

Ljubljana, 25 November 2022  
ACER-CZ-CGC-ss-2022

**Mr. Rafael Gómez-Elvira González**  
Chairperson of the NEMO Committee  
-Redacted-

**All NEMOs, listed in Annex to this  
letter**

***By e-mail only***

**Subject: Request for a proposal for amendment of the SDAC algorithm  
methodology**

Dear Chairperson, dear NEMOs,

I contact you with regard to an amendment of the methodology for the price coupling algorithm and for the continuous trading matching algorithm for the single day-ahead coupling ('SDAC algorithm methodology') adopted under Article 37(5) of Commission Regulation (EU) 2015/1222 ('CACM Regulation'), which ACER requests all nominated electricity market operators ('NEMOs') to propose in accordance with Article 9(13) of the CACM Regulation.

1. The SDAC algorithm methodology needs to be amended

The existing methodology for the SDAC algorithm was developed by all NEMOs under Article 37(5) of the CACM Regulation, and was approved by ACER with [Decision No 08/2018](#) of 26 July 2018 and [Decision No 04/2020](#) of 30 January 2020. The methodology includes the TSOs' and NEMOs' sets of requirements for algorithm development in accordance with Article 37(1) of the CACM Regulation.

The changes to the SDAC algorithm methodology, in particular to the requirements for the SDAC algorithm, are necessary to enable co-optimised allocation of cross-zonal capacity for the exchange of balancing capacity or sharing of reserves ('co-optimisation'). Co-optimisation is considered a target solution for the allocation of cross-zonal capacity for the exchange of balancing capacity or sharing of reserves, which facilitates the integration of the balancing capacity markets and may bring significant welfare benefits through efficient use of available cross-zonal capacity.

According to Article 13 of the methodology for a co-optimised allocation process of cross-zonal capacity for the exchange of balancing capacity or sharing of reserves ('co-optimisation methodology'), developed under Article 40 of Commission Regulation (EU) 2017/2195 ('EB

Regulation’) and approved by ACER with [Decision No 12/2020](#) of 17 June 2020, all TSOs had to carry out an implementation impact assessment (IIA) and propose an updated set of requirements for the SDAC algorithm to all NEMOs.

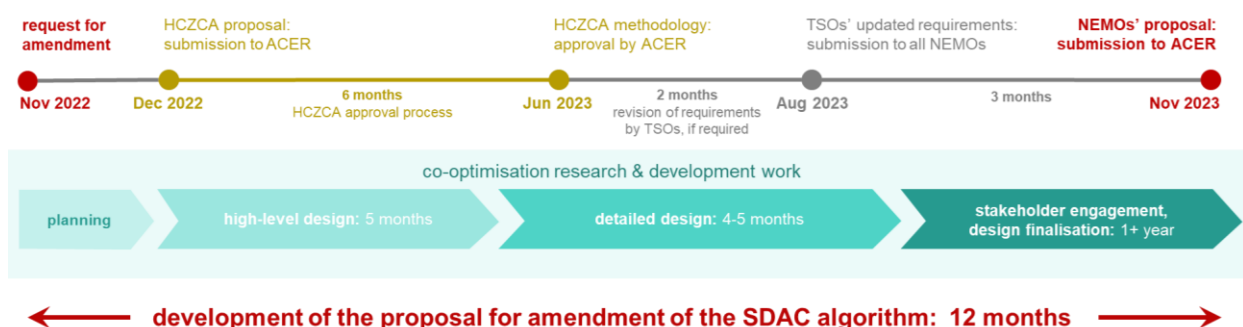
On 17 December 2021, the TSOs issued an [IIA Report](#), in which they recommended to complement the IIA with a technical feasibility study based on an algorithm prototype, in order to support their work on the updated set of SDAC algorithm requirements. The feasibility study, performed by the day-ahead algorithm service provider with the input from TSOs and NEMOs, was completed in May 2022. On 16 June 2022, all TSOs published and submitted to all NEMOs a proposal for updating the common set of requirements for the price coupling algorithm to include the TSOs’ requirements ([‘updated set of SDAC algorithm requirements 2022’](#)).

To effectively take into account the updates in the common set of requirements for the price coupling algorithm in accordance with Article 37 of the CACM Regulation, as approved by ACER Decisions No 08/2018 and No 04/2020, it is necessary that the NEMOs propose an amendment of the SDAC algorithm methodology with regard to those requirements. The NEMOs should therefore develop a proposal for the amendment of the SDAC algorithm methodology in accordance with the TSOs’ updated set of SDAC algorithm requirements 2022, and submit it to ACER for approval.

Currently, it cannot be excluded that the TSOs’ updated set of SDAC algorithm requirements 2022 might be revised in 2023, following the approval of the methodology for the allocation process of cross-zonal capacity for the exchange of balancing capacity or sharing of reserves (‘HCZCA methodology’) developed under Article 38(3) of the EB Regulation (see also below 2.1). If this was indeed the case, the NEMOs should take these revisions also into consideration for their proposal for amendment, to ensure the submission of an up-to-date proposal.

2. The proposal for amendment of the SDAC algorithm methodology should be submitted not later than 25 November 2023

For developing and submitting the proposal for amendment of the SDAC algorithm until 25 November 2023 the following milestones and processes are relevant:



## *2.1 Possible changes to the TSOs' updated set of SDAC algorithm requirements 2022 do not prevent developing the proposal for amendment*

The TSOs are currently developing a proposal to harmonise the HCZCA methodology, as required by Article 38(3) of the EB Regulation, which ACER expects to receive for approval in December 2022. Since the HCZCA methodology includes the co-optimised allocation process, both the TSOs and the NEMOs, by letters of 16 June and 14 July 2022 respectively, expressed concerns that the approval of the HCZCA methodology might result in further changes to the TSOs' updated set of SDAC algorithm requirements 2022, and therefore proposed to postpone the process for amending the SDAC algorithm until the HCZCA methodology is approved, which is expected by June 2023.

Though ACER does not expect the HCZCA methodology to bring significant changes to the co-optimised allocation process or to the requirements received by the NEMOs on 16 June 2022, the TSOs' and NEMOs' concerns can be addressed without postponing the process for amending the SDAC algorithm methodology and without causing further, undue delay. To that end, the NEMOs should finalise the proposal for amendment of the SDAC algorithm methodology only once the HCZCA methodology has been approved. In this phase, ACER expects the TSOs to revise the requirements for no more than 2 months so that the NEMOs have additional 3 months for considering any resulting changes in the proposal for amendment before submitting it to ACER.

## *2.2 The proposal for amendment should be developed in the course of the research & development work indicated in the feasibility study on co-optimisation*

The development proposal for amendment is contingent on progressing the required research & development work indicated in the feasibility study. ACER expects that the planned changes to the SDAC algorithm, including co-optimisation, can be finalised by 2026<sup>1</sup>. Regarding co-optimisation alone, the feasibility study estimates that its integration in the algorithm would take between 1.5 years and 2.5 years of research & development and implementation work. This timeframe consists of approx. 5 to 8 months for completing the high-level design, approx. 4 to 5 months for specifying the detailed design and more than a year for stakeholder management and last design adjustments.

ACER and the regulatory authorities are concerned about the lack of progress in this area. ACER strongly encourages the NEMOs to engage with the TSOs and commence the research & development work indicated in the feasibility study as soon as possible in order to inform and facilitate the development of the proposal for amendment.

---

<sup>1</sup> Other key changes relate to the implementation of 15 minutes MTU, advanced hybrid coupling and (Nordic) flow-based allocation.

### 2.3 *The high-level design can be completed within 5 months*

ACER considers that the NEMOs are able to complete the high-level design already within 5 months, which is the low end of the time range estimated in the feasibility study.

First of all, the key high-level design elements indicated in the co-optimisation methodology, the IIA and the feasibility study<sup>2</sup> have already been determined and reflected in the TSOs' updated set of SDAC algorithm requirements 2022 provided to the NEMOs on 16 June 2022. As such, the NEMOs can already start developing their proposal for amendment of the SDAC algorithm based on these requirements.

Second, some high-level design options do not need to be further explored. In particular, the feasibility study considers at length the requirement to minimise overall costs for the procurement of balancing energy according to Article 58(3) of the EB Regulation. ACER and the regulatory authorities have already provided the TSOs with guidance on how to interpret this requirement: This requirement should be understood as minimisation of socioeconomic costs (i.e. equivalent to welfare maximisation) and not only the TSOs' cost<sup>3</sup>. Therefore, instead of investigating design options based on alternative interpretations of this requirement, the NEMOs should divert resources to other design aspects. This will save time and allow the NEMOs to complete the high-level design within 5 months.

### 2.4 *The detailed design can be completed within 4 to 5 months*

ACER also considers that the NEMOs are able to complete the detailed design within 4 to 5 months and take it into account in the proposal for amendment before the submission to ACER.

Moreover, the proposal for amendment does not need to determine all detailed design aspects. Certain aspects may be presented as options for ACER's and the regulatory authorities' consideration. In this way, the final design choices can still be made during the first months of ACER's approval process, with support of ACER and the regulatory authorities.

### 2.5 *Close cooperation with ACER and the regulatory authorities can facilitate the timely submission of the proposal for amendment*

The NEMOs' engagement with ACER and the regulatory authorities in the coming months can facilitate the development of the proposal for amendment and its regulatory approval. ACER invites the NEMOs to actively and transparently involve ACER and the regulatory authorities in the development of the proposal for amendment. To foster this process, ACER intends to provide early views on the TSOs' updated set of SDAC algorithm requirements 2022 and discuss them with the NEMOs and the TSOs.

---

<sup>2</sup> E.g. general principles on how the process should be embedded in the SDAC; choice of a 1-step approach.

<sup>3</sup> See [ACER Decision 12/2020](#), [ACER Decision 22/2020](#), [ACER Decision 11/2021](#), [ACER Decision 10/2021](#).

## 2.6 *Deadline to submit the proposal for amendment of the SDAC algorithm methodology*

In view of the above milestones and processes, ACER considers it feasible and necessary that the NEMOs submit their proposal for the amendment of the SDAC algorithm methodology in accordance with the TSOs' updated set of SDAC algorithm requirements 2022 no later than 25 November 2023 to ACER for approval.

## 3. Conclusion

Considering the above, ACER requests the NEMOs to develop the proposal for amendment of the SDAC algorithm methodology in accordance with the TSOs' updated set of SDAC algorithm requirements 2022, including any revisions thereof resulting from the approval of the HCZCA methodology, and submit it to ACER **no later than 25 November 2023**.

ACER also urges the NEMOs to commence the research & development work indicated in the feasibility study on co-optimisation as soon as possible to inform and facilitate the development of the proposal for amendment.

ACER asks the NEMOs to engage with ACER, the regulatory authorities and the TSOs throughout this process and provide regular updates to ACER on the progress in developing the proposal for amendment and the related research & development work.

If you have any questions or would like to discuss this matter, please contact Martin Viehhauser (-Redacted-) and Thomas Kawam (-Redacted-).

Yours sincerely,

**-Redacted-**

Christian Zinglensen  
Director

**ANNEX**

List of NEMOs addressed by this letter:

- EXAA AG
- Independent Bulgarian Power Exchange (IBEX)
- CROPEX Ltd
- OTE a.s.
- EPEX SPOT SE
- HEnEx SA
- HUPX Zrt.
- SONI Ltd
- EirGrid plc
- GME Spa
- Towarowa Gięlda Energii S.A.
- OPCOM S.A.
- OKTE a.s.
- BSP Regionalna Energetska Borza d.o.o.
- OMIE S.A.
- NORD POOL EUROPEAN MARKET COUPLING OPERATOR AS
- Nasdaq Spot AB