



– Consultation response –

ACER public consultation on the high-level approach for the identification of alternative bidding zone configurations to be considered for the bidding zone review

Brussels, 27 July 2021 | Bidding zones are a fundamental part of the electricity market design in Europe. Adequate attention must be paid to the development of alternative bidding zone configurations as well as their assessment. Europex therefore welcomes the opportunity to provide feedback on ACER's high-level approach to identify alternative configurations. While we acknowledge that LMP modelling can provide useful data to support the development of potential configurations, care should be taken regarding the constraints or 'boundary conditions' for this exercise. In general, we believe market efficiency objectives must be considered both when developing the alternative configurations and when evaluating them.

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 bidding zones; 2) Maximization of economic efficiency and 3) Maximisation of cross-zonal trading opportunities?

Strongly disagree

Disagree

Neither agree nor disagree

Agree

Strongly agree

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

The three objectives as outlined in Article 14(1) are relevant. However, as ACER acknowledges in the described approach, these three elements are explicitly mentioned in the Electricity Regulation as objectives, while recital 19 of the same Regulation states that “Bidding zones therefore should be defined in a manner to ensure market liquidity, efficient congestion management and overall market efficiency”. In our view, it is challenging to separate the Article 14(1) objectives and the CACM criteria. Market efficiency, as defined in CACM, is an important objective that additionally needs to be considered when delineating BZs. The analysis of market efficiency (including competition and liquidity) should consider not only day ahead markets, but also other timeframes, e.g. also for long-term hedging/trading markets.

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?

Strongly disagree

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.

On the dispersion of nodal prices, it would be useful to know the source and the details of the data provided by relevant TSOs and made available to ACER in order to assess the value of the corresponding indicator. We recommend developing an additional indicator to also take into account an objective of market efficiency (see our response to Q1). We refer to [our response to the ACER consultation on the BZR methodology \(24 April 2020\)](#) for recommendations on how to operationalise the measurement of market efficiency, including liquidity.

We also question the approach which selects individual target bidding zone/Member State on which to run the clustering algorithm. We recommend an alternative European approach which considers configurations per Bidding Zone Review Region (BZRR), also allowing mergers (i.e. allowing multiple Member States (MS) / Bidding Zones (BZs), and adjacent borders relevant for the scope of SDAC, SIDC and balancing markets (e.g. Norway), to be targeted by the clustering algorithm and removing the boundary condition of Member State borders), rather than using the indicators to select an individual BZ / MS. Please see our response to question 3.1.

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 recommend exploring configurations per BZRR, also allowing mergers (i.e. deprioritising the boundary condition of member state borders), rather than selecting an individual BZ / MS, and running the algorithm. This proposed approach will only result in BZ splits, except in the few cases where there are already multiple BZs within a MS (Sweden, Italy etc.) and already strong fundamental indications of increased overall market efficiency etc. in case of a merger of BZs within one MS. It is understandable that Member State borders and adjacent borders relevant for the scope of SDAC, SIDC and balancing markets (e.g. Norway) normally should still be recognised, as well as network topological constraints (i.e. the zones must comprise an electrically connected subset of the grid). However, the possibility of mergers between MS, or parts of MS, must not be excluded at this LMP modelling stage. The feasibility of political agreement on such configurations is a second step which should not limit the fundamental analysis in this first step.

Some alternative regional configurations may be able to solve congestions and also score highly on other important aspects of the CACM Article 33 review criteria, including market efficiency. Taking into account this additional objective, we both strongly recommend and expect that mergers are included as possible configurations.

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.

No comment.

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.

We in principle agree with the described approach. However, we would like to highlight that an alternative BZ configuration always impacts the efficiency of the whole integrated single European market for electricity, meaning the impact goes beyond the concerned BZ. A joint impact assessment is therefore absolutely needed. To limit the review of alternative configurations to the respective BZ leads to an incomplete and potentially biased assessment. While we understand that the timeline can prove challenging to conduct an analysis with such an extensive scope, the potential impacts are too important to neglect them in the various scenarios.

Even when considering combinations of configurations, it is still key to evaluate if each delimited BZ as such is market efficient and, among other aspects, that sufficient internal supply/demand competition combined with cross zonal capacity exists to ensure efficient price formation both in spot markets and for long-term energy hedging needs.

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?

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.

The high-level approach should further clarify how the model-based approach will be used. For example, whether it will apply only to Bidding Zone Review Regions (BZRRs) where no

configurations were agreed on i.e. Central Europe and whether in these cases, it will replace entirely the expert-based approach to developing alternative configurations. Coordination between regional modelling exercises should also be ensured, to avoid a fragmented national approach to developing alternative configurations.

We believe there is a risk in focusing more on certain objectives i.e. reducing congestions within bidding zones, when defining the boundary conditions for the clustering, which may prematurely conclude the outcome of the review itself. The configurations are a vital part of the bidding zone review and should be determined in an objective a way as possible. For example, the modelling should not exclude mergers from being assessed as alternative configurations – feasibility due to political or other reasons should be considered in a subsequent step.

Besides that, we also note that the LMP analysis is solely prepared and performed by the TSOs. Thus, they will collect and prepare the original data as well as derive and deliver the results after the LMP simulations. There might be a benefit to add a neutral third party, e.g. a qualified research/scientific institute, to the process, for instance to aggregate the data and/or to monitor the analysis. This could enhance the transparency and credibility of the review.

About

Europex is a not-for-profit association of European energy exchanges with 29 members. It represents the interests of exchange-based wholesale electricity, gas and environmental markets, focuses on developments of the European regulatory framework for wholesale energy trading and provides a discussion platform at European level.

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