

CONSULTATION RESPONSE

Energy Traders Europe response to ACER's consultation on the electricity price coupling algorithm methodology due to co-optimisation

Brussels, 16 February 2024

General remarks

Energy Traders Europe welcomes the opportunity to respond to ACER consultation on amending the electricity price coupling algorithm methodology due to co-optimisation.

Since the early stage of drafting of the Electricity Balancing network code, we have questioned the concept of reservation of cross-border transmission capacity by the TSOs for balancing purposes. While we understand that the amendment of the present methodology is a requirement of the EBGL and the Clean Energy Package (CEP), we invite TSOs and NRAs to refrain from setting up balancing capacity cooperations, based on co-optimisation.

By allocating transmission capacity specifically for use in the balancing timeframe, TSOs remove available capacity from the allocation in the other timeframes. The bidding complexity of the day-ahead market – already increasing with the introduction of the 15' MTU – will be dramatically increased with co-optimisation. The increased complexity applies to all units with any sort of dependency between previous and future generation schedules (power output, energy level), most prominently with energy restrictions (hydro, battery, demand response, ...).

Energy Traders Europe has seen no evidence from previous studies that the exponential increase in bidding complexity can neither be tackled by the auction algorithm, nor whether market participants will be able to handle the multitude of market outcomes to be considered through a viable bidding structure. Both aspects are negatively impacting the potential efficiency gains by co-optimisation.

Taking into account these observations, we welcome that the NEMOs and TSOs considered several inputs from market participants, including:

- Reprioritisation and removal of an implementation deadline with discussions to take place in the Market Stakeholder Committee (MESC project prioritisation framework)
- a clear framework to define a bidding guide before implementation (although Energy Traders Europe cannot contribute to this because of antitrust policies)

- consideration of multilateral linking
- further R&D with the 15 min MTU implementation

We comment below on the specific consultation questions.

Topic 1: R&D activities

1. Do you consider that the Proposal should take into account the steps listed under chapter 9 of the feasibility study when defining the R&D activities necessary to enable the implementation of co-optimisation?

Yes

Partially

No

Please explain your answer.

It is important to define in the MESC framework when this process will start and if the bidding guide is part of the high-level design described at the beginning of Chapter 9.

It will be key to involve market participants at the beginning of the process since the high-level design instead of leaving stakeholder interaction after the start of the industrialization of the final base design.

1.5 years to 2.5 years to achieve a full implementation of co-optimisation in the SDAC algorithm seems ambitious.

This methodology based on co-optimisation will impact all market outcomes (i.e. prices, publications...) in SDAC. Any next step should be an all TSOs proposal and not just be the result of an implementation process by a small subsection of TSOs because it will have regional impact on day one.

Therefore, the MCSC and market participants should be involved in all the steps if co-optimisation is to be pursued.

Furthermore, the timeline is lacking a decision point to account for the outcome of a detailed co-optimisation assessment. If the envisaged theoretical benefits of co-optimisation cannot be realized considering real-world constraints and the benefits are outweighed by negative practical consequences, any further implementation steps should be stopped.

2. Paragraph 4.3.2 of the explanatory note lists a set of design elements which, according to the NEMOs, would need to be further investigated before implementing co-optimisation. However, Article 4 (16)(c) of the algorithm methodology includes other elements that are not mentioned in the explanatory note.

Do you consider that the Proposal includes all the necessary design elements requiring further R&D?

Yes

No

In your view, what other elements should the Proposal consider?

It is not possible to assess whether the list of design elements to be investigated is exhaustive if the specific implementation context is not yet defined. The list forms a good basis of elements that will have to be included but may have to be extended based on the R&D process and stakeholder interactions.

As highlighted in the feasibility study, the output obtained by the analysis is high-level and preliminary. We want to underline that the study considers only one type of product and does not consider the 15 minutes market time unit (MTU) developments. Further R&D activity is needed.

Energy Traders Europe will not be able to comment on article 4.16 c) via the bidding guide process by 2025 due to antitrust policies. Therefore, it will have to be done via single interviews.

Topic 2: Bid design and products

3. When a market participant intends to bid in both day-ahead and balancing capacity markets, which bid design would you consider more appropriate?

- *Separate bids for day-ahead and balancing capacity market(s)*
- *A single bid covering both day-ahead and balancing capacity market(s)*

Please justify your answer and, in case of a single bid, please explain how the bid would allow to capture the interactions between the two markets.

It is difficult to answer this question without knowing the type of linking. We need more advanced linking (conditional etc..). The consultation documents how linking is done within balancing capacity bids. They should include more clarifications in the set of requirements.

4. In your view, what information would the NEMOs and the TSOs still need from market participants to define the bid design?

While we welcome cross-product linking as the minimum requirement, it has to be considered whether co-optimisation is a desirable option altogether and its application will be picked up by TSOs, NRAs and NEMOs. It has a severe impact on bidding processes and negative consequences on the ability of BSP to properly represent their assets.

If decided to move forward with co-optimisation, we would welcome a bidding guide in order, notably, to assess the complexity linked to co-optimisation from a BRP/BSP point of view. When estimating the welfare impact, the loss of market efficiency by increased complexity for market participants and unclear price signals needs to be taken into account.

As with all methods of reservation of cross-border capacity, the consideration of the intraday market value is neglected (while ID capacity will be priced soon) which makes the split much less relevant. The welfare loss due to the restriction of intraday trading opportunities is neglected as well. This should also be studied.

5. What is the most suitable process for market participants to provide such information?

- *Public consultation*
- *Public workshop*
- *Other*

Please elaborate your answer.

Energy Traders Europe can contribute to public consultations and workshop and we would recommend private interviews for the bidding guide because of the commercial sensitivity.

6. Under Article 4(16) of the algorithm methodology, a 1-year timeline is foreseen for the collection of inputs from market participants on the bid design. How do you consider this 1-year timeline?

- *Too short*
- *Adequate*
- *Too long*

Please explain your answer.

This will have to be done mainly on one-to-one interviews with BSPs so we believe it is too short. Previous experiences highlight that any adjustments to the algorithm bring about several changes in market dynamics, demanding thorough examination and an extended evaluation period. We expect NEMOs and TSOs to be on the lead for the development of the bidding guide.

However, we would like to reiterate that it is important to define in the MESC framework when this process will start and if the bidding guide is part of the high-level design described at the beginning of Chapter 9.

As soon as it becomes apparent that co-optimisation is a dead-end because the efficiency loss generated by the additional bidding complexity exceeds the drawbacks of market forecasts or the computation becomes intractable, the process should be terminated.

7. With the introduction of co-optimisation, the list of products which can be taken into account in SDAC will need to be amended to include products related to balancing capacity and, potentially, products linking day-ahead and balancing capacity bids. Which additional products would you consider necessary to be added to the list of SDAC products?

The structure of the products must ensure the same flexibility as of today. The no-step back principle is essential for market participants.

Linking all products with intertemporal links between all market time units (MTUs) needs to be facilitated by the new products.

The structure of the products, both balancing and electricity products, must allow market participants to communicate how contracting of one product affects volumes and prices of the other product. Effectively, each market participant would need to enter price/volume curves into each market for each potential outcome in the other market.

Topic 3: Benefits of co-optimisation

8. By allocating cross-zonal capacity where its market value is the highest, i.e. either to the day-ahead market or to the balancing capacity markets, co-optimisation aims to

facilitate the integration of balancing capacity markets and to allow for a more optimal use of cross-zonal capacity between these two markets. Thanks to the co-optimisation process, the cost for the procurement of balancing capacity is expected to decrease by making use of cheaper bids from other areas and/or by reducing the individual TSO's demand for balancing capacity through sharing of reserves.

What do you consider to be the most significant benefits of co-optimisation?

Joint clearing of day-ahead market and balancing capacity procurement will result in an increase of paradoxical market results. For individual markets, the results will be less representative of the actual supply and demand balance. This will in turn impact the welfare optimum.

With co-optimisation, market participants' bids for balancing capacity and day-ahead markets will be negatively affected in a significant way. For the moment it appears extremely complex to develop an efficient multi-product offer matrix for the two markets. The load and ancillary services offer cannot be exchanged 1:1 and exact dependencies have to be respected. Co-optimisation will thus decrease the efficiency of the stepwise approach currently in place.

The bidding complexity is not manageable for balancing capacity/day-ahead market participants and they will need to reduce the offered volumes to account for the uncertainty involved. The feature of iteratively offering all of the previously unused capacity is lost¹.

The theoretical benefits of lower spread will materialise if implemented under certain circumstances that have huge market implications.

Although we agree with ACER's academic/theoretical description of the benefits, we believe that the complexity of co-optimisation has so far been underestimated. Its implementation would lead to significant interventions in the current market design for established and liquid day-ahead, intraday and balancing markets. There is a high likelihood that the theoretical benefits will not be achieved, leading to suboptimal use of cross-border capacity. This could cause market distortions and inefficiencies at significant social cost, far outweighing any of the benefits.

In addition to the potential benefits, any possible drawbacks should be considered:

- complexity;
- costs of implementation and adaptation of operating systems and processes;
- increase of algorithm computational times;
- difficulty for operators to decide on the optimal "share" between BC vs SDAC offers;
- need for bid linking;
- risk of reduction of XB capacity for day ahead market,
- transparency decrease (it could be more difficult for the operators to understand the reasons behind accepted/not accepted bids).

Further elements of complexity could derive from the need for the co-optimisation algorithm to take also into account the estimate of potential activations (balancing

¹ See [Energy Traders Europe presentaiton](#)

energy) of balancing capacity products. Also, it must be ensured there is not step back in day-ahead bidding formats, and that the complexity that entails co-optimisation would not be detrimental for any future need. For example, it should allow for new capacity balancing products if needed. Hence, it would be appropriate to implement a CBA estimating potential benefits against the above-mentioned drawbacks.

When assessing the benefits of co-optimisation on a theoretical basis, the increased efficiency in cross-zonal capacity allocation (CZCA) is mentioned. This, however, only holds for identical bids from market parties under different CZCA methodologies. Market parties that are offering flexibility from units with intertemporal dependencies (which applies to most technical units, most prominently storage) will be affected by the exponential increase in bidding complexity by co-optimisation and will therefore need to include additional safety margins or risk premiums into their bids, or worse be forced to decide for bidding either in the BCM or the DAM. The resulting market outcome will be far from optimal and the theoretical benefits will be outweighed by the practical inefficiencies.

Topic 4: Other remarks

9. Please provide any other remarks on the Proposal.

There are no estimates on the balancing market volumes that will be procured in SDAC.

Fall back solution need to be studied in case of SDAC decoupling, as well as the increase of risk of decoupling under the – more complex – co-optimisation context.

In the Common set of requirements for intraday Art. 6.2 c)² there is a differentiation between NTC and flow-based in case of SIDC partial decoupling. It is non-optimal to have different bidding zones in different groups and this might reduce the theoretical optimum.

The existing implementation study does not provide any meaningful conclusions for the subsequent co-optimisation assessment. It merely shows that a highly reduced problem with synthetic bids (assuming identical bids for different CZCA methodologies) can be solved in reasonable time. It does not provide any insights on the tractability of the full-blown clearing problem or the impact on market participants' bidding.

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²https://acer.europa.eu/sites/default/files/documents/Official_documents/Public_consultations/PC_2024_E_01/Annex_2-Common_requirements_ID_tc.pdf