

25 August 2022

## **Cross-zonal Capacity Allocation Harmonised Methodology**

The European Federation of Energy Traders (EFET) welcomes the opportunity to provide comments to the ENSTO-E public consultation of the Cross-zonal Capacity Allocation Harmonised Methodology and Explanatory Document pursuant to the Art. 38(3) of EB Regulation.

The harmonised methodology will replace by 2025 the current methodologies concerning the allocation of cross-zonal-capacity for balancing capacity / reserve sharing developed by all TSOs or by capacity calculation regions.

### **General comments on capacity reservation by the TSOs for balancing purposes**

Since the early stage of drafting of the Electricity Balancing network code, we have opposed the concept of reservation of cross-border transmission capacity by the TSOs for balancing purposes. Though by the time of the adoption of the EB GL, the concept was rebranded as “cross-zonal capacity allocation” (CZCA), its effects remain the same.

The cross-border reservation of transmission capacity by the TSOs for balancing purposes poses a serious risk to the availability of cross-border transmission capacity in the preceding trading timeframes. By allocating transmission capacity specifically for use in the balancing timeframe, TSOs remove available capacity from the allocation in the other timeframes, thereby restricting market participants’ ability to adjust their positions across borders in the most economically efficient manner (especially when it comes to the intraday market), and to contribute to overall system balance.

The efficient use of cross-border transmission capacity is a key element of European market integration in the forward, day-ahead and intraday timeframes. A major objective of integration projects such as the EU Harmonised Allocation Rules for forward transmission rights, as well as single day-ahead and intraday coupling, is to improve the access and use of such transmission capacity by the market. Reserving capacity (from the forward timeframe until the intraday market) for use by the TSOs in the balancing timeframe would turn the clock back on those improvements.

## **1. Any views on the CZCA Harmonised Methodology proposal**

While we understand that the development of the present methodology proposal 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-optimization.

We notice that one new element proposed by the TSOs is unilateral cross-product linking of bids, that can be applied in a one-step and in a two-step co-optimised allocation approach. The NEMOs will then decide whether to apply one or the other approach.

The calculation of the CZC market values for day-ahead market or balancing capacity purposes, and hence the accuracy of the CZCA, is influenced by the information available when taking the CZC split decision and on the bidding behaviour of market participants (in both the day-ahead and the balancing capacity markets). As stated in the explanatory document, the uncertainty and complexity introduced with requiring BRPs and BSPs to submit bids to several markets simultaneously in the co-optimization approach, will necessarily have an impact on the bidding behaviour. Introducing links between bids for the same market time unit (MTU) in different markets will at best slightly mitigate the efficiency loss associated with increased bidding complexity, certainly not resolve it. Hence, applying the co-optimization approach results in an immediate loss of efficiency compared to the other approaches.

On the other hand, when maintaining a sequential bidding process (balancing capacity procurement followed by day-ahead market or day-ahead market followed by balancing capacity procurement) with the market-based approaches, the capacity split decision has to be taken based on forecasts for day-ahead market or balancing capacity procurement outcomes. With a perfect forecast, the optimal capacity split can be determined. Any error, likely unavoidable, in the forecasted market results will result in a suboptimal CZC split decision.

When choosing between the different approaches, the certain loss of welfare by introducing additional complexity and the potential loss of welfare resulting from forecasting errors have to be considered.

In order to restrict the possible impact of forecasting errors in the market-based approach, the accuracy target of 5 percent for the forecast error 3 should not only be monitored and possibly improved, but immediately linked to the CZCA decision. Each percent of positive forecast error 3 (under-estimation of the day-ahead market CZC value) could for example reduce the available capacity for exchange of balancing capacity by two percent, of the maximum 10 percent. Once the threshold for the maximum forecast error is reached, adverse effects on the day-ahead market are avoided.

We do not agree with restricting balancing capacity prices (€/MW) to the day-ahead market price limit (€/MWh). The reasoning in the Explanatory document (“As the SBCP price compensates the opportunity costs of not providing energy from a generation unit to another energy market, the maximum SBCP price should be the same as the maximum day-ahead market energy price.”) is just one of many possible considerations. Following the same line of reasoning, the SIDC price limit could be applied.

## **2. Do you see the need for one unique BSP-TSO gate closure time (GCT) for all different applications of the market-based process, even if there is no interdependency?**

As indicated previously, we strongly recommend maintaining the possibility for sequential bidding processes. Only this way, BRPs and BSPs have the opportunity to re-optimize their bids for subsequent auctions. For this reason, also the balancing capacity auctions in the market-based CZCA approach should be performed sequentially. The CZCA optimisation function (CZCAOF) can be called repeatedly for aFRR, mFRR and RR bids.

Concerning timing, there are not many alternative schedules possible for balancing capacity procurement in the different balancing capacity cooperations. Therefore, it is probably useful to find a common timing. With the FCR cooperation at 8am, aFRR, mFRR and RR in hourly sequences would be an obvious choice. We would welcome that a target timing is disclosed in the methodology.

## **3. Views on the timing overlap and interaction of the FCR co-operation and the BSP-TSO GCT of the market-based process**

Gate closure times (GCTs) for FRR and RR auctions in the market-based process must be placed after the GCT of the FCR cooperation, i.e. 9:00 am at the earliest.

The market-based approach appears as the least disruptive method of capacity reservation for balancing purposes when it comes to the existing timings of market processes.

## **4. Views on the proposed cross-product unilateral linking design between balancing capacity bids towards day-ahead bids for the co-optimised process**

In January 2022 we recommended to go for Option 3 or multilateral linking because market participants wanted the methodology to strive for the very optimal model with no further amendments. Given that multilateral linking should be chosen over the unilateral linking, only the 1-step approach should be considered so that all bids in the money are cleared.

We need more advanced linking (conditional etc..) even if the TSOs starts with unilateral linking. The TSOs do not explain in the consultation documents how linking is done within balancing capacity bids. They should include more clarifications in the set of requirements.

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. Market participants oppose it for several reasons:

- 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.
- 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 offers 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. If decided to move forward with co-optimization, we would welcome a bidding guide in order, notably, to assess the complexity linked to co-optimization 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 in the near future) which makes the split much less relevant. The welfare loss due to the restriction of intraday trading opportunities is neglected as well.

## **5. Views on the pricing regime for balancing capacity (marginal pricing vs. pay-as-bid) for the market-based process**

We support the pay-as-cleared principle for balancing capacity procurement.

## **6. Any other feedback**

We request more clarity on the interdependencies in a balancing capacity cooperation where one TSO may use aFRR and the other RR.

We hope to discuss all these elements further at the next EBSG on 27 October.

## **7. Detailed comments on articles of the methodology proposal**

### *Title 1- General Provisions*

Article 1: it should be clarified that a TSO may only use one methodology for procuring one standard balancing capacity product (SBCP). I.e. within one BCC, there should not be two or more methodologies used for the procurement of one type of reserve.

Article 2.2.e: under co-optimization and the market-based approach, why does the CZCAOF determine firm values for balancing capacity prices and volumes? What if the capacity procurement optimization function (CPOF) leads to different results? What would be considered as the contracted prices and firm volume?

Art 2.2.h/i/j: the definitions of forecast errors 1/2/3, applying to the market-based and inverted market-based approaches, are not clear. Practical examples would help here.

Art 2.2.k : the reference day data used is the cross-zonal capacity value for the day-ahead market and not the day-ahead market bids themselves. This is not fully correct, as a set of day-ahead market bids could lead to different values of cross-zonal capacity. Also, the definition of 'TSO balancing capacity demand' is missing.

Art 2.2.l: the definition of 'TSO balancing capacity sensitivity demand' is unclear. Does that mean elastic demand? An improved definition and accompanying explanation is needed.

Art 4.2: the validity period is not defined.

Art 4.3: the article misses a definition of the pricing mechanism for the market-based approach. Pay-as-cleared is specifically mentioned only for co-optimization and the

inverted market-based approach. We recommend that pay-as-cleared also be mandated for the market-based approach in this methodology.

Art 4.4: we invite a more thorough discussion on the price limit for SBCPs. Day-ahead market and balancing capacity bids will not be directly comparable, when applying the CZCA decision. Therefore, aligning their clearing price limits is far less evident than the TSOs present. The SIDC price limit could just as well apply to SBCPs.

Art 4.5: the single GCT principle is not clear – see also our comments above.

Art 4.11: if TSO demand linking is applied, we see even more importance in using one timeframe (and method) for procuring all SBCPs by each TSOs. Also, if co-optimisation is implemented, multilateral linking of bids for SBCP and for the day-ahead market is a must.

Art 4.12: the first sentence is not clear. We ask for clarification and possible reformulation.

Art 4.13: the fallback solution in case of insufficient SBCPs to fill TSO balancing capacity demand is not described here.

Art. 5: a 3-month notification period is extremely short. A 12-month notification period at least is needed for market participants to adapt systems and bidding approaches.

## *Title 2 – Methodology for the co-optimised allocation process*

Art 6.1.c: we welcome the fact that the notification period to announce the selected standard balancing capacity bids has been reduced to 15 minutes maximum after the publication of SDAC results, instead of one hour.

Art 6.2.a: we request that TSOs make it explicit that the multilateral linking amongst SPBC is in scope of this methodology.

Art 6.2.d (iv): it is unclear whether this item refers to elasticity of TSO balancing capacity demand or substitution of balancing capacity? Please explain the reason why this has been added compared to the previous ACER decision on this methodology.

Art 6.2.d (ix): which text/article defines the TSO's maximum volume of balancing capacity?

Art 6.2.k: we understand that the CPOF determines firm and final selected balancing capacity bids. This is not the role of the CZCAOF. Is our understanding correct?

Art 6.2.l and m: what is the difference between the 2 proposals?

Art 6.2.o: what would cause capacity reserved for the exchange of balancing or sharing of reserves not to be needed anymore? We understand this is the consequence of having the CPOF outside of the CZCAOF. Is our understanding correct?

Art 8.2: we expect some bidding zones to see a decrease of CZC at their borders while not benefitting from welfare gain linked to the exchange of balancing capacity. While overall welfare will be optimised, welfare of a BCC's bidding zones will also increase but probably at the cost of bidding zones outside of this BCC. As the participation to a BCC is voluntary, one should ensure that bidding zones not participating in the BCC(s) are not disadvantaged.

Art 9.3: we do not agree, balancing capacity procurement cost minimization should not be the optimization objective. Total social economic welfare should be, via the CZCAOF. We have always wondered why the CPOF was needed as the analysis of balancing capacity bids for CZC splitting was already done in the CZCAOF. Also, applying this could decrease overall market efficiency, as there would be less transparency on the real amount of balancing capacity needed.

Art 10.6: we do not fully understand this paragraph. Does this mean that due to netting, the overall level of cross-zonal capacity allocated to sharing or exchange of reserves will be increased (possibly trespassing the 10 % limit)? Or will this capacity be allocated to the day-ahead market? This needs to be clarified.

### *Title 3 – Methodology for the inverted market-based allocation process*

In general, timings as suggested (and commented on) below are too vague – timing after the DA GCT and before SIDC GCT give no impression over rules, which will be applied and thus present no harmonization. Also, how will the capacity for ID market be calculated & allocated if the results are not known until let's say 14:00? (as the ID GOT is 15:00 D-1)?

Art 12.1.a: why such a timing constraint on the GCT of the SBCPs and TSO demand?

Art 12.1.d: the timing to bid balancing capacity is unclear, as the GCT for SIDC is one hour before delivery. BRPs need enough time to organize intraday bids while considering the results of the inverted market-based process.

Art 12.1.e and Art 12.1.f: please clarify the definitions of “unused” and “not needed” CZC reserved for balancing capacity. We consider that the unused/not needed CZC reserved for balancing capacity should be released for the intraday market before it is released to balancing energy mechanisms.

Art 12.1.g: what timing applies for self-dispatch models?

Art 12.2.a: how can a single TSO apply the inverted market-based approach (or any other capacity reservation method for balancing, for that matter) when capacity reservation for balancing purposes is supposed to take place in the framework of a BCC (i.e. at least two TSOs)? These methodologies are supposed to be for the exchange of balancing capacity or sharing of reserves: with whom does a single TSO 'exchange' or 'share'? Also in this paragraph, the exact role of the RCC is not clear. Please clarify.

Art 12.2.d(i): there is a need to clarify the principle of applied reference day of the balancing capacity procurement accompanied by a possible forecast adjustment. This clarification should be part of this methodology or be included in the BCC specifications (which should also be subjected to consultation).

Art 13.1.b: without a volume limitation, there is potentially a significant impact on flow-based day-ahead orders while forecasted bids are used.

Art 13.1.c: we understand that this is an open door for isolated higher percentages of CZC use for balancing capacity reservation. This is not in line with the EBGL, 10 % should be the absolute maximum. We request amending this paragraph so that it reflects EU legislation.

Art 13.1.d: this is in contradiction to EBGL. If such case would happen, there is obviously an adequacy issue on the TSOs side – and it should be tackled by the relevant TSO. with the proposed provision in this paragraph, all market participants would bear the burden of decreased capacities for the day-ahead market due to inadequacy of one single TSO (in the flow-based day-ahead calculation, this would inevitably affect other borders as well). Moreover, what does 'for at least one month' mean (e.g. one occurrence/MTU per day during one month)?

Art. 13.2: what does 'cumulative allocation' means? Better explanation is needed here.

Art 13.4: what does 'available transmission constraint extraction' mean? Why would that be needed?

In general for the inverted market-based (Art 15) and market-based (Art 20) approaches: forecast error 1 (applied reference day vs. default day) should be further explained. It seems this is a point left open in the drafting process accommodating different views. What is the added-value of forecast error 2?

15.9 refers to previous working day – what about weekends?

15.10 should describe what would happen in case the error is higher than the chosen threshold (5 %) for a longer period.

Art 17.9: we would replicate the possibility to link SBCP for all methodologies, we believe this is an important feature allowing maximum efficiency of the procurement.

#### *Title 4 - Methodology for the market-based allocation process*

Art 18.1.a: same as for the inverted market-based approach: what is the timing for self-dispatch model?

Art 18.1.e: probable typo, self-reference, we assume there should be a reference to 18.1.d.

In general art 18.1 lacks clarity and seems not to list all consecutive timings of the market-based approach – sequence of actions is unclear.

Art 18.2.a: in general, same as for the inverted market-based approach, reference to one single TSO applying the market-based approach – this makes no sense as there will be no cross-zonal capacity allocated. Exact role of RCC is not clear.

Art 18.2.g(v): in general, reference to TSO volume sensitive balancing capacity demand (for reserve substitution?) – this needs to be clarified, does this mean elastic demand?

Art 18.2.g(ix): clarify the principle of applied reference day of the day-ahead market accompanied by possible forecast adjustments? Based on which principles may the forecast be adjusted? We understand linking of bids across products is possible with use of market-based methodology, could this be clarified?

Art 18.4: because of the existence of CZCAOF and CPOF as separate functions, that can lead to different results in terms allocated CZC for balancing capacity (1) and CZC effectively used by balancing capacity (2).

Art 19.b: similar to the inverted market-based approach, no limitation for bidding zone borders within an LFC area or bidding zone border within a TSO is foreseen – we wonder which effect this could have on other borders in the flow-based day-ahead market.

Art 19.c/d: similarly to the inverted market-based approach, we strongly oppose possible increase of 10% max up to 20%. This is in direct contradiction to the EBGL and deteriorates functioning of liquid day-ahead markets. See our comments on the inverted market-based approach for more details.

Art. 19.2 – see our response on equivalent inverted market-based approach article: it is not clear what cumulative allocation of all balancing products means. In any case, the maximum limit of cross-border capacity reserved for balancing for both the market-based and the inverted market-based approach should not exceed 10 %.

Art 19.4: similar to the inverted market-based approach, it is not clear (and explained) what 'available transmission constraint extraction' means.

Art 20 : the text is equivalent to the inverted market-based, therefore see our comments on that part.

The process to choose reference days and making adjustments is not explained at all. If it will be developed in the future, then this methodology must clearly state this and say that it will be thoroughly consulted with stakeholders.

It's unclear what the order book for the day-ahead market comprises? E.g. what about block bids?

Art. 20.9: the choice of previous working day as a default reference day may provide faulty results. For instance, there is a huge difference between Thursdays and Fridays, also, what about weekend days?

Art 21.4.a: our comments are equivalent to those on the inverted market-based approach, see relevant part. Transparency is needed here.

Art. 21.5: more explanation on a tolerance band and TSO elastic demand is needed – or at least ex-post transparency on targeted volume to be procured and the actual procured volume.

Art 22.4: does this paragraph mean that all order books for the day-ahead market of all TSOs within a flow-based day-ahead CCR have to be used? What will be the role of TSOs that are not part of a BCC but part of the CCR?

## *Title 5 – Provision on cross-zonal capacity*

Art 23.5: we assume these costs could be born also by more than one TSO?

## Title 6 Final provisions

Art. 26.1: we assume bids should be anonymised almost systematically. Also, the publication of accepted offers is crucial (for the whole market, not only to the successful bidders), to provide a transparent framework allowing efficient bidding behavior.

Art 26.2.d: what is meant by 'market value'? Check art 39 EB GL

Art 26.3.b: we expect CZC to be released to later timeframes to be directly published (as it is anyway used for the subsequent balancing markets).

Art 26.3.c: how are the estimated realised costs and benefits calculated?

Art. 26.4: this methodology should be published after its approval, both by NRAs and TSOs, not only 3 months before its application (if we do not understand this correctly, it should be clarified, also with regard to Article 28 assuming it will be published without delay).

Art. 26.5: the publication of algorithm requirements by the TSOs only one month before application is far too short. We cannot assess whether this will induce any change on market participants' side. However, we suggest to keep the general timeline of publishing all requirements and intention to use the methodology at least 12 months before application.

Art 26.8: it is not clear who should submit the report to the NRAs. Why making a distinction for the inverted market-based approach? It seems this article should be reorganised to make a clearer distinction between the market-based and the inverted market-based approach.

Article 27: we understand that a decision has been taken to implement the market-based methodology, as concrete steps (requiring already some amount of investment) are foreseen by this Article. This could be clarified in the whole document – as mentioned in our earlier comments.

We wonder whether it is feasible to submit 9 methodologies (all undergoing a public consultation) within 12 months. This is up to TSOs, but in order to properly engage all stakeholders, maybe an 18-month period would be more feasible.

Deadlines in paragraph 2 should be amended accordingly.