



Capacity Calculation Region Hansa TSOs'
Common Redispatching and Countertrading
Cost Sharing Methodology in accordance with
Article 74 of Commission Regulation (EU)
2015/1222 of 24 July 2015 establishing a
Guideline on Capacity Allocation and
Congestion Management

23 March 2022

All TSOs of the Capacity Calculation Region Hansa, taking into account the following:

Whereas

- (1) This document is a common methodology of the TSOs of Capacity Calculation Region (hereafter referred to as “CCR”) Hansa as described in ACER decision 04-2019 of 1 April 2019 and associated annexes¹ and any amendments thereof by all NRAs or ACER in line with Article 9 of Commission Regulation (EU) 2015/1222 of 24 July 2015 establishing a guideline on Capacity Allocation and Congestion Management (hereafter referred to as the “CACM Regulation”).
- (2) This Methodology is a common methodology for redispatching and countertrading cost sharing (hereafter referred to as “RCCS Methodology”) in accordance with CACM Regulation Article 74.
- (3) This RCCS Methodology takes into account the general principles, goals and other methodologies set in the CACM Regulation, Commission Regulation (EU) 2017/1485 of 2 August 2017 establishing a guideline on electricity transmission system operation (hereafter referred to as “SO Regulation”), Regulation (EU) 2019/943 of the European Parliament and of the Council of 5 June 2019 on the internal market of electricity (hereafter referred to as “Regulation (EU) 2019/943”), the Commission Decision (EU) 2020/2123 of 11 November 2020 on the derogation for Krieger’s Flak Combined Grid Solution (hereafter referred to as “KF CGS”) following article 64 of Regulation (EU) 2019/943. The CACM Regulation sets out rules to ensure optimal use of the transmission infrastructure, operational security and optimising the calculation and allocation of cross-zonal capacity, and it sets requirements for the TSOs to cooperate on the level of CCRs, on a pan-European level and across bidding-zone borders. The SO Regulation defines rules and requirements for methodology development for the purpose of safeguarding operational security, frequency quality and the efficient use of the interconnected system and resources.
- (4) In accordance with CACM Regulation Article 9(9), the proposed RCCS Methodology across CCR Hansa contributes to and does not in any way hinder the achievement of the objectives of CACM Regulation Article 3 . The RCCS Methodology ensures operational security and fair and non-discriminatory treatment of TSOs (Article 3(c) and CACM Regulation Article 3(e) and Article 74(6)(i)). It ensures operational security by specifying the cost sharing principles for the process of coordinated countertrading and redispatching (hereafter referred to as “RD and CT”) with cross-border relevance thus enabling the use of RD and CT in a regionally coordinated way. This ensures equal treatment of TSOs. Further, the RCCS Methodology ensures transparency in the measures taken by TSOs by obliging them to record all measures taken and the subsequent cost of these measures and allowing for CCR Hansa NRAs to request the information recorded.
- (5) The RCCS Methodology identifies the cost sharing principles between relevant TSOs for RD and CT actions of cross-border relevance, according to the requirements from CACM Regulation Article 74(2), and follows the principles of the CCR Hansa Coordinated Redispatching and Countertrading Methodology according to CACM Regulation Article 35 (hereafter referred to as “CRC Methodology”).

¹ ACER decision 04-2019 on electricity TSOs proposal for amendments of CCRs of 1 April 2019 (https://acer.europa.eu/Official_documents/Acts_of_the_Agency/Individual%20decisions/ACER%20Decision%2004-2019%20on%20electricity%20TSOs%20proposal%20for%20amendments%20of%20CCRs.pdf), and associated annexes (https://acer.europa.eu/Official_documents/Acts_of_the_Agency/Pages/Annexes-to-the-DECISION-OF-THE-AGENCY-FOR-THE-COOPERATION-OF-ENERGY-REGULATORS-No-04-2019.aspx).

- (6) This RCCS Methodology defines costs and income and sets rules for region-wide cost sharing from using RD and CT in the situations defined in Article 35 (2) of the CACM Regulation and the respective article of the CRC Methodology
- (7) Only costs of RD and CT measures that are consistent with CACM Regulation Articles 35(4) and 74(2), hence which are coordinated and of cross-border relevance, are relevant for the CRC Methodology and the RCCS Methodology.
- (8) The eligible costs are determined in a transparent and auditable manner, as required by CACM Regulation Article 74(3) as it is clearly defined which costs can be included in the cost sharing and that, to the extent possible, existing markets mechanisms and appropriate mechanisms and agreements are used as stated in the CRC Methodology Article 4(1)(a).
- (9) Following Article 78(2)(a) of the SO Regulation, the CCR Hansa RSC is obliged to recommend to the relevant TSOs the most effective and economically efficient remedial actions, following the updated list of possible remedial actions and their anticipated costs. Each TSO is obliged to submit the list to the RSC, following Article 78(1)(b) of the SO Regulation. Ex post the activation of RD and CT, the eligible realised costs will be documented by the TSOs as part of the requirements in this RCCS Methodology Article 4.
- (10) The RCCS Methodology follows the requirements by CACM Regulation Articles 74(6)(a), (b), (c) and (f) as it provides incentives for TSOs to manage congestions. This includes using RD and CT and thereby incentivises TSOs to invest effectively, as this RCCS Methodology states that costs and incomes are, depending on the situation, either:
- a. fairly distributed to the owners of the CCR Hansa interconnectors,
 - b. to be covered by the TSO in whose control area the physical congestion took place,
 - c. split between TSOs of neighbouring CCR, according to the cost sharing methodology of that CCR.
- This transparent and closely coordinated procedure allows the TSOs to have a reasonable financial planning as required by CACM Regulation Article 74(6)(g).
- (11) The RCCS Methodology is consistent with the relevant methodologies, as the cost sharing principles ensure that the cost of the RD and CT is distributed to the TSOs who benefit from the methodology for sharing congestion income as set out in CACM Regulation Article 73, and the inter-TSO compensation mechanism as set out in Article 13 of Regulation (EU) 2019/943 and Commission Regulation (EU) No 838/2010 of 23 September 2010 on laying down guidelines relating to the inter-transmission system operator compensation mechanism and a common regulatory approach to transmission charging. Thus, it complies with CACM Regulation 74(6)(d).
- (12) The RCCS Methodology follows the requirements by CACM Regulation Articles 74(5)(a) and (c) as the need to utilise RD and CT is analysed and verified through the operational security analysis carried out by the RSC and in real-time by the TSOs. If RD and CT has been recommended, following Article 4(1)(b) in the CRC Methodology and SO Regulation 78(2)(a), the CCR Hansa RSC has verified the RD and CT of cross-border relevance to have been the most effective and economically efficient solution to violations of the operational security limits in the operational security analysis. In the CRC Methodology Article 7, the TSOs oblige the CCR Hansa RSC to document the use of RD and CT and the costs in order to monitor the use of RD and CT with costs ex post following the requirements by CACM Regulation Article 74(5)(b).

- (13) The RCCS Methodology follows the requirements by CACM Regulation Article 74(5)(d) as planning the use of remedial actions, including RD and CT, will take place from the moment the market participants' schedules are known in day-ahead and throughout the day of operation, while the activation of measures will be done as close to the time of operation as possible. The time slot for activation of measures should be coordinated between TSOs as this will allow for the planning to be updated with the latest information, as specified in Article 3(5) of the RCCS Methodology. This allows for improvement of the selection of RD and CT measures, and has been specified in the CRC Methodology and also in the requirements by the SO Regulation Article 76(1)(b). The time frame for the proposed process for CCR Hansa is compatible across the day-ahead and intraday market time frames as the RD and CT identified in one process step are also taken into account in the following process steps and coordinated as close to operation as possible, thus complying with CACM Regulation Article 74(6)(h).
- (14) Article 4(3) of this RCCS Methodology specifies a process to allow the monitoring of the CCR Hansa by the competent regulatory authorities, as the CCR Hansa TSOs are obliged to provide a complete record of the items stated in Article 4(1) of this RCCS Methodology. The similar process is specified in Article 7(8) in the CRC Methodology.
- (15) The RCCS Methodology facilitates the efficient long-term development and operation of the pan-European interconnected system and the efficient operation of the pan-European electricity market as required by CACM Regulation Article 74(6)(e), as specified in whereas (4) and (8), the methodology provides the incentives to invest effectively, to coordinate the use of RD and CT to allow improvements in the use of remedial actions and to ensure an efficient utilisation of the transmission grid. Whereas (12) also specifies why the methodology helps ensuring an efficient operation of the pan-European electricity market, as it allows for further coordination and improved use of RD and CT.
- (16) With the Commission Decision (EU) 2020/2123 of 11 November 2020 on the derogation for KF CGS following Article 64 of Regulation (EU) 2019/943 the KF CGS was granted a 10 year exception. This RCCS Methodology is in line with the Commission Decision. The decision sets out that the capacity to be used for calculating the minimum capacity shall be the residual capacity after deduction of the capacity necessary for transporting the forecasted electricity production by the wind farms connected to the KF CGS grid network at the day ahead stage to the respective national onshore systems, rather than the total transmission capacity.

SUBMIT THE FOLLOWING RCCS METHODOLOGY TO ALL REGULATORY AUTHORITIES OF THE CCR HANSA:

Article 1

Subject, matter and scope

1. This RCCS Methodology shall be considered the common methodology of the CCR Hansa TSOs in accordance with Article 74 of CACM Regulation and covers the sharing of costs of coordinated RD and CT actions realised in line with the CRC Methodology developed in accordance with Article 35 of the CACM Regulation on bidding-zone borders included in CCR Hansa.

Article 2

Definitions and interpretation

1. For the purposes of the RCCS Methodology, terms used in this document shall have the meaning of the definitions included in Article 2 of the CACM Regulation, of Regulation (EU) 2019/943, Directive (EU) 2019/944, Commission Regulation (EU) No 543/2013 of 14 June 2013 on submission and publication of data in electricity markets (hereafter referred to as “Transparency Regulation”) and the Commission Decision (EU) 2020/2123 of 11 November 2020 on the derogation for KF CGS following article 64 of Regulation (EU) 2019/943.
2. In addition, in this RCCS Methodology, the following terms shall have the meaning below:
 - a. “Costs” are the actual costs incurred by TSOs according to the appropriate mechanisms and agreements, as stated in CACM Regulation Article 35(3), for coordinated RD and CT in accordance with the CRC Methodology, needed to relieve physical congestion. If applicable, this is limited to:
 - i. Cost of increase or decrease of generation and/or load pattern;
 - ii. Availability payments for additional upward and downward regulation;
 - iii. Curtailment of renewables;
 - iv. Activation and start-up costs;
 - v. Activation of balancing energy bids according to Commission Regulation (EU) 2017/2195 Article 29 in connection with Title V Articles 44 to 57;
 - vi. Costs related to imbalances, in the absence of settlement mechanisms for deviations pursuant to Commission Regulation (EU) 2017/2195 Articles 50(4) and 51(2);
 - b. “Incomes” are the actual revenues received by TSOs according to the appropriate mechanisms and agreements, as stated in CACM Regulation Article 35(3), for coordinated RD and CT in accordance with the CRC Methodology, needed to relieve physical congestion. If applicable, this is limited to:
 - i. income from increase or decrease of generation and/or load pattern;
 - c. ‘RSC’ means the Regional Security Coordinator(s) (RSC(s)) appointed for CCR Hansa, unless it is explicitly otherwise stated, according to Article 77(1)(a) of the SO Regulation that will perform the tasks allocated to this(these) RSC(s) according to Article 77(1)(c)(i) of the SO Regulation;
 - d. ‘TSO’ means the CCR Hansa TSO(s) unless it is explicitly otherwise stated.
3. In this RCCS 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 the RCCS Methodology;
 - c. References to an “Article” are, unless otherwise stated, references to an article of this RCCS Methodology;
 - d. Any reference to legislation, regulations, directives, orders, instruments, codes or any other enactment includes any modification, extension or re-enactment of it when in force.
4. If a TSO plans to apply cost sharing for the first time of one or more of the types of Costs, referred to in Article 2(2)(a)(ii) to (vi), the TSO shall inform the all CCR Hansa regulatory authorities on the TSO’s cost sharing of those types of Costs, at the latest 2 months in advance. The TSO is to accompany this information by explanations, elaborating how the cost sharing of the types of Costs will be consistent with the RCCS Methodology, and showing examples how the cost sharing of those types of Costs will work in practice.

Article 3

Cost-sharing methodology for redispatching and countertrading measures

1. Costs and Incomes relating to a RD and CT measure in accordance with CACM Regulation Article 35(5), which is applied in order to:
 - a. maintain minimum technical limits for stable operation of a CCR Hansa HVDC interconnector, following the CRC Methodology Article 3(1)(a),
 - b. handle fault, failure or unplanned outage of a CCR Hansa interconnector including the converter stations, following the CRC Methodology Article 3(1)(b),
 - c. maintain the capacity on the KF CGS interconnector in case a congestion occurs that is due to wind forecast error for one of the windfarms, following the CRC Methodology Article 3(1)(c),

shall be split between the owners of the relevant CCR Hansa interconnector according to the sharing key in Annex 1.

2. Costs and Incomes relating to a RD and CT measure in accordance with CACM Regulation Article 35(5), which is applied:
 - a. In case the RD and CT related to the CCR Hansa bidding-zone borders is proposed based on the operational security analysis carried out by the RSC other than referred to in Articles 3(1)(a), 3(1)(b) and 3(1)(c) of the RCCS Methodology, following the CRC Methodology Article 3(1)(d),
 - b. In case the RD and CT is coordinated between neighbouring TSOs of CCR Hansa in situations, other than referred to in Articles 3(1)(a), 3(1)(b), 3(1)(c) and 3(2)(a) of the RCCS Methodology, following the CRC Methodology Article 3(1)(e),

shall be covered by the TSO in whose control area the physical congestion took place.

3. Costs and Incomes relating to a RD and CT measure in accordance with CACM Regulation Article 35(5), for cross-regionally coordinated RD and CT across CCR Hansa bidding-zone borders, in order to handle a physical congestion in the adjacent AC grid, following the CRC Methodology Articles 6(1)(a) and 6(1)(b), shall be covered by TSOs of the relevant CCR, according to the cost sharing methodology of that CCR.

4. Costs and Incomes relating to TSOs requesting RD and CT measures in accordance with CACM Regulation Article 35(5), , from adjacent CCRs in the following situations:
 - a. The RSC requesting RD and CT measures through the RSC of neighbouring CCRs, following the CRC Methodology Article 6(2),
 - b. After the last relevant coordinated operational security analysis carried out by the RSC, the TSOs can request RD and CT measures from neighbouring CCR through the relevant connected TSO participating in that CCR, following the CRC Methodology Article 6(3),

shall be covered by the TSO in whose control area the physical congestion took place.

5. The mechanism to verify the actual need for RD and CT as required by CACM Regulation Article 74(5)(a) follows the requirements put out by Articles 78(2) and 78(3) of the SO Regulation to the RSC's coordinated regional operational security assessment and the individual TSO's assessment following Article 78(4) of the SO Regulation.
6. The assessment of the impact on operational security and economic criteria of the RD and CT is performed by the CCR Hansa RSC in the coordinated regional operational security assessment as required in Article 74(5)(c) in CACM Regulation and Article 78(2)(a) of the SO Regulation, specifying that when the CCR Hansa RSC detects a constraint, it shall recommend to the relevant TSOs the most effective and economically efficient remedial actions.

Article 4

Documentation of the Costs and Incomes of activated redispatching and countertrading

1. The RSC shall record the following information, on a market time-unit basis, for each redispatching measure activated, in line with the Transparency Regulation:
 - a. the measure taken (i.e. production increase or decrease, load increase or decrease, in MW);
 - b. the duration of the measure (in multiples of the market time unit);
 - c. the identification, location and type of network elements concerned by the measure;
 - d. the reason for the measure; and
 - e. capacity affected by the measure taken (in MW).
2. The RSC shall record the following information, on a market time-unit basis, for each countertrading measure activated in their control area, in line with the Transparency Regulation:
 - a. The measure taken (i.e. cross-zonal exchange increase or decrease, in MW);
 - b. the duration of the measure (in a multiple of the market-time unit);
 - c. the bidding zone concerned;
 - d. the reason for the measure; and
 - e. change in cross-zonal exchange (in MW).
3. For the activated RD and CT measures recorded in accordance with the above Article 4(1) and Article 4(2), and following Article 7 of the CRC Methodology, developed in line with Article 35 of

CACM Regulation, the RSC is obliged to keep a record, for 5 years, of the Costs and Incomes incurred separately for the RD and CT measures applied.

4. Each TSO has to inform the RSC of the Costs and Incomes incurred from measures referred to in Article 4(1) and Article 4(2).
5. Upon request of NRAs, the TSOs are obliged to provide a complete record of the items stated in Article 4 of this RCCS Methodology.

Article 5 Implementation of the RCCS Methodology

The implementation of this RCCS Methodology is subject to the implementation of the CRC Methodology in accordance with Article 35 of the CACM Regulation.

Article 6 Language

The reference language for this RCCS Methodology shall be English. For the avoidance of doubt, where TSOs need to translate this RCCS 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 RCCS Methodology to their relevant national regulatory authorities.

Annex 1

Current CCR Hansa bidding zone borders

CCR Hansa bidding zone border	Interconnector	Involved TSOs/Parties	Sharing key
Denmark (DK2) – Germany/Luxembourg (DE/LU)	Kontek	Energinet, 50Hertz Transmission GmbH, Vattenfall AB	Southbound direction (585MW): Energinet: 190/585 50Hertz: 195/585 Vattenfall AB: 200/585 Northbound direction (600MW): Energinet: 1/3 50Hertz: 1/3 Vattenfall AB: 1/3
	Krieger's Flak Combined Grid Solution	Energinet, 50Hertz Transmission GmbH	For Articles 3(1)(a), 3(1)(b): 50%/50% For Article 3(1)(c): The TSO whose wind forecast leads to RD or CT shall cover the cost.
Denmark (DK1) – Germany/Luxembourg (DE/LU)	All	Energinet, TenneT TSO GmbH	50% / 50%
Sweden (SE4) – Poland (PL)	SwePol Link	Svenska Kraftnät, PSE S.A.	50% / 50%
Denmark (DK1) – The Netherlands (NL)	COBRACable	Energinet, TenneT TSO B.V.	50% / 50%
Sweden (SE4) – Germany (DE/LU)	Baltic Cable	Baltic Cable AB	100%