

Bidding zone review questionnaire

A Eurelectric response paper

September 2024

Eurelectric represents the interests of the electricity industry in Europe. Our work covers all major issues affecting our sector. Our members represent the electricity industry in over 30 European countries.

We cover the entire industry from electricity generation and markets to distribution networks and customer issues. We also have affiliates active on several other continents and business associates from a wide variety of sectors with a direct interest in the electricity industry.

We stand for

The vision of the European power sector is to enable and sustain:

- A vibrant competitive European economy, reliably powered by clean, carbon-neutral energy
- A smart, energy efficient and truly sustainable society for all citizens of Europe

We are committed to lead a cost-effective energy transition by:

investing in clean power generation and transition-enabling solutions, to reduce emissions and actively pursue efforts to become carbon-neutral well before mid-century, taking into account different starting points and commercial availability of key transition technologies;

transforming the energy system to make it more responsive, resilient and efficient. This includes increased use of renewable energy, digitalisation, demand side response and reinforcement of grids so they can function as platforms and enablers for customers, cities and communities;

accelerating the energy transition in other economic sectors by offering competitive electricity as a transformation tool for transport, heating and industry;

embedding sustainability in all parts of our value chain and take measures to support the transformation of existing assets towards a zero carbon society;

innovating to discover the cutting-edge business models and develop the breakthrough technologies that are indispensable to allow our industry to lead this transition.

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KEY MESSAGES

- **On the Transition costs report:**
 - **Eurelectric expresses significant reservations about the reasonableness and feasibility of the transition cost estimates** provided in the study. The study's reliance on a small and potentially non-representative sample, combined with methodological limitations and data quality issues, raises doubts about the reliability of the results. Therefore, **Eurelectric urges caution in interpreting these estimates** and calls for more transparency in the methodology to ensure accurate and reliable cost assessments.
 - **Eurelectric argues that the current definition of transition costs used in the studies is too narrow, potentially leading to an underestimation of the transition costs** associated with bidding zone reconfigurations. The definition fails to account for factors such as the impact on forward trades, stranded costs, foregone costs, and the broader economic redistribution among market participants.
 - **Eurelectric emphasises the need for sufficient lead time to allow market participants to adapt and suggests to closely aligned with the duration of forward trades.**
- **On the Market liquidity report**
 - **Eurelectric acknowledges the negative impact on market liquidity for most of the proposed reconfiguration, especially in the long-term markets.** This is expected to result in higher transaction costs, with wider bid-ask spreads and reduced liquidity.
 - **Eurelectric considers that the conclusions about liquidity and transaction costs are based on proxy indicators** (market size, market concentration, and price correlation), which may not reliably reflect actual market conditions. Issues include questionable data transparency, overestimation of interconnection capacities, and flawed reasoning behind using price correlation as an indicator. **Therefore, Eurelectric urges caution in interpreting these estimates.** The assessment of liquidity should include more comprehensive factors beyond just volume, such as open interest, bid-ask spreads, and time to maturity. This broader view is crucial for fully evaluating the market's ability to manage risks effectively.

- **Eurelectric regrets that the mitigation measures will only be considered ex-post** and that they have not been informed about TSOs stance on this matter before TSOs issue their upcoming recommendation.
- **On the Bidding Zone Review process:**
 - **Eurelectric raises concerns about the lack of clarity on how the conclusions of studies**, such as the transition cost and market liquidity studies, are integrated into the broader Bidding Zone Review process and **how they are weighted against the other 20 parameters investigated**. Eurelectric also calls for transparency and consultation on the results of the assessment of the other indicators.
 - Additionally, **Eurelectric raises concerns regarding the potential inclusion of mitigation measures in the final report without adequate investigation**. This approach represents a significant shortcoming in the consultation process.
- **Eurelectric emphasises the need for a more forward-looking study (e.g. up to 2035) that considers various scenarios and sensitivities over extended time horizons.**

Transition cost study

[Link](#) to report on Transition costs study (version for public consultation, 6 December 2023).

1. On costs

- a. **Do you consider the estimated range of transition costs reasonable and feasible? Please indicate why or which part of the estimate of transition costs you consider (not) reasonable. Please specify in your answer if you are referring to all configurations or to a specific one.**

While we appreciate the effort conducted for this first study on transition costs of bidding zone reconfigurations, Eurelectric has several concerns regarding the reasonableness and feasibility of the estimated range of transition costs presented. Those concerns are due to significant methodological limitations, data quality issues, and the representativeness of the sample used for this study.

Firstly, the study is based on responses from only 42 power sector stakeholders, which, not only highlights the challenges in completing the related questionnaire but is also a small sample size relative to the scale of the EU power market. In addition, this limited number of respondents does not always accurately represent the diversity of all affected stakeholders, leading to potential biases in the estimated costs. For instance, in some countries, TSO and DSO have not taken part in the survey.

Secondly, the study highlights several methodological limitations, including data quality issues, restricted dataset and inconsistencies among respondents in cost inputs. The limited number of data points can lead to both underestimation and overestimation of costs. The presence of outliers contributes to this uncertainty and that potentially actual costs could be substantially higher. Evaluations should be based on established models and standard costs (e.g., the cost of renegotiating a PPA or a forward contract multiplied by the operations in each area). Survey estimates are highly dependent on the respondent's perspective, which could lead to significant underestimation by wholesale operators. In the end, the study produces a wide range of estimated costs, indicating substantial variability and uncertainty. The large range suggests that the methodology may not be fully robust.

Thirdly, there is limited information on the assumptions that have been made, be it expert or model based on how the estimated costs correspond to specific transition activities and how extrapolations were made. This lack of transparency, potentially due to confidentiality concerns, makes it difficult to assess the validity of the estimates. A deeper investigation/audit into the data could have provided valuable insights, particularly in understanding the rationale behind the data qualified as outliers. Furthermore, it would have been interesting to describe how the provided inputs were cleaned by ENTSO-E, the TSOs and in discussion with ACER and the NRAs and how they scaled it to calculate total transition costs per bidding zone reconfiguration.

Overall, these limitations are acknowledged in the study and are significant enough to question the reliability of the estimates provided. This should warrant additional caution when interpreting and using the results. We highly recommend remaining modest in the conclusions to be drawn on this indicator.

- b. **Which mitigation measures, e.g. by TSOs, regulators, policy makers or NEMOs, could decrease transition costs in general?**

Eurelectric would like to highlight that part of transition costs are inherent to bidding zone reconfiguration and thus cannot be mitigated with regulatory measures. The transition costs

linked to the reconfiguration of bidding zones itself should not be underestimated and should be properly considered. Moreover, Eurelectric would like to recall that changing bidding zone configuration has significant socio-economic costs such as undermining of existing investments, increased investment risk, undermining of case for network expansion leading to network build shortfall, reduced market liquidity.

Alternatively, congestion can also be efficiently managed through alternative coordination measures, such as capacity calculation and allocation, countertrading and redispatching, targeting a maximization of the socio-economic welfare. Structural congestions can also be efficiently managed through network development in close coordination with the expected evolution of the electricity generation mix and with the expected evolution of demand.

Do you have experiences from previous bidding zone reconfigurations?

The Bidding Zone split between Germany-Luxembourg and Austria in 2018 has caused Austrian futures markets to dry up. As costs of a lower liquidity of the Austrian futures markets in relation with higher spreads are unavoidable, considerable additional transition costs for Market Participants arose that still exist today and are hard or impossible to abate. One major driver was the challenge of renegotiating already concluded forward contracts (both in wholesale and retail markets) which constitutes not only a time-consuming and bureaucratic process but may also constitute a commercial risk. Furthermore, regulatory changes were required, such as adjusting reference prices in subsidy schemes or updating the balancing price calculations.

c. Considering the impact of the lead time on the transition costs: What mitigation measures to decrease these costs do you consider reasonable and feasible and how much, in your estimate, would they decrease the costs (in %)?

Firstly, we are concerned that the final report will include recommendations on mitigation measures without having investigated or communicated any such measures in the report subjected to this public consultation. Furthermore, incorporating feedback from this consultation into the report ex-post seems disproportionate. This oversight underscores a significant shortcoming in the process, as we were not adequately informed on TSOs whereabouts on these crucial aspects.

Secondly, it is challenging to accurately estimate the impact of mitigation measures on total costs involved, making it impractical to determine the specific contribution of any single measure. Nevertheless, the following measures could potentially alleviate transition costs:

- For alternative configuration involving Bidding Zone split, limiting the number of bidding zones as well as limiting or avoiding combined reconfigurations.
- Provide sufficient lead time to implement the changes. The more the lead-time corresponds to the actual adaptation needs by Market Participants, the lower the transition costs would be. Shorter lead-times will lead to frictions and thus higher transaction costs. In neither case, however, reliable prediction of the cost is possible.

d. Do you expect other types of transition cost that are not covered by the definition used in the study which was based on the bidding zone review methodology1?

In Eurelectrics' views, ACER's definition of transition cost is too narrow and fails to account for the full range of effects resulting from a Bidding Zone reconfiguration which can lead to underestimated transition costs.

The categories of costs assessed in the study appear to omit several critical factors:

- **The amount of stranded costs, foregone costs and opportunity costs** for assets associated with configuration changes. The exclusion of these costs represents a significant limitation of the study, which must be taken into account when formulating the recommendations. Indeed, changes of bidding zone configurations can significantly affect market fundamentals, influencing to a large extent the value of price-sensitive assets. The potential for these changes introduces a regulatory risk that is difficult for investors to anticipate, creating a financial risk potentially leading to increased investment costs. More generally, Eurelectric considers that it is essential to **consider the economic redistribution among market participants and system operators across different bidding zones**
- **Potential impacts on forward trades, including PPAs.** PPAs with a renegotiation clause or the ability to withdraw would add financial costs to existing assets which suddenly are exposed to a larger degree of risk. This omission could lead to an incomplete understanding of the total transition costs.
- **Costs and benefits of congestion.** Reconfiguration could result in a shift in value from market participants to TSOs/DSOs, which needs to be accounted for in the overall assessment. **Parallel run simulation costs** in order to anticipate the price spread as well as the usage of the cross-border capacity.
- **Indirect costs for delaying effect on other (regulatory) projects.** They shall not be underestimated since they might incur further opportunity costs.
- The effects on the **uncertainty behind investment decisions** were not covered. It is important to note that the unknown delineation of new Bidding Zones leads to a high level of uncertainty among project developers and therefore to delays in investment decisions.

The above list requires Market Participants to anticipate or assess multiple factors which will be costly, and which usually cannot be measured ex-ante.

2. Implementation and timeline

- a. **What do you consider an appropriate minimum implementation lead time of a new bidding zone configuration? Please explain why you consider this to be a minimum.**

The leading principle governing the reconfiguration of bidding zones should be that the impact on the existing market institutions and contracts in wholesale and retail markets are as small as possible. It should provide enough time to allow MPs to plan and adapt to the new configuration, minimizing disruptions to existing contracts. Against the background that a quantitative estimate of a suitable lead-time cannot be given reliably, a good indicator for the minimum lead time is the term structure of the forward market, i.e. how many years out forward contracts are traded. For instance, the majority of already concluded forward contracts, in terms of number of contracts, is linked to the retail market with terms that can extend up to 5 years. Additionally, the minimum lead time should account for the longer life span of Power Purchase Agreements (PPAs), which can range from 5 to 15 years, which will be particularly affected by changes in BZ delineation. Moreover, when determining the lead time, it is essential to also consider and be consistent with the transmission development plans and the implementation of Offshore Bidding Zones, when relevant. The objective is to reduce uncertainties and ensure a smooth transition for all market participants.

b. What are practical considerations that impact the minimum implementation lead time?

The minimum implementation lead time for a bidding zone reconfiguration is influenced by several practical considerations. One of the key factors is the cost and complexity of renegotiating contracts, such as PPAs, which must be adjusted to reflect the new market realities. It is crucial to avoid impacts on the correlated futures and options contracts and to what would happen to the open interest of those contracts.

Additionally, significant costs and adequate time are required to adapt internal processes including IT systems, HR, business operations. These technical updates are essential for ensuring that market operations continue smoothly under the new configuration. Stakeholders will face learning costs as they adapt to the new systems and processes, leading to a temporary loss of efficiency across trading and valuation tools.

Furthermore, Eurelectric would like to stress that stability is of the utmost importance. Indeed, a change of bidding zone configuration can have a dramatic impact on market fundamentals, influencing to a very large extent the value of price-sensitive assets. For example, if a single bidding zone encompasses the two ends of a merchant line, then its market value drops virtually to zero. The fact that bidding zone configuration can change is per se a regulatory risk that is very difficult to anticipate for investors and the financial risks lead to extremely high costs. Stability is key to limiting financial risk. Moreover, stability is key to fostering investment in development network as well as in generation/demand assets.

Last but not least, the minimum lead implementation time can potentially impact grid reinforcement. In theory, it should not matter. TSOs should be able to assess the socio-economic costs and benefits of transmission infrastructure projects. And the result should not depend on the bidding zone configuration. However, in practice it could have an impact. It depends on the incentives for TSOs, especially around the use of congestion rents. Furthermore, we fear that with smaller zones, we will see TSOs even more focused on their own control area.

c. What is your experience of previous bidding zone reconfigurations on the implementation and timeline?

Based on the German-Luxembourg-Austrian split experience, significant challenges and underestimated timelines were highlighted. Initially announced in 2016, the go-live was postponed from July to October 2018, reflecting the complexities involved. Assessing the consequences proved difficult, as parallel runs couldn't simulate order books and Market Participants' behavior, a challenge that is expected to be even greater in a flow-based environment. The split preserved a dominant market, but future splits may not offer the same clarity, leading to increased uncertainty and potential transition costs. Despite regional partners' intense focus, Market Participants were still caught off guard by the immediate outcomes, suggesting that while adequate lead times are essential, they may not fully mitigate long-term market impacts.

Thus, although proper lead times are required for the Market Participants to adapt systems and portfolios, it cannot not be guaranteed that there won't be any long-lasting impact on the market itself, whatever the lead time is.

- d. Are there any other potential changes in the market design that could affect the transition costs of a bidding zone reconfiguration or the implementation and timeline? Why and how would they affect the transition costs and the implementation and timeline?**

Changes in the energy landscape, such as the integration of renewable energies, increased cross-border trading and the resulting changes to market design rules, are having an impact. This is why we reiterate the need to take into account different scenarios or sensitivities and to investigate more forward-looking time horizons.

Additionally, alignment with transmission development plans and offshore bidding zone implementation considerations is necessary.

National developments related to support mechanisms and implementation processes also play a significant role.

3. Please provide any other practical considerations on transition costs and implementation and timeline and comments you may have on the transition cost study.

We would like to highlight the need for regulatory support to facilitate investment decisions in region with smaller bidding zones. A bidding zone split inherently leads to more investment uncertainty. To enhance investment certainty, regulatory measures should be put in place to improve the ability to make an FID (Final Investment Decision). One key improvement could be to facilitate cross-zonal PPAs by offering longer maturities for FTRs.

In terms of practical consideration regarding the Bidding Zone Review process, we criticize the fact that it remains unclear how the conclusions of this study are integrated into the broader Bidding Zone Review process and how transition costs are weighed relative to the 21 other parameters investigated.

Additionally, as noted in our response to question 1.C, we have concerns that the final report may include recommendations on mitigation measures without prior investigation or communication of these measures during public consultation. Incorporating feedback from this consultation ex-post seems disproportionate and highlights a significant shortcoming in the process, as we were not adequately consulted on these critical aspects.

Transition costs would continue to rise. If long-term stability of the zone configuration is not ensured, with the possibility of periodical changes, the costs of PPAs and forward contracts should consider the possibility of renegotiation or early termination of contracts.

Liquidity and transaction cost study

[Link](#) to report on Market liquidity and transaction costs study (version for public consultation, 17 July 2024).

1. On the impact of bidding zone reconfigurations on liquidity and transaction costs

a. What do you perceive to be the impact of the proposed bidding zone reconfigurations on liquidity and transaction costs in comparison with the status quo configuration?

The proposed bidding zone reconfigurations are expected to have a predominantly negative impact on liquidity compared to the status quo configuration, particularly in long-term markets. Higher transaction costs are anticipated, reflected in wider bid-ask spreads. Furthermore, this can hamper the intentions of the recent reform of the EU electricity market design, which aims to boost and enhance the liquidity of the internal electricity market.

Given the report's statement that "there is no absolute consensus in the literature, and no clarity on the magnitude of impact on market liquidity that a change in the delineation of bidding zones would have, it is nevertheless a critical factor that is likely to be influenced by the configuration of bidding zones", Eurelectric advises to be very cautious with any preliminary conclusions made on liquidity development for potential Bidding Zone reconfigurations in the report as the magnitude of the impact on liquidity cannot be firmly established.

b. Do you agree with the conclusions on the liquidity and transaction costs in alternative bidding zone configurations? Please indicate why you consider the conclusions (not) reasonable. Please specify if you are referring to all configurations or to a specific one.

General comments:

The conclusions of the study are mainly based on 3 parameters that act as proxies for liquidity and transaction costs: market size, market concentration and price correlation. Of these 3 parameters, only market size has a direct link with market liquidity and a transparent calculation methodology.

Regarding market concentration, irrespective of the validity of its link with liquidity (which the authors of the study consider 'difficult to conclude in general'), the calculation methodology and data are insufficiently transparent. The market concentration data is provided to the authors of the study by the TSOs and integrates cross-zonal capacity, leading to the (counter-intuitive) result that smaller bidding zones have lower levels of market concentration because of a higher level of import capacity. This disregards the actual ownership of capacity providing the cross-zonal capacity, leading to dubious dynamics where assets owned by the same company but ending up in different bidding zones would result in a lower level of market concentration in case of a bidding zone split. Moreover, in the forward market timeframe, the assumed levels of available interconnection capacities appear to be an overestimation. As a result, the conclusions regarding market liquidity and transaction costs based on market concentration seem unreliable and should be disregarded as an indicator for assessing the liquidity of bidding zone reconfigurations.

Regarding the price correlation indicator, the reasoning for its use as an indicator for market liquidity seems flawed. It is based on the ability of market participants to use the liquidity of other bidding zones to mitigate a lack of liquidity in its own bidding zone through the practice of proxy-hedging. Higher correlation leads thus to lower risks when performing such proxy-hedging. This assumes that a neighboring bidding zone has a (more) liquid market available to perform such proxy-hedging actions. However, these proxy-hedging opportunities were already available

before a bidding zone reconfiguration, and most improvements in price correlation are actually due to the split bidding zones having high price correlations with the other bidding zones with which they were previously sharing a single bidding zone.

i. Remarks to the conclusions on the short-term timeframe

For short-term markets, the study suggests mixed effects depending on specific configurations. While some configurations may benefit from increased price correlation and reduced market concentration, irrespective of whether these indicators are a good measure for market liquidity, these effects are inconsistent and do not apply to all BZs. The overall expectation of decreased liquidity due to reduced market size remains most likely. Given the number of limitations and caveats mentioned in the report, no conclusion/decision should be taken from this work.

Large markets with highly diverse participants tend to be more liquid and therefore incur measurably lower transaction costs. The size of the bid/offer spread from one asset or product to another will differ mainly because of the difference in liquidity of each asset. The bid/offer spread should decline *ceteris paribus* with the number of market participants (and the size of the market), because the more market participants, the more potential counterparties with different risk preferences are available for a trade.

In general, creating more zones in a market reduces trading opportunities as the upfront network capacity limitations are always defined on assumptions in the future that may or may not occur and lead to stronger price reactions to new producers or consumers, increasing uncertainty about revenues or costs. Therefore moving to a greater locational granularity would have a detrimental impact on the investment, which should be carefully assessed when considering a bidding zone reconfiguration. This will cause an increased perception of risk by operators resulting in higher “risk premium” and thus higher costs of investments functional to energy transition.

Further analysis is needed on how liquidity changes affect the efficiency of balancing markets, which are becoming increasingly important with the growing penetration of renewables, storage, and demand response. In fact, lower liquidity and smaller zones increase balancing costs because the asset distribution among zones is eliminated, creating market power in balancing due to the limited number of assets per balancing market. Related to this and in general regarding the BZR methodology, we believe, considering the important effects on balancing costs mentioned, that operators should be informed and be consulted on the study of indicator number 15 “Impact on operation and efficiency of balancing” along with all other indicators as mentioned earlier.

ii. Remarks to the conclusions on the long-term timeframe

Firstly, Eurelectric acknowledges that in the long-term timeframe, the negative impact on liquidity metrics is more pronounced. For some configurations, it is expected to have a very significant negative effects on liquidity.

Secondly, we regret that the potential impacts on the entire European Internal Electricity Market have not been thoroughly analyzed. Specifically, the split of large bidding zones could not only reduce liquidity within these zones but also lead to significant negative effects for market participants who rely on these prices for various evaluations across other European bidding zones. Consequently, this may result in additional risk-related costs for EU market participants.

Finally, Eurelectric opposes the following statement raised on page 20 “[...] forward markets would be split, and since there is no system like implicit market coupling (yet) in place for forward markets, the single submarkets would be smaller [...]” and emphasizes that forward markets should not be subject to any coupling, as they reflect only financial risks, not physical ones.

c. What is your experience of previous bidding zone reconfigurations on the impact on liquidity and transaction costs?

Following the split of the German-Luxembourg-Austrian Bidding Zone in 2018, liquidity for both short-term and long-term products was reduced in Germany but never developed in the smaller Bidding Zone in Austria.

On the one hand, the German-Luxembourg market liquidity has not recovered to its pre split levels. On the other hand, the Austrian Bidding Zone still suffers from liquidity until today which is proven by the very low trading volumes in the Austrian Bidding Zone. This is because since the split Austrian Market Participants trade electricity in Germany and pay additional fees in addition to taking risks, e.g., the price spread between the German-Luxembourg and Austrian Bidding Zone, in order to transfer electricity to Austria. It proves that hedging was virtually no longer possible in the Austrian Bidding Zone. The Austrian derivatives market dried up and resulted in considerable additional costs for Market Participants which still exist and cannot be reduced.

Therefore, fragmentation leads to lower liquidity in one Bidding Zone, while most of the activity focuses on the market with the higher liquidity (liquidity will draw liquidity).

d. What effects on intra company transactions do you expect from a bidding zone reconfiguration?

e. Do you think that after a reconfiguration, the hedging opportunities would or would not suffice in certain alternative configuration(s)? Please specify the respective alternative configuration(s) you are referring to and explain how you come to this conclusion. Does it differ under current market design or with mitigation measures in place? If so, please specify.

The hedging opportunities are likely to be insufficient in certain alternative configurations, particularly those where market size significantly decreases due to limited diversity in generators and generation capacity resulting in limited volume and increased bid-ask spreads.

f. Do you expect additional impacts of the proposed bidding zone reconfigurations on liquidity and transaction costs that were not addressed in the draft report?

Direct liquidity indicators like the market depth, particularly for longer-term maturities (Y+2, Y+3) across different bidding zones of varying sizes would provide valuable insights into the dynamics of splitting bidding zones.

This approach would avoid the need to only use proxy-indicators and provided more direct insight into the dynamics of bidding zone reconfigurations. The list of metrics presented in table 2.1 provides a good overview, and it is unfortunate that at least some of them have not been assessed directly. While we understand that these indicators are challenging to measure, we recommend clearly highlighting the resulting shortcomings and gaps in the study's findings and applying caution in drawing definitive conclusions.

Other additional costs could arise from spillover effect in other markets such as PPAs that should be highlighted in the study and in the recommendation to the Member States.

2. On mitigation measures

a. What risks or adverse impacts on liquidity and transaction costs do you anticipate with the bidding zone reconfigurations?

i. on short-term markets

With the bidding zone reconfigurations, we anticipate several risks on short-term markets:

- **Decreased liquidity** due to the reduction of the market size, especially in the intraday market.
- **Higher price volatility:** volatility may indeed be an issue for investment decisions and operation of units with limited reserves, as the more volatility there is, the riskier the revenues of peaking generation/demand response units will be.
- **Increased perception of risk** by operators: resulting in higher “risk premium” and thus higher costs of investments functional to energy transition.
- **Increased Balancing Costs:** Lower liquidity and smaller zones raise balancing costs, as the asset distribution across zones is eliminated, which is problematic with the growing share of renewables.

ii. on long-term market

We anticipate the following risks for the long-term market:

- **Reduced hedging opportunities** due to market size and higher transaction costs.
- **Fewer or less reliable indications of the future value of power from wholesale markets.** This increases risk and cost of risks and can adversely affect investment and lead to ill-informed decisions and inefficient investments.

For all market-based investments (demand, storage and generation) a split/merge decision can have direct consequence on the revenues. The possibility to revise bidding zone configuration periodically introduces thus a significant risk for investors that is likely to justify higher risk premium.

- **Market efficiency may be impacted due to the fragmentation of markets**, as isolated bidding zones with insufficient liquidity might not support robust trading activities.
- Moreover, in the long-term timeframe, profound impacts and related adjustment costs of existing long-term mechanisms (e.g., RES incentive mechanisms) must be considered, unless mitigation measures are planned or implemented.
- A bidding zone split would negatively affect the PPA market, especially if contracts originally within the same zone are affected. Some PPAs might be ended, while others would need renegotiation. Dividing the market into smaller zones reduces the potential to enter PPAs, with complicated, if feasible at all, setups if producers and buyers are in different zones. This leads to basis price risks that cannot be fully mitigated, increasing risk costs and making PPAs, and so new renewable capacity investments, more expensive. Additionally, smaller market participants may face higher transaction costs due to the reconfiguration.

Eurelectric favours stability in the configuration of bidding zones. Certainty and continuity are essential to underpin liquidity, investments in generation and demand-response on the basis of stable price signals stemming from fair competition between market participants in all

segments of the market as well as to signal the need for transmission infrastructure developments.

b. Which mitigation measures to decrease risk or an adverse impact on liquidity and transaction costs do you consider reasonable and feasible?

We find it concerning that the study claims several mitigation measures are available and expected to influence the results without providing any specific details or examples. Additionally, including feedback from this consultation in the report after the fact seems disproportionate, especially given that these measures were not part of the reports initially involved in the public consultation. This oversight highlights a shortcoming in the process, as we were not adequately informed on the whereabouts of TSOs on these crucial aspects.

i. On short-term markets

- Maximise cross-zonal transmission capacity availability.

ii. On long-term markets ¹

The following measures could reduce risks, but it remains to be proven whether they are enough to fully address the negative impacts of BZ reconfigurations on the long-term market:

- Ensure a stable regulatory framework for all market timeframes: regulatory uncertainties undermine investors' confidence, interventions on spot market can lead to important liquidity reduction in forward market. To this end, remove revenue caps on existing inframarginal production.
- Ease collateral regulations in forward markets, by widening the types of non-cash collateral accepted
- Facilitate hedging opportunities across borders through improved allocation of Long-Term Transmission Right within the existing regulation (higher volumes, longer maturities, more frequent auctions, facilitate secondary trading e.g. having power exchanges easing the exchange of LTTRs between market participants at a price agreed between them)
- Consider introducing voluntary mechanism for market makes in forward markets to stimulate demand and supply at longer horizons, and therefore stimulate liquidity

c. Liquidity risk is not necessarily distributed equally among market participants.

- i. What changes in the distribution of liquidity risk do you expect to result from a change in bidding zone configuration and how would it affect different market participants? Please give an example.

This will depend on market participants, regarding their size, their geographical location from the bidding zone split.

The intent behind this question should be explained. The issue of fair competition between market participants is already taken into account with the competition law, at national as well as European level.

¹ For some examples of measures aiming to increase liquidity in long term markets see [ACER policy paper on the further development of the EU electricity forward market \(February 2023\)](#) and [ENTSO-E advocacy paper on forward markets \(July 2024\)](#).

- ii. Do you think there are risk exposure shifts that need to be mitigated? If so, which mitigation measures do you consider to be reasonable and feasible?

- d. Which mitigation measures both generally and against shifts of risk exposure do you consider to be not reasonable or feasible?

3. Practical considerations:

- a. Which practical considerations do you think could affect the impact of a bidding zone reconfiguration on liquidity and transaction costs

4. Please provide any other comments you may have on the liquidity and transaction cost study

The study does not include the impact on existing assets and contracts, which raises the issue of insufficient information on the scale of necessary mitigation measures, such as remuneration for lost income of renewables, including subsidized assets falling below existing floors.

Moreover, the study's assessment of liquidity is somewhat narrow, concentrating mainly on volume aspect. A more comprehensive view of liquidity, as mentioned in the report, should include factors like open interest, bid-ask spreads, and time to maturity. This broader perspective is crucial for evaluating whether a market can effectively manage risks over the forward time horizon.

Eurelectric regrets that the liquidity and transaction costs study does not encompass the assessment of the long-term impact of the bidding zone reconfiguration. Indeed, this study is focused on the picture to date of network congestions which are not necessarily structural (3 years horizon). On the contrary, the focus should be on the answer to proven structural congestions rather than on short-term issues to properly assess the potential benefit of a bidding zone reconfiguration.

Finally, as with the transition cost study, it remains unclear how the conclusions of this study will be integrated into the broader Bidding Zone Review process or how this indicator will be weighed against the 21 other parameters considered.

Further Questions

- 1. In the course of the BZR, as foreseen in ACER decision 11-2022, TSOs will also investigate two combinations of bidding zone reconfigurations for Central Europe. What do you consider to be the impacts of more than a single bidding zone reconfigured at the same time in terms of**

- a. Liquidity and transaction costs**

This question cannot be answered in full length as it is purely theoretical and dependent on a few unknown factors, such as market liquidity, availability of transmission capacity, and the ability and appetite to renegotiate supply contracts and prices.

In general, splitting bidding zones leads to decreasing liquidity. More than a single bidding zone reconfigured at the same time would certainly decrease even more liquidity. Moreover, the negative effect could be amplified if at least one is considered as a reference point because of its market liquidity.

- b. Transition costs**

It is not possible to assess in detail hypothetical changes to Bidding Zone configurations and their impact on transition costs. Particularly, since this would require hypothetical discussions with

contractual counterparties. Even if such numbers could be derived, Eurelectric highly doubts their relevance and reliability given the many uncertainties.

c. lead time

This question cannot be answered in full detail as it is purely theoretical and dependent on a few unknown factors, such as market liquidity, availability of transmission capacity, and the ability and appetite to renegotiate supply contracts and prices. Nevertheless, more testing will be required which could lead to a need to extend the lead-time.

d. any additional practical considerations

The following questions may not necessarily arise out of the BZR methodology and may be incorporated in an annex of the BZR report.

2. Considering the different potential reconfigurations: Are you of the opinion that any implementation of a reconfiguration assessed in this bidding zone review should be undertaken simultaneously or stepwise? If stepwise, then how should the steps be defined?

Reconfiguration should only be undertaken if it is clearly demonstrated (taking account of wide impacts including implementation complexity & lead times, distributional effects, impact on network investments, and importantly impacts on current and future investments and any subsequent negative impacts on net zero transition/decarbonisation goals) that a reconfiguration represents the best outcome across a wide range of scenarios and that at least, the benefits of doing so exceed costs. In such a case, should such a reconfiguration encompass combined reconfigurations, it should be implemented in a single step. At this stage it is difficult to imagine what a stepwise approach could be. Indeed, since the benefits of a reconfiguration would be well-known and agreed upon upfront, a partial implementation of a reconfiguration could have negative effects both in operational and economic terms. At last, in a stepwise approach, there does not seem to be fair and rationale ground to decide on the different steps and their sequence.

3. Please share any additional practical considerations you may have (apart from the timeline and liquidity and transition costs which are covered by previous questions).

In general, Eurelectric reiterates its regret that only two of the specific assessment criteria taken into account in the bidding zone review process are subject to consultation.

Concerning investment in generation/demand assets, bidding zone configuration can indeed influence market fundamentals and deliver a more locational signal. However, the more local the more sensitive this price signal is to network development and operation, or demand/generation evolutions. Therefore, smaller bidding zones do not always deliver sufficiently reliable signals for local investments and cannot be considered as more efficient to address structural congestions in the long term.

Additionally, the LMP analysis report presented in 2022, which serves as the foundation for this process, is now outdated and inaccurate for several reasons:

- The analysis was based on the anticipated evolution outlined in the TYNDP 2020. Consequently, it did not account for significant changes in TSOs' development plans following the Covid-19 pandemic and the gas supply crisis that began in 2021. These crises led to major European initiatives such as Re-Power EU, which were not considered in the original report.

- Between the launch of the simulations and the projected start date for potential bidding zone reconfiguration, many TSOs have implemented various measures, including network reinforcements. These actions have significantly reduced redispatching volumes and costs. For instance, in Italy, data from Resolution 327/2024/R/Eel indicates that Terna's initiatives reduced the volumes procured on the MSD (national ancillary services market) from 15.7 TWh in 2019 to 5.5 TWh in 2022, and further down to 3.5 TWh in 2023.
- The PEMMDB, used as the database for reference climatic years, has been updated in recent years. These updates provide more accurate projections, reflecting anticipated climate behavior more reliably.
- The report's focus on 2025 as the reference year is not relevant. The proximity of 2025 to the present means that the assumptions used are not applicable. We recommend a more forward-looking approach that extends the analysis over the next 10 to 15 years.

4. What effects on Power Purchase Agreements (PPAs) and other contractual arrangements not covered by the report on liquidity and transaction costs do you expect from a bidding zone reconfiguration?

The development of long-term power purchase agreements (PPAs) will be particularly affected by changes in bidding zones delineation especially if the two parts of the contracts, originally in the same bidding zone, are concerned by the reconfiguration. Indeed, some of contracted PPA would be broken and others would be renegotiated. Smaller parties may be hit harder by the reduced liquidity compared to larger parties, as they have – on average – less counterparties. Reduced liquidity will result in an additional hurdle for new market entrants.

Market participants already face significant challenges in concluding cross-border PPAs due to the complexity of associated regulatory risks. Introducing sudden reconfigurations to existing PPA contracts poses a substantial risk, potentially leading to renegotiations or terminations. This instability threatens the success of the energy transition. PPAs are a critical funding mechanism for low carbon technologies. The study does not address the impacts on these related markets and investment signals, and, to our knowledge, these issues have not been covered elsewhere in the Bidding Zone Review.

5. Moreover, one of the main outcomes of the energy crisis is the need for long-term visibility to foster investment in development in generation/demand assets. As explained before, a reconfiguration can have a dramatic impact on market fundamentals, influencing to a very large extent the value of price-sensitive assets, notably if a single bidding zone encompasses the two ends of a merchant line, then its market value drops virtually to zero.

6. What alternative policy measures could be implemented to achieve the potential benefits of a bidding zone reconfiguration?

- Enhance coordination and planning of grid investments consistently with supply/demand investments.
- Maximise the cross-border trade, accompanied by an enhanced development of interconnector capacity.
- Improve the ability of Market Participants to hedge price risks in the internal electricity market.
- Reduce taxes and levies to lower electricity prices for end consumers.

- Increase system flexibility to solve local grid congestions.
- Foster signals to consumers for an efficient use of the grids (static Time-of-Use Tariffs).
- Foster specific connection tariff to incentivise the right location of new assets.
- Comprehensive protections / remuneration for existing and sunk investments.

Eurelectric pursues in all its activities the application of the following sustainable development values:

Economic Development

- Growth, added-value, efficiency

Environmental Leadership

- Commitment, innovation, pro-activeness

Social Responsibility

- Transparency, ethics, accountability



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