ACER consultation on the high-level approach for identifying alternative bidding zone configurations

EFET response – 30 July 2021

The European Federation of Energy Traders (EFET) welcomes the opportunity to provide comments on the ACER consultation on the high-level approach for the identification of alternative bidding zone (BZ) configurations to be considered for the bidding zone review (BZR) process, pursuant to Article 14(5) of Regulation (EU) 2019/943 of the European Parliament and of the Council of 5 June 2019 on the internal market for electricity ('The Electricity Regulation').

Our response to this consultation should be read in conjunction with our paper on lessons learnt from the previous bidding zones review, the comments we sent to ACER on the draft report of DNV GL on liquidity and transaction costs and our previous answer in the context of a second bidding zones review.

We have concerns that although this consultation will help ACER in taking a Decision, we are missing the Locational Marginal Pricing (LMP) analysis and the different scenarios. This means that we have no additional details on the work of the TSOs compared to the methodologies proposed more than one year ago, and we are left wondering how the LMP analysis and alternative configurations for the BZR will play out.

Topic 1: Main objectives for the identification of alternative bidding zone configurations

Article 14(1) of the Electricity Regulation establishes that “Bidding zone borders shall be based on long-term, structural congestions in the transmission network. Bidding zones shall not contain such structural congestions unless they have no impact on neighbouring bidding zones or, as a temporary exemption, their impact on neighbouring bidding zones is mitigated through the use of remedial actions and those structural congestions do not lead to reductions of cross-zonal trading capacity in accordance with the requirements of Article 16. The configuration of bidding zones in the Union shall be designed in such a way as to maximise economic efficiency and to maximise cross-zonal trading opportunities in accordance with Article 16, while maintaining security of supply”.

1.1. Do you agree that the identification of alternative bidding zone configurations should mainly seek the following three objectives: 1) Minimisation of structural congestions within open, transparent and liquid wholesale markets, unhindered by national borders or other undue obstacles. We build trust in power and gas markets across Europe, so that they may underpin a sustainable and secure energy supply and enable the transition to a carbon neutral economy. EFET currently represents more than 100 energy trading companies, active in over 27 European countries. For more information: www.efet.org

2. See EFET position paper on bidding zones - Lessons from the past and recommendations for the future, dated September 2019, EFET response to ACER consultation on bidding zone review methodology and assumptions, dated April 2020 and EFET reaction to the DNV GL study on the impact of bidding zones redelineation on liquidity and transaction costs, dated July 2020.
bidding zones; 2) Maximization of economic efficiency and 3) Maximisation of cross-zonal trading opportunities?

1.2 Please provide any comments on the main objectives to be considered when identifying and prioritising alternative bidding zone configurations.

The three objectives taken from the Electricity Regulation are relevant, but incomplete. Additionally, we believe that aspects like the creation of a “reliable market environment” (§14(3) of Electricity Regulation), “liquidity”, “transaction costs”, “transition costs” and “stability over time”, as described in §33 CACM, should play a role.

It is also important that the proposal provides a consistent framework for TSOs to conduct bidding zones reviews (BZRs) in the future. For this, the principles for the assessment of both network congestions and market efficiency should be clear and harmonised in the methodology, irrespective of whether the BZRs are performed at EU, regional or Member State (MS) level. Without this approach, no harmonised implementation of the methodology can be guaranteed.

Additional cooperation and coordination between BZRs must be ensured and the different principles and assessment criteria must be applied in the same way across the different BZRs.

On the minimisation of structural congestions within bidding zones, we note that the methodology almost fully focuses on modelling a static economic dispatch. This allows measuring the efficiency or inefficiency of redispatch or congestion management. However, this is just one element of a proper BZR. For example, the methodology does not provide any detail as to how to quantify the impact of different BZ configurations on:

- the efficiency of locational signals for investments and divestments,
- liquidity of forward and intraday markets,
- imbalance risk exposure,
- the functioning of retail markets, or level of competition in wholesale and retail markets.

A proper BZR review must contain a balanced assessment of all relevant elements, which requires quantification and monetisation of these elements. It is obvious that such monetisation will be difficult. A modelling approach may not be appropriate, in which case other approaches must be developed. However, it is wrong to ignore some elements just because monetisation is difficult. In that case some basic assessment and quantification must be done. Finally, it also means that very precise modelling for the quantification of one element (like the efficiency of redispatch) seems unnecessary.

On the maximization of economic efficiency, we insist that all segments of the markets should be scrutinised. In particular, the efficiency of forward markets should not be forgotten, as they
still represent over two-thirds of transactions on the European electricity markets. Effects of bidding zone reconfigurations on intraday and balancing timeframes, as well as on retail markets should also be analysed, as they suffer when the liquidity of wholesale markets decreases.

Demand-side response and storage should be taken into account in the analysis, once again with reasonable expectations as to their development in the years to come.

Finally, while we appreciate that there is a precise timeline for the target year for all BZRs (2025), we have long argued that bidding zone reconfigurations should foresee a lead time of 5 years from the moment of the redelineation decision. Hence, given that the BZR and ensuing decision process can take up to two years, we suggest a target of 7 years from the start of the BZR.

Most forward contracts have a maturity of maximum three to five years in the current context of electricity markets. It should be noted that the change will nonetheless affect (positively or negatively) existing investments (generation plants, storage assets, demand-response providers) which have a longer amortisation period. Also, the development of long-term power purchase agreements (PPAs) for renewable electricity, often concluded for a period of five to ten years, will be particularly affected by changes in bidding zones delineation.

**Topic 2: Indicators for the selection of the target bidding zone/member state**

To ensure that the objectives listed in Topic 1 are met, and based on the data available to ACER, the following indicators are proposed:

- The amount of internal flows and loop flows contributing to congestions, per bidding zone and on network elements included in capacity calculation, for the maximisation of cross-zonal trading opportunities; and
- The dispersion of nodal prices, i.e. assessing the level of homogeneity of nodal prices within the same bidding zone, for the maximisation of economic efficiency.

2.1. Do you agree with the proposed indicators?

at most 1 choice(s)

- [ ] Strongly disagree
- [x] Disagree
- [ ] Neither agree nor disagree
- [ ] Agree
- [ ] Strongly agree

2.2 In light of the objectives listed in Topic 1, please indicate other possible indicators for the selection of the target bidding zone/member state.

4999 character(s) maximum

We strongly suggest reviewing bidding zones configuration from a neutral perspective, i.e. being open not only to splitting them, but also to maintaining or merging existing bidding zones, as well as a combination of splitting and merging. This means not pre-judging that congestions and loop flows inherently induce welfare losses without assessing their actual cost on the one hand, and the market benefits of the zone they stem from on the other hand: physical loop flows and transit flows are an integral part of any zonal model.
For example, depending on the bidding zones configuration, the same physical loop flows and transit flows could either become “loop flows”, “transit flows”, “internal flows” or “import/export flows”. As such, loop flows and transit flows cannot be considered as “good” or “bad”, but just need to be managed and have no preferential treatment, the cost of congestions and loop flows they create should definitely be analysed as part of the bidding zone review – it could even be a trigger to launch one. But from a welfare perspective, these congestions and loop flows should be accepted until the cost of their management is higher than the gain associated with more cross-border capacity for cross-border trade. The question is how TSOs coordinate in order to manage loop flows and ensure economically efficient decision-making. The sole measurement of loop flows and their associated costs does not demonstrate a welfare loss as such and should not be presented in this manner.

The TSOs are not a neutral actor on the subject of bidding zones. Their main task is to maintain system security, which would be facilitated in a system without any kind of corrective congestion management. TSOs may also be inclined to wish to reduce redispatch costs by increasing the number of bidding zones without regard for the effect of this on market efficiency, and hence the price of energy on the market. Hence, while we trust TSOs to do their best in the BZRs they will perform, it is important that they present ranges of options with pros and cons when a specific BZ configuration is considered as deserving to be changed. This should allow the final decision makers – Member States and the European Commission – to make as balanced as possible decisions.

**Topic 3: Boundary conditions for the clustering algorithm**

The high-level approach is designed in such a way that each iteration focuses on one single bidding zone or one single member state, based on the ranking built in the first step (‘the selection of the target bidding zone/member state’). In practical terms, this implies that both splits and mergers of bidding zones as alternative configurations are possible as long as the new bidding zone remains within existing member state borders, with the only exception of maintaining already existing bidding zones comprising more than one member state.

3.1. Do you agree that member state borders should be considered as boundary condition for the clustering algorithm?

- [ ] Strongly disagree
- [ ] Disagree
- [ ] Neither agree nor disagree
- [ ] Agree
- [ ] Strongly agree

3.2 Please indicate other possible geographical boundary conditions for the clustering algorithm, including pros and cons of such approach. 

We strongly disagree with the idea that model-based scenarios be restricted to Member State borders. While we understand the political difficulty that a recommendation to delineate bidding zones borders without regard for Member State borders may face at a regulatory and political level, we believe it is not the role of TSOs to care for such concerns. Rather, TSOs should deliver a technical analysis with hopefully a strong input for a bidding zones delineation expected to maximise welfare at the European level.
We recommend that the model-based scenarios be independent from Member State borders, respecting the results of the clustering exercise, even if re-processed and if they produce politically sensitive recommendations.

We welcome ACER’s proposal to investigate both the physical and commercial dimensions of congestion and we would appreciate further analysis and engagement with market participants on this.

Two examples could serve to bring balance to ACER’s reasoning regarding the exclusion of any possibility for mergers beyond Member State borders in this BZR:

- In Continental Europe, TSOs seem to be unable to agree on scenarios to study concerning the same bidding zone(s), with contradictory views whether to study reducing or enlarging specific zones. Instead of considering this as a disagreement and not proposing scenarios, we suggest that TSOs and ACER study both splitting and merging scenarios.
- In SWE, TSOs have indicated the absence of congestion at the PT-ES border. We therefore insist that the SWE TSOs study the merging of the Spanish and Portuguese bidding zones.

An additional boundary condition of the clustering algorithm is introduced, according to which the size, in terms of total generation and consumption of the newly identified bidding zones, should not be too different. This is needed to mitigate the issue related to the so-called flow-factor competition that could arise in case of very diverse bidding zone sizes, as further elaborated below. The competitive position of one bidding zone with respect to the others in the access to cross-zonal capacity is determined by the zonal Power Transfer Distribution Factors (PTDFs). A so-called flow-factor competition issue arises whenever zone-to-zone PTDFs between two bidding zones are systematically larger than between any other pair of bidding zones. In those circumstances, the concerned bidding zones have fewer chances to access the available cross-zonal capacity and, under scarcity circumstances, this could in turn lead to security of supply issues.

3.3. Do you think that having bidding zones with homogenous size in terms of total generation and consumption should be an objective when identifying alternative bidding zone configurations?

☐ Only for newly-defined bidding zones
☐ Always
☑ Never

3.4 Please provide any comments on this boundary condition.

Homogeneity in bidding zone size is not mentioned in any of the legislation setting out the objectives for bidding zone reviews so we do not think that it is right to use this new criterion. Besides, we doubt that this new criterion adds any value to the process or results. It also raises questions such as how size would be defined and which size is considered optimal.

Fundamentally, the flow-factor competition is also not only determined by the size of supply and demand in individual zones, but also by the how supply and demand are connected within and across the zones. Hence, we doubt that a metric trying to align the level of supply/demand in bidding zones would make sense in itself.
Topic 4: Combination of identified individual alternative bidding zone configurations to study their joint impact

An individual bidding zone configuration refers to e.g. the split of a given bidding zone A into two bidding zones A1 and A2, while an alternative bidding zone configuration may consider the joint impact of such split with another individual bidding zone configuration, e.g. the merge of bidding zone B and bidding zone C into a single bidding zone.

A list of maximum 10 alternative configurations per bidding zone review region is envisaged. This list includes a limited number of:

- Individual alternative bidding zone configurations;
- Combination of two individual alternative bidding zone configurations;
- Combination of three (or more) individual alternative bidding zone configurations.

selected among all possible combinations of individual alternative bidding zone configurations that lead to the highest incremental improvements for the considered indicators.

The need to set a limit to the maximum number of alternative configurations to be studied is derived from the time window available to transmission system operators to perform the bidding zone review. This is laid down in Article 14(6) of the Electricity Regulation, according to which “On the basis of the methodology and assumptions approved pursuant to paragraph 5, the transmission system operators participating in the bidding zone review shall submit a joint proposal to the relevant Member States or their designated competent authorities to amend or maintain the bidding zone configuration no later than 12 months after approval of the methodology and assumptions pursuant to paragraph 5”.

4.1. Please provide any comments on the approach to combine the incremental effects of individual alternative bidding zone configurations to study their joint impact.

4999 character(s) maximum

It is unclear how the “stop criterion” has been derived. Also here all objectives of the bidding zone review, including around market efficiency (see our comments above), should play a role.

4.2. In your view, how many alternative bidding zone configurations per bidding zone review region should be analysed during the bidding zone review to ensure an adequate level of representativeness, while still allowing transmission system operators to comply with the timeline set out in Article 14(6) of the Electricity Regulation?

at most 1 choice(s)

☐ Less than 5
☐ Between 5 and 10
☑ More than 10

Topic 5: Other comments

5 Please provide any other comments on the high-level approach and add a sufficient explanation.

4999 character(s) maximum
Transparency in the BZR process should be improved. Stakeholders should be enabled to follow and participate to the work of the TSOs, and to verify results of the final outcome. The data that market participants would need for verification purposes should include at least the following:

- Zonal demands in hourly resolution;
- Zonal renewables infeed (wind, solar, others) at hourly resolution;
- Underlying generation (generators not connected to the transmission grid, such as small-scale generators) at hourly resolution;
- RAMs at hourly resolution (for flow-based region);
- Zonal PTDFs at hourly resolution (for flow-based region);
- Power plant allocations to zones.

This data is needed for each bidding zone configuration and for each of the modelled zones.

Engagement with stakeholders should be pursued, both at regional and the EU level, with a view to coordinating the various on-going BZRs. Regular meetings of a pan-European group is necessary, using the platform of the former BZ SAG or the MESC.