, the "Channel Capacity Calculation Region TSOs' proposal for the methodology for 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" (hereafter referred to as "Channel RD and CT Methodology").
On the same date, the related "Channel Capacity Calculation Region TSOs' proposal for Redispatching and Countertrading cost sharing methodology in accordance with Article 74(1) of Commission Regulation (EU) 2015/1222 of 24 July 2015 establishing a guideline on capacity allocation and congestion management" (hereafter referred to as "Channel RD and CT Cost Sharing Methodology") was also submitted to Channel NRAs.

Channel TSOs held a public consultation on the Channel RD and CT Methodology from 1 December 2017 until 12 January 2018 on ENTSO-E public consultation website[1].
The Channel RD and CT Cost Sharing Methodology is not subject to public consultation.

This report provides an overview of the comments received during this public consultation, the Channel TSO's assessment on these comments and how the Proposed Channel RD and CT Methodology was amended based on these comments. The full list of comments received is included in section 3 of this document.

Note: Channel TSOs received officially only one response from one stakeholder (hereafter referred to as "the Respondent") during the consultation period. However, CWE TSOs, some of whom are also Channel TSOs, received by email on 30 January 2018 a position paper on Redispatching and Countertrading elaborated jointly by EFET, Eurelectric and the MPP. Even if not received during the consultation period and even if the content of this paper is more related to the coordinated Redispatching and Countertrading in an AC meshed network, Channel TSOs tried to answer to the relevant comments for the Channel Region in chapter 4 of this consultation report.

2. Assessment of stakeholders' comments

2.1. General remarks

On a general comment about Redispatching definition, the Respondent defines Redispatching as being a measure which consists in limiting the possibility to change the schedule of a specific asset

[1] https://consultations.entsoe.eu/markets/channel-redispatchandcountertrd/

or in a request of modification of this schedule. The Respondent notes that a change of dispatch requires complementary actions within the same bidding zone to restore the demand-supply balance in the system concerned.

While this comment is valid for an internal Redispatching where a congestion bid is compensated by a compensation bid elsewhere within the same bidding zone, this is not true in the case of cross-border Redispatching on a bidding zone border that consists of HVDC interconnectors. Indeed, as explained in Article 3(2) and Article 4 of the Proposed Channel RD and CT Methodology, coordinated Redispatching on a bidding zone border of the Channel region consists in a change of physical flow on one or several HVDC interconnector(s) of this bidding zone border, associated with a RD and CT Actions in the Requesting and Participating TSOs' bidding zone.

The Respondent also notes that, in order for countertrading to be cost-effective, the restoration of the demand-supply balance in each bidding zone should be implemented through market-based solutions.

In the context of Channel CCR, the only difference between Coordinated Redispatching and Countertrading is that in case of Coordinated Redispatching the selection of the RD and CT Actions is localised in the Requesting TSO's Control Area because of the congestion-relieving effect this RD and CT Action has. In the case of Countertrading, the selection of RD and CT Actions could be market-based as defined in Article 12(4)(a) of the Proposed Channel RD and CT Methodology. Alternatively, it could also be a specific selection of RD and CT Actions (in this case, without localization, and thus based only on economic criteria) and could also be implemented by other local mechanisms or via cross-border Redispatching.

This selection of RD and CT Actions could be possibly implemented via tenders as suggested by the Respondent, but this is not the only method of implementation. As explained in Article 12(3), the selection of the RD and CT Actions in each control area is the responsibility of the TSO operating each control area and based on local agreements or via a market-based solution applicable to its control area and approved by the national regulator, while ensuring the economic efficiency of the selected RD and CT Actions. The RD and CT Actions must also respect the operational security constraints (in accordance with Article 12 of the Proposed Channel RD and CT Methodology).

The Respondent wishes also a minimum level of coordination between CCRs in line with the provision of article 35(3) of the CACM Regulation on the progressive harmonisation of these methodologies.

The coordination between CCR is currently safeguarded by the role of RSCs. The provisions of Article 35(3) of the CACM Regulation aim at coordinating and harmonizing the mechanisms and agreements put in place on a control area level to redispatch all available generation units and loads including interconnectors and this, amongst all TSOs of each CCR. The progressive harmonisation of methodologies referred in Article 35(3) of the CACM Regulation is not across CCRs. Indeed, the report should provide the progressive coordination and harmonization inside the Channel CCR only.

Due to the Channel Region specificity, coordinated Redispatching and Countertrading within the region is not identical to coordinated Redispatching and Countertrading on bidding zone borders of other continental regions (as in the Core Region for example). Indeed, in opposition to other regions, no unscheduled flows over the Channel bidding zone borders might be observed since all the bidding zone borders are composed of fully controllable HVDC cables. A harmonization is thus

difficult to reach. However the RSCs will coordinate the coordinated Redispatching and Countertrading process in the Channel Region in parallel of coordinating these actions with the RSCs of other CCRs.

The Respondent regrets that the proposed methodology does not provide any details on the RD and CT Actions initiated by the Requesting and Assisting TSOs to compensate on each side of the interconnector the updated setting.

Channel TSOs have decided to add a specific Article 12 with more information of the selection of RD and CT Actions in the final version of the Channel RD and CT Methodology submitted to NRAs.

Finally, the Respondent wishes to highlight that "*the current practice of National Grid aimed to satisfy part of its system congestion management needs by contracting with balance responsible parties who are able to deliver electricity trading services, is an interesting tool since:*

- *It provides the TSO with a considerable amount of resources;*
- *It ensures transparency on the actions taken by the TSO to manage its system;*
- *It generates relevant price signals by influencing the electricity market price in the bidding zone concerned.*

The implementation of this practice by other TSOs in the Channel region and in other CCRs should therefore be duly considered."

While Channel TSOs recognises that this practice is interesting, they would like to highlight that this mechanism is dependent on explicit intraday allocation on the bidding zone borders of the Channel Region which will not continue under XBID and is not coordinated between TSOs of the region. Alternatives which do not make use of explicit capacity allocation, but achieve the same objective, must be carefully designed to ensure coordination between TSOs, avoid distortion to the Individual Grid Models (used for the coordinated security assessment of RSCs) and ensure that the BRP and Interconnector nominations seen by TSOs are representative of their expected physical output.
The coordination aspect is a strong requirement from Article 35(4) of CACM Regulation and article 78 of SO GL regulations for such remedial actions of cross-border relevance.

2.2. Article 7 - Calculation of the volumes available for countertrading

The Respondent suggests that the determination of volumes available for countertrading doesn't take into account the parameters used to calculate the capacity calculation (IGM, GSK, PTDF) and the market results.

The purpose of the indicative exchange of volume as described in Article 6 of Proposed Channel RD and CT Methodology is to give an indication, after the day-ahead market coupling results, of the available volume that Assisting TSOs could propose based on the production units and load schedules received for its control area.

Each Channel TSO will provide the available volume information daily to the RSCs and bilaterally with the concerned onshore TSOs located in the other side of the bidding zone border of the Channel Region. RSCs will then know the available indicative volume of other Channel TSOs as well as available transmission capacity of bidding zone borders of Channel CCR and other CCRs.

RSCs will then be able to propose a Countertrading (which can be reviewed into a Redispatching if the Requesting TSO proposes it) as remedial action to the Requesting TSOs, based on all these information.

During the coordination process, once the decision to initiate a coordinated Redispatching or a Countertrading is taken by Requesting and Assisting TSOs, both TSOs will confirm the actual availability of the needed local RD and CT Actions volume, potentially increased by the available cross-border RD and CT Actions volumes that neighbouring TSOs could provide upon proposal and analysis of Channel RSCs.

If we add the fact that Channel bidding zone border interconnectors are all HVDC lines where the expected final flow is determined univocally by the commercial and Countertrading nominations, the use of IGM, GSK and PTDF is thus useless for the exchange of volume available for Coordinated Redispatching and Countertrading. Nevertheless, those parameters will be used by the RSC to determine the volume to activate in order to solve congestion.

2.3. Article 8 - Calculation of the prices of the volumes available for countertrading

The Respondent requests that TSOs provide more details on the methodology and parameters used to calculate the price of the resources available for Countertrading and recommends in particular that TSOs rely on observed intraday prices for the imbalance settlement periods under consideration to predict the balancing of each bidding zone when Redispatching or Countertrading actions are triggered.

The purpose of the indicative exchange of volume as described in Article 7 is to give information and a forecast of the RD and CT Actions prices that could be activated if Redispatching or Countertrading is initiated. This indicative price should help the RSCs to propose the most economically efficient remedial action able to solve the congestion, while taking into account operational security.
The final price, used for settlement of the coordinated Countertrading and Redispatching process, will be determined by Participating TSOs after the coordination process, based on the information provided ex-ante by the Generation units and loads via the national agreements, as required by Article 35(6) of CACM Regulation. As such, the final price cannot be described directly within the Channel RD and CT Methodology.

2.4. Article 12 - Activation of Countertrading

The Respondent believes that, as far as congestion can be scheduled, it is more relevant to address them as soon as possible, e.g. shortly after the DA auction or during the ID continuous trading market, as this broadens the range of available resources.

Congestion depends on renewable energy that can fluctuate throughout the day, in contrast to the forecast. Later activation is to be preferred in case of sufficient available resources in order to increase the grid safety (i.e. less uncertainty…). However in case of insufficient volumes (or large needs), activation might be better earlier Therefore, the methodology allows also to address the issue as soon as possible after the Day-ahead market results, if a congestion problem is

immediately detected (for instance in case of physical congestion created by full flow reversal compared to the forecasted flow on Channel interconnector used as input for the Day-ahead capacity calculation). Practically, Article 5 explains that the range of time for activation of coordinated Redispatching and Countertrading is between the Day-ahead market results and the Interconnector Countertrading Deadline which is defined in the Annex of the Channel CT and RD Methodology.

2.5. Article 14 – Transparency and reporting

The Respondent highlights that both Redispatching and Countertrading Actions have an influence on price formation at regional level and may be considered to be subject to REMIT Regulation and the corresponding information should be published, not only "no later than one hour after the operating period" as foreseen by the Transparency Regulation, but as soon as the action is decided: i.e. before the corresponding operating period.

Channel TSOs agree with this comment and have modified the reporting requirement (now in Article 5(1)(a) of the Proposed Channel RD and CT Cost Sharing Methodology) with the new wording: "In line with the REMIT Regulation, all coordinated Redispatching and Countertrading will be reported within 1 hour from the activation of the Countertrading", and no more 1 hour after the operating period.

2.6. Annex

The Respondent suggests that the ICRTU should be consistent with the Imbalance Settlement Period (ISP) in force in the relevant electricity markets. The ICRTU will reflect the shortest capacity products available on each interconnector. Therefore, the future evolutions towards a 15 minutes ISP, as foreseen by the Guideline on Electricity Balancing, should be reflected by shorter ICRTU on interconnectors GB-FR and NL-GB, once the new ISP will be in force.

The ICRTU have been amended in the submitted version of the proposed RD and CT Methodology. On the GB-BE border, the ICRTU was already 15 minutes, being the minimum granularity period between the Imbalance Settlement Period in Belgium (15 minutes) and in GB (30 minutes).
On the GB-FR border, the ICRTU has been set to 30 minutes as the current Imbalance Settlement Period for the French and GB areas.
For the GB-NL border, ICRTY has been set to 15 minutes as the current Imbalance Settlement Period in the Netherlands, with a minimum activation time of 4 ISPs. Activation time of multiple of 15 minutes is then possible if this activation Period is minimum 60 minutes.

3. Full list of comments

Below is the full list of comments received via the public consultation (only one response, received on 12 January 2018)

Article	Comment
General remarks	The elaboration of a coordinated methodology for redispatching and countertrading by TSOs in each capacity calculation region (CCR) is an important step towards the optimisation of the actions taken by TSOs to effectively relieve physical congestions. In particular, the possibility for TSOs to rely on a large scope of remedial actions, preferably market-based, would allow to maximise the cross-zonal capacity made available to market participants while limiting congestion management costs. In particular, two different types of measure are available to TSOs to solve congestions: i) Redispatching: this measure consists in limiting the possibility to change the schedule of a specific asset or in a request of modification of this schedule. The Respondent notes that a change of dispatch requires complementary actions within the same bidding zone to restore the demand-supply balance in the system concerned. ii) Countertrading: this measure consists in updating the net export/import of two bidding zones, by simultaneously i) updating the scheduled cross-border exchanges, ii) updating the NTC or FB domain for the subsequent markets, and iii) opening opposite balance positions in the corresponding bidding zones. In order for countertrading to be cost-effective the restoration of the demand-supply balance in each bidding zone should be implemented through market-based solutions. In Respondent 's view, in case of congestion, TSOs should systematically compare the costs of all the possible combinations of redispatching and countertrading options and choose the most efficient, in line with Art. 35(4) of the CACM Regulation. For example, cross-zonal redispatching can be managed by countertrading plus local redispatching in both bidding zones. After both redispatching and countertrading actions, it is key that TSOs balance their system as swiftly as possible with a market-based approach. In this regard, The Respondent tends to favour that TSOs contract (through tenders) balance restoration actions with BRPs participating in the electricity markets. This solution would allow a transparent selection of the available resources based on a merit order and the early emergence of electricity prices more consistent with the actual status of the system and able to trigger efficient operational decisions. In addition, the Respondent wishes to draw TSOs' attention on the need to ensure a minimum level of harmonisation and consistency of coordinated redispatching and countertrading methodologies, in particular in control areas whose borders belong to multiple CCRs, as it is the case of France. A minimum level of coordination between CCRs as from this first stage of the elaboration of the different methodologies for coordinated redispatching and countertrading would therefore be welcome and in line with the provision of article 35(3) of the CACM Regulation on the progressive harmonisation of these methodologies. This is all the more important as redispatching and countertrading methodologies can have an impact on the level of market prices and on the dimensioning of reserves in each bidding zone/control area. Concerning the coordinated redispatching and countertrading methodology proposed for the Channel CCR, the Respondent regrets that it is focused only on the process for changing the flow over HVDC interconnectors and updating the NTC. The proposed

	methodology does not provide any details on the RD and CT Actions initiated by the Requesting and Assisting TSOs to compensate on each side of the interconnector the updated setting. The Respondent considers indeed, that the implementation of RD and CT Actions is key for managing congestions efficiently, by appropriately remunerating units which contribute to address congestions and by delivering reliable signals through energy markets. Moreover, the Respondent considers that the proposed methodology should be accompanied by an impact assessment of the proposal to enable market participants to provide an informed opinion. Thus, in Respondent 's view, the proposed methodology has to be completed with the RD and CT processes that TSOs of the Channel CCR intend to use in their control areas following an update of HVDC and NTC settings. In particular, the Respondent wishes to highlight that the current practice of National Grid aimed to satisfy part of its system congestion management needs by contracting with balance responsible parties who are able to deliver electricity trading services, is an interesting tool since: • It provides the TSO with a considerable amount of resources; • It ensures transparency on the actions taken by the TSO to manage its system; • It generates relevant price signals by influencing the electricity market price in the bidding zone concerned. The implementation of this practice by other TSOs in the Channel region and in other CCRs should therefore be duly considered.
Article 7 – Calculation of the volumes available for countertrading	The Respondent believes that the current methodology does not make sufficient reference to the opportunity to use the up-to-date results of the day-ahead (or intraday) capacity calculation process as an input for the determination of the volumes available for countertrading. Taking into account the updated parameters used for cross-zonal capacity calculation (ex. the updated Common Grid Models, GSK and PTDF values, etc.) in the coordinated redispatching and countertrading process will ensure the consistency of the data used in both processes. This will lead to a consistent framework for the selection of the remedial actions used in the capacity calculation process and the redispatching and countertrading actions decided afterward. In particular, for a border where X GW have been allocated from bidding zone A to bidding zone B, and where the latest capacity calculation determined that the exchange capacity from B to A would be Y GW, the Respondent recommends that TSOs consider a countertrading potential from B to A of X+Y, unless region B faces scarcity.
Article 8 – Calculation of the prices of the volumes available for countertrading	TSOs should provide more details on the methodology and parameters used to calculate the price of the resources available for countertrading. The proposed methodology does not go beyond what is already foreseen by the CACM Regulation without giving stakeholders further information on practices that TSOs intend to follow. The Respondent recommends in particular that TSOs rely on observed intraday prices for the imbalance settlement periods under consideration to predict the balancing costs of each bidding zone when redispatching or countertrading actions are triggered. A premium factor may be accounted for depending on the depth of the needed balancing action.
Article 12 – Activation of Countertrading	The Respondent believes that, as far as congestions can be scheduled, it is more relevant to address them as soon as possible, e.g. shortly after the DA auction or during the ID continuous trading market, as this broadens the range of available resources. Furthermore, the Respondent supports a more coordinated approach for the whole redispatching and countertrading actions taken by TSOs whose control area's borders

	belong to different CCRs. In Respondent 's view, it is important to consider all the available resources on an equal footing, including the ones located across borders and across different CCRs, as far as their activation could have an impact on the level of market prices and on the dimensioning of reserves in each bidding zone/control area. Hence, TSOs' redispatching and countertrading decisions should be the result of the selection of all available resources according to their merit order, including cross-border redispatching and countertrading actions across different CCRs. This approach would allow TSOs to activate the cheapest resources able to meet their system requirements. Yet, the process described in Article 12(10) does not seem to be in line with this principle, since it envisages the possibility for TSOs to consider cross-border exchange of energy on other Interconnectors/borders, only if local RD and CT Actions are not sufficient, thus without implementing a unique optimisation process.
Article 14 – Transparency and reporting	The Respondent wishes to highlight that both redispatching and countertrading actions have an influence on price formation at regional level. From this perspective, the related TSOs' decisions may be considered to be subject to REMIT Regulation (Regulation (EU) n°1227/2011) and the corresponding information should be published, not only "no later than one hour after the operating period" as foreseen by the Transparency Regulation (Regulation (EU) n°543/2013), but as soon as the action is decided: i.e. before the corresponding operating period. Such publications will then allow market participants to forecast more accurately imbalance energy prices in each bidding zone taking into account the remedial actions initiated by TSOs.
Annex	In the Respondent view the ICRTU should be consistent with the Imbalance Settlement Period (ISP) in force in the relevant electricity markets. Therefore, the future evolutions towards a 15 minutes ISP, as foreseen by the Guideline on Electricity Balancing (Regulation (EU) 2017/2195), should be reflected by shorter ICRTU on interconnectors GB-FR and NL-GB, once the new ISP will be in force.

4. Answers to EFET, Eurelectric and the MPP letter

CWE TSOs received on 30 January 2018 an email from the Market Parties Platform providing a position paper (dated 29 January 2018), on Redispatching and Countertrading elaborated jointly by EFET, Eurelectric and the MPP and entitled "Principles for Coordinated Re-dispatching & Countertrading for congestion management - Response of EFET, EURELECTRIC and the Market Parties Platform to the TSOs' regional consultations". This letter is included in section 4.2.

This response was not sent to Channel TSOs and some parts of this paper are not relevant for the Channel Region. However, Channel TSOs have chosen to answer to the relevant comments for the Channel Region in this chapter.

4.1. Channel TSOs answers to questions relevant to the Channel region

In addition to the answers already provided in the previous pages, here is complementary feedbacks for the questions relevant to the Channel Region:

For the comment 2 (on scheduled exchanges, NTC and balance positions handling), these actions are described in Article 11(7): "Coordinated Redispatching and Countertrading nomination on the Interconnector will be netted with the existing market nominations on the Nomination Platform" and Article 12 of the proposed Channel RD and CT Methodology. More details are also available in the explanatory note.

Concerning third comment, regarding the reporting requirements for compliance with Transparency and REMIT Regulations, these topics are addressed in the Article 5 of the Channel RD and CT Cost Sharing Methodology.

Concerning the fourth comment, on the RD and CT Actions used to restore the balance of the Requesting and Assisting TSO's area; the Channel TSOs agree that the different listed options listed in the letter are possible, and have defined them in Article 12(4) of the Channel RD and CT Methodology.

Regarding the fifth comment on financial compensation of the redispatched assets resulting of a RD and CT Actions, this is dependent on local mechanisms and agreements applicable to each Channel TSO's control area, while being compliant with Article 35(5) and 35(6) of the CACM Regulation.

In response to the comments regarding the Redispatching and Countertrading Actions, Channel TSOs refer to the explanatory note where the specifics of coordinated Redispatching and Countertrading in the Channel region are detailed.

4.2. Full letter

EFET European Federation of Energy Traders SO YOU CAN RELY ON THE MARKET

eurelectric ELECTRICITY FOR EUROPE

MARKET PARTIES PLATFORM Linking the CWE Market

Principles for Coordinated Re-dispatching & Countertrading for congestion management

Response of EFET, EURELECTRIC and the Market Parties Platform to the TSOs' regional consultations

■

29 January 2018

EFET, EURELECTRIC and the Market Parties Platform thank the TSOs for the opportunity to provide their views on the regional methodologies for redispatching and countertrading.

According to the CACM GL, TSOs shall propose by March 2018 methodologies for coordinated redispatching and countertrading in every capacity calculation region. In the daily management of transmission networks, redispatching and countertrading are measures taken by TSOs to manage congestions alongside topology measures and limitations of cross-border capacities offered to the market. For this reason, we believe that a holistic approach is necessary when considering redispatching and countertrading.

We believe that European TSOs can effectively manage congestions in the most efficient way by relying on a combination of topology measures, countertrading and redispatch actions, and buyback of transmission rights. Properly applied, this is a key aspect of an efficient zonal market design.

Our primary concerns lie in the manner in which TSOs choose to initiate redispatching and countertrading, what level of transparency accompanies these actions, and how they are remunerated.

Therefore, the redispatching and countertrading methodologies to be developed on the basis of the CACM and SO Guidelines need to detail:

1. How redispatching and countertrading on the one hand, and restrictions of cross-border capacities allocated to the market on the other hand are treated on an equal footing. In our joint response to the consultations on regional capacity calculation methodologies[1], we insisted on the importance for TSOs to systematically consider redispatching and countertrading when still facing congestion after applying non-costly remedial actions: indeed, any decision to restrict cross-border transmission capacities for reasons other than system security should be based on an analysis comparing the costs/benefits of applying redispatching or countertrading vs. limiting the availability of cross-border capacities to the market, in order to achieve a welfare optimum. This requires that both redispatching and countertrading are fully part of the possible means for TSOs to deal with congestions in each CCR, and mandatorily considered by the TSOs alongside topology measures.

2. How the scheduled exchanges, NTC/FB domain, and balance positions are simultaneously generated and handled by the relevant market and system operators.

3. How the operation scheme ensures full transparency and conforms to Transparency (ex-post) and REMIT Regulations, in terms of how much redispatching and countertrading is activated. This information should be available to market participants as soon as those actions are decided; full transparency on deviations from merit order activation (in case of joint congestion management and balancing) is also required.

4. How open positions generated by redispatching or countertrading are to be counterbalanced in a market-based manner to deliver appropriate economic signals. In this regard, we see three main options:
   a. TSOs managing the counterbalance in the framework of the balancing mechanism
   b. TSOs managing the counterbalance within the intraday markets
   c. Activation through a dedicated congestion management mechanism

   The methodologies to be developed on the basis of the CACM and SO Guidelines need to assess the pros and cons of these options as well as justify the choice of the option(s) that has (have) been retained.

5. How actions on specific assets based on their location are remunerated. In our view, any network user being redispatched or constrained must be fully financially compensated (full costs and opportunity loss) so as to leave the asset owner is left financially indifferent to the TSO action.

[1] EFET, Eurelectric, MPP and Nordenergi response to the TSOs' consultations on regional capacity calculation methodologies, dated 19 July 2017 and last updated on 14 December 2017, available at: http://www.efet.org/Files/Documents/Downloads/EFET_Eurelectric_MPP_Nordenergi-TSOs%20consultation%20CCM_14122017.pdf.

Going more in depth into redispatching and countertrading actions themselves, we believe that the proposals should be accompanied by a thorough evaluation of the advantages and drawbacks of the various options, so as to justify the choice of the preferred one (or the preferred combination of options). In our view, there are three basic types of redispatching and countertrading (in the following part of the document, "asset" should be understood as a generic/technology neutral term covering all sources of flexibility – generation, demand, storage):

- Constraining the dispatch of a specific asset:
  This means part of the flexibility of the asset around its scheduled set point is disabled by the relevant network operator.
  This may represent a loss of opportunity for the asset that should be fully financially compensated (full costs and opportunity loss), for instance in case offers for standard balancing products are "filtered" and consequently not shared on the European balancing platforms.
  In terms of system balance, such an intervention has no immediate impact on the asset and does not require any complementary action.
  We note however that the measure may have an impact on balancing markets, as some assets potentially contracted as reserves may be disabled because of the measure, leading to more expensive balancing activations or potentially to a lack of reserves, affecting subsequently imbalance settlement prices. When it has a potential to affect balancing reserves or balancing energy activation, the congestion management process needs to ensure that there is sufficient transparency on what is used for which purpose, that balancing energy bids activated for congestion management purposes do not impact the imbalance price, and that full compensation for congestion management actions is ensured.

- Modifying the scheduled dispatch of a specific asset:
  This means requesting a set point different than the scheduled one for a specific asset based on its location within a bidding zone.
  This may represent extra costs and/or loss of opportunity for the asset that must be fully financially compensated (full costs and opportunity loss).
  In terms of system balance, the activation of a specific asset opens a balance position in the same bidding zone that should be counterbalanced as discussed in point 4.

- Countertrading:
  This means updating the net export/import of two bidding zones, by simultaneously updating the scheduled cross-border exchanges, updating the NTC or FB domain for the same market time units, and opening opposite balance positions in the corresponding bidding zones.
  In terms of system balance, the opened balance position in each bidding zone will have to be managed as discussed in point 4.

Unfortunately, the methodologies already submitted by TSOs in several CCRs as part of the CACM implementation do not include such an evaluation so far. In our view, this evaluation is a pre-requisite to allow real progress on the optimisation of countertrading and redispatching and the improvement of market functioning at European level.

5. Changes made to the Proposal after the consultation

After the public consultation, Channel TSOs made some improvements to the proposed methodology, especially on the structure, leading to a new, leaner structure and a better synergy with the related proposed "Channel RD and CT Cost Sharing Methodology" by:

- Transferring the content of the old Articles 13 (Total Cost Calculation) and 14 (Reporting) from the Channel RD and CT Methodology to Articles 4 (Principles) and 5 (Monitoring and Reporting) of the proposed Channel RD and CT Cost Sharing Methodologies, as these topics are related to Article 74 and not Article 35 of CACM Regulation;
- Merging of TITLE 2 (Coordinated Redispatching) and TITLE 3 (Coordinated Countertrading Process), as both processes are quite similar in the Channel Region with the only difference being that the RD and CT Actions is localised in the Control Area of the Requesting TSO in the case of a Coordinated Redispatching;
- A new Article 12 was created "Selection of RD and CT Actions" in order to provide more information of this process following the change of flow on the HVDC interconnector (in the consultation version, it was included in the "Activation of Countertrading" Article).

Channel TSOs Explanatory note for the methodology for coordinated Redispatching and Countertrading and for the methodology for Redispatching and Countertrading Cost Sharing in accordance with Article 35(1) and Article 74(1) of Commission Regulation (EU) 2015/1222 of 24 July 2015 establishing a guideline on capacity allocation and congestion management

21 May 2018

Table of Contents

1. Introduction

The Commission Regulation (EU) 2015/1222 of 24 July 2015 establishing a guideline on Capacity Allocation and Congestion Management (hereafter referred to as "CACM Regulation") sets out rules to ensure optimal use of the transmission infrastructure, operational security and optimise the calculation and allocation of cross-zonal capacity.

To implement the CACM Regulation, each Capacity Calculation Region (hereafter referred to as "CCRs") is required to develop a common methodology for coordinated Redispatching and Countertrading as well as a common methodology for cost sharing of coordinated Redispatching and Countertrading. Pursuant to Article 35(1) and Article 74(1) of the CACM Regulation, all TSOs in the Channel CCR have established a proposal for a methodology for coordinated Redispatching and Countertrading (hereafter referred to as "Channel RD and CT Methodology") and a proposal for a methodology for coordinated Redispatching and Countertrading cost sharing (hereafter referred to as "Channel RD and CT Cost Sharing Methodology". This document provides additional information and explanations of these two proposals.

The following TSOs are submitting the proposed Channel RD and CT methodology and Channel RD and CT Cost Sharing methodology: RTE, NGET, NGIC, BritNed Development Ltd, Tennet NL, Nemo Link Ltd and Elia.

In accordance with Article 35(1) of CACM Regulation, the proposal for the Channel RD and CT Methodology has to be submitted for approval to all national regulatory authorities within the Channel CCR (hereinafter "Channel NRAs") no later than 16 months after the regulatory approval of capacity calculation regions referred to in Article 15 of the CACM Regulation. The date of submission of this proposal for Channel NRAs approval is therefore to be 17 March 2018 at the latest. Moreover, the proposal shall be subject to consultation in accordance with Article 12 of the CACM Regulation.

The proposed Channel RD and CT Methodology was publicly consulted on through the ENTSO-e website between 1 December 2017 and 12 January 2018. The consultation report is annexed to the proposal for the Channel RD and CT Methodology submitted for approval to Channel NRAs.

In accordance with Article 74(1) of CACM Regulation, the proposal for the Channel RD and CT Cost Sharing Methodology has to be submitted for approval to all Channel NRAs no later than 16 months after the regulatory approval of capacity calculation regions referred to in Article 15 of the CACM Regulation. The date of submission of this proposal for Channel NRAs approval is therefore to be 17 March 2018 at the latest.

2. Legal reference and requirements

2.1. Generalities in CACM Regulation

A number of relevant parts of the preamble of the CACM Regulation are cited here and should be taken into account in order to properly interpret the articles stated further below. No. 10 of the preamble of the CACM Regulation states that TSOs should:

"use a common set of remedial actions such as countertrading or redispatching to deal with both internal and cross-zonal congestion. In order to facilitate more efficient capacity

allocation and to avoid unnecessary curtailments of cross-border capacities, TSOs should coordinate the use of remedial actions in capacity calculation."

Followed by no. 12 of the preamble:

"TSOs should implement coordinated redispatching of cross-border relevance or countertrading at regional level or above regional level. Redispatching of cross-border relevance or countertrading should be coordinated with redispatching or countertrading internal to the control area."

2.2.coordinated Redispatching and Countertrading: link between CACM and SO GL Regulation

The basis for the proposed Channel RD and CT Methodology is Article 35 of the CACM Regulation:

> *"1. Within 16 months after the regulatory approval on capacity calculation regions referred to in Article 15, all the TSOs in each capacity calculation region shall develop a proposal for a common methodology for coordinated redispatching and countertrading. The proposal shall be subject to consultation in accordance with Article 12.*
>
> *2. The methodology for coordinated redispatching and countertrading shall include actions of cross-border relevance and shall enable all TSOs in each capacity calculation region to effectively relieve physical congestion irrespective of whether the reasons for the physical congestion fall mainly outside their control area or not. The methodology for coordinated redispatching and countertrading shall address the fact that its application may significantly influence flows outside the TSO's control area.*
>
> *3. Each TSO may redispatch all available generation units and loads in accordance with the appropriate mechanisms and agreements applicable to its control area, including interconnectors.*
> *By 26 months after the regulatory approval of capacity calculation regions, all TSOs in each capacity calculation region shall develop a report, subject to consultation in accordance with Article 12, assessing the progressive coordination and harmonisation of those mechanisms and agreements and including proposals. The report shall be submitted to their respective regulatory authorities for their assessment. The proposals in the report shall prevent these mechanisms and agreements from distorting the market.*
>
> *4. Each TSO shall abstain from unilateral or uncoordinated redispatching and countertrading measures of cross-border relevance. Each TSO shall coordinate the use of redispatching and countertrading resources taking into account their impact on operational security and economic efficiency.*
>
> *5. The relevant generation units and loads shall give TSOs the prices of redispatching and countertrading before redispatching and countertrading resources are committed.*
> *Pricing of redispatching and countertrading shall be based on:*
> *(a) prices in the relevant electricity markets for the relevant time-frame; or*
> *(b) the cost of redispatching and countertrading resources calculated transparently on the basis of incurred costs.*
>
> *6. Generation units and loads shall ex-ante provide all information necessary for calculating the redispatching and countertrading cost to the relevant TSOs. This information shall be shared between the relevant TSOs for redispatching and countertrading purposes only."*

The proposed Channel RD and CT Methodology following Article 35 of the CACM Regulation is also interlinked with Article 21 of Commission Regulation (EU) 2017/1485 of 2 August 2017 establishing a guideline on electricity transmission system operation (hereafter

referred to as “SO GL Regulation”) specifying that each TSO shall apply principles when activating and coordinating remedial actions in accordance with Article 23 of the SO GL Regulation:

> *“for operational security violations which need to be managed in a coordinated way, a TSO shall design, prepare and activate remedial actions in coordination with other concerned TSOs, following the methodology for the preparation of remedial actions in a coordinated way under Article 76(1)(b) and taking into account the recommendations of a regional security coordinator in accordance with Article 78(4).”*

Further Article 23(2) of SO GL Regulation specifies that:

> *“When preparing and activating a remedial action, including redispatching or countertrading pursuant to Article 23 and 35 of Regulation (EU) 2015/1222, or a procedure of a TSO’s system defence plan which affects other TSOs, the relevant TSO shall assess, in coordination with the TSO concerned, the impact of such remedial action or measure within and outside of its control area, in accordance with Article 75(1), Article 76(1)(b) and Article 78(1), (2) and (4) and shall provide the TSOs concerned with the information about this impact.”*

Also relevant in this respect is the requirement for TSOs to develop common provisions for operational security coordination on a regional level in Article 76(1) of the SO GL Regulation:

> *“…all TSOs of each capacity calculation region shall jointly develop a proposal for common provisions for regional operational security coordination, to be applied by the regional security coordinators and the TSOs of the capacity calculation region.”*

Article 76(1) further specifies that:

> *“The proposal shall respect the methodologies for coordinating operational security analysis developed in accordance with Article 75(1) and complement where necessary the methodologies developed in accordance with Articles 35 and 74 of Regulation (EU) 2015/1222.”*

Lastly, Article 78(1) of the SO GL Regulation states:

> *“Each TSO shall provide the regional security coordinator with all the information and data required to perform the coordinated regional operation security assessment, including at least:*
> *…(b) the updated list of possible remedial actions, among the categories listed in Article 22, and their anticipated costs provided in accordance with Article 35 of Regulation (EU) 2015/1222 if a remedial action includes redispatching or countertrading, aimed at contributing to relieve any constraint identified in the region; and …”*

The methodologies from the CACM Regulation and the SO GL Regulation are thus highly interlinked. The following chapters provide a description of Channel CCR interpretation and scope of this proposal.

2.3. Redispatching and Countertrading cost sharing

The basis for the proposed Channel RD and CT Methodology is Article 74 of the CACM Regulation:

> *“1. No later than 16 months after the decision on the capacity calculation regions is taken, all TSOs in each capacity calculation region shall develop a proposal for a common methodology for redispatching and countertrading cost sharing.*

2. The redispatching and countertrading cost sharing methodology shall include cost-sharing solutions for actions of cross-border relevance.

3. Redispatching and countertrading costs eligible for cost sharing between relevant TSOs shall be determined in a transparent and auditable manner.

4. The redispatching and countertrading cost sharing methodology shall at least:

(a) determine which costs incurred from using remedial actions, for which costs have been considered in the capacity calculation and where a common framework on the use of such actions has been established, are eligible for sharing between all the TSOs of a capacity calculation region in accordance with the capacity calculation methodology set out in Articles 20 and 21;

(b) define which costs incurred from using redispatching or countertrading to guarantee the firmness of cross-zonal capacity are eligible for sharing between all the TSOs of a capacity calculation region in accordance with the capacity calculation methodology set out in Articles 20 and 21;

(c) set rules for region-wide cost sharing as determined in accordance with points (a) and (b).

5. The methodology developed in accordance with paragraph 1 shall include:

(a) a mechanism to verify the actual need for redispatching or countertrading between the TSOs involved;

(b) an ex post mechanism to monitor the use of remedial actions with costs;

(c) a mechanism to assess the impact of the remedial actions, based on operational security and economic criteria;

(d) a process allowing improvement of the remedial actions;

(e) a process allowing monitoring of each capacity calculation region by the competent regulatory authorities.

6. The methodology developed in accordance with paragraph 1 shall also:

(a) provide incentives to manage congestion, including remedial actions and incentives to invest effectively;

(b) be consistent with the responsibilities and liabilities of the TSOs involved;

(c) ensure a fair distribution of costs and benefits between the TSOs involved;

(d) be consistent with other related mechanisms, including at least:

(i) the methodology for sharing congestion income set out in Article 73;

(ii) the inter-TSO compensation mechanism, as set out in Article 13 of Regulation (EC) No 714/2009 and Commission Regulation (EU) No 838/2010 (5);

(e) facilitate the efficient long-term development and operation of the pan-European interconnected system and the efficient operation of the pan-European electricity market;

(f) facilitate adherence to the general principles of congestion management as set out in Article 16 of Regulation (EC) No 714/2009;

(g) allow reasonable financial planning;

(h) be compatible across the day-ahead and intraday market time-frames; and

(i) comply with the principles of transparency and non-discrimination.

7. By 31 December 2018, all TSOs of each capacity calculation region shall further harmonise as far as possible between the regions the redispatching and countertrading cost sharing methodologies applied within their respective capacity calculation region."

While Articles 74(2), 74(3), 74(4), 74(6) and 74(7) are related to the Redispatching and Countertrading Cost Sharing, Article 74(5) adds some specific requirements about monitoring, reporting and improvement of actual need of Redispatching and Countertrading and its use, impact and improvement of remedial actions within the Channel CCR.

3. Definitions of Redispatching and Countertrading

3.1. Countertrading

According to the Article 2(13) of Commission Regulation (EU) 543/2013 of 14 June 2013 on the submission and publication of data in electricity markets and amending Annex 1 to Regulation (EC) No 714/2009 of the European Parliament and of the Council (hereafter referred to as "Transparency Regulation"), Countertrading has the following definition:

> "*'countertrading' means a cross-zonal exchange initiated by system operators between two bidding zones to relieve physical congestion."*

Countertrading is therefore considered as a measure with the objective of relieving physical congestion between two bidding zones, where the precise generation or load pattern alteration is not pre-defined. This measure consists of a specific cross zonal exchange between the two TSOs (referred to as an "SO-SO trade") of the two bidding zones, and the activation by each TSO of compensation in each bidding zone, in order to restore the balance in their respective control area, where this compensation is independent of the geographical location within the bidding zone.

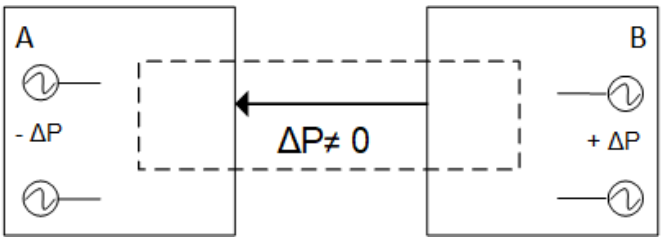

Figure 1 - Example of countertrading between 2 areas in the Channel Region

Application to Channel CCR: The cross-zonal exchange is materialised with the change of flow on the HVDC Interconnectors of a Channel bidding zone border. This action relieves effectively the physical congestion. Unlike for AC interconnectors, this change of physical flow will be similar to the value of the SO-SO trade[1]. This SO-SO trade leads to an imbalanced situation in both control areas that must be tackled by compensation actions (defined as "RD and CT Actions" in Article 2 of the Proposed Channel RD and CT Methodology) whose value is also identical to the SO-SO trade. In the specific case of Countertrading, these RD and CT Actions might be a market-based solution as the geographical location of these RD and CT Actions does not matter and are totally cross-border independent: the location of the RD and CT Actions in one Control Area has strictly no influence on the other Control Area implied in the Countertrading. Only the cross-zonal exchanges have an impact.

3.2. Redispatching

Article 2(26) of the Transparency Regulation further clarifies that:

[1] Not exactly identical, as there is e.g. ramping constraints management which will transform the 'rectangles' of commercial trades + SO-SO trades nominations to the Interconnector Reference Program (ICRP shape). However, this 'shape' will follow the schedule defined by the nominations, which is different in the case of an AC meshed grid.

"'Redispatching' means a measure activated by one or several system operators by altering the generation and/or load pattern in order to change physical flows in the transmission system and relieve a physical congestion."

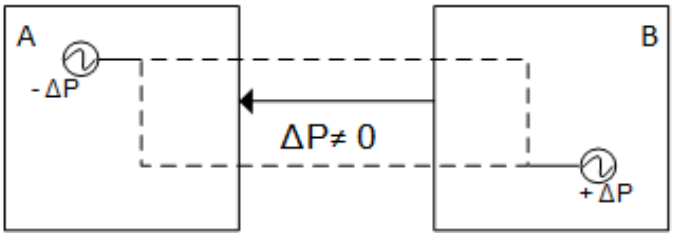

Figure 2 - coordinated Cross-border redispatching between 2 areas

Redispatching is therefore considered a measure with the objective of relieving physical congestions by altering a particular generation and/or load pattern. Specifically, this refers to one or several TSO(s) requesting, when congestion appears, specific generators (or specific consumers) to start or increase production (or consumption) and specific other generators (or loads) to stop or reduce production (or consumption), in order to maintain the network security.

Application to Channel CCR:
The cross-zonal exchange is materialised with the change of flow on the HVDC Interconnectors of a Channel bidding zone border. This action relieves effectively the physical congestion. Unlike for AC interconnectors, this change of physical flow will be similar to the value of the SO-SO trade. This SO-SO trade leads to an imbalanced situation in both control areas that must be tackled by RD and CT Actions whose value is also identical to the SO-SO trade. The only difference with Countertrading is that in case of coordinated Redispatching on a Channel bidding zone border, the RD and CT action in the Requesting TSO's area is localised. . However, the localisation of the RD and CT Actions in the Assisting TSO's area does not have any influence on the physical congestion.

The specific representation of the coordinated Redispatching in the Channel Region is thus represented on the figure 3.

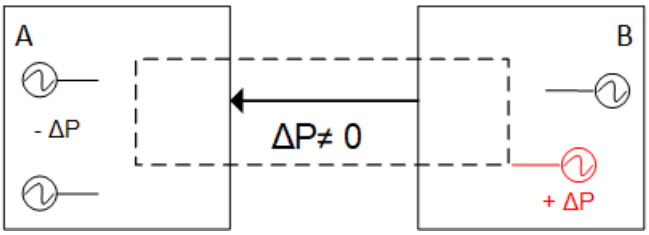

Figure 3 - coordinated Redispatching between 2 bidding zones of the Channel Region. RD and CT Actions is localized only in the area B (where the physical congestion is localized)

In the Channel Region, if a physical congestion should be relieved in the bidding zone of a Channel TSO (Requesting TSO), coordinated Redispatching and Countertrading on HVDC interconnector of the Channel CCR's bidding zone border with another Channel TSO (Assisting TSO) is thus made of[2]:

- *Change on flow on the HVDC interconnector* via a SO-SO trade;
- *RD and CT Actions* in the Assisting TSO's area; and
- *RD and CT Actions* in the Requesting TSO's area (localised in case of coordinated Redispatching, not localised in case of Countertrading).

[2] Art. 3(2) of the proposed Channel RD and CT Methodology

4. Scope and application of the proposed Channel RD and CT methodology

This section provides additional information and explanations related to Article 3 “Scope” and Article 4 “General principles for coordinated Redispatching and Countertrading” of the proposed Channel RD and CT Methodology

The scope of this proposed Channel RDCT Methodology is limited to the coordinated Redispatching and Countertrading on Channel Interconnectors because those constitute the Channel Region, which consists of the 3 bidding zone borders FR-GB, NL-GB and BE-GB.

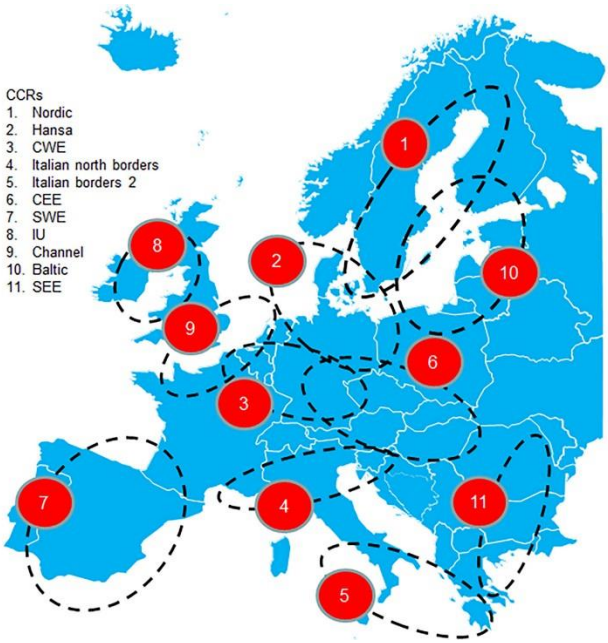

Figure 4 - Channel CCR localisation in Europe

The CACM art 2.3 defines ‘capacity calculation region’ as being the geographic area in which coordinated capacity calculation is applied;

As per Article 10 of the “All TSOs proposal for Capacity Calculation Regions (CCRs[3])” in accordance with Article 15(1) of CACM, the Channel CCR includes the bidding zone borders FR-GB, NL-GB and BE-GB and are attributed to TSOs RTE, NGET, NGIC, BritNed, Tennet, Nemo Link, Elia.

Channel TSOs consider that coordinated Redispatching and Countertrading activated for solving congestion on FR-BE, NL-BE of UK-SEM are actions on bidding zone borders of other CCRs, and in consequence these actions will follow the RDCT methodologies of those CCRs.

Redispatching or Countertrading on a particular HVDC Interconnector of the Channel Region can only be applied for solving congestions situated in the control areas of the TSOs this HVDC Interconnector links.

[3] in its current amended version, modified after inclusion of the BE-GB Bidding zone border which was approved by All NRA’s (ERF - 18th of September 2017)

This proposed Channel RDCT Methodology only applies to physical congestion occurring in the AC grid of the relevant Channel TSOs, which is detected between the Day-ahead Market Coupling Results and the Interconnector Countertrading Deadline.

As defined in Article 2(18) of CACM Regulation, a physical congestion is: *"any network situation where forecasted or realised power flows violate the thermal limits of the elements of the grid and voltage stability or the angle stability limits of the power system".*

The principle of coordinated Redispatching and Countertrading is to resolve physical congestion. This will ensure firmness of cross-border nominations and is to be applied before any curtailment after the Day Ahead Firmness Deadline.

The application of coordinated Redispatching and Countertrading occurs after the Day-Ahead capacity calculation and before, during, or after the Intraday Capacity Calculation. The result of this Intraday Capacity Calculation does not allow for a revised Net Transfer Capacity (NTC) below the Already Allocated Capacity (AAC) which could not be enough to solve the physical congestion.. The proposed Channel RD and CT Methodology could allow such a reduction (capping of NTC) in order to allow the countertrading process.

The failure or unplanned outage of a Channel Interconnector or constraints due to technical limits for stable operation of a Channel Interconnector fall outside of this methodology as this does not correspond to a physical congestion. Furthermore, any SO-SO trade initiated by TSOs on a HVDC interconnector of a Channel Bidding zone border for other purposes than relieving physical congestion (for instance, ramping constraint management, Replacement Reserve management (TERRE), Rate of Change of Frequency (ROCOF) management, …) does not fall under the definition of Countertrading or Redispatching as defined in Transparency Regulation and therefore falls also outside of the scope of this methodology.

A physical congestion on a network element that is significantly impacted by Channel cross-zonal flows (according to the Channel ID/DA CC Methodology) can be relieved by cross-border Redispatching or Countertrading on the HVDC interconnector. Cross-border Redispatching or Countertrading is thus a Remedial Action of Cross border relevance for which the cost sharing principles described in the proposed Channel RD and CT Cost Sharing Methodology apply.

In Channel Region, as Redispatching and Countertrading are only done via change of flow over the HVDC interconnector, it is not possible to have uncoordinated RD and CT Actions as per the coordination process described in the proposed Channel RD and CT Methodology.

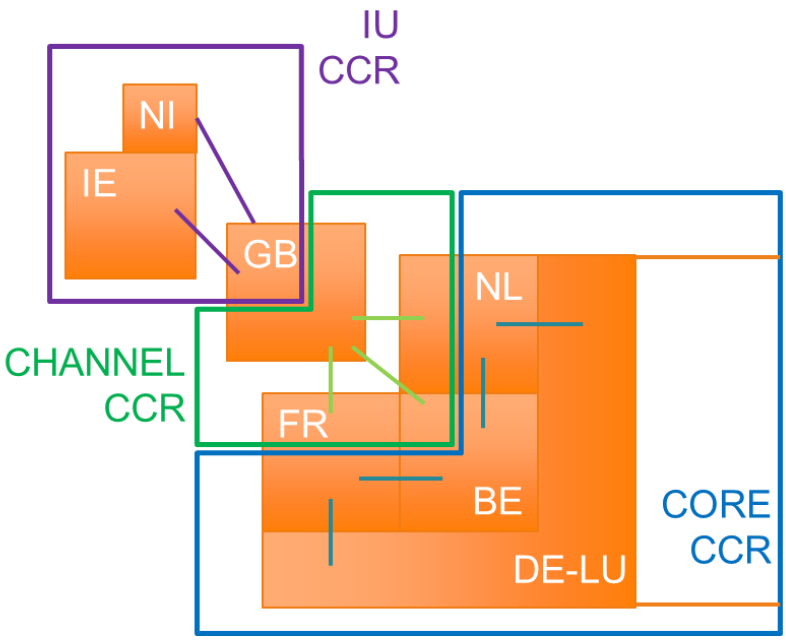

Figure 5 - Channel, IU and CORE CCRs

While some Channel Interconnector TSOs are only part of the Channel CCR, Channel "Onshore" TSOs have bidding zone borders belonging to more than one CCR, as shown on Figure 5.

As methodologies relating to CACM Regulation Article 35 and 74 are per CCR, there are overlaps for some bidding zones.

The scope of the Channel RD and CT Methodologies is limited to Countertrading and coordinated Cross-border Redispatching on the Interconnectors of the bidding zone borders of the Channel Region (i.e. modification of flow on the Interconnectors of FR-GB, NL-GB and BE-GB borders) that follow the description of article 3(2) of the proposed Channel RD and CT Methodology

> *"Art 3(2) coordinated Redispatching and Countertrading in the Channel Region are a set of Remedial Actions that must been considered as one package:*
>
> *a. Change of flow on the Interconnector of a bidding zone border of the Channel Region which significantly contributes to the relieving effect of the physical congestions. This change of flow has to be coordinated in all conditions;*
>
> *b. RD and CT Actions in the Bidding Zone of the Assisting TSO which might be coordinated if there is a cross-border impact;*
>
> *c. RD and CT Actions in the Bidding Zone of the Requesting TSO, localized in case of Redispatching and not localized in case of Countertrading, which might be coordinated if there is a cross-border impact."*

As explained in Article 4(3) of the proposed Channel RD and CT Methodology, "*a coordinated Redispatching and Countertrading remedial action that does not follow the description of Article 3(2) falls outside of the scope of this proposed Channel Methodology and have to be handled in the coordinated Redispatching and Countertrading methodologies developed in accordance with Article 35(1) of the CACM Regulation by the relevant CCR*".

For instance, cross-border Redispatching between France and Belgium should follow the methodologies and the cost sharing principles defined in the relevant Article 35 and 74 coordinated Redispatching and Countertrading Methodologies of the Core CCR. The same principle should apply for countertrading on Moyle or East-West Interconnector, following the methodologies developed in the IU CCR.

Similarly, if TSO(s) are members of both the Core and Channel Region and decide to use cross-border Redispatching/Countertrading (from the Core CCR) as a RD and CT Actions for Channel CCR, this RD and CT Actions should also be aligned with the Core CCR methodologies and the bilateral or multilateral TSOs agreements allowing such exchanges.

Finally, internal redispatching in the grid of an onshore Channel TSO is also out of scope of this Channel RD and CT Methodology. For instance, internal redispatching in Belgium won't have any cross-border impact on the National Grid (UK) control area, because of the HVDC specific context on the Channel Region bidding zone borders. However, if this internal redispatching has an impact on RTE Control Area, this internal redispatching should follow the processes that will be defined in the Core CCR coordinated Redispatching and Countertrading Methodologies, as such internal redispatching of cross-border relevance should be coordinated.

5. Coordinated Redispatching and Countertrading Processes

5.1.TimeTable overview

Article 5 and the Annex of the proposed Channel RD and CT methodology describes the timeframes associated to the coordination and activation processes. For the sake of clarity, the following table summarises the timings of Period 1 to Period 4 with more details

Timing	Timing description	RD and CT Methodology step	Comments
D-1 9h30 CET	LT GCT	No RD or CT	
D-1 11h00 CET	Day-ahead Firmness deadline	No RD or CT	
D-1 14h30 CET	SDAC results of day-ahead allocations and nominations are integrated in Nomination Platform and TSOs Systems.	Start of Period 1	Coordinated Redispatching or Countertrading cannot be initiated before SDAC results (and shipper nominations) are integrated in each TSO systems(deadline D-1 14h30).
D-1 20h00 CET	Deadline for "Input Data Gathering" phase of the Intraday Capacity Calculation (Exact Timing still to be confirmed in the implementation of the Channel ID CC Methodology)	End of Period 1 Start of Period 2	During Period 1, IGM is updated with the SO-SO trade, allowing this information to be taken into account in the ID Capacity Calculation Process
D-1 21h30 CET	"Validation" phase of the Intraday Capacity Calculation; (Exact Timing still to be confirmed in the implementation of the Channel ID CC Methodology)	End of Period 2 Start of Period 3	During Period 2, IGM is updated with the SO-SO trade. But this is too late to have it taken into account in the ID Capacity Calculation Process. If needed, TSOs will have to reject the ID NTC resulting from

			ID CC and propose an updated one.
XX' before delivery (RSC Coordination Deadline)	RSC Coordination deadline is the latest moment in time when the Channel RSCs are able to perform the coordination for coordinated Redispatching or Countertrading and the operational security assessment. This deadline (currently estimated between 60 and 120' before realtime) will be determined with the RSCs during the implementation of the Channel RD and CT methodology and the definition and implementation of the methodology for the preparation of remedial actions managed in a coordinate way in accordance with Article 76(1)(b) of SO GL Regulation.	End of Period 3 Start of Period 4	During Period 3, if SDIC is still open for the SO-SO trade concerned period, the NTC should be capped in order to allow the SO-SO trade to take place and not have the market cancelling the SO-SO trade effect by taking the new available capacity in SDIC due to netting.
55' before delivery (deadline for receiving XBID results) *(Only applicable to borders included in the TERRE project)*	Between the reception of the XBID results and the deadline for introducing TERRE inputs (30 minutes before delivery)	During Period 4	During this period, SOs participating in the TERRE project may submit interconnector constraints to the TERRE algorithm in order to perform countertrading. In such case, the coordination would be done directly between Channel TSOs without the participation of Channel RSCs as explained in Article 10 of the proposed Channel RD and CT mehodology
Interconnector deadline	Last limit to introduce a SO-SO trade instruction on RNP (minimum time needed for interconnector Dispatch System to update the Reference Program of the Interconnector based on the RNP nominations)	End of Period 4	During Period 4, the coordination process could exceptionally be done between Channel TSOs without the participation of Channel RSCs as explained in Article 10 of the proposed Channel RD and CT methodology

Here is an example of timeline in the case of a countertrade of 120 minutes between 3h and 5h CET in day D, with a ICRTU of 15 minutes, an Interconnector deadline of 30 minutes before physical delivery and a RSC Deadline of 90 minutes before realtime (example, as RSC deadline is not yet defined).

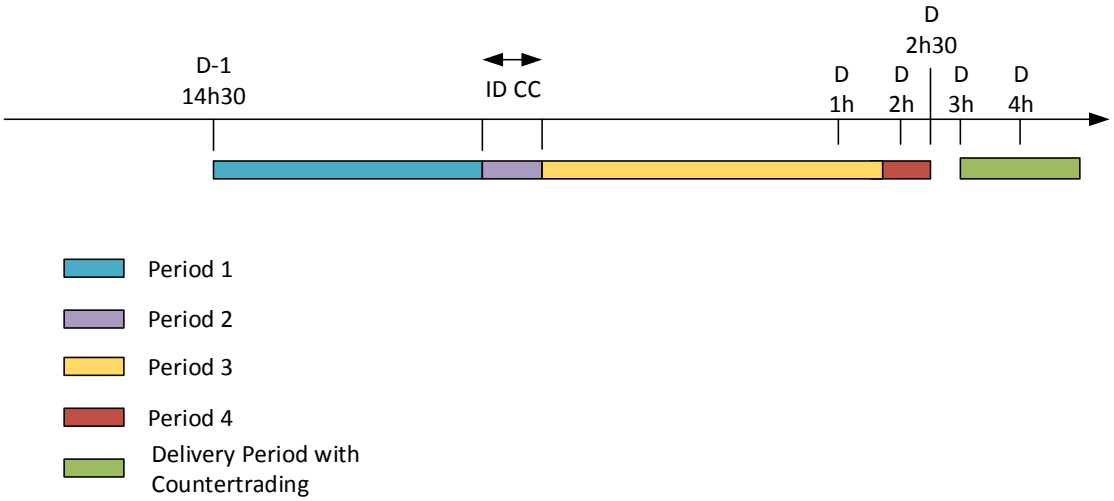

Figure 6 - Timeline for Nemo Link

Note: In the case where more than one ID Capacity Calculation will take place in the Channel region in the future, multiple sequences of Period 1 and Period 2 will follow, with Period 3 beginning after the last ID CC of the day.

5.2. Border-specific coordinated Redispatching and Countertrading operational procedures

The border-specific coordinated Redispatching and Countertrading operational procedures (hereafter referred to as “RD and CT Procedures”) are operational procedures implementing the proposed Channel RD and CT Methodology on each bidding zone border of the Channel CCR. They are not part of the methodology and will be written with the Participating TSOs during the implementation phase. They shall be compliant with the principles described in the proposed methodology and will at least detail the following aspects of the methodology:

- Indicative volume exchange and update;
- Indicative price exchange and update;
- Type of RD and CT Actions used in each Control Area;
- Detection and Coordination process between Participating TSOs;
- Final Pricing methodology; and
- Settlement process.

5.3. Process description

The proposed Channel RD and CT Methodology is centred on the cooperation of the TSOs in the Channel Region via the RSC. Specific requirements in the SO GL Regulation already require, to a large extent, coordination when implementing remedial actions. As coordinated Redispatching and Countertrading are remedial actions with cross-border impact, these are implicitly included in the coordination process.
Coordination is done during different timeframes in relation to different markets as described in the timetable overview section and in Article 5 of the proposed Channel RD and CT Methodology.

5.3.1. Volume information availability and Price information Exchange

Firstly, as defined in Article 6 and 7 of the proposed Channel RD and CT Methodology, TSOs shall individually assess the estimation of the available RD and CT Actions volume and provide it, including the estimated costs, to the RSC and the other Channel TSO on the channel bidding-zone Border[4].

This price and volume information is a non-binding estimation, provided at least once in Day-ahead, after the results of the SDAC. It is to be noted that the TSOs will provide an estimation of the available volume that could be used for coordinated Redispatching and Countertrading on all of its borders, without any specific reservation. This is why this volume availability will be confirmed again during the detection and coordination process.
The RSC also needs this information, amongst other data such as common grid models, the contingency list and the operational security limits, in order to carry out a coordinated regional operational security assessment. The RSC then delivers the results of the coordinated regional operational security assessment to the Channel TSOs.

5.3.2. Detection

The RSC shall, where it detects a physical congestion, recommend to the relevant TSOs the most effective and economically efficient remedial action. This will take place in the frame of the SO GL Art 76 methodology. If the proposed remedial action is coordinated Redispatching or Countertrading over a Channel Interconnector then the coordination falls under this proposed Channel RD and CT Methodology. This recommendation is the result of coordination across the borders of Channel Region, through coordination of the RSC with other RSCs.

Except in Period 4, if one TSO detects a physical congestion in its bidding zone either caused by the flow on a Channel Interconnector or that could be solved by a change of scheduled flow on a Channel Interconnector, this TSO should inform the RSC and the other Channel TSO linked by this Channel Interconnector. RSC will then perform the analysis and will confirm (or not) the TSO assumption by coming back with a remedial action recommendation.

Any recommendation received from the RSC for a particular Countertrading action shall be evaluated by the Participating TSO with regard to the elements involved in that action and located in its control area. The decision-making right on the implementation of countertrading action remains with the TSOs but there shall be a duty to inform and explain the TSOs' decision to the RSC in case the recommendation by the RSC for a particular action is not accepted.

The Requesting TSO (the one facing the physical congestion) can always propose to the Participating TSOs and RSCs to turn the Countertrading into coordinated Redispatching (as explained in Article 3 (2)(c) of the proposed Channel RD and CT Methodology) if the Requesting TSO can select and activate a RD and CT Actions that contributes (together with the change of the flow in the HVDC Interconnector) to the relieving effect on the physical congestion.

[4] Practically, the exchange between TSOs will be done respectively between NGET and Tennet, NGET and RTE, and NGET and Elia.

5.3.3. Coordination

The process described above leads to a considerable degree of coordination of redispatching and countertrading, as assessment for needed actions on a regional level will be performed by a third party, the RSC. Thus, this neutral entity will ensure a more efficient dispatching of relevant resources on a regional level in comparison to the current situation, where congestion is relieved bilaterally by involved TSOs.

As a RD and CT Action is considered as making part of the coordinated Redispatching/Countertrading Remedial Action in Channel, the concept of a cross-border impact as defined in the methodologies developed in accordance with Article 75/76 SO GL also apply on them. If a RD and CT Action has a cross border impact as defined in the methodologies developed in accordance with the Article 75/76 of SO GL, then the RSC must be included in order to analyse the effect of it on the neighbouring control area's element.

5.3.4. Fast Coordination

Closer to real time there will be less possibilities for regional coordination via the RSC. In order to ensure coordination of unforeseen events causing physical congestions happening after the last relevant coordinated operational security analysis (defining the RSC deadline) and until real time, the TSOs shall coordinate bilaterally with neighbouring TSO(s) in order to plan and carry out coordinated Countertrading and Redispatching. These TSOs will inform directly impacted TSOs in Channel Region as well as the Channel Region-appointed RSC, taking into account that Congestions in a third TSOs' grid as a result of a Countertrading or the coordinated Redispatching on a Channel Interconnector should be avoided.

5.3.5. Activation of coordinated Redispatching and Countertrading

Once the coordination process amongst the participating TSOs and the RSC is done, the the volume of the RDCT is firm and the SO-SO Trade nomination will be introduced on the Nomination Platform (after NTC update if needed). The prices of the RD and CT Actions are also firm at the end of the coordination process, in the case of a bilaterally agreed model between Participating and Assisting TSO based on the cost of resources available for the RD and CT Actions at that moment in time, in accordance with Article 35(5) of CACM Regulation.
The nominated SO-SO trade shall be included by the TSOs in the forthcoming Individual Grid Model (IGM).

An NTC Reduction will be needed before the SO-SO Trade introduction on the Nomination platform in the case where the SIDC is still open for the delivery period, to avoid market trades worsening the congestion.

<u>Example</u>: 800 MW flow from BE to GB between 10 and 11am on day D. NTC at this time is 1000 MW in both direction. AAC is 800MW and then ATC in direction BE-GB is thus 200MW and ATC in direction GB-BE is 1800MW, after netting
At 2am of Day D, a physical congestion is detected in GB, due to this import flow. During its analysis, the RSC concludes that the maximum import flow on the BE-GB Interconnector (in order to relieve the congestion) is 500MW.

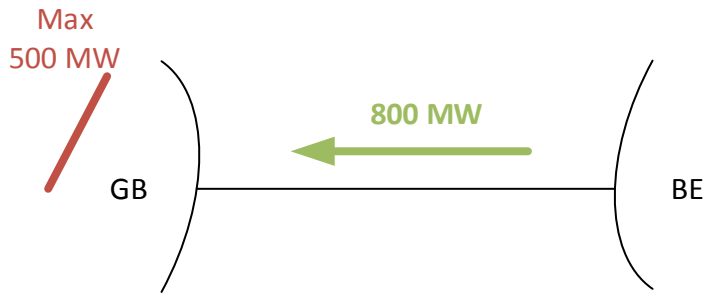

Figure 7 - Countertrading example: congestion in GB

RSC proposes a countertrading proposal of 300MW from NGET and Elia as remedial action. We are in period 3, after the ID CC. After coordination with Elia and Nemo Link, a countertrading of 300 MW is accepted, Elia and NGET having respectively the 300 MW down and 300MW up RD and CT Actions. This countertrading would reduce the final flow to 500 MW.

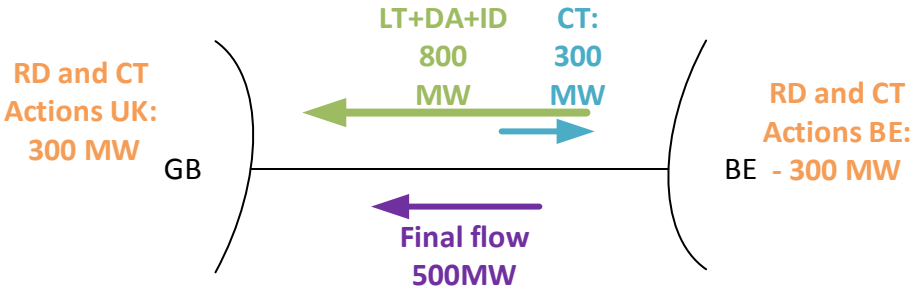

Figure 8 –Countertrading Example: Final flow after 200 MW of countertrading

In this example, the SO-SO trade nominations could be introduced in the Nomination Platform in parallel of SDIC platform. Therefore, for XBID, AAC is still 800 MW because it doesn't know that there is a countertrading of 300 MW.
If this 300MW countertrading is applied without NTC reduction, there is still a risk that the market will use the ATC of 200 MW still available on the BE→GB direction, cancelling the effect of the countertrading.

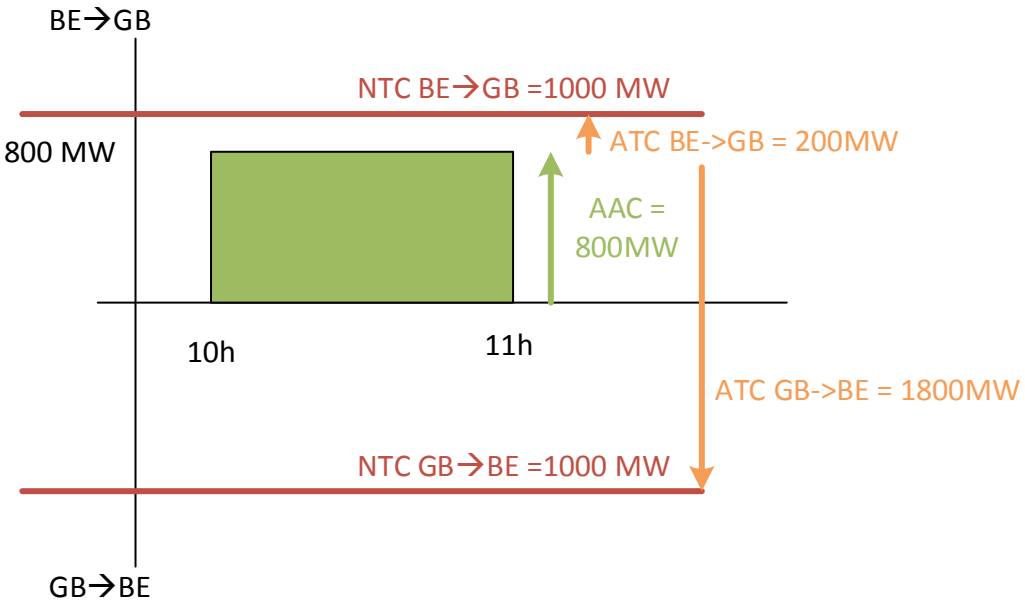

Figure 9 - Countertrading Example: visualisation of AAC, NTC and ATC before SO-SO Trade

This is why the NTC should be reduced to 800MW, in order to have an ATC of 0MW in the direction BE → GB. Similarly, the ATC in the opposite direction is still 1800MW. In order to allow room for the 300MW countertrading, the NTC in opposite direction should be reduced by the amount of the countertrade (new NTC in direction GB→BE = 700 MW = 1000 MW-300MW), leading to a new ATC in the direction GB→BE of 1500 MW.

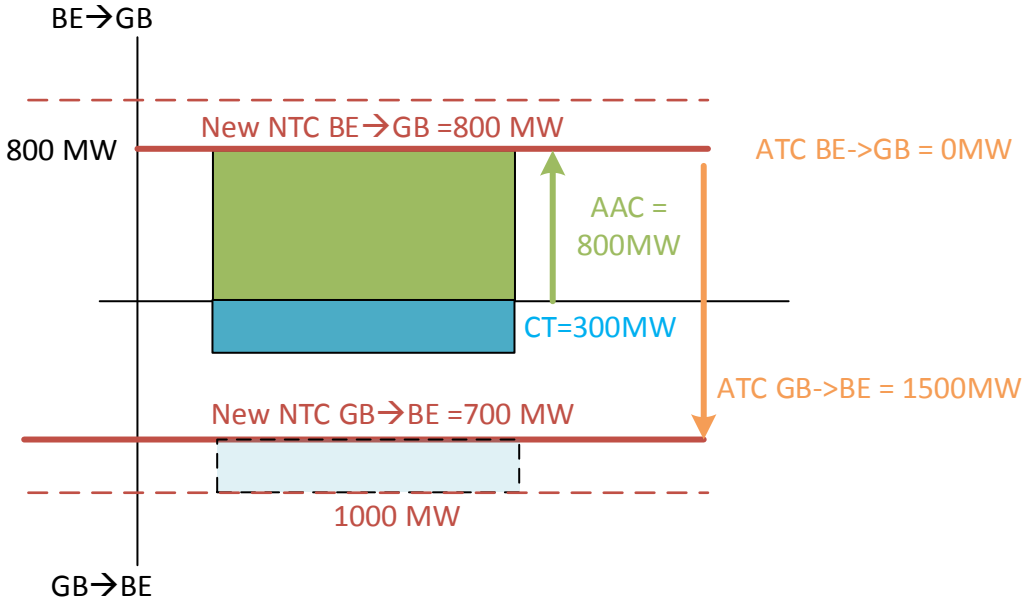

Figure 60 - Countertrading example: New NTC in both direction

Another NTC Reduction strategy could also be implemented: for instance, capping the NTC below the 800 MW AAC to 500 MW and then modifying AAC in XBID to 500 MW in order to have the same results without having to reduce the NTC in the opposite direction).
The exact NTC Reduction process will be designed during the implementation phase of this proposed RD and CT Channel Methodology.

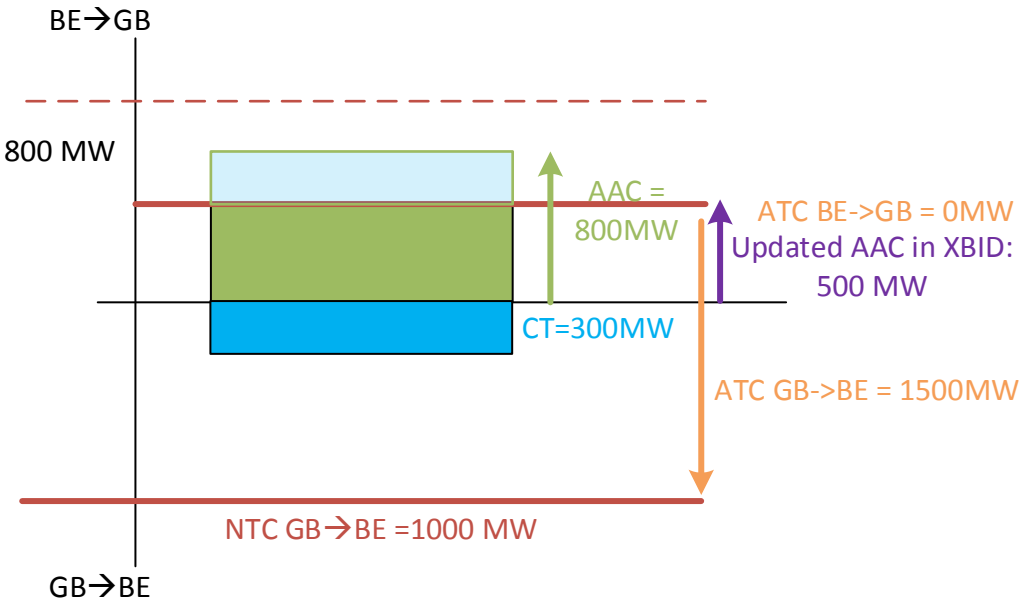

Figure 11 - Countertrading example: other NTC reduction strategy (Capping in the congested direction and update of AAC in XBID)

Once the NTC reduction phase is applied, countertrading could be introduced in the Nomination Platform via a SO-SO trade, and TSOs will prepare the RD and CT Actions.

5.3.6. Selection of RD and CT Actions

As explained in Article 12(3), the selection of the RD and CT Actions in each control area is the responsibility of the TSO operating each control area and based on local agreements or via a market-based solution applicable to its control area and approved by the national regulatory authority, while ensuring the economic efficiency of the selected RD and CT Actions. The RD and CT Actions must also respect the operational security constraints (in accordance with Article 12 of the Proposed Channel RD and CT Methodology).

In the context of Channel Region, the only difference between coordinated Redispatching and Countertrading is that in case of coordinated Redispatching the selection of the RD and CT Actions is localised in the Requesting TSO's Control Area because of the congestion-relieving effect this RD and CT Action has. In the case of Countertrading, the selection of RD and CT Actions could be market-based as defined in Article 12(4)(a) of the Proposed Channel RD and CT Methodology. It could also be a specific selection of RD and CT Actions (in this case, without localisation, and thus based only on economic criteria) and could also be implemented by other local mechanisms or via cross-border Redispatching/Countertrading.
However, in case of coordinated Redispatching, a specific selection of the RD and CT Actions based on their location (rather than only the economic criteria) will be needed. Similarly, even in case of Countertrading, if the activation of some RD and CT Actions selected by the Merit Order will cause operational issue in the Requesting or Assisting TSO, these RD and CT Actions could be discarded.

The process to select these RD and CT Actions will be described in the RD and CT Procedures, considering the rules and agreements applicable in the control area of each Participating TSO.

6. Cost Sharing process of the coordinated Redispatching and Countertrading

6.1. Total cost calculation

The total cost of a coordinated Redispatching and Countertrading is composed of the following:

- RD and CT Actions cost/revenue in the CA of the Requesting TSO
- RD and CT Actions cost/revenue in the CA of the Participating TSO

In addition, when calculated and provided by the Assisting TSO, the charges incurred by the Facilitating TSO due to the impact of the SO-SO trade (e.g. additional imbalance, additional interconnector losses, …) could be added to the total cost of the coordinated Redispatching and Countertrading.

6.2. Cost Sharing

The third “High Level Principle” in the Recommendation of the Agency for the Cooperation of Energy Regulators (ACER) no 02/2016 of 11 November 2016 on the Common Capacity Calculation and Redispatching and Countertrading Cost Sharing Methodologies states that “*As a general principle, the costs of remedial actions should be shared based on the ‘polluter-pays principle’, where the unscheduled flows over the overloaded network elements should be identified as ‘polluters’ and they should contribute to the costs in proportion to their contribution to the overload*”.

In the Channel Region, there are no unscheduled flows due to the Interconnectors of the Channel Bidding Zone borders being HVDC, and as such there is no direct “polluter” identified.

The assisting TSO is requested to help, by providing RD and CT Actions in order to compensate the imbalance of its grid due to the SO-SO trade. The Requesting TSO, who is facing the congestion, should thus logically bears the entire costs of the coordinated Redispatching or Countertrading.

7. Monitoring

Coordinated Redispatching and Countertrading will be reported to the Entso-e Transparency Platform (ETP) within one hour after the activation, in order to monitor the use of remedial actions with costs.

In addition, the Requesting TSO will record the justification of its request for coordinated Redispatching or Countertrading, as well as, if any, the reason of rejection provided by the assisting TSO. The Participating TSOs will also log the costs of the RD and CT Actions and the impact of the remedial Actions. Once per year they will share this log with other Channel TSOs in order to review these remedial actions and to improve the operational procedures. Channel TSOs will also share this information with NRAs upon request.

As explained in Article 5(4) of the Channel RD and CT Cost Sharing Methodology, the mechanism to verify the actual need for coordinated Redispatching or Countertrading between the TSOs involved exists in the detection and the coordination process.

Finally, the process for allowing monitoring of Channel Region by the competent regulatory authorities, in addition with the other reporting of the Channel RD and CT Methodology, will be effectively done by the monitoring mechanisms described in the Proposed Channel DA and ID CC Methodology as explained e.a. in

- Article 6(7) Proposed Channel DA and ID CC Methodology:
  A TSO of the Channel Region may decide to keep some of the CNECs which have a cross-zonal flow sensitivity below the threshold, in which case it will justify them to the other TSOs and shall furthermore provide them to the NRAs of the Channel Region for monitoring.

- Article 7(5) Proposed Channel DA and ID CC Methodology:
  Each TSO may apply an operational adjustment before practical implementation of the FRMs into their CNE definition. Each TSO shall submit to the NRAs for monitoring any new value of the FRM for each CNE.

- Article 9(3) Proposed Channel DA and ID CC Methodology:
  The external constraints shall be based on system study and shall be regularly reviewed and, in any case, at least once a year. The concerned TSO shall submit the system study justifying their application to the NRAs of the Channel Region for monitoring.