

ACER Decisions on Nordic aFRR Balancing Capacity Market Methodologies: Annex II

Evaluation of responses to the public consultation on the Nordic aFRR Balancing Capacity Market

1 Introduction

On 15 April 2019, the TSOs submitted to the regulatory authorities four 'All TSOs of CCR Nordic' proposals made by all Transmission System Operators on the methodologies to create a Nordic automatic Frequency Restoration Reserve (aFRR) Balancing Capacity Market, in accordance with Articles 33(1), 34(1), 38(1) and 41(1) of the Commission Regulation (EU) 2017/2195 of 23 November 2017 (hereafter referred to as the 'Proposals'). The last regulatory authority received the Proposals on 17 April 2019.

The regulatory authorities jointly agreed to request an amendment to the Proposals and sent this request to the TSOs. The last regulatory authority issued the request for amendment nationally on 17 October 2019.

On 17 December 2019, the TSOs resubmitted the amended Proposals to the regulatory authorities and the last regulatory authority received the amended Proposals on 17 December 2019. Therefore, the new deadline for approval by the regulatory authorities was 17 February 2020.

On 28 February 2020, the National Regulatory Authorities of Denmark, Finland, Sweden and Norway submitted the amended Proposals to the Agency for a decision

The Agency shall take a decision on the Proposals within six months of submission in accordance with Article 6(10) of the Regulation (EU) 2019/942 of the European Parliament and of the Council of 5 June 2019 establishing a European Union Agency for the Cooperation of Energy Regulators ('Regulation (EU) 2019/942').

In order to take an informed decision, the Agency launched a public consultation on 30 April 2020 inviting all interested parties to express their views on potential amendments of the amended Proposals. The closing date for comments was 20 May 2020.



More specifically, the public consultation invited stakeholders to provide views on the four methodologies proposed by the Nordic TSOs with Commission Regulation (EU) 2017/2195 **establishing a guideline on electricity balancing** (hereafter: the EB Regulation) and namely on two topics:

- (i) aFRR common Balancing Capacity market rules pursuant to Article 33(1);
- (ii) Market-based method for Allocation of Cross-zonal Capacity pursuant to Article 41(1);

2 Responses

By the end of the consultation period, the Agency received responses from 13 respondents.

This evaluation paper summarises all received comments and responses to them. The table below is organised according to the consultation questions and provides the respective views from the respondents, as well as a response from the Agency clarifying the extent to which their comments were considered.



Respondents' views ACER views

Question 1.1: Please share your views regarding the TSOs' proposal and ACER assessment presented above on the balancing capacity pricing method for the settlement between TSO(s) and BSPs. The TSOs' proposal is to include CZC reservation costs in the pricing method, whilst ACER proposes to remove these costs and to solely base the prices on balancing capacity bids. Please also include in your views on how congestion in the balancing capacity market should be reflected in balancing capacity prices to ensure efficient allocation and a level playing field for participating BSPs.

13 respondents provided an answer to this question.

9 respondents agree with ACER's proposal to only use the balancing capacity bids to set the balancing capacity price (ELFI, shadow analysis ab, UNIPER, UPM-Kymmene Oyj, Fortum, Finnish Energy, Nord Pool, EMCO, Danish Energy, Swedenergy). The main arguments are that CZC reservation costs shall not affect the pricing of aFRR capacity, the pricing shall solely be based on the prices of balancing capacity bids and that the inclusion of a CZC reservation component in the clearing price will lead to inefficiencies.

ACER agrees with the arguments brought forward by the stakeholders and amended the proposal pursuant to Article 33 to ensure that balancing capacity prices are solely based on the bids provided by balancing service providers

Out of these 9 respondents, four respondents (Swedenergy, Finnish Energy and Danish Energy, Fortum, Shadow Analysis) further state that congestion should occur in the balancing capacity market if reserved transmission capacity between the areas is not sufficient to lead to price convergence and that in this case the highest accepted bid in each area should define the price for that area. One of these respondents (Fortum) further states that including CZC reservation component will lead to inefficiencies and to a situation where cost of reserving CZC is actually paid twice, first in the balancing capacity market due to the CZC reservation component in the balancing capacity prices and then in the DA market due to lower socio-economic welfare (due to CZC reservations).

ACER agrees with stakeholders' comments and amended the proposal pursuant to Article 33 to ensure that balancing capacity prices are solely based on the bids provided by balancing service providers and amended the description of the algorithm in the proposals pursuant to Article 33 and 41 to reflect that the cross-zonal capacity allocated to the exchange of balancing capacity will limit the exchange in that market.

Out of these 9 respondents, one respondent (ELFI) states that prices should be solely based on balancing capacity bids fully thereby reflecting the cost of the market players and that if TSOs can create additional costs or cost sharing components the efficiency of the market and market transparency will be seriously harmed.

ACER agrees with this comment and amended the proposal pursuant to Article 33 to ensure that balancing capacity prices are solely based on the



| Respondents' views | ACER views |
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| | bids provided by balancing service providers |
| Out of these 9 respondents, one respondent (UNIPER) states that the economic efficiency analysis according to the electricity balancing guideline should consider these costs and that as the decision regarding a reservation of CZC for balancing issues is made in advance of the process the cost of reserved CZC can be considered as sunk cost for the TSO and the community. Therefore, the merit order should be based on the bids of the BSP only. | ACER takes note of the comment regarding economic efficiency analysis requirement from the EB Regulation. However the proposal pursuant to Article 41 is a proposal for a market-based cross-zonal capacity allocation method, which allocates cross-zonal capacity based on actual balancing capacity bids before the clearing. The requirement for a cost-benefit analysis pursuant to Article 38(2)(b) EB Regulation is not applicable to this methodology. |
| Out of these 9 respondents, one respondent (UPM) states that an addition to the price based on forecasts is not transparent and does not reflect the actual cross-border cost and that CZC cost level includes many uncertainties due to e.g. differing weather conditions, production availability and consumption patterns. This respondent further states that if an addition to the price was used, this price would not be solely market-based and transparency would be lost. Market results should not be affected by TSO capacity optimisation, nor the fact how good or bad TSO's forecast quality is. | ACER agrees with the position and arguments brought forward by stakeholders but notes that the uncertainties mentioned in the comment will affect the amount of cross-zonal capacity allocated to the exchange of balancing capacity and the price of balancing capacity and price differences between the bidding zones. |
| Out of these 9 respondents, one respondent (Shadow Analysis) further states that the basis for how the calculation of the CZC-component should be done is erroneous and that this is unfortunately a result of the silo-thinking that characterizes the Nordic TSOs thinking as each project is developed in isolation from other network codes despite the actors pointing out the importance of at least considering the three network codes/guidelines dealing with the market in different time frames as one piece of coherent legislation. | ACER takes note of the comment. |



| Agency for the Cooperation of Energy Regulators | |
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| Respondents' views | ACER views |
| This respondent (Shadow analysis) further states that if a DA price difference is used to calculate the value, this should be possible in a flow-based context and that just using the price difference between two zones will not reflect the true value of the capacity used. This respondent also states that a) any reservation of capacity requires a full recalculation of prices when accounting for the effect of all critical network elements (CNEs) and b) that the TSOs must explain how they will treat a negative price difference in case of non-intuitive flows. | ACER agrees with the comment and amended the methodology to reflect future application of flow-based capacity calculation in the proposal pursuant to Article 41. |
| 4 respondents agree with the TSOs' proposal to include the cost of cross-zonal-capacity component in the pricing model (Energy Norway, Hydro Energi AS, Agder Energi, Statkraft Energi). The main arguments are that the TSO proposal gives more transparency and facilitates well- functioning market and price signal, that the CZC reservation cost element is essential for the TSOs' evaluation of socio-economic valid decisions on a daily basis and that the pay as cleared price principle will lower the total cost for the delivery of automatic reserves in the total Nordic market. | ACER takes note of the comments brought forward by stakeholders and notes that although it didn't follow the TSOs' approach the principles asked for are largely complied with in the amendments. |
| Out of these 4 respondents, three respondents (Energy Norway, Hydro Energy, Statkraft) state that in general the TSOs' proposal is in line with the principle of allocating scarce transmission capacity to where it has the highest value. They further argue that it is relevant to include the CZC reservation cost in the pricing method in order to facilitate a well-functioning market and to provide for the best price signals. This approach also builds on pay as cleared as pricing principle. Two of these respondents (Energy Norway, Hydro Energy) further state that including congestions in the balancing capacity prices should provide for more transparency around market value of aFRR capacity and hence to ensure level playing field for the participating BSPs and effective allocation over time. | ACER takes note of the comments brought forward by stakeholders and largely agrees (except with the CZC reservation costs issue). The amendments made to the Article 41 and 33 proposal ensure that first crosszonal capacity is allocated to the process where it has the highest value (given the uncertainties of the forecasting method) and the amount of |

cross-zonal capacity will reflect the point where the marginal value of exchange for the exchange of balancing capacity and the (forecasted) exchange of energy is equal. ACER disagrees with the respondents that it is necessary to include a CZC reservation costs in the pricing to achieve the principles of

a well-functioning market.



| Respondents' views | ACER views |
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| Out of these 4 respondents, one respondent (Agder Energi) states that it understands the CZC reservation cost element to be essential in the evaluation for the TSOs to make socio-economic valid decisions on a daily basis and that the evaluations in the explanatory document from the TSO also shows how this approach with the use of pay as cleared as pricing principle will lower the total cost for the delivery of automatic reserves in the total Nordic market. | ACER takes note of the comment and agrees with most principles brought forward although it does not see a need to use a CZC reservation cost component in the balancing capacity pricing. The approach described in the TSOs' explanatory document mainly shows the higher efficiency when applying the socio economic principle which is not directly related to the use of CZC reservation costs to determine the CZC price. |
| One respondent (Statkraft) further states that the CZC used for aFRR capacity market could alternatively be used in the DA market and would create a congestion rent when the cross-zonal capacity is constrained and that using this CZC for aFRR capacity market should also generate a congestion rent (when the CZC is estimated to be constrained) which should be reflected in the price the importing TSO has to pay for reserving CZC for aFRR capacity. This respondent further states that an alternative for using estimated DA (DA) congestion rent as CZC reservation cost could be to use the difference between the aFRR reservation cost in importing and exporting bidding zone (e.g. congestion rent for aFRR capacity market) as the CZC reservation cost. | ACER takes note of the comments brought forward by this stakeholder and largely agrees. The amendments made to the Article 41 and 33 proposal ensure that first cross-zonal capacity is allocated to the process where it has the highest value (given the uncertainties of the forecasting method) and that the amount of cross-zonal capacity will reflect the point where the marginal value of exchange for the exchange of balancing capacity and the (forecasted) exchange of energy is equal. The latter also ensures prices differences (or congestion rent) to be largely the same. |

Question 1.2: What would be your preferred solution for the setting of the timeframe and Balancing Capacity Gate Closure Time (BCGCT):

- the current TSO proposal is acceptable (including stakeholder consultation as a requirement)
- the common procurement rules should define the balancing capacity timeframe and require the BCGCT to be within that timeframe



| Respondents' views | ACER views |
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| - the common procurement rules should define both the timeframe and the BCGCT | |
| Further comments to Question 1.2. | |
| 13 respondents provided an answer to question Q.1.2 and 12 respondents gave further comments. | |
| 6 respondents replied that the common procurement rules should define both the timeframe and the BCGCT (Shadow Analysis, UNIPER, Fortum, Finnish Energy, Danish Energy, Swedenergy) and gave several reasons for that, e.g. the timeframe and the gate closure time are important information for BSPs in planning their operations and potential development needs, it would help harmonisation and level playing field, timings should be aligned with CWE, the two markets must be separated and market participants should know the results of one market before the other market closes. Out of these 6 respondents, four respondents (Fortum, Finnish Energy, Danish Energy, Swedenergy) state that timeframe and gate closure time are also important information for BSPs in planning their operations and potential development needs and that when defining the balancing capacity GCT it is important to ensure that there is enough time between the publication of balancing capacity market results and DA GCT. | ACER takes note of the comments brought forward by these stakeholders and decided to amend the proposal to define the balancing capacity timeframe between 7 am and 10 am (CET) of D-1 and to require that the BCGCT is within this time window. This both ensures flexibility for the TSOs when defining the final procurement and optimisation process while ensuring that market results are known before the gate closure of the DA market at 12:00 CET. |
| Out of these 6 respondents, three respondents (Finnish Energy, Danish Energy, Swedenergy) state that ideally aFRR capacity market would take place simultaneously with DA market in order to determine where the transmission capacities bring most value (in DA or in aFRR) but that they understand combining aFRR capacity bids and DA bids as being a challenging task. These respondents are in general worried with the development where more and more different markets are established for different purposes and eventually the same resources are bid in those markets. | ACER agrees with this comment but also notes that this would entail implementation of the co-optimisation approach pursuant to Article 40 of the EB Regulation. The TSOs' proposal already included the explicit intention to implement this as soon as possible. ACER amended the proposal to further clarify this intention. |
| Out of these 6 respondents, one respondent (UNIPER) states that the target is the harmonisation across Europe in order to achieve a common market and a level playing field for all market participants, that the market needs to be informed in due time before the restricted capacities are given to the DA market. This respondent further states that the FRR capacity auction gate closure should be at 08:00 am or latest at 09:00 | ACER takes note of the comment and sees that the amendments made with regard to the timeframe allow for the deadlines proposed. |



| Respondents' views | ACER views |
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| am and the auction gate closure should be ideally be aligned with the gate closure for FRR capacity in the CWE markets. | |
| 1 respondent replied that the common procurement rules should define the balancing capacity timeframe and require the BCGCT to be within that timeframe (UPM). The respondent highlights the importance that BCGCT be before the DA market GCT in order to allow BSPs to submit bids to the latter. This respondent also states that under the precondition that BSPs must receive information on the approved bids before the DA GCT, to be able to submit bids for the remaining capacity left after the approved upregulation bids to DA markets and supports Option 1. | ACER takes note of the comments brought forward by this stakeholder and decided to amend the proposal to define the balancing capacity timeframe between 7 am and 10 am (CET) of D-1 and to require that the BCGCT is within this time window. This both ensures flexibility for the TSOs when defining the final procurement and optimisation process while ensuring that market results are known before the gate closure of the DA market at 12:00 CET. |
| 6 respondents replied that the current TSO proposal is acceptable (including stakeholder consultation as a requirement) (ELFI, Energy Norway, Hydro Energi, Agder Energi, Nord Pool, Statkraft Energi) and give several reasons for that, e.g. that flexibility is needed in the current fast changing environment. One respondent (Nord Pool) agrees mainly with the requirement to consult stakeholders while is the opinion that more information should be given on the different options, that the impacts on the DA and intraday (ID) markets should be assessed and that BCGCT should be subject to a separate consultation. | ACER takes note of the comments brought forward by this stakeholder and decided to amend the proposal to define the balancing capacity timeframe between 7 am and 10 am (CET) of D-1 and to require that the BCGCT is within this time window. This both ensures flexibility for the TSOs when defining the final procurement and optimisation process while ensuring that market results are known before the gate closure of the DA market at 12:00 CET. |
| Out of these 6 respondents three respondents (ELFI, Agder Energi, Statkraft Energi) state that the Nordic electricity market is under heavy structural development which requires room for flexibility in the rules of the | ACER agrees with this comment and amended the proposal to include the |



| Respondents' views | ACER views |
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| balancing capacity timeframe and the BCGCT. It is vital that in all changes stakeholder consultation is required. | requirement to consult stakeholders before setting the final BCGCT. |
| Out of these 6 respondents one respondent (Energy Norway) states that the organisation and operation of the aFRR capacity market should be seen in connection with other development under aFRR and mFRR balancing markets and that it is important to retain flexibility regarding BCGCT at this point to design a balancing market as a whole that that can be operated effectively by the market players. | ACER agrees with this comment and amended the proposal to include the requirement to consult stakeholders before setting the final BCGCT.also allowing changing the BCGCT if the design of other balancing capacity market requires it to |
| Out of these 6 respondents one respondent (Nordpool) states that at this stage with scarce information about the different noted solutions, including the one proposed by TSOs, they are not ready to conclude on what will be the most efficient solution. This respondent further states that it is crucial that impacts on DA and ID markets are duly considered and that the issue about BCGCT should be subject to a new consultation when relevant facts and solutions have been clarified. | ACER takes note of this comment. |
| - Question 1.3: Which approach would you prefer for the balancing capacity market? | |
| o 1-run approach | |
| 2-step approachAny other (please specify) | |
| Any other (please specify) Question 1.4.: Please provide your reasoning for the chosen option. | |
| 12 respondents provided an answer to Q.1.3. and the same number responded to Q 1.4. giving their reasoning. | |
| 7 respondents replied with "Any other" (ELFI, Energy Norway, Agder Energi, Finnish Energy, Danish Energy, Swedenergy, Statkraft Energi). The reasons, however, are very heterogeneous: on the one side, the preference for the original TSO proposal together with the inclusion of CZC into the final price while on the other side the support of a mechanism working for large market areas so that full amount of cross border capacity is offered to the DA markets by TSOs. | ACER takes note of the comments brought forward by this stakeholder and amended the proposals pursuant to Article 33 and 41 to reflect the different objectives. In the proposal pursuant to Article 41 the objective with the allocation of the CZC across timeframes – balancing capacity and DA energy – is to maximize economic |



| Respondents' views | ACER views |
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| | surplus of exchange whereas in the proposal pursuant to Article 33 the objective is to minimize procurement costs within the given constraint of available cross zonal capacity to that process. By describing principles the practical implementation is left to TSOs. |
| Out of these 7 respondents one respondent (ELFI) states that it supports a mechanism where first priority is to work for large market areas and due to that full amount of CZC should be offered to the DADA markets by TSOs. | ACER takes note of the comment. |
| Out of these 7 respondents six respondents (Energy Norway, Agder Energi, Statkraft Energi, Finnish Energy, Danish Energy, Swedenergy) state that their chosen option is in line with the original proposal by the TSOs and their response to question 1.1. and that if they have to choose between the 1-run or 2-step approach they prefer the 2-step approach because this method allows for better price signals. | ACER takes note of the comment. |
| Further general comments were provided by three respondents (Finnish Energy, Danish Energy, Swidenergy) regarding the acknowledging that the ideal solution is a challenging task (i.e. to run simultaneously aFRR capacity market and DA market in order to determine where the transmission capacities bring most value, if in DA or in aFRR). They also expressed concerns over the developments, where more and more different markets are established for different purposes, and eventually the same resources are bid in those markets. | ACER agrees with the comments brought forward by stakeholders and amended the proposal as described above to create a clear timeslot within which the markets should be organised. |
| 4 respondents replied with "1-run approach" (Shadow Analysis, Hydro Energi, Nord Pool, Fortum) clarifying that it is simpler, more transparent, selects best orders, more efficient, brings the same result of the more complicated 2-step approach and paradoxically rejected or accepted orders would happen in both cases because of the welfare optimisation algorithm. One of the respondents stresses again that complications occur only if the CZC component is wrong which another reason in order not to include the CZC component (Shadow Analysis). | ACER takes note of the comments brought forward by this stakeholder and amended the proposals pursuant to Article 33 and 41 to reflect the different objectives. In the proposal pursuant to Article 41 the objective with the allocation of the CZC across timeframes – balancing capacity and DA energy – is to maximize economic surplus of exchange whereas in the proposal pursuant to Article 33 the |



| Respondents' views | ACER views |
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| | objective is to minimize procurement costs within the given constraint of available cross zonal capacity to that process. By describing principles the practical implementation is left to TSOs. |
| Out of these 4 respondents one respondent (shadow analysis) states that the 1 run approach avoids unnecessary complicated procedures as the complications only occur if the CZC-component is wrong and that this is yet another argument to not allow the inclusion of the CZC-component | ACER agrees with the comment brought forward by this stakeholder but notes that as the market value for the exchange of energy is based on a forecast it provides for inaccuracy and presents a risk of allocating to much cross zonal capacity for the exchange of balancing capacity and that this is not solved by either including or removing the CZC-component but only by improving the forecasting methodology. See answer to Q2.1 |
| Out of these 4 respondents one respondent (Hydro Energi) states that it is their understanding that this approach will give better cost efficiency with the effect of the DAM taken into account into the calculation. | ACER takes note of the comment brought forward by this stakeholder |
| Out of these 4 respondents one respondent (Fortum) states that they don't see a benefit of having a 2-step approach in determining volume of cross-zonal capacity for the exchange of balancing capacity and bid selection, that based on their understanding 1-step approach should lead to the same end result as 2-step approach if selection of bids is done in a same way in both approaches and both steps of a 2-step approach and that a 2-step approach would only unnecessarily increase the calculation time. This respondent further states that they understand that paradoxically rejected or accepted orders are a feature of social welfare optimizing auction-type markets and these might occur in any of the two proposed options. | ACER agrees with the comments brought forward by these stakeholders that the results should largely be the same if the algorithm descriptions and their interaction are correctly described. ACER amended the proposal as described above. |
| Out of these 4 respondents one respondent (Nordpool) states that they are preliminary are in favour of the 1-run approach since it could be more transparent and place focus on "sharp aFRR orders" ready to be executed | ACER takes note of the comment |



| Respondents' views | ACER views |
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| (activated) in that 1-step process to enable TSOs to secure best ("least expensive") selection of aFRR orders across the Nordic region. | |
| 1 respondent replied with "2-step approach" because seen as more precise but it should apply, compared to the "1-run approach", only if no postponement of BCGCT (UNIPER). | ACER takes note of the comments brought forward by this stakeholder and decided to amend the proposals pursuant to Article 33 and 41 to reflect the different objectives. In the proposal pursuant to Article 41 the objective with the allocation of the CZC across timeframes — balancing capacity and DA energy — is to maximize economic surplus of exchange whereas in the proposal pursuant to Article 33 the objective is to minimize procurement costs within the given constraint of available cross zonal capacity to that process. By describing principles the practical implementation is left to TSOs. |
| - Question 2.1: Do you agree to the method described in the TSOs' amended Proposal? If not, what would be your preferred option for improving the forecasting methodology (now or in the future)? | |
| - Question 2.2: Please provide your reasoning for the chosen option. | |
| 11 respondents replied to Q2.1 and 13 respondents provided reasoning for the preferred option. | |



| Respondents' views | ACER views |
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| 4 respondents explicitly disagreed (Shadow Analysis, Danish Energy, Finnish Energy, Swedenergy), expressing concerns on, among others: absence of TSOs publicly available analyses both on the methodology for reserving capacity with flow based and on the results on the good outcomes in more than 75% of the cases; too simplified TSO analysis based on average values and average forecasts rather than on hourly values because some hours would have high forecasting errors potentially leading to market distortions between local and regional resources; CZC-component, which hampers competition; cascade effects of estimation errors from one market to another through the CZC-component; mark ups and forecasted spread based on previous day are not a good solution. | ACER takes note of the comments brought forward by these stakeholders on the accuracy and quality of the forecasting method. It however also acknowledges that getting the forecast of the market value for the exchange of energy right is difficult and also presents the question whether the value used should attempt to get a precise value or that the main objective is to be transparent and prevent over allocation to the exchange of balancing capacity. After discussion with TSOs and NRAs ACER decided to ensure the latter with a simple adjustment mechanism based on average forecast errors. |
| 4 respondents agreed and clarified that the method for CZC allocation should be improved and updated with further experience (Agder, Statkraft, Hydro Energi, Energy Norway). | ACER agrees with the comments brought forward by these stakeholders and amended the proposal requiring the TSOs to assess the efficiency of the forecasting method on a regular basis. |



| Respondents' views | ACER views |
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| Some respondents expressed their concerns on the choice of the previous day as the reference day both when comparing a weekend with a business day and when comparing consecutive business or weekend days (UNIPER, UPM, Fortum, Danish Energy, Finnish Energy, Swedenergy) also given the expectation of higher price volatility between subsequent days (e.g. because of RES increase, new interconnection capacity). One respondent proposes to use as a reference day the equivalent day, so e.g. Monday for Monday, Tuesday for Tuesday etc (UPM). | ACER takes note of the comments brought forward by this stakeholder and agrees that there are a number of aspects that influence the accuracy of the forecasting method. ACER therefore amended the proposal requiring the TSOs to propose an amendment analysing all the aspects of the forecasting method 18 months after the decision. |
| Respondents also commented on how to improve the forecasting method now or in the future, including: defining a method to determine mark-ups per direction differently per bidding zones (ELFI); examining the possibility of using the auctions in the Intra-Day-market when these are in place (Agder Energi and Energy Norway), regular re-assessment (i.e. once or twice a year) of the efficiency of the forecasting methodology used in the market-based cross-zonal allocation method (Danish Energy, Finnish Energy, Swedenergy, UNIPER, UPM) together with: publication of detailed hourly results, assessment of uplift levels, revisions of reference day method after 1 year based on efficiency parameters; include analyses on ways to reflect ID CZC value in the forecasted value; analyse possibilities to procure the needed CZC by countertrading or via the ID auctions (Danish Energy, Finnish Energy, Swedenergy); consider that proposed mark ups are too low and proposal ignores different elasticity of demand in the different Nordic bidding zones which lead to the wrong results that it is better to reserve capacity for "aFRR" than in the DA market (Nord Pool). | ACER takes note of the comments brought forward by these stakeholders and agrees that there are a number of aspects that influence the accuracy of the forecasting method. ACER therefore amended the proposal requiring the TSOs to propose an amendment analysing all the aspects of the forecasting method 18 months after the decision. |
| Question 3: If you would like to comment on other topics please indicate clearly the related proposal and add a sufficient explanation. Please indicate which Proposals are addressed in your answer to Question 3. | l Proposal, Article, paragraph of the |
| 9 respondents replied to this question (Energy Norway, Shadow Analysis, Fortum, Agder Energi, Finnish Energy, Nord Pool, Danish Energy, Swedenergy, Statkraft Energi). Some of the comments are very extensive and cover different aspects of the four consulted documents. | |



Respondents' views ACER views

Out of these 9 respondents four respondents (Fortum, Danish Energy, Finnish Energy, Swedenergy) state that they:

- have transparency concerns (e.g. data and results would be available with some delay or only available to BSP, weak transparency in forecasting methodology, proposed mark ups: reason and potential impacts not explained)
- have TSOs' simulations concerns (e.g. not realistic benefits results, based on old data and old market rules, simulations should be not only on yearly average levels but on an hour-by-hour basis and should include flow-based scenarios, welfare simulations should include the additional payments from importing to exporting TSO which would impact the total welfare, use synthetic bids is not a good idea).
- Have concerns over compatibility of Nordic solution with the rest of EU and with EU provisions (e.g. flow-based capacity allocation and EU implementation timeline, Euphemia algorithm, Picasso platform, FAT).
- Consider the best solution would be "countertrading" (to identify real-time value of CZC, to ensure SOS, to increase efficiency, to be aligned with EU rules), in alternative usage of "explicit capacity products" in the DA market or IDAs, with calculations included into Euphemia.
- Have further market design concerns that include:
 - Proposal to set aFRR capacity market gate closure time only after DAM results publication in order not to impact the price formation in the DA market where the volumes and hence the impacts are the largest.
 - o Given that the proposed solution is not reflected in imbalance prices, it disincentives network users to stay balanced.
 - o Min bid size of 1 MW favours larger market participants.
 - TSO should pay same price as BSP.
 - o Allow also transfer of obligations between bidding zones (not only within bidding zones).
 - o Clarify occasions and reasons for offered volumes and prices anonymised.
 - TSOs and NRAs to study the benefits of introducing an aFRR energy market only.
 - o aFRR capacity price assumptions for other countries except Norway seem to be very high.

ACER takes note of the comments brought forward by these stakeholders and was able to address most of them in the amendments to the different proposals although where comments where general and non specific they were duly noted but did not lead to any amendments. Also proposals which clearly do not fit within the scope of the proposal of the applicable legal framework were not taken into account.



| Respondents' views | ACER views |
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| Out of these 9 respondents, two respondents (Energy Norway, Agder Energi) state that there is a need to monitor the CZC allocation method in order to transparently identify forecast errors and the need for the 10% limit of the available capacity of the exchange of energy between bidding zones. | ACER agrees with the comments brought forward by these stakeholders and amended to proposal requiring the TSOs to assess the efficiency of the forecasting method on a regular basis and amended the proposal pursuant to Article 41 to clearly limit the exchange of balancing capacity to a maximum of 10% of available CZC and only extend this to maximum 20% in case of local shortage. |
| Out of these 9 respondents, one respondent (Shadow Analysis) states that Nordic TSOs reservation of capacity should be more transparent and Nordic market should be compatible with the rest of Europe and the European platforms and that the best way to handle the need for capacity in the real time markets would be to countertrade the necessary capacities. | ACER takes note of this comment. |
| Out of these 9 respondents some respondents stated on the decision text of Article 41 of the EB Regulation that they have concerns with regard to compatibility of the Nordic solution with the rest of the EU and with other EU legislative provisions with regards CACM Regulation implementation and some stakeholders emphasised that there is a need to monitor the CZC allocation and to apply the 10% maximum limit to the exchange of balancing capacity. Stakeholders further emphasised the importance of transparency and publication of results. | ACER takes note of this comment and clarified in the proposal that there is a legal basis for allocating cross-zonal capacity across different timeframes (including the balancing capacity timeframe) in Article 17 of the Regulation 2019/943 of 5 June 2019 on The Internal Market For Electricity. As stated above ACER amended the proposal pursuant to Article 41 to specify the 10% limit to the available cross-zonal capacity explicitly. |



| Respondents' views | ACER views |
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| Out of these 9 respondents, some respondents stated on the decision text of Article 41 of the EB Regulation that countertrading is the best solution to identify the real-time value of cross zonal capacity and/or a use of explicit capacity products as an alternative. | ACER takes note of this comment. |
| Out of these 9 respondents some respondents stated on proposal of Article 34 of the EB Regulation that also transfer of obligations between bidding zones and not only within bidding zones should be allowed. | ACER takes note of the comments brought forward by these stakeholders but did not amend the proposal. The EB Regulation clearly allows the disallowance of transfer when procurement is done within one week which is the case in this market. |



3 List of respondents

| Organisation | Туре |
|---|-----------------|
| ELFI - Association of Energy Users in Finland | Association |
| Energy Norway | Association |
| Shadow Analysis AB | Energy company |
| Hydro Energi - Hydro Energi AS | Energy company |
| UNIPER | Energy company |
| UPM – UPM -Kymmene Oyj (Transparency Register no 861194311863-31) | Energy company |
| Fortum | Energy company |
| Agder Energi | Energy company |
| Finnish Energy | Association |
| Nord Pool - Nord Pool EMCO | Energy exchange |
| Danish Energy | Association |
| Swedenergy | Association |
| Statkraft Energi | Energy company |