

Explanatory note for amendments to the Algorithm Methodology* for the price coupling algorithm due to Co-optimisation

Also includes explanation of amendment to:

Annex 2 to the Algorithm methodology: Set of requirements for the intraday auction algorithm.

- Amendments to the requirements for IDAs.

Annex 3 to the Algorithm methodology - Algorithm monitoring for SDAC

- Amendments due to co-optimisation.
- Monitoring of Scalable Complex Orders.
- General amendments on used terms and for text consistency.

Links on the referenced documents in this Explanatory note are provided in the “Useful links” section.

23 November 2023

Disclaimer

This explanatory document is submitted by all NEMOs to the Agency for the Cooperation of Energy Regulators for information and clarification purposes only accompanying the “All NEMOs’ proposal for amendment of the Methodology for the price coupling algorithm, the continuous trading matching algorithm and the intraday auction algorithm also incorporation a common set of requirements in accordance with Article 37(5) of the Commission Regulation (EU) 2015/1222 of 24 July 2015 establishing a guideline on capacity allocation and congestion management.

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1. Introduction

This explanatory document gives an overview of the background and context for All NEMOs proposed amendments to the Algorithm methodology and its Annexes due to Co-optimisation.

Background section provides a short resume of the legal background and the existing ACER's decisions on the co-optimized allocation process of cross-zonal capacity for the exchange of balancing capacity or sharing of reserves in accordance with Article 40 of the EB Regulation (hereinafter "Co-optimisation methodology" or "co-optimisation") as well as the Initial impact analysis and Roadmap study performed by TSOs and NEMOs.

The proposed amendments to the Algorithm methodology concerning the price coupling algorithm for Day-Ahead Market aims to include the relevant TSOs requirements and relevant elements needed for introducing the co-optimisation process. Section 4 lists and further underpins the actual amendments and additions that are proposed in the different articles of the Algorithm methodology and its Annexes.

Supported also by the Market Participants' (MPs) feedback during the Public Consultation process, far more research and development are required to be done by TSOs and NEMOs, taking into account the MPs feedback considering their bidding needs, for a proof-of-concept of co-optimisation to be provided, and a fully-fledged methodology to be defined, allowing a subsequent implementation of co-optimisation. The considerations of the SDAC MSD working group are presented in Section 3, and in Section 4 the NEMOs elaborate on the complexity of implementing Co-optimisation into SDAC, and the areas of uncertainty that will need further research.

In addition to amendments due to Co-optimisation, NEMOs are also proposing amendments due to the already implemented Scalable Complex Orders, to the Algorithm Monitoring methodology. (Annex 3 to the Algorithm methodology). These amendments are further elaborated in Section 4.3.5.

For preparation of the upcoming Intraday Auctions (IDAs) specific amendments to Algorithm methodology Article 6.2 and to the SIDC Requirements (Annex 2 to the Algorithm methodology) are also proposed and further explanations are provided in Section 5.

2. Background

2.1 Relevant Regulations and Directives

The Article 40 of EB Regulation lists Co-optimised allocation process as one of three alternative processes for two or more TSOs to exchange balancing capacity or sharing of reserves. A proposal for the application of Co-optimisation may be initiated by two or more TSOs, or be requested by their relevant regulatory authorities, in accordance with Article 59 of Directive 2019/944. Co-optimisation shall apply for the exchange of balancing capacity or sharing of reserves with a contracting period of not more than one day and where the contracting is done not more than one day in advance of the provision of the balancing capacity.

2.2 The Co-optimisation methodology proposed by TSOs and decided by ACER

[All TSOs submitted to ACER on 18 December 2019](#) a proposal for a methodology for a co-optimised allocation process of cross-zonal capacity for the exchange of balancing capacity or sharing of reserves in accordance with Article 40(1) of the EB Regulation.

[On 17 June 2020, ACER amended and decided – Decision No 12/2020](#) – on the methodology for a co-optimised allocation process of cross-zonal capacity for the exchange of balancing capacity or sharing of reserves (the "co-optimisation methodology") in accordance with Article 40(1) of the EB Regulation.

Article 3(1) of the co-optimisation methodology states that one principle for applying co-optimised cross-zonal capacity allocation is that the process shall be integrated within the SDAC algorithm and shall allocate cross-zonal capacities for the exchange of standard balancing capacity products (SBCPs) or sharing of reserves following the objective in Article 9(2). The objective of the cross-zonal capacity allocation optimisation function shall be the maximization of the sum of economic surplus for SDAC and the economic surplus from the exchange of balancing capacity or sharing of reserves per trading day.

2.3 Entso-e's Implementation Impact Assessment

During the drafting of the co-optimisation methodology, the complexity of co-optimisation made clear that several DA and BCM market and process related aspects require deeper investigation. ACER therefore confirmed to let TSOs conduct an implementation impact assessment as part of the implementation phase in cooperation with the NEMOs. [This report was published by all TSOs on 17 December 2021.](#)

The report contains a Technical Feasibility analysis providing a high-level qualitative overview for the set of requirements for the implementation of co-optimisation. As the set of requirements will be provided by TSOs to NEMOs, the Implementation impact analysis recommended a prototype-based analysis of the identified implementation options to be provided also. Foreseen detailed requirements for a 2-step implementation and a 1-step implementation needed to be further assessed. It was also expected that such a prototype analysis would provide detailed insights into the technically most favourable implementation approach. Therefore, it was recommended to conduct a prototype analysis to compare computational variants of the 1-step co-optimisation implementation option with 2-step co-optimisation implementation and facilitate the definition of the set of requirements.

2.4 TSO proposals on set of requirements

On 17 June 2022, in accordance with Article 8(2)(a) of the CACM, [all TSOs sent a proposal for updating the Common set of requirements](#) for the price coupling algorithm to include TSOs requirements as per Article 13(3) of the co-optimisation methodology.

On 15 September 2023 All NEMOs received an updated set of the TSOs Requirements for the Price Coupling Algorithm in accordance with Art 27(7) of ACER Decision no 11/2023 of 19 July 2023 (*“Considering the requirements for the co-optimised allocation process in this methodology, all TSOs shall review and re-submit, if necessary, the new set of requirements for the price coupling algorithm pursuant to Article 8(2)(a) of the CACM Regulation to all nominated electricity market operators by two months after the approval of this methodology”*).

2.5 The Co-optimisation Roadmap study

NEMOs and TSOs, within the framework of the MCSC, commissioned N-SIDE to perform a Co-optimisation roadmap study based on input from TSOs and NEMOs. [The study was completed in May 2022 and made available to the public in February 2023.](#)

2.6 ACER request for amendment of the SDAC algorithm methodology

On 25 November 2022, ACER requested by letter to All NEMOs to develop a proposal for amendment of the SDAC algorithm methodology in accordance with the TSOs' updated set of SDAC algorithm requirements from 17 June 2022, including any revisions thereof resulting from the approval of the HCZCA methodology, and submit it to ACER no later than 25 November 2023.

2.7 The methodology for harmonized allocation process for cross-zonal capacity

On 16 December 2022 All TSOs proposed a [methodology for a harmonized allocation process of cross-zonal capacity for the exchange of Balancing capacity or sharing of reserves per timeframe](#) in accordance with Article 38(3) of the EB Regulation (HCZCA methodology).

Further, ACER clarified, under Article 9(4) of the HCZCA methodology, the provision for linking between balancing capacity bids and day-ahead energy bids. Considering the possible drawbacks of ‘unilateral’ linking, as highlighted by respondents in the public consultation, ACER did not limit this provision to ‘unilateral’ linking as proposed under Article 7(2)(a) of the Proposal.

3. Considerations for Co-optimisation

Article 40 of the EB Regulation considers the introduction of energy and reserve co-optimisation in the SDAC. Co-optimisation is an allocation process of CZC for the exchange of balancing capacity or sharing of reserves, and cross-border matching of the Day-ahead market bids. Co-optimisation requires the central optimisation of the allocation of CZC based on actual DAM bids and actual BCM bids.

In 2020, Entso-e launched two studies in relation to this aspect: one on the linking of bids in a co-optimisation setup and one on flow-based compatibility with co-optimisation.

- The purpose of bid linking in a co-optimisation of energy and reserve capacity context is to allow market participants to better express their technical and economic characteristics while being able to bid in both markets.
- As the level of activation of the TSO demand in real time is not known in advance, flow-based compatibility shall ensure that, for any activations of TSO demand lower than the TSO demands that are matched in balancing capacity market clearing, the network can support the resulting flows that are required for balancing this configuration of TSO demands.

NEMOs and TSOs commissioned in 2022 N-Side to perform a Co-optimisation roadmap study based on the Entso-e studies mentioned above and other input by TSOs and NEMOs. The main objective for the Co-optimisation study was to provide more insights for the implementation ability of co-optimised allocation process of the balancing capacity market and day-ahead energy market, mainly comparing:

- 1-step vs. a 2-step implementation of co-optimised CZC allocation and
- multilateral vs. unilateral cross-product linking of bids between Balancing Capacity Markets (BCMs) and the Day Ahead Market (DAM).

The Co-optimisation roadmap study was the very first data-based study employing a potential combination of Cross-Zonal Capacity Allocation Optimisation Function (CZCAOF), Single Day-ahead Market Coupling (SDAC) and Capacity Procurement Optimisation Function (CPOF) under the conditions of co-optimised CZC allocation. The prototype study aimed to identify expected operational obstacles in terms of optimisation complexity and calculation time. As a quick and easy-to-implement approach N-SIDE enhanced Euphemia by expanding the existing SDAC optimisation algorithm by the co-optimised allocation requirements (CZCAOF & CPOF) for energy and balancing capacity.

The basic assumptions, as well as the scope, that were applied to the model in the prototype study are elaborated in the explanatory note to the Co-optimisation roadmap study.

The study produced a Euphemia Prototype for Co-optimisation, taking into account the flow-based compatibility deterministic requirement, which performs well with 60' MTU data and one additional BC product besides the DA. The simulations validate the proof-of-concept implementations of the scenarios in scope. Furthermore, they also show that the 1-step scenarios, compared to the 2-step

scenario, avoid incoherent cross-zonal capacity allocations with respect to zonal price spreads, risks of infeasible second steps, and are also faster overall. On high-level, the scenarios can be simulated. This initial simulation still lacks key elements like the 15min MTU, multiple SBCPs etc, and in general it is a simplification of the real market case. Thus, prototype study was only a first preliminary exploration, also in the way it was designed, so the results cannot be used for any decision-making process before the simulation data and key assumptions brought up to date. There are still many design questions that need to be addressed.

3.1 Concerns identified by SDAC MSD

It should be noted that the Roadmap study has several significant limitations as the prototype study applied some far-reaching simplifications and not all requirements from the EB Regulation have been included in this prototype study. Therefore, the results of the prototype study cannot be considered as a starting point of any implementation effort, since the study does not offer sufficient ground for drawing any far-reaching conclusions. Any actual implementation steps, specifically any amendments to existing regulation and methodologies strictly require further analysis and a complete technical assessment.

When deploying the entire topology, functionalities of only a single standard balancing capacity product were analysed out of total of six (6) products. The optimisation of bid linking across the balancing capacity products was not considered, which will put more stress to the algorithm performance, and is likely to seriously delay the market coupling calculation process. Because of this, required EB Regulation and Clean Energy Package requirements such as substitution of reserves could not be assessed.

Below are listed several concerns by NEMOs and TSOs that still needs further clarification for a future implementation of Co-optimisation:

- Unilateral bid linking option, this seems to come with down-sides and complexity. In the unilateral bid linking option, the balancing market is prioritised over the DAM.
- The basic principles of multilateral bid linking, and its complexity needs to be further investigated.
- The prototype only considers balancing capacity for mFRR up. The scalability of the co-optimisation for more than one SBCP needs to be further evaluated.
- Use of different SBCPs in opposite ends of the bidding zone border needs to be defined.
- Further assessment of the co-optimisation and TSOs processes should be explored in detail in the extended R&D process.
- The simulations were done using 60 min MTU historical data. There are not any performance results reflecting the status with 15 min MTU data, which would be essential as any potential implementation of co-optimisation would need to be done in a 15 min MTU framework (and take into consideration the continuing/on-going R&D results for 15min incorporation in SDAC and any conditions for deploying cross-product matching at the BZs and cross-borders).
- Impact of co-optimisation requirements and modelling at market design, performance reliability and quality of SDAC. The selected linking options, deterministic/probabilistic flow-based compatibility and any requirements for feasibility of market produced schedules for energy and balancing capacity, would affect market design options also at a BZ level. This assessment was not included in the initial study scope and should be further addressed via extended R &D as also proposed by the MPs in the public consultation feedback, so as to also secure the principles of SDAC performance in terms of security, reliability and quality.

- In terms of prioritization of the workload of TSOs and NEMOs experts involved in SDAC & SIDC and current challenges of other on-going projects planned to be implemented before co-optimisation (e.g IDA implementation, 15 min MTU implementation and Nordic FB implementation). It is certain that R&D and implementation of the co-optimisation requirements should be considered also as an input to the maturity of on-going projects (i.e. the 15min MTU in SDAC). Apart from any risk of proposing a co-optimisation model which does not properly handle the 15min MTU considerations, a parallel work on co-optimisation could also jeopardise the performance of these projects.

4. Amendments to the Algorithm methodology

Taking into consideration the feedback of the MPs, TSOs during the public consultation conducted by All NEMOs for the Algorithm methodology during 31st July – 25th September 2023, along with ACER's recommendations, All NEMOs are currently providing, in cooperation with All TSOs, an updated proposal for the Algorithm methodology.

4.1 References to Regulations and relevant methodologies:

References to Article 40 of EB Regulation, as well as to the ACER decisions 12/2020 and 11/2023 on TSOS proposal for a Harmonized Crosszonal Capacity Allocation methodology (HCZCAM) for Co-optimisation were added in the 'Whereas' section of the Algorithm methodology. Reference to Article 40 of the EB Regulation is also made in the Article 1 – Subject matter and scope. Article 2 is also amended with references to the EB Regulation for the Definitions and interpretations relevant for the co-optimisation process.

4.2 Updates on terms and definitions

Definitions for the Bidding Guide, Bidding Structure, Linking and Standard Balancing Capacity Products (SBCPs) required for the interpretation of the co-optimisation process, were added in Article.

Any reference to SDAC algorithm shall be considered as a reference to the same algorithm solution used for the Co-optimised allocation process.

4.3 The Price coupling algorithm with co-optimisation

Taking into consideration ACER's recommendation on providing a concrete proposal for the Algorithm methodology text, the relevant requirements for co-optimisation process were merged in the existing Algorithm articles.

4.3.1 Update of SDAC requirements

Articles 3 and 4 in the Algorithm methodology incorporate the requirements to the SDAC algorithm. The All TSOs proposal of the set of requirements, received on 15 September 2023, updating the common set of requirements for the SDAC algorithm is added in Annex 1 to the Algorithm methodology.

4.3.2 Proposal for further R&D needed for complementing missing requirements and providing a full-fledged Algorithm methodology.

Results collected during the public consultation clearly support the initial proposal of All NEMOs and All TSOs for further structured R&D process, incorporating MPs requirements for the co-optimisation process as already reported by the co-optimisation Roadmap Study.

Article 4 par.16 presents a proposal from All TSOs and All NEMOs for further R&D, with a detailed roadmap, required for complementing the requirements of Annex1, prior to any implementation request. The Bidding Guide set-up process, which will be used for transparently collecting MPs needs on usage and linking of SBCPs and DA products with proper MTU selection, and consequent further R&D leading on a proof-of-concept for the co-optimisation model and a fully-fledged Algorithm methodology, is now included in the proposal. However, even this R&D and implementation roadmap proposal still needs proper prioritization for feasible planning among TSOs, NEMOs and MPs considering on-going projects requirements (and further SDAC extension for EnC Countries) and the fact that the co-optimisation would heavily impact the market participation processes applied daily, at least by the MPs, and should be properly industrialized also at their level. Further, detailed design shall include, indicatively, the handling of curtailment management, tie-break rules, rounding procedures and ramping.

This proposal, constituting an intermediate step, would also be beneficial for revealing any further updates on existing Regulations and methodologies required for the co-optimisation (any updates for CACM regulation and relevant SPCPs and DA products methodologies where relevant).

4.3.3 Corrective measures

Articles 3 and 12 are now updated, incorporating similar provisions for the application of corrective measures for algorithm performance degradation, for both DA and SPCPs, in cooperation with All TSOs where the co-optimisation process is applicable. Considering that the Bidding Guide, Bidding Structure and Linking options would imply also updates on the SBCPs and DA products methodologies, further detailing of applicable corrective measures could be provided for the proof-of-concept co-optimisation process for guaranteeing the Algorithm performance.

4.3.4 Operational procedures, back-up, and fall-back procedures

Considering that the normal, backup, and fallback processes for co-optimisation will fall under the same procedural requirements of Article 36(3) of CACM for SDAC, a reference to the co-optimisation process was also added in par.18 of Article 4. However, it is worth mentioning already that such processes are subject to the implementation/industrialisation of the proof-of-concept model under R&D.

4.3.5 Indicators for Algorithm Monitoring

Following up on ACER's recommendation on incorporating monitoring indicators in the existing articles of the Algorithm Monitoring methodology All NEMOs now provide the following update proposals:

- SDAC products' usage indicators and submitted orders are now incorporated in Article 10 also for the SBCPs (in relevant paragraphs 2 and 3). The same principles, as the current ones used for the DA products, are proposed having the Bidding Guide and Bidding Structure for the co-optimization be defined.
- Number of bidding zones where co-optimisation is used for reporting the geographical extension of SDAC in Article 11.
- Indicators for the monitoring of the DA and BC markets are now provided separately in Article 13 (both for the first and the accepted SDAC solution).
- Indicators for monitoring the status of orders submitted at SDAC, where the co-optimisation process is applicable, are proposed in Article 14, under the condition of having the Bidding Guide and Bidding Structure for the co-optimization defined.

The proposed amendments include changes to add indicators regarding the Scalable Complex Orders (SCOs). Although, such definition for SCOs, is not currently active in the relevant DA Products

methodology, all NEMOs propose to include this definition already in the Algorithm Monitoring methodology. All NEMOs are considering providing in early Q1 2024 also an update on DA Products methodology, containing required amendments for handling the 15min Products update for SDAC, that will also include further definition details for SCOs. The following indicators for SCOs are already included in the Algorithm Monitoring methodology:

- The “total number of SCOs”, “total number of matched SCOs” and “total matched volume from SCOs” indicators have been added. This inclusion shall provide transparency in the monitoring study of the CACM annual report, with the purpose of reflecting the transition from Complex Orders to Scalable Complex Orders.
- The description of “number of PRMICs in the final solution”, “maximum delta MIC in the final solution”, “the PRMIC utility loss in the final solution” and “the volume of PRMICs in the final solution” indicators have been amended to include the Scalable Complex Order contribution additionally to the contribution of Complex Orders. Based on the current SDAC algorithm implementation, it reports these values in the same approach followed for Blocks, in which all variants of the Order type (Simple Blocks and Complex Blocks) are reported in the same indicator.

5. Other changes proposed

In preparation of the upcoming Intraday Auctions (IDAs) the following amendments are included:

- In Article 6.2 of the Algorithm methodology; The proposed amendment regarding DA scheduled exchanges calculation includes a clarification that the deadlines set in DA SEC methodology are not applicable to IDAs. Scheduled exchanges delivery after IDAs must occur within specific deadline after IDA gate closure time and not once a day as per DA SEC methodology. Operational deadlines are in this case captured by contracts among the TSOs and NEMOs.
- Additional change is proposed in Annex 2 – ID requirements, Article 6.2(c) – where the obligation to allow partial coupling is captured. NEMOs and TSOs want to clarify that algorithm can allow this process within NTC domain however due to time restrictions and consequently impossibility to reopen the OBK the use of partial coupling, in number of bidding zones, is not considered appropriate and in interest of Market Participants. Moreover, not to endanger the process robustness within FB domain in the future when FB is implemented both in continuous allocation and IDAs, it is suggested to clarify that NEMOs operating in a Flow-Based domain are either all-coupled or all-decoupled from the IDA session. The following details are provided also for explanatory purposes:
 - Partial decoupling in day-ahead auction is performed with involvement of the NEMO’s operators and include following steps: (a) need of partial decoupling is identified (e.g. OBK not delivered by a NEMO or ATCs are not provided in time); (b) Incident Committee is triggered and NEMOs decide on application of partial decoupling, including which NEMOs are decoupled, taking into account information about background of the issue; (c) NEMOs inform market participants on partial decoupling and some of them reopen the OBKs, allowing market participants to adjust their bidding strategy in view of the new market situation; (d) after the deadline for OBKs update is completed and any Shadow Auctions execution, process continues with uploading the OBKs for processing by EUPHEMIA and other steps being part of the normal process. Indicated steps (a) to (d) prolong the auction process for more than 15 minutes.

- In Intraday Auction timeframe however, a high-level process of automation is required for identifying which NEMOs should be decoupled, based on system included predefined rules, and decoupling shall be executed automatically. It should also be mentioned that due to time restrictions it is not possible to reopen the OBKs.
- Day-ahead and intraday auction process cannot be harmonized due to different requirements on processes timing, therefore also provisions related to both processes cannot be harmonized.

6. Useful links

“Commission Regulation (EU) 2017/2195 of 23 November 2017 establishing a guideline on electricity balancing – EB GL”.

https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2017.312.01.0006.01.ENG

CACM

<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A02015R1222-20210315>

“All TSOs’ proposal for a methodology for a co-optimised allocation process of cross-zonal capacity for the exchange of balancing capacity or sharing of reserves in accordance with Article 40(1) of the Commission Regulation (EU) 2017/2195 of 23 November 2017 establishing a guideline on electricity balancing.”

https://docstore.entsoe.eu/Documents/nc-tasks/EBGL/EB_GL_A40.1_191218_ALL_TSOs_Co-optimised_CZC_allocation_Proposal.pdf?Web=0

“Methodology for a co-optimised allocation process of cross-zonal capacity for the exchange of balancing capacity or sharing of reserves, in accordance with Article 40(1) of the Commission Regulation (EU) 2017/2195 of 23 November 2017 establishing a guideline on electricity balancing”.

[https://eepublicdownloads.entsoe.eu/clean-documents/nc-tasks/200617_A40\(1\)_ACER_Decision_on_CO_CZCA-Annex_I.pdf](https://eepublicdownloads.entsoe.eu/clean-documents/nc-tasks/200617_A40(1)_ACER_Decision_on_CO_CZCA-Annex_I.pdf)

“Implementation Impact Assessment for the Methodology for a Co-Optimised Allocation Process of CZC for the Exchange of Balancing Capacity or Sharing of Reserves. Entso-e – from all TSOs 17 December 2021”.

https://eepublicdownloads.entsoe.eu/clean-documents/nc-tasks/211217_All_TSOs_Co-optimisation_IIA_Report.pdf

“All TSOs proposal for updating the Common set of requirements for the price coupling algorithm”.

[https://eepublicdownloads.entsoe.eu/clean-documents/nc-tasks/220617_EB_Regulation_Art.40\(1\)_DA_Requirements_COCZCA_Submission-to-NEMOs.pdf](https://eepublicdownloads.entsoe.eu/clean-documents/nc-tasks/220617_EB_Regulation_Art.40(1)_DA_Requirements_COCZCA_Submission-to-NEMOs.pdf)

“All TSOs proposal for updating the Common set of requirements for the price coupling algorithm to include TSOs requirements as per Art. 13(3) of ACER decision on methodology for a co-optimised allocation process for cross-zonal capacity.”

https://eepublicdownloads.entsoe.eu/clean-documents/nc-tasks/230911_EB%20Regulation_DA_Requirements_COCZCA_Submission-to-NEMOs_Updated_final.pdf

“MCSC – SDAC MSD: The Co-optimisation roadmap study”.

<https://nemo-committee.eu/assets/files/co-optimization-roadmap-study-.pdf>

“Methodology for a harmonized allocation process of CZC for the exchange of balancing capacity or sharing of reserves per timeframe. Entso-e 16 December 2022”.

All TSO proposal:

https://www.acer.europa.eu/Official_documents/Public_consultations/PC_2023_E_02/TSOs_HCZAM_Proposal.pdf

Explanatory document to proposal:

https://www.acer.europa.eu/Official_documents/Public_consultations/PC_2023_E_02/TSOs_HCZAM_Proposal_Explanatory_Document.pdf

“Decision no 11/2023 of the European Union Agency for the cooperation of energy regulators of 19 July 2023 on the TSOs proposal for the harmonised cross-zonal capacity allocation methodology.”

https://www.acer.europa.eu/Individual%20Decisions/ACER_Decision_11-2023_on_Harmonised_Cross-Zonal_Capacity_Allocation_Methodology.pdf

7. Abbreviations

AM – Algorithm Methodology

BC – Balancing Capacity

BCM – Balancing Capacity Market

BSP – Balancing Service Provider

CACM – Commission Regulation (EU) 2015/1222 of 24 July 2015 establishing a guideline on Capacity Allocation and Congestion Management (Capacity Allocation and Congestion Management)

CZC – Cross Zonal Capacity

DA – Day-ahead

DAM – Day Ahead Market

EB Regulation – Commission Regulation (EU) 2017/2195 of November 2017 establishing a guideline on electricity balancing (Electricity Balancing GuideLine)

EC – European Commission

HCZCA – Harmonized Cross-Zonal Capacity Allocation

IDA – Intraday Auction

MCSC – Market Coupling Steering Committee

MIC – Minimum Income Condition

MTU – Market Time Unit

NEMO – Nominated Electricity Market Operator

OBK – Orderbook

PRMIC – Paradoxically Rejected Minimum Income Condition

R&D – Research and Development

SBCP(s) – Standard Balancing Capacity Product(s)

SCO – Scalable Complex Orders

SDAC – Single Day-Ahead Coupling

SDAC MSD – SDAC Market System Design working group

SEC – Scheduled Exchanges Calculation

TSO – Transmission System Operator