

# ENTSO-E Bidding Zone Review Consultative Group (BZR CG) physical meeting: BZR study status update

Date: Thursday, 13 October 2022  
 Time: 10am-3pm  
 Location: ENTSO-E office, Brussels, Belgium

## Minutes of the Meeting

### 1. Welcome and introduction of the BZR CG members

The Chair welcomes the BZR CG members, Bidding Zone Review Region (BZRR) members, pan-EU studies leads as well as Bidding Zone Task Force (BZ TF) representatives. Tour de table is provided for the members to introduce themselves, and the Chair guides the members through the agenda points.

### 2. Sensitivity analysis

The convenors of CE and Nordic BZRR present the sensitivities that will be performed in each BZRR, highlighting the differences and similarities on the parameters used; the main difference being the consideration of future network infrastructures with cut-off year 2028 considered by BZRR CE but not by the BZRR Nordic.

ACER outlines that in the BZR Methodology considering at least one sensitivity analysis is required to assess the criterion “robustness of the study over time“. According to ACER, if the time horizon is used a parameter for the sensitivity analysis, this sensitivity should consider infrastructure, RES changes but also demand evolution and decommissioning of generation units. Otherwise, considering only infrastructure and RES changes leads to a scenario that will never materialise and hence to unrealistic results. NRAs and ACER will provide a draft feedback to the TSOs on the sensitivities until end of October, whereas a more consolidated feedback will be provided by 21 November, in line with Article 17(3) of the BZR Methodology.

Given the latest market design changes, one of the main concerns for the BZR CG members is the target year (2025) of the BZR study. They ask whether it can be changed at this stage. ACER explains that the main limitation is set forth in Article 14(5) of the Electricity Regulation which prescribes a 3 year time period between the start of the review and the target year (i.e. 2025 is a fixed year for the BZR).

BZR CG members ask specific questions (see table below).

Question	Answer
For CE BZRR: It should be noted that a target year ahead in future (at least 2030) should yield better results; why is year 2028 chosen as a target year for the grid and RES sensitivities?	2028 has been chosen for the sensitivity analysis as there is a reference to a 3 year time period in Article 14(5) of the CEP regulation for taking into consideration future grid infrastructures. Since the current bidding zone review is performed for 2025, the next 3 years have been considered for the sensitivity.

<p>For Nordic BZRR:</p> <ol style="list-style-type: none"> <li>1. Why is target year 2028 not considered for the sensitivity, like it is done in CE BZRR?</li> <li>2. Taking mature projects only is a wrong approach as the objective is to do calculations based on a relevant period, which should ideally be 2030. In addition, grid and intermittent RES changes in the Nordics are quite significant in the period between 2025-2035. Can Nordic BZRR clarify why a target year beyond 2025 (like 2028 in CE BZRR) and relevant projects are then not considered in the sensitivity?</li> <li>3. Hydro levels are very important, does the region plan to include a dry/wet year scenario in the sensitivity?</li> </ol>	<ol style="list-style-type: none"> <li>1. The BZR Methodology outlines a target of 3 years after the start of the BZR. There are limited benefits to assess grid developments beyond 2025 as a sensitivity in the Nordic BZRR. There are also large uncertainties around mature projects and RES development beyond 2025 and would be difficult to consider in a sensitivity for 2028.</li> <li>2. The Nordic BZRR follows the methodology where the analysis is centred around the target year 2025. The sensitivity analysis is done the conventional way, i.e. changing one parameter in order to assess its impact.</li> <li>3. The Nordic BZRR is currently discussing this point; a concrete answer will be given at a later stage.</li> </ol>
<p>Should sensitivities be the same for both regions, or can these differ?</p>	<p>The regions can perform different sensitivities, however these should be in line with the requirements laid down in the BZR Methodology.</p>
<p>For fuel prices: are the results calculated on changes with regards to individual fuel type price, or are these just increased/decreased altogether as a bundle?</p>	<p>Parameters are changed as a bundle and do not change over time. ACER representatives add that, in order to capture the specific impact of increased fuel prices, a separate sensitivity analysis where only this variable is affected should be carried out.</p>
<p>What is the source of the targeted capacities for the RES parameter?</p>	<p>Planned projects are the primary sources. RES are aligned based on the new and updated plans in EU; BZRRs try to be in line with the latest developments as well as other studies performed by the TSOs (such as the ERAA study) and adjust the capacities respectively.</p>
<p>Will the data used for the sensitivities be based on the updated TYNDP data set?</p>	<p>The TYNDP 2020 data were used in the study, same as in the LMP study. Regarding sensitivities, the BZRRs will try to align on the updated scenarios and data sets on the respective sensitivity dimensions.</p>

### 3. Pan-EU studies

### 3.1. Market liquidity and transaction costs: scope extension and data collection

Study lead explain how comments on scope of extension received by the BZR CG were considered by the TSOs. They further explain that TSOs are currently assessing a possible extension of the scope considering bid-ask spreads for forward markets as well as adjusting the time-frame to include years 2016 and 2021. However, data collection is a challenge, and scope extension is conditional to data availability.

An overview on the data collection process for all timeframes is given, and challenges are being highlighted. Cooperation with NEMOs on day-ahead and intra-day time-frame is promising, however, the data might not be available for intra-day market time-frame.

BZR CG members ask specific questions (see table below).

Question	Answer
It would be beneficial to assess liquidity and costs in the balancing market time-frame. Does the team plan to do this?	At the moment, the balancing market is not considered in the scope and is not part of the BZR Methodology requirements.
Speaking of data availability, are there challenges with data ownership and privacy?	The TSOs and Compass Lexecon have done extensive work to identify the data, and it can be confirmed there are no privacy obstacles. Data collection seems challenging due to several aspects, and given the time limitations to perform the study, a simplified data set might be considered in the end. At the moment, the timeline is not an issue, and discussions with relevant parties continue to take place.
BZR CG members are interested to see how data will be collected for assessing the liquidity and transaction costs. Simplified data might not yield good results, and if that is the case, the BZR process should be postponed; has the study group looked into this aspect?	While there is a challenge with obtaining the data needed for the study, there is still enough time to allow the group to look into alternative solutions. Postponing the study is not an option due to legal requirements, since the market liquidity and transaction is one of the criteria to be assessed according to the bidding zone review methodology.
NEMOs reaction on the aspect of intra-day data availability: NEMOs have shared all historic data with ACER, however NEMOs do not store this data. ACER has the data since 2019, NEMOs would like to ask ACER why this data cannot be shared with TSOs?	ACER's reply: This data is only accessible to REMIT colleagues on a need-to-know basis and it is stored in a highly secure environment due to the level of confidentiality it carries. There are Chinese walls between the REMIT department and the Electricity department, whose staff is involved in the bidding zone review process. For these reasons, this data cannot be extracted and shared with TSOs. However, ACER's Electricity department is looking into potential solutions how to provide market monitoring data to TSOs.  TSOs' response: there is an on-going discussion on obtaining the market monitoring data from ACER.

	The BZR CG will be updated on the outcome of this discussion.
--	---

### 3.2. Questionnaire on transition costs: BZR CG experience on on-going consultation and filling in the questionnaire

BZR CG members take the floor to share their and the experience of members of their respective organisations on the process for filling in the questionnaire. In general, stakeholders struggle to make an estimate on several questions (e.g., lead time, FTE). The stakeholders explain that, additionally they experience difficulty on collecting member feedback because of the on-going market design changes and prioritisation of other projects within the organisations. Transition costs study lead acknowledges the challenges faced by the BZR CG members in filling in the questionnaire; however, they highlight the result of the study is dependent on the answers received by external stakeholders on the market survey. Therefore, cooperation from the stakeholders is critical in this regard.

A couple of BZR CG members take the opportunity to ask ACER representatives if the current energy crisis associated with the talks of a structural market reform could be used as an argument to request for a delay of the BZR process to the European Commission. ACER representatives take note of the argument; however, they explain that they see the BZR study as part of the solution for the current problems. If an alternative bidding zone configuration allows to manage congestions in a more efficient way, make more cross-zonal capacity available and provide accurate price signals for investments, this would help solving the challenges that Europe currently experiences. In addition, delaying or stopping the BZR process risks creating a cascading effect on many other ongoing activities affected by the current energy crisis. For this reason, ACER would like to keep the discussion on a potential structural market reform separate from the ongoing BZR process. ACER representatives invite the concerned BZR CG members to reach out to the European Commission and express their concerns on this matter on an individual basis.

### 3.3. Public consultation: process and content

The group lead explains the requirements, content and scope of the public consultation. They explain what the BZR Methodology prescribes to be part of the consultation and how the BZR CG feedback will be considered in preparing the consultation. In essence, the BZR CG members will be asked to provide feedback on:

- Pan-EU studies (feedback was already collected);
- (Policy) measures to mitigate negative impacts (i.e. liquidity effects) of specific BZ configurations; and
- Practical considerations, particularly on implementation dates.

BZR CG members brainstorm of several mitigation measures that can be considered. TSO representatives acknowledge these points and explain these might be considered in drafting the consultation. BZR CG will be updated on the next steps and their involvement in the process.

BZR CG members ask specific questions (see table below).

Question	Answer
Has the group considered conducting more than 1 public consultation, because the methodology does not limit the TSOs to conducting just a single public consultation?	A second public consultation is not planned at the moment. However, based on the developments, if a need for a second or more consultations is considered, the overall impact on the timeline of the project must be accounted for when making the decision.

The BZR CG requested to broaden the scope of block b) (mitigation of negative impacts of bidding zone split) and suggested to include a question into the public consultation on what alternative (policies) measures could be applied to obtain the positive benefits a bidding zone reconfiguration would entail without splitting bidding zones.

## 4. Status update from Central Europe BZRR

### 4.1. CE BZRR tool chain and computational challenges

The CE BZRR convenor explains the steps in the tool chain, outlining what each step represents, the different platforms and tools used to process input data and parameters to finally obtain indicator results.

The convenor explains that the main computational challenge is the fact to perform 60 full years of simulation. As such, the simulations required to be run with the modelling chain are very demanding from a computational/performing point of view. CE team is trying to reduce the computational time, with an end goal to reduce the time for 90%, which would allow 1 year to be run in 5-6 days. The region is having bilateral exchange with ACER and NRAs and the tool providers to discuss potential simplifications and efficient computational time. The convenor explains that several solution directions have been looked into:

- Simplifications to be applied in the modelling chain
- Simulation prioritisation
- Computational performance: 4 additional computational cores (on top of the 3 existing ones) are to be added.

BZR CG members ask specific questions (see table below).

Question	Answer
What is the use of the <i>Integral</i> tool?	This tool is used in Germany for performing capacity calculation and operational security analysis and redispatch optimisation. Since it has proven to be a useful tool to cover different aspects of the regulation, it was agreed to use this tool at the beginning of the project.
Has CE BZRR considered cloud computing?	Yes, it is considered as a potential option.
Has CE BZRR discussed with university teams optimisation problems?	Not at the moment, it could be an option to be considered in the next BZ review.
Has CE BZRR discussed strategies to reduce the computational time?	Yes, some ideas have been discussed, and in particular how to bundle small distributed units or reduce number of CNECs. No specific actions are agreed at the moment, but updates will be given following the on-going discussions with the tool provider.
There is enough expertise in the BZR CG that can support in addressing the computational challenges;	ACER's reply: Any ideas are in principle welcome, especially the ones aiming at reducing computational time by fine-tuning the optimization problem, yet without introducing simplifications that

can CE BZRR share the list of ideas with the BZR CG members?	are deemed to significantly affect the final results of the study.
The BZR CG is interested on how the different indicators are compared and considered. Can CE BZRR further explain how they intend to analyse the indicators? For example the indicator on impact on need for infrastructure seems very important, but the tool chain does not provide any results that can be used for this indicator.	CE BZRR follows the indicators as outlined in the methodology; the process of analysing and comparing the indicators is outlined on the <a href="#">ENTSO-E BZR website</a> . CE BZRR proposes to provide a more detailed presentation on the evaluation of the indicators in the next BZR CG meeting.
What is the cost associated with the computation?	CE BZRR does not have an exact figure at the moment; an update will be given at a later stage.

## 5. Update from Nordic BZRR

### 5.1. Nordic BZRR status update

The Nordic BZRR convenor explains the steps in the modelling chain, outlining what each step represents, the different platforms and tools used to process input data and parameters to finally obtain indicator results. The main modelling tool is BID3. They outline that several modelling tweaks and changes are made to optimise the modelling aspect.

### 5.2. Nordic BZRR data publication update:

The convenor explains that there was a technical error in the initially published Nordic input data. The error is now corrected, and the correct file is being re-published on the [ENTSO-E website](#) as well as [Svenska Kraftnäts's \(SVK\) website](#).

The convenor also explains that the Nordic BZRR is also working on making the NTC available for publication in December 2022.

BZR CG members ask specific questions (see table below).

Question	Answer
How is publication of data being done for all regions?	Data has been <a href="#">published</a> according to the BZR Methodology requirements. The same data type is published for both CE and Nordic BZRR. The final publication of the input BZR data is planned to take place in December 2022.
Does Nordic BZRR experience same computational challenges as CE BZRR?	The level of detail of the network model is different when compared to CE BZRR (CE model being bigger compared to the Nordic model). This results in different computational time for both regions.
What is the cost associated with the computation?	Nordic BZRR does not have an exact figure at the moment; an update will be given at a later stage.

## 6. BZR general timeline

The Chair of the meeting gives an update on the main milestones planned during the BZR study. They explain that the next BZR CG meeting is planned to take place in Q1 2023. The BZR CG members are keen on having another meeting before the end of the year, mainly to discuss updates on pan-EU studies and assessment of the indicators.

The BZ TF convenor takes the floor to explain that the TSOs follow the process for assessing indicators as prescribed in the BZR Methodology. Keeping the framework of the BZR Methodology and Electricity Regulation in mind is quite important; the BZ TF convenor explains that it is important for the stakeholders to be more familiar with the requirements in the BZR Methodology with regards to the indicators. This would provide room for more constructive discussions between the TSOs and the stakeholders.

The Chair of the meeting then outlines that another important milestone is February 2023 as the latest point in time to start the public consultation.

Lastly, the Chair explains that the decision on alternative BZ configurations has led to an additional step to select combinations and this might result in an increase of the project time. This exact time required to perform this step is still under assessment, and an update on will be communicated with the BZR CG.

Question	Answer
When can ACER come back with the request to discuss with the EC to delay the BZR process?	ACER's position on this topic has already been expressed in the meeting, including the supporting arguments for which a postponement of the BZR process is not envisaged at this stage. Market participants may reach out directly to the European Commission with their request for feedback.

## 7. Conclusion and next steps

The Chair of the meeting and the BZ TF convenor thank the BZR CG members for their active involvement and contribution to the project until now. They explain that having discussions in a physical-meeting format are of added benefit, and agree to organise another physical meeting. Depending on the circumstances (COVID restriction, etc), the next BZR CG meeting might be online or in-person, and the members will be consulted on the date and informed in advance on the format of the meeting.