Evaluation of responses to the public consultation on the methodology to determine prices for the balancing energy that results from the activation of balancing energy bids

1 Introduction

On 18 December 2018, all TSOs submitted to all regulatory authorities an 'all TSOs' proposal on methodologies for pricing balancing energy and cross-zonal capacity used for the exchange of balancing energy or operating the imbalance netting process pursuant to Article 30(1) and Article 30(3) of Commission Regulation (EU) 2017/2195 of 23 November 2017 establishing a guideline on electricity balancing' ('Proposal'). The last regulatory authority received the Proposal on 11 February 2019.

The Agency received a letter on 24 July 2019 from the Chair of all Energy Regulators' Regional Forum[1], on behalf of all regulatory authorities. This letter informed the Agency that on 16 July 2019, all regulatory authorities reached a unanimous agreement to request the Agency to adopt a decision on the Proposal.

In this letter[2], and the accompanying non-paper[3], all regulatory authorities explained their diverging views. According to these documents, there are five main points of disagreement among all regulatory authorities: (a) the length of the balancing energy pricing period, (b) the remuneration of scheduled and directly activated mFRR standard product bids, (c) the general principles of marginal pricing, (d) whether the calculation of the balancing energy price should take into account additional system constraints, and (e) the definition of the uncongested area.

In order to take an informed decision, the Agency launched a public consultation on 28 October 2019 inviting all interested parties to express their views on potential amendments of the Amended Proposals. The closing date for comments was 18 November 2019.

[1] The all regulatory authorities' platform to consult and cooperate for reaching a unanimous agreement on NEMO's and TSO's proposals.
[2] https://www.acer.europa.eu/en/Electricity/MARKET-CODES/ELECTRICITY-BALANCING/07%20Pricing/Action%202%20-%20Pricing%20referral%20to%20ACER%20letter.pdf
[3] https://www.ceer.eu/documents/104400/-/-/7d9b8fd4-26ea-7a55-4e6d-4ec6ab51060c

More specifically, the public consultation invited stakeholders to comment on the following aspects of the methodology:

(i) The timing and value of the Balancing energy pricing period ('BEPP');
(ii) Pricing bids for system constraints;
(iii) Pricing of scheduled activation ('SA') and directly activated ('DA') frequency restoration reserves with manual activation ('mFRR') bids;
(iv) The inclusion of technical price limits; and
(v) Pricing volume without bid price.

2 Responses

By the end of the consultation period, the Agency received responses from 38 respondents[4].

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 taken into account.

[4] One respondent asked to be treated confidentially and is therefore not listed here nor are the answers provided to the consultation.

Respondents' views	ACER views
Question 1: Do you agree with the replacement of the term BEPP with MTU? *(In the Proposal on pricing methodology the TSOs introduce the term balancing energy pricing period ('BEPP'), which in accordance with Article 2(2)(d) of the Proposal on pricing methodology is defined as follows:* *"'balancing energy pricing period' means a time interval for which cross-border marginal prices are calculated."* *Article 2(19) of Regulation 543/2013 defines the 'market time unit' as: "the period for which the market price is established or the shortest possible common time period for the two bidding zones, if their market time units are different."* *The BEPP definition proposed by TSOs is consistent with the market time unit definition provided in Regulation 543/2013, hence the Agency proposes to not use the term BEPP, but instead the term market time unit ('MTU'), defining it for each process (e.g. aFRR MTU, mFRR MTU, RR MTU).)*	
30 respondents provided an answer to this question.	
12 respondents support the replacement of the term BEPP with MTU (ACM, AIGET, Association of Energy Users in Finland, Edison S.p.A., Energy Norway, Fortum Power and Heat Oy, GAS NATURAL COMERCIALIZADORA, IFIEC Europe, Next Kraftwerke, PGE Polska Grupa Energetyczna S.A., Polish Power Plants Association, UPM-Kymmene Oyj). 6 respondents see that the use of MTU ensures consistency of definitions in various legal acts (ACM, AIGET, Edison s.p.a., PGE Polska Grupa Energetyczna S.A., Polish Power Plants Association, UPM-Kymmene Oyj).	The Agency agrees.
6 respondents support the proposal, with further amendments (Danish Energy, EFET, Enel, Energie-Nederland, Swedenergy, TenneT Netherlands) 5 respondents recommend that BEPP is replaced by MTU and that the time period is changed from optimization cycle to 15 min – Imbalance Settlement Period (Danish Energy, Enel, Energie-Nederland, Swedenergy, TenneT Netherlands). The pricing period should not be determined by technical parameters, but is a time unit that is relevant for the balancing market.	The Agency considers that whether a time period is named MTU is mainly related to whether it fulfils the definition of the MTU, as provided in the Regulation (EU) 543/2013. Article 2(19) of the Regulation 543/2013 specifies that the MTU is: *"the period for which the market price is established ..."* Therefore the replacement of BEPP with aFRR MTU is independent of the duration of aFRR MTU as in

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1 respondent supports the change of nomenclature from BEPP to MTU only if ACER sets the BEPP for all standard balancing products on the ISP, in order to alleviate the following concerns, as the MTU concept includes elements that do not fit if the BEPP is set on the optimisation cycle (EFET): • if the BEPP is set on the optimisation cycle, the optimisation cycle of the load-frequency controller is not a "market" time unit. Neither activities nor bids of market participants are based on this time interval. Usage of the term MTU in case of an optimisation cycle-BEPP is misleading, as it implies deliberate market action, which is not applicable in this case; • if the MTU definition from the Transparency Regulation is to be applied to an aFRR optimisation cycle-BEPP, all the other MTU-related requirements from the Transparency Regulation should also apply accordingly (including the publication of data on forecasts on load and consumption, as well as unavailability reporting on an optimisation cycle basis).	both cases it needs to be equal to the period for which the market price is established. Regarding the length of the MTU and whether it represents the real market time unit, see Agency's responses to the question 2. Regarding the transparency requirements, indeed, since the aFRR MTU is set equal to the AOF optimization cycle, the publication obligation of the TSOs for the aFRR should also be fulfilled on an optimization cycle level.
12 respondents are opposing the change of nomenclature from BEPP to MTU (BDEW, CEZ, EDF, EnBW Energie Baden-Württemberg AG, Energie AG Oberösterreich Trading GmbH, ENTSO-E, Eurelectric, illwerke vkw AG, Oebb Infrastruktur AG, Slovenská elektrizačná prenosová sústava, a.s., Slovenské elektrárne, TIWAG-Tiroler Wasserkraft AG). 5 respondents raise the following objections (BDEW, CEZ, EnBW Energie Baden-Württemberg AG, Eurelectric, TIWAG-Tiroler Wasserkraft AG): • Firstly, the optimization cycle of the load-frequency controller is not a "market" time unit. Neither activities nor bids of market participants are based on this time interval. Thus, the term MTU is misleading as it implies a deliberate market action, which is not applicable in this case. • Secondly, if the MTU definition under Regulation 543/2013 would be applied for aFRR, it should then also consistently be applied for all the other provisions in Regulation 543/2013 accordingly. This would mean that TSOs would be required to	See the responses above. See the responses above.

Respondents' views	ACER views
e.g. publish data and forecasts on load, as well as the unavailability reportings on an optimization cycle basis. 3 respondents note that market time unit is differently defined in CACM (EnBW Energie Baden-Württemberg AG, Slovenská elektrizačná prenosová sústava, a.s., Slovenské elektrárne). 1 respondent deems the term "MTU" misleading, since it will implicitly make reference to "energy markets" DA and ID, and not to aFRR balancing energy which constitutes a specific mechanism with a different timeframe (EDF).	Regarding the relation to the DA and ID, the Agency understands that each market in principle have an MTU, but these can be different due to different needs for market time resolution. The closer the time to delivery, the higher market time resolution is required. This is also supported by the wording in Article 17 of the Regulation 543/2013, which refers to the "balancing time unit", and by the wording in Article 12 of the EB Regulation, which refers to the "relevant market time unit".
1 respondent considers that the Agency's proposal to replace the term BEPP with MTU would be only effective if there was a clear definition for each process (e.g. aFRR MTU, mFRR MTU, RR MTU) (illwerke vkw AG).	Indeed, the Agency understands that the MTU will not be defined for the whole balancing timeframe, but separately for each process. So, the Agency agrees with the comment and indeed it defines different MTUs per process (i.e. RR MTU, mFRR MTU and aFRR MTU).
Question 2: Do you agree with setting the aFRR MTU equal to the optimization cycle? If not, how would you support the requirement for pay-as-cleared pricing and how would you address the inconsistency between the cross-zonal exchanges and the prices?	
31 respondents provided an answer to this question.	
10 respondents support the proposal of setting the aFRR MTU equal to the optimization cycle (AIGET, Association of Energy Users in Finland, Edison s.p.a., EDF, Energie AG Oberösterreich Trading GmbH, ENTSO-E, IFIEC Europe, Next Kraftwerke, Slovenská elektrizačná prenosová sústava, a.s., Slovenské elektrárne). 4 respondents consider that this approach provides a full consistency with the AOF results and the decision of using AOF results for the pricing determination (ENTSO-E, AIGET, Edison s.p.a., EDF). 3 of these respondents further observe that setting the aFRR MTU equal to the	The Agency agrees.

Respondents' views	ACER views
optimization cycle is the only solution that would allow revealing balancing energy prices reflecting the actual cost of the balancing resources needed by TSOs and consistent with the results of the AOF, while the 15 minutes aFRR MTU would produce prices not fully consistent with cross-zonal exchanges resulting from each optimization cycle and may also induce excessively high balancing prices (AIGET, Edison s.p.a., EDF). 1 respondent further supports that this approach is the most likely to provide correct price signals for all BPSs and/or BRPs (Slovenská elektrizačná prenosová sústava, a.s.) Further, 1 respondent observes that this approach maximises the occurrence of price convergence (ENTSO-E). 1 respondent clarifies that this is due to the dynamic nature of frequency and subsequent triggering of aFRR, frequently (as revealed by data from the ENTSO-E transparency platform) resulting in cases where, within a 15 minutes ISP, a bid is activated on one or more cycles and deactivated during the subsequent cycles; the clearing price of the optimisation cycle with highest activation would not reflect the actual system need over the whole ISP and therefore should not set the marginal price for the related ISP (EDF); this analysis is supported by the contribution of 1 respondent (Next Kraftwerke). 1 respondent states that this approach is simple and transparent from an algorithmic perspective (ENTSO-E). Similarly, 1 respondent observes that the optimization cycle BEPP is neither more complex nor less transparent than the 15 minute BEPP. Even with a 15 min BEPP, data and transparency will be needed at the granularity of the control cycle to secure that the min/max actually corresponds to a level reached during at least one optimization cycle (EDF). 2 respondents state that this approach avoids unnecessarily increasing the remuneration of BSPs at the expense of the BRPs (ENTSO-E, Next Kraftwerke), thereby creating unfair competition between different technologies (Next Kraftwerke); 1 respondent further details that the remuneration at each optimization cycle BEPP's marginal cost facilitates market participation by allowing BSPs to price their bids at their activation cost. 15 min BEPP would unduly increase BSPs revenues, TSOs congestion revenues and BRPs costs (EDF). Each platform should calculate one CBMP for each standard balancing energy product. A cross-products marginal price would not send appropriate incentives to BSPs to submit balancing products, especially the most flexible ones, and would unduly increase imbalance	

Respondents' views	ACER views
settlement prices. (EDF) 1 respondent shares that the approach decreases the financial exposure of BRP due to high imbalance prices (ENTSO-E). 1 respondent assumes that the approach will provide the correct incentives to market parties to minimize system costs to the benefit of consumers (IFIEC Europe).	
Finally, 1 respondent believes that BSPs and BRPs should not be penalized for possible deviations between bids selected by the AOF and bids activated by the TSOs and the energy delivered during deactivation periods should be adequately remunerated (Edison S.p.A.). 1 respondent believes the issue of incentive for BSPs to effectively deliver activated energy should be addressed through prequalification and penalties, and not through imbalance settlement price (EDF).	Regarding the remuneration of the energy delivered during deactivation, please check the Agency's views in Question 7 below.
21 respondents are opposed to the proposal of setting the aFRR MTU equal to the optimization cycle (ACM, BDEW, CEZ, Danish Energy, EFET, EnBW Energie Baden-Württemberg AG, Enel, Energie-Nederland, Energy Norway, Eurelectric, Finnish Energy, Fortum Power and Heat Oy, GAS NATURAL COMERCIALIZADORA, Illwerke vkw AG, PGE Polska Grupa Energetyczna S.A., Polish Power Plants Association, RWE Supply & Trading GmbH, Swedenergy, TenneT Netherlands, TIWAG-Tiroler Wasserkraft AG, UPM-Kymmene Oyj).	The Agency disagrees.
The proposal is incompliant with the legal requirements (3 respondents) 2 respondents believe that only the ISP-BEPP, not the optimisation cycle-BEPP, guarantees a clear and unbiased application of this EB GL requirement to have balancing energy bids remunerated pay-as-cleared. The optimisation cycle-BEPP will create 225 marginal prices over an Imbalance Settlement Period (ISP), averaged into one composite price for the ISP, which is not a marginal price but rather a weighted average price based on a number of sub-periods (EFET, RWE Supply & Trading GmbH). The incompliance of the proposal with the legal requirements is further outlined by 1 respondent (TenneT Netherlands)	The Agency does not share this view. On the contrary, since, as also admitted in the comment, *"[t]he optimisation cycle-BEPP will create 225 marginal prices over an […] ISP"*, defining the aFRR MTU equal to the optimisation cycle is the only way to ensure that marginal pricing (pay-as-cleared) is implemented as required by Article 30(1)(a). This is because the market is cleared every optimisation cycle with different aFRR demands and different cross-border exchanges. Thereby, it is incorrect to assume that the market clears every ISP and that therefore the pricing is the average price over the ISP. Any

Respondents' views	ACER views
	resolution different than the one that is selected for the algorithm run (that calculates the price), would be a deviation from the pay-as-cleared principle.
Wrong determination of congestions (2 respondents) 1 respondent observes that the criterion that is chosen to decide whether a BEPP is declared congested or not, is the outcome of the momentary AOF selection result, reflecting TSO demand and current usage of cross-zonal capacity. This snapshot might never occur and be out-dated by TSOs' controller dynamics and subsequent BSP activations affecting cross-zonal capacity once the bid is finally activated. (EFET). 1 respondent observes that BSPs bid and BRPs hedge for the whole 15-minute validity period, and count with possible congestion for the whole 15 minutes period, not for 4-seconds long control cycles. (CEZ).	Indeed, the market scheduling (AOF outcome) and physical delivery (energy produced, consumed and exchanged) are not the same and this is true in all market timeframes and the differences get smaller close to real time. However, if the BEP would be equal to ISP, the differences would be much larger. This is because the prices defined at the end of each ISP would not reflect the flows and congestions estimated by the AOF in each optimisation cycle. Thereby, the requirement of the EB Regulation that the balancing energy price should reflect market congestion would not be met. The market decisions for BSPs and BRPs do take into consideration the whole ISP, however, in order to provide correct signals to them, the congestions should be properly reflected throughout this period. With 15 min aFRR MTU the price of cross-zonal capacities could sometimes be non-zero even if cross-zonal capacity was almost never fully utilised. This would contradict the fundamental principle that the price difference between bidding zones should occur only in the presence of market congestion.
Lack of consistency across timeframes (2 respondents). 1 respondent states that with regard to the consistency between cross-zonal exchanges and aFRR balancing energy prices, the proposal of the TSOs gives a false sense of accuracy	The Agency does not understand why ISP-BEPP would ensures better consistency between how cross-zonal capacity is prices and how it is physically used. In Agency's understanding ISP-BEPP compounds

Respondents' views	ACER views
between the period for which the balancing energy price is set and the moment during which cross-zonal capacity is used at the activation of the bid. Rather, an optimisation cycle-BEPP actually ensures a lack of consistency between price and use of cross-zonal capacity in all cases, while an ISP-BEPP allows it part of the time. Using an optimisation cycle-BEPP of 4 seconds while the full activation time of aFRR products is 5 minutes ensures in all cases a mismatch between the period for which the balancing energy price is set and the moment during which cross-zonal capacity is used at the activation of the bid (EFET). In the same line, 1 respondent considers that prices must remain consistent with each other and that the balancing market must reflect the residual imbalance with a price that is equal to the real time value of energy (ACM).	two errors, one related to the time delay between market scheduling and physical delivery and one related to discrepancy between congestions estimated in each optimisation cycle and prices estimated at the end of each optimisation cycle. The optimisation cycle-BEPP suffers only from the former one. As market outcome should provide consistency between the prices and the market congestions, and accuracy with respect to the market signals sent to market participants.
Wrong incentives (3 respondents) 1 respondent states that towards BSPs, an optimisation cycle-BEPP would create the issue of providing one price but subsequently participating to 225 separate auctions, each with a separate clearing price. It blurs the distinction between Pay-as-Bid and Pay-as-Cleared, as it artificially reduces the infra-marginal rent that is the basis for a bidding strategy in Pay-as-Cleared systems. Towards BRPs, the optimisation cycle-BEPP results in a drastically suppressed price signal – if there is at least some alignment between imbalance energy pricing and imbalance settlement price – by providing a weighted average price of the individual activation cycles (EFET). 1 respondent states that to ensure consistency with the intra-day market, and give market parties timely visibility over their hedging needs against balancing risks, there should be one price per ISP, per direction and uncongested area; there should be cross product pricing for all Frequency Restoration Reserves products. Thereby the price of Balancing Energy and imbalances are equal per ISP and provide correct incentives to BSPs and BRPs alike (ACM). 1 respondent sees no significant distortion on the direction of flows and prices differences from pricing per ISP as long as prices are determined separately per direction and per ISP. If there is no congestion, prices are equal in both zones. If there is a congestion prices will be different for both zones and the flow will be limited with the cross-zonal capacity even if this is only the case for part of the ISP. In an ISP where positive balancing energy and negative balancing energy are both procured, they should be considered as separate products	The Agency recognises that since aFRR market is cleared every optimisation cycle, also the bidding should be done per optimisation cycle. However, the Agency understands that this is not possibly for stability reasons, would be burdensome and would not provide added value, since the bidding price is not expected to change within the 15 min period as underlying schedules of reserve providing units do not change within ISP. Optimisation cycle MTU does represent the pay-as-cleared because the price of the bid that clears the market is determining the price. ISP pricing would indeed further increase the aFRR price, but would not be pay-as-cleared pricing, but rather intertemporal pricing – where price in one clearing would affect the marginal price in another clearing. It would also be against the requirement that balancing energy price need to represent the real time value of energy.

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on separate markets and be consistently priced according to their own merit order. (ACM) 1 respondent further notes the avoidance of distortion of incentives on BSPs and BRPs by defining the aFRR price to determine the imbalance price as the maximum of aFRR prices in every ISP (GAS NATURAL COMERCIALIZADORA)	With respect to incentives, the Agency in general, understands that the optimisation cycle aFRR MTU does not provide perfect incentives for BRPs to support system balance. However, this can only be achieved if all balancing energy products across different processes receive the same marginal price, which is equal to the imbalance price, as mentioned in the comment. On the other hand, such a cross-product pricing methodology would not respect the requirement for marginal pricing (pay-as-cleared) and would not properly reward flexibility.
ISP-BEPP ensures link across timeframes (5 respondents) 1 respondent observes that on the contrary, an ISP-BEPP allows, in its first 10 minutes, that the use of cross-zonal capacity at the time a bid is activated takes place in the same period for which the balancing energy price is set. In the last 5 minutes of the ISP, the use of cross-zonal capacity would span both the period during which the balancing energy price is set, and the next one. (EFET) Similarly, 3 respondents advocates for a 15-minute pricing period following the need for consistency in pricing across timeframes, a clear link to products traded in earlier timeframes while optimization cycle pricing creates unnecessary complexity with associated data-processing costs and burdens, and reduces transparency for market participants (Danish Energy, Energie-Nederland, Energy Norway, Eurelectric). 1 respondent further states that this approach is compliant with the legal requirements of a marginal pricing (Energy-Nederland).	The Agency does not understand why is it important that cross-zonal capacity is used in the same period in which balancing energy price is set. It seem more important that the activations of balancing energy is based on correct marginal prices which determine these activations and not on marginal prices which have determined activations much before or after. Regarding the complexity of the data processing, the agency understands that TSOs should offer to BSPs the data per optimisation cycle and aggregated data so that BSPs can chose whether they want complex or simple data for their purposes.
Price spikes (5 respondents) 4 respondents suggest, against price spikes and as an alternative to optimization cycle pricing, that TSOs should rather ensure that activations on the AOF correctly reflect the needs of TSOs to resolve imbalances and the activation dynamics on the CMOL. If at any moment during an ISP, the activation of a bid is required for imbalance reasons, such requirement should be	The Agency does not see a need for limiting price spikes, nor does it consider them as a "problem" in the ISP aFRR MTU. The price spikes are part of a well-functioning market and can be valuable signals, when they really reflect system needs. If the marginal price

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reflected towards BSPs and BRPs during the relevant Imbalance Settlement Period. (Danish Energy, Energy Norway, Eurelectric, Swedenergy). Alternatively, 1 respondent suggests, in case it proves impossible to fully exclude 'unnecessary' bid activations from the AOF to exclude ex-post (yet based on a transparent approach defined ex-ante) the prices from bids that were not actually activated locally, or only during such a short period that it did not materially impact the system balance (Eurelectric).	is set by a rather expensive bid, reflecting the high demand and/or a resource shortage, this is acceptable and is considered a proper market signal. The issue the Agency sees with the ISP aFRR MTU is that it cannot be considered marginal pricing.
Wrong remuneration of BSPs (5 respondents) 1 respondent observes that the determination of the cross-border marginal price per optimisation cycle according to bid selection by the AOF is arbitrary. In practice, a BSP bid that is remunerated for a specific optimisation cycle is not actually activated in that specific optimisation cycle and does not use cross-zonal capacity in that specific optimisation cycle either. Instead, according to the current aFRR product design, this bid is activated and potentially uses available cross-zonal capacity in subsequent optimisation cycles (EFET). 3 respondents observe that setting the BEPP according to the optimisation cycle leads to inefficient remuneration of BSP and inefficient identification of congested situations. An alternative approach for the determination of the aFRR-CBMP we could consider a "sliding window" equal to the FAT (not to be mistaken with three BEPPs of 5 minutes per ISP). The CBMP per optimization cycle is calculated as in the current proposal, but it is preserved for the full FAT (5 minutes) or until a higher price was reached in a subsequent BEPP. This way the actual dynamics of the aFRR process are reflected in the pricing. At the same time this approach can be applied across ISP boundaries to guarantee a consistent marginal pricing remuneration of all accepted balancing energy, which is required for BSP bid preparation. No ex-post reward for bids activated earlier in the ISP would occur as it would be need with an ISP BEPP. Finally, the concern related to an ISP BEPP of setting a high price for the full ISP by short activation spikes will be alleviated (BDEW, EnBW Energie Baden-Württemberg AG, TIWAG-Tiroler Wasserkraft AG).	The Agency does not agree with the view that such determination is arbitrary, since it respects the market clearing results. The concerns that BSP bid is does not deliver in optimisation cycle in which it has determined the price is relevant only for bids whose activation is different from previous cycles. However most other bids that are remunerated for specific optimisation cycle are delivering in that cycle. This discrepancy is equally present in ISP-MTU, but should be further reduced with that control request model and shorter FAT. Finally, cross-border exchanges During the drafting of the pricing proposal, the TSOs analysed a number of different options for pricing balancing energy. One of them was linked to the actual activations, where the balancing energy price could be determined based on the price of the highest (for positive balancing energy and lowest for negative balancing energy, respectively) priced activated bid, after the activations have taken place. However, this approach does not respect the marginal pricing principle. Using the outcome of the optimisation algorithm, for setting the balancing energy price,

Respondents' views	ACER views
	ensures the implementation of the marginal pricing, but is also implies that it does not represent the actual situation. Regarding the rolling window proposal, the Agency considers that any deviation from the resolution of the optimisation algorithm does not respect the marginal pricing but finds the proposal interesting for future discussions.
Additional complexity (5 respondents) 4 respondents believe that control cycle-based BEPP would also bring a significant increase in data and complexity both for BRPs and BSPs and lead to lack of transparency for market players (CEZ, Eurelectric, PGE Polska Grupa Energetyczna S.A., Polish Power Plants Association). 1 respondent further notes the complexity (GAS NATURAL COMERCIALIZADORA). As a solution, 2 respondents suggest, bearing in mind that FRR's main purpose is to replace and supplement FCR when it is not available, properly to define aFRR optimization cycle, e.g. as 1 minute timeframes. Such definition would enable optimization cycle BEPP without significant increase in data and complexity for market participants. At the same time it should address the inconsistency between the cross-zonal exchanges and the prices as BEPP-based would be identical to the optimization cycle. Then, the imbalance price for BRPs should be calculated as volume weighted average from 15 optimization cycles during the imbalance settlement period (PGE Polska Grupa Energetyczna S.A., Polish Power Plants Association).	The Agency understands the concerns expressed by the stakeholders on the increased complexity of the data handling processes with respect to changes in the aFRR optimization cycle. Therefore, it specified in the Implementation Framework for the aFRR-Platform (Article 11(7)) that *"[a]ll participating TSOs shall establish a data publication and communication format for data related to aFRR that is independent from the changes in the optimisation cycle."* The proposal for much longer optimisation cycle would need to be discussed with TSOs and the Agency understands that it would be unfeasible in control request model where AOF cycle needs to be the same as local load-frequency control cycle.
Further remarks 4 respondents call for specific inclusions in the proposal (Danish Energy, Energy Norway, Eurelectric, Swedenergy): • Full transparency on the activated volumes • A clear signal in case of a change of net position (and direction of volumes activated) within an ISP	The Agency agrees with providing sufficient transparency on the activated volumes and the system state and understands that this is envisaged by Article 12 of the EB Regulation.

Respondents' views	ACER views
• Visibility on the state of the system close to real time • Calculation of the imbalance price as soon as possible after real time.	Regarding the calculation of the imbalance price as soon as possible after real time, this is out of the scope of this methodology and linked to the imbalance settlement harmonisation pursuant to Article 52(2) of the EB Regulation.
Question 3: Do you agree that the purpose of using balancing energy bids for system constraints should be considered as an update of the CZC?	
30 respondents provided an answer to this question.	
11 respondents agree that the purpose of using balancing energy bids from system constraints should be considered as an update of the CZC (ACM, EDF, Energie-Nederland, Energy Norway, Eurelectric, Fortum Power and Heat Oy, GAS NATURAL COMERCIALIZADORA, IFIEC Europe, Illwerke vkw AG, PGE Polska Grupa Energetyczna S.A., Polish Power Plants Association).	The Agency agrees.
2 respondents request clarification and justification of the circumstances under which TSOs could rely on balancing bids to manage constraints is needed, as they disagree that it should be "where the cross-zonal capacity which was already allocated to market participants in the previous time frames exceeds the physically available cross-zonal capacity"– and would rather support a simple update of the available CZC and the use of CBMP. (PGE Polska Grupa Energetyczna S.A., Polish Power Plants Association)	The Agency included in Article 4(2)(d)(i) of the implementation frameworks all the legal grounds for TSOs to request an adjust the cross-zonal capacities for operational security reasons, and in Article 4(4) of the implementation frameworks and obligation to the TSOs to publish the request for these limitations, together with a justification for the request, no later than 30 minutes after the end of the relevant validity period in which the additional limitations have been requested.
2 respondents state that the purpose of using balancing energy bids for system constraints should be considered as an update of the CZC (Fortum Power and Heat Oy, illwerke vkw AG). 1 respondent believes that the update of CZC is a good alternative as it anticipates the next step	The Agency agrees.

Respondents' views	ACER views
where TSOs will have to propose and implement a capacity calculation method for balancing. (ACM)	
1 respondent recalls that available CZC is one of the fundamentals affecting the price signals and that in a zonal market model any cross-zonal congestion should affect the marginal prices (GAS NATURAL COMERCIALIZADORA).	The Agency agrees and its views on this topic are presented below, in Question 4.
1 respondent considers the proposed two-run system constraint approach ineffective for physical congestion as the geographic information on balancing energy bids is limited to the level of imbalance area/LFC area. Applying an additional run is of little use when it's unclear whether the activation will actually solve the physical congestion (ACM). Similarly, 1 respondent observes that FRR and RR bids are very close to real time products and have limited time duration so they can hardly be used for redispatch purposes. Furthermore, the exact location of the bids is not known, which make these bids ineffective for solving congestions (Energie-Nederland).	Indeed, the fact that the only locational information the balancing platforms recognise is the bidding zone or LFC area, limits a lot the possibility of the platforms to be used for congestion purposes. However, the Agency acknowledges that the TSOs are the ones to decide how to solve the physical congestions and whether the balancing platforms would be an efficient way of doing so.
2 respondents confirm the ACER view that TSOs have other tools than relying on balancing bids (interconnection controllability) to address congestions by adjusting cross-zonal exchanges. In particular, when congestions can be reliably forecasted, they should be addressed before the IDCZGCT by adjusting the cross-zonal exchange capacities to be allocated with the intraday market (e.g. with countertrading as suggested by ACER) (EDF, Eurelectric). Further, one respondent notes that should system constraints be identified within the balancing time frame, after the IDCZGCT, then it might be legitimate to update the ATC to be allocated with the balancing platforms. However balancing bids activated for system purposes should not impact the balancing energy prices. (Eurelectric).	The Agency agrees with the comments regarding previous timeframes. Therefore, in order to address the concerns, it included in the implementation frameworks (Article 4(3)) that the adjustments may only apply to operational security reasons, which could not be addressed with the latest cross-zonal capacity calculation and coordinated regional operational security analysis and such adjustment shall be made and published as soon as the need is identified.
1 respondent recalls that all cross-zonal capacity should be given as early as possible to the markets and no capacity should be reserved for the balancing timeframe. The cross-border capacity for the balancing timeframe should consist of all capacity that comes available through	The Agency agrees. Indeed, apart from the allocation of cross-zonal capacity pursuant to Article 38 of the EB Regulation for the exchange of balancing energy

Respondents' views	ACER views
recalculation of capacity (less uncertainty) as well as all non-used capacity from previous timeframes (IFIEC Europe).	or sharing of reserves, no other reservation is envisaged for balancing.
1 respondent would agree to the statement, provided that TSOs who do not use this option will not be impacted (i.e. no additional cost; no influence on Imbalance Settlement Price) (Slovenská elektrizačná prenosová sústava, a.s.)	The Agency understands that the use of this option will have an impact on the cross-border marginal price, hence implicitly also on the imbalance settlement price (to the extent that these are linked). However, the relevant question is whether it should have an impact or not, which is addressed in (the next) Question 4.
18 respondents are opposed to the statement that the purpose of using balancing energy bids from system constraints should be considered as an update of the CZC (Association of Energy Users in Finland, Austrian Windenergy Association, BDEW, CEZ, Danish Energy, EFET, EnBW Energie Baden-Württemberg AG, Enel, Energie AG Oberösterreich Trading GmbH, ENTSO-E, Finnish Energy, Oebb Infrastruktur AG, Orsted Nesa, RWE Supply & Trading GmbH, Slovenské elektrárne, Swedenergy, TIWAG-Tiroler Wasserkraft AG, Wien Energie GmbH)	The Agency disagrees.
Lack of transparency and untimely information provision (2 respondents) 1 respondent states that TSO's use of balancing bids for systems constraints should be fully transparent for all market parties (Association of Energy Users in Finland). Further, 1 respondent recalls that from a theoretical perspective, congestion management actions by the TSOs that reduce or increase cross-zonal capacity should indeed be taken into account when calculating the available cross-zonal capacity for cross-border balancing processes. This means, in very practical terms, that as long as capacity is updated prior to each auction, and that market participants have this information available when placing their bids, capacity ought to be updated to reflect the reality of congestions. This respondent observes that if a bid submitted to the mFRR or RR processes is to be used to manage system constraints, changing the available cross-zonal capacity in the middle of the process would change the condition	The Agency agrees with the comment on the transparency. Therefore, it has included in the Implementation Frameworks (Article 4(4)) that TSOs should publish the request for the requested limitations, together with a justification for the request, no later than 30 minutes after the end of the relevant validity period in which the additional limitations have been requested. The Agency in general agrees with the comment on the transparency of the calculation of the available cross-zonal capacity. However, the legal ground for TSOs to limit the available cross-zonal capacity for

Respondents' views	ACER views
under which bids have been submitted for the balancing process, and hence change the conditions of the balancing market (EFET).	operational security reasons envisaged in the SO Regulation cannot be overlooked.
Impact on prices (8 respondents) 5 respondents state that balancing prices, and, consequently, imbalance prices should not be affected from activations for system constraints (Austrian Windenergy Association, Finnish Energy, Oebb Infrastruktur AG, Slovenské elektrárne, Wien Energie GmbH). 2 respondents shares the statement - if system constraints are handled through an update of the CZC in the AOF, resulting activations will all be made for balancing energy purposes and will impact the balancing and imbalance prices. Consequently, the pricing in the DA and ID markets will be distorted and will not fully reflect the available CZC. The 70 % target for interconnector capacity in the Clean Energy Package will be undermined by ACERs proposal (Danish Energy, Orsted Nesa). 1 respondent sees that this would disturb a proper incentive for market participants to support balancing the system (Wien Energie GmbH). 1 respondent states that there is a danger to externalise congestion management costs towards BRPs by limiting the conditions under which balancing would be performed without congestions, not only on the balancing market and the imbalance price, but also on congestion management mechanisms themselves, which are key to guide TSO grid management and investment decisions (connection agreements, long-term investment decisions, zonal delineation) (EFET).	The Agency considers that the fundamental principle for pricing balancing energy bids activated through the platform is the merit order principle according to which all bids activated on the merit order should receive the same marginal price. If the balancing platforms allow the activation of balancing energy bids for different purposes and if these activations are respecting the merit order, it is not possible to distinguish exactly which bids have been activated for which purpose. The design of balancing energy platforms implies that the same pool of balancing energy bids can be used for balancing and possibly for other purposes. Hence, the activation for one purpose always affects the supply of bids for the other purpose and, thereby, the price for the other purpose is always affected. However, internal congestion would require the activation of specific bids at a specific location, hence, the bids outside the merit order would need to be activated (i.e. the merit order activation would no longer be respected) and such bids should not define the marginal price, as required also by the EB Regulation.
Separate balancing energy pricing from system constraints bids (8 respondents) 4 respondents states that system balancing and congestion management are two very different tasks of the TSOs, which should be defined by clear processes and cost recovery patterns	The Agency does not share this view. As explained above, the congestion management through the platforms, respecting the merit order, cannot be distinguished in activation level from the activations

Respondents' views	ACER views
(EFET, Energie AG Oberösterreich Trading GmbH, Swedenergy, TIWAG-Tiroler Wasserkraft AG). 3 respondents state that the labelling of the process does not matter, as long as it is not balancing, which was clear in the TSO original proposal, as interconnector controllability was clearly an activation purpose other than balancing and not included in the CBMP (BDEW, EnBW Energie Baden-Württemberg AG, TIWAG-Tiroler Wasserkraft AG). 1 respondent further supports the original proposal (Danish Energy).	for covering balancing needs. The internal congestion actions that take place outside the platforms should indeed not set the cross-border marginal price.
1 respondent refuses the huge intervention into balancing energy pricing which represents the pricing of system constraints bids together with and undifferentiated from bids used for balancing. This respondent nevertheless agrees that CZMP should reflect on available cross-zonal capacity (CEZ). Similarly, 1 respondent states that TSOs should use counter-trading or other remedial actions to handle system constraints. These should be activated and priced separately from regular balancing energy in order to insulate the balancing and imbalance prices from the use of remedial actions (Danish Energy).	The Agency agrees that TSOs should, as much as possible, solve congestion issues prior to balancing timeframe.
In contradiction with legal requirements (3 respondents) 1 respondent states that the CZC update approach is in conflict with the rules and principles established in the new Electricity Regulation, namely Article 16(6), which states that "The maximum level of capacity of the interconnections and the transmission networks affected by cross-border capacity shall be made available to market participants complying with the safety standards of secure network operation. Counter-trading and redispatch, including cross-border redispatch, shall be used to maximise available capacities to reach the minimum capacity provided for in paragraph 8 […]". By reducing CZC available for cross-border activations in the MARI optimization, TSOs are de facto reducing the CZC available to market participants, which is contrary to the principles of the Electricity Regulation (Danish Energy). Similarly, 1 respondent considers that reducing cross-zonal capacity at this stage would result in the activation of bids for congestion management purposes affecting the balancing energy price – and in turn the imbalance price – which would not comply with Article 30.1(b) EB GL. This would also be tantamount to using cross-zonal capacity to manage network congestions	The Agency has only included in the implementation frameworks what is provided as possibility by the SO Regulation. As mentioned in the comment, there is also a requirement for *"complying with the safety standards of secure network operation"* and this is exactly what the Agency envisages in the implementation frameworks. Additionally, Article 30(1)(b) of the EB Regulation refers only to internal congestion, and, in line with that, the pricing methodology does not allow for activations taking place outside the platforms, without respecting the merit order, for addressing internal congestions, to set the cross-border marginal price.

Respondents' views	ACER views
("pushing congestions to the borders"), which would violate Chapter III, Section 1 of the recast Electricity Regulation (2019/943) and go against the principles of ACER Recommendation 02-2016 (EFET). 1 respondent sees further contradictions as (i) the purpose is not compliant with Regulation on the internal market for electricity (EU) 2019/943 article 16: 1: "Network congestion problems shall be addressed with non-discriminatory market-based solutions which give efficient economic signals to the market participants and transmission system operators involved" and (ii) (EU) 2019/943 article 13: "Balancing energy bids used for re-dispatching shall not set the balancing energy price". Re-dispatching and countertrading have the same purpose, none of them shall set the balancing energy price (Orsted Nesa).	As explained above, redispatching is not possible through the platforms, as they do not recognise any locational information apart from the bidding zone or LFC area.
Implementation difficulties (1 respondent) Updating the CZC in the balancing timeframe before the running of the optimisation function is one of the implementation options for imposing a certain flow (range) on a border. This approach, when implemented with the definition of a negative CZC, would result in hard optimisation constraints that may, in certain circumstances and based on the current knowledge of the TSOs of the expected algorithmic developments, be difficult to manage by the algorithm, or give a priority to satisfying the activation of other purposes instead of balancing (ENTSO-E).	The Agency understands that the development of the algorithms is an ongoing project and not full knowledge is yet available on that. Therefore, it considers that the implementation of the update of the cross-zonal capacity in the algorithm (whether to use hard or soft constraints) is up to the TSOs (and based on the experience gained during the development phase) and nothing on that is prescribed in the implementation frameworks.
Question 4: Do you agree that the CBMP should reflect actually available CZC at the time of the auction?	
31 respondents provided an answer to this question.	
17 respondents agree with the proposal (ACM, AIGET, EDF, Edison S.p.A., Energie-Nederland, Energy Norway, Eurelectric, Finnish Energy, Fortum Power and Heat Oy, GAS NATURAL COMERCIALIZADORA, IFIEC Europe, illwerke vkw AG, Oebb Infrastruktur AG, PGE Polska Grupa Energetyczna S.A., Polish Power Plants Association, RWE Supply & Trading GmbH, UPM-Kymmene Oyj).	The Agency agrees and deleted the provisions in the pricing proposal that excluded the activations for other than balancing purposes from the calculation of the cross-border marginal price.
2 respondents recall that balancing energy prices should reflect the actual electricity system conditions at the time of clearing. Therefore, limitations in the available cross-border capacities	The Agency agrees.

Respondents' views	ACER views
due to preceding over-allocations should be taken into account when calculating the system marginal price for balancing energy (AIGET, Edison S.p.A.). Similarly, 1 respondent states that the CBMP should reflect actual congestions on the actually available cross-zonal capacity occurring after AOF selection and cross-zonal activation of bids (RWE Supply & Trading GmbH).	
Reciprocally, 1 respondent states that when there's no congestion between the bidding zones, the balancing energy prices and hence the imbalance settlement prices should converge (Finnish Energy).	Although the Agency in principle agrees that if in all balancing platforms there is no congestion between two bidding zones, then the imbalance settlement prices should converge, it notes that this is not in the scope of the pricing methodology. The determination of the imbalance settlement price is a national issue and the framework for its harmonisation should be defined pursuant to Article 52(2) of the EB Regulation.
2 respondents note that the current system proposed by TSOs does not foresee any compensation for market participants whose offers are not selected due to the application of system constraints even if the offered price is lower than the system marginal price. In this way TSOs would not pay the full cost of their congestion management actions (AIGET, Edison S.p.A.).	The Agency agrees and its proposal would solve this problem.
4 respondents believe that TSO should update the available CZC to the actual physical value towards real time (Energie-Nederland, EurelectricPGE, Polska Grupa Energetyczna S.A., Polish Power Plants Association). 2 respondent state that if the ATC gets negative after the IDCZGCT, whatever the reason, TSOs should use the appropriate measure to solve the constraint outside the balancing market (Energie-Nederland, Eurelectric). 1 respondent further states that, should the AOF clearing be managed with two runs as proposed by the TSOs, the run aimed at defining the balancing activation prices should consider a 0 ATC, and the one aimed at selecting the safe level of bid activation in each bidding zone should consider the negative ATC as suggested in ACER's consultation (Eurelectric).	The Agency agrees that if the ATC gets negative before the balancing timeframe, then actions should be taken outside the balancing platforms. In particular the Agency included in the Implementation Frameworks (Article 4(3) that the limitations may only apply to operational security reasons which could not be addressed with the latest cross-zonal capacity calculation and coordinated regional operational security analysis.

Respondents' views	ACER views
1 respondent further proposes to delete the provisions for pricing bids selected for system constraint purposes and treat all bid selections on the platforms as activations for balancing purposes and pricing them all at the CBMP (illwerke vkw AG).	The Agency agrees; the provisions have been deleted, as mentioned above.
3 respondents condition their agreement to amendments of the proposal (CEZ,ENTSO-E, Slovenská elektrizačná prenosová sústava, a.s.) 1 respondent agrees if the BEPP is of 15 minutes, so that market participants can take this into account when bidding for aFRR.	The question on whether the cross-border marginal price should reflect the actually available cross-zonal capacity at the time of the auction is fundamental, and the Agency does not consider that it is linked to the validity period of the bid.
1 respondent notes that the activation of bids for system constraint purposes is not always equivalent to an update of CZC. In this context, the respondent requests ACER to clarify how the additional costs resulting from the increased cross-border marginal prices will be distributed among the countries, under consideration of CACM and SO Regulations provisions on cost sharing of remedial actions. Further, due to the effect of local issues on the whole cross-border marginal prices as well as potential effects on imbalance prices, the respondent strongly prefer the approach in the submitted proposal. Should ACER decide to amend the all TSO proposal on this point, the respondent strongly recommends ACER not to decide on the way the desired flow range functionality would be implemented (ENTSO-E).	The Agency notes that any update on the cross-zonal capacity may have an impact on prices and activations. The Agency considers that this impact should be visible on the cross-border marginal price, and the associated costs should be shared based on the settlement methodology pursuant to Article 50(1) of the EB Regulation. Regarding the provisions of CACM and SO Regulation on the cost sharing of remedial actions, the Agency specified in the Implementation Frameworks (Article 4(3) that the limitations may only apply to operational security reasons which could not be addressed with the latest cross-zonal capacity calculation and coordinated regional operational security analysis. Therefore, there is no overlapping with the remedial actions envisaged in CACM and SO Regulations.
1 respondent agrees with the statement of the ACER that CBMP should reflect the actual CZC but is opposed to deleting the provisions for pricing bids selected for system constraint purposes because it is not in line with Article 30 (1) (d) "give correct price signals and incentives to	As explained above, the Agency considers that the fundamental principle for pricing balancing energy bids activated through the platform is the merit order

Respondents' views	ACER views
market participant", i.e. activation of small amount of balancing energy for system constraints will mean significant impact on single marginal price. The respondent suggests keeping separate pricing for balancing energy purpose (based on marginal pricing) and separate pricing for standard balancing energy product bids selected for system constraint activation purpose (based on pay-as-bid).	principle according to which all bids activated on the merit order should receive the same marginal price. If the balancing platforms allow the activation of balancing energy bids for different purposes and if these activations are respecting the merit order, it is not possible to distinguish exactly which bids have been activated for which purpose. The design of balancing energy platforms implies that the same pool of balancing energy bids can be used for balancing and possibly for other purposes. Hence, the activation for one purpose always affects the supply of bids for the other purpose and, thereby, the price for the other purpose is always affected.
11 respondents disagree with the statement (Association of Energy Users in Finland, Austrian Windenergy Association, BDEW, Danish Energy, EFET, EnBW Energie Baden-Württemberg AG, Enel, Slovenské elektrárne, Swedenergy, TIWAG-Tiroler Wasserkraft AG, Wien Energie GmbH)	The Agency disagrees.
4 respondents state that the congestion inside the zones should not affect the zonal marginal prices (Association of Energy Users in Finland, Austrian Windenergy Association, Danish Energy, Swedenergy). 1 respondent observes that the activation of a small amount of balancing energy for system constraints will mean significant impact on single marginal price (Slovenské elektrárne).	The Agency agrees. Indeed the congestion inside the bidding zones should not affect the cross-border marginal price and the Agency's proposal does not suggest that.
4 respondent recalls that the cross-border marginal price, by definition, should reflect the value of cross-zonal capacity made available to market at the time of the auction, in any timeframe (BDEW, EFET, EnBW Energie Baden-Württemberg AG, TIWAG-Tiroler Wasserkraft AG). 1 respondent further states that the pricing of balancing energy bids activated for purposes other than balancing should not set the CBMP and those bids could not be underpriced (ENEL). Therefore, 1 respondent suggests to keep separate pricing for balancing energy purpose (based	The Agency understands the position that the cross-zonal capacity made available to the market should be taken into account. However, due to the limited timing as well as the proximity to the real-time, in balancing timeframe we do have the case of a limitation in the available cross-zonal capacity (taking place in any

Respondents' views	ACER views
on marginal pricing) and separate pricing for standard balancing energy product bids selected for system constraint activation purpose (based on pay-as-bid) (Slovenské elektrárne).	case, due to the provisions of the SO Regulation) happening after the last capacity calculation and yet before the AOF run. Since this limitation is known before the auction run, the question is whether it should be reflected in the cross-border marginal price. The Agency considers that being one of the fundamentals, it should have an impact on the price calculation, even if as information was not available to the market participants, in order for them to take it into account to their bidding.
1 respondent states that if cross-zonal capacities are modified in the course of the process, such modification would be a congestion management affecting the balancing market and the imbalance price, in violation of article 30.1(b) EB GL and Chapter III, Section 1 of Regulation 2019/943 (EFET).	As explained above, Article 30(1)(b) of the EB Regulation refers only to internal congestion, and, in line with that, the pricing methodology does not allow for activations taking place outside the platforms, without respecting the merit order, for addressing internal congestions, to set the cross-border marginal price.
Question 5: Do you agree with proposed approach for pricing SA and DA mFRR bids?	
32 respondents provided an answer to this question.	
14 respondents agree with the proposed approach for pricing SA and DA mFRR bids (AIGET, Association of Energy Users in Finland, EDF, Edison S.p.A., Enel, Energie AG Oberösterreich Trading GmbH, ENTSO-E, IFIEC Europe, illwerke vkw AG, Oebb Infrastruktur AG, Slovenská elektrizačná prenosová sústava, a.s., Slovenské elektrárne, UPM-Kymmene Oyj, Wien Energie GmbH).	The Agency agrees.
1 respondent recalls that irrespective of the applied pricing mechanism, it is of the utmost importance to foster liquidity for the mFRR products (IFIEC Europe).	The Agency agrees. Any other approach would either split the liquidity or remove part of it.

Respondents' views	ACER views
2 respondents note that the proposal sets proper incentives for BSPs to make DA mFRR bids (AIGET, Edison S.p.A.). 1 respondent believes that the approach chosen ensures a proper remuneration of DA bids and removes the risk of spreading the same price over several subsequent ISPs, with no rationale and in contradiction with the principle of real-time energy cost-reflectiveness (EDF). 1 respondent states that rating DA mFRR higher than SA mFRR guarantees the liquidity of DA mFRR (ilwerke vkw AG).	The Agency agrees.
5 respondents approve the proposed approach but express reservation (CEZ, EFET, EnBW Energie Baden-Württemberg AG, Fortum Power and Heat Oy). Namely, these respondents agree to the proposal in the context of a similar pricing of SA and DA. Nevertheless, these respondents restate that SA and DA have different quality parameters and should not be priced in the same way (CEZ). Further, they consider that DA mFRR products are not useful and should be discarded (EFET, EnBW Energie Baden-Württemberg AG, Fortum Power and Heat Oy).	The Agency understands the different views and these were part of the consultation with regulatory authorities and TSOs during the last months. The Agency considers that given the strict conditions of time to restore frequency, the DA mFRR bids are needed in case of sudden imbalance which cannot wait till the next activation of SA mFRR bids However, with the development of the platforms and the increase of the cross-border exchanges of aFRR bids, the needs for DA mFRR bids may change, and this will be evaluated in the context of the review envisaged in Article 25(3) of the EB Regulation.
14 respondents disagree with the proposed approach for pricing SA and DA mFRR bids (ACM, BDEW, Danish Energy, Energie-Nederland, Energy Norway, Finnish Energy, GAS NATURAL COMERCIALIZADORA, Next Kraftwerke, Orsted Nesa, PGE Polska Grupa Energetyczna S.A., Polish Power Plants Association, RWE Supply & Trading GmbH, Swedenergy, TIWAG-Tiroler Wasserkraft AG).	The Agency disagrees.
1 respondent recalls that the price for SA and DA shall be the same according to Regulation on the internal market for electricity (EU) 2019/943 article 6 no 4 and no 5 (Orsted Nesa).	The Agency does not consider that the interpretation of Article 6 of Regulation 2019/943 supports that the price for SA and DA should be the same.

Respondents' views	ACER views
2 respondents promote a unified CBMP for all selected mFRR bids (PGE Polska Grupa Energetyczna S.A., Polish Power Plants Association). 1 respondent promotes one FRR price cross product for all FRR types of balancing energy but with separate prices for positive and negative balancing energy for each uncongested area) as ensuring correct incentives (ACM). Similarly, 1 respondent promotes cross product marginal pricing (Energie-Nederland). Further, 2 respondent states that the CBMP for SA mFRR bids should be equal to the marginal price of all selected SA and DA mFRR bids and the CBMP for DA mFRR bids should be equal to the marginal price of all selected SA and DA mFRR bids (Energy Norway, GAS NATURAL COMERCIALIZADORA).	The Agency considers that the cross-product pricing is not complaint with the marginal pricing principle. When defining the cross-product "marginal price", the highest (for positive balancing energy and lowest for negative balancing energy, respectively) marginal price from all products is selected. This would imply that if cross-product marginal price would be set by aFRR, there would be some or many mFRR bids that would be paradoxically rejected, i.e. they would be in-the-money, but would not be activated.
1 respondent considers that per product pricing with the proposed approach could be acceptable under the condition that the definition of TSO demand is harmonized and that the pricing method is open equalizing the balancing energy price on a national level (ACM).	The Agency considers that the definition of the TSO demand is out of the scope of this methodology and of the EB Regulation.
2 respondents disagree with the proposed approach due to decreasing transparency over the pricing of balancing energy, i.e. the BSP cannot know in advance if the bid is required for one or two ISPs. The interaction and differentiation between SA and DA bids should be clarified – the respondent recommends using SA only as significantly reducing complexity, lowering cost, and improving transparency (BDEW, RWE Supply & Trading GmbH, TIWAG-Tiroler Wasserkraft AG). 1 respondent recommends that, instead of providing incentives to BSPs to offer direct activated bids and ensure liquidity, the TSOs which have a demand for direct activated bids should increase its contracted aFFR volume. This would provide more transparency and allow fair competition in aFFR markets between conventional plants and new flexibility sources (Next Kraftwerke).	TSOs cannot commit to fulfilling the frequency quality parameters defined in accordance with the SO Regulation with SA mFRR only and therefore the Agency agrees to have both SA and DA mFRR as a consecutive process. Indeed the underlying problem (i.e. sudden large imbalance), could also be mitigated with higher volume of aFRR reserve capacity or available balancing energy bids. Therefore, when more experience is gained in this regard, the TSOs should revaluate the need for DA mFRR bids. On the other hand, complete separation of these two products is a suboptimal solution, because DA bids can equally satisfy the SA mFRR demand, while the opposite is not true.

Respondents' views	ACER views
1 respondent opposes the TSO interference with the balancing price and believes that TSOs should not be allowed to artificially depress mFRR pricing by using SA with elastic demand for mFRR, which results from separate pricing of DA and SA (Danish Energy, Swedenergy).	The use of the elastic demand is addressed in the mFRRIF.
Question 6: Do you agree with the inclusion of a technical price limit at the proposed level? If not, what price limit you consider as not interfering with the balancing energy market results? *(The Agency proposes to set technical price limit equal to 99,999€/MWh.)*	
34 respondents provided an answer to this question.	
21 respondents agree with the inclusion of a technical price limit at the proposed level (ACM, BDEW, Danish Energy, EnBW Energie Baden-Württemberg AG, Enel, Energie AG Oberösterreich Trading GmbH, Energie-Nederland, Energy Norway, Eurelectric, Finnish Energy, Fortum Power and Heat Oy, Next Kraftwerke, Oebb Infrastruktur AG, Orsted Nesa, PGE Polska Grupa Energetyczna S.A., Polish Power Plants Association, RWE Supply & Trading GmbH, Slovenské elektrárne, TIWAG-Tiroler Wasserkraft AG, UPM-Kymmene Oyj).	The Agency agrees.
1 respondent believes that the price limit should not be higher than the proposed 99999EUR/MWh (Danish Energy). 4 respondents agree with the proposed level as it allows for pricing at the value of lost load (level to be adjusted in the future if it is not the case anymore) Energie-Nederland, Eurelectric, Finish Energy, RWE Supply & Trading GmbH). 3 of these respondents suggest that the price limits in the intra-day and day ahead market be adjusted to the same level (Energie-Nederland, Eurelectric, Finish Energy).	The Agency agrees. The Agency takes note of this comment, yet consultation on price limits in day-ahead and intraday timeframe revealed different interests and complexities.
1 respondent recommends to mitigate adverse market impacts and less liquidity on balancing markets, at least real time publication of activated volumes and prices (Fortum Power and Heat Oy).	The Agency notes that the requirement of the EB Regulation (Article 12) is for publication 30 minutes after the relevant market time unit.

Respondents' views	ACER views
4 respondents agree with the inclusion of a technical price limit at the proposed level under conditions (AIGET, EDF, Edison S.p.A., IFIEC Europe) 3 respondents agree with the principle of a price limit but believes that the limit suggested is too high (AIGET, EDF, EDISON). 1 respondent suggests a price limit consistent with ID markets (EDF). 1 respondent believes that technical limits (positive and negative) at ± 3000 €/MWh should not interfere with balancing energy market results while avoiding the formation of extremely high prices due to erroneous computations, and suggests an automatic adjustment mechanism to avoid distortions (AIGET, EDISON). 1 respondent agrees on principle but does not pronounce itself on the proposed value (IFIEC Europe).	The Agency understands that in the day-ahead and intraday timeframe, these limits have been set at rather moderate levels in order to minimise the risks and costs associated with collaterals when trading in the day-ahead and intraday markets. The Agency understands that these limits will not affect collaterals in the balancing market, neither for BRPs, nor for BSPs. Therefore, in order to prevent restrictions on price formation and real-time value of energy, the Agency considers that these higher price limits are justified.
11 respondents are opposed to the proposal (Association of Energy Users in Finland, CEZ, EFET, ENTSO-E, Finnish Wind Power Association, GAS NATURAL COMERCIALIZADORA, illwerke vkw AG, Metsä Group, Slovenská elektrizačná prenosová sústava, a.s., TenneT Netherlands).	The Agency disagrees.
3 respondents see no clear reason for the price limit (CEZ, GAS NATURAL COMERCIALIZADORA, illwerke vkw AG, TenneT Netherlands). 1 respondent observes that the proposal would result in imbalance prices ten times higher than the existing price limit in day-ahead and intraday markets, whereas the respondent does not see the reason behind different price caps in each of these markets (CEZ). 2 respondents are opposed to the price limit at the level of 99999€/MWh, as technical price limit for balancing market should be equal to technical price limit in the intra-day market. If those are not same there is serious risk that market parties in the scarcity period would not offer all their capacity or demand flexibility to intraday market due the reason potentially much higher prices in the balancing market (Association of Energy Users in Finland, Metsä Group). 1 respondent further notes that in markets like Finland where there is scarcity of the balancing power the possibility to offer on the balancing market up to certain price limit (currently 5000 €/MWh) has led to situation where balancing power is offered to the market on very high price	The Agency understands that the technical price limits are needed for the operation of the algorithm and the TSOs intend to apply them, but they refrain from defining them in the Proposal in order to have some flexibility to change them if they deem it necessary. The Agency considers that this is not in line with Article 30(2) of the EB Regulation since such limits can only be applied if they are defined in the methodology. The EB Regulation, therefore, does not allow for flexibility on setting these limits, mainly because these limits need to be defined in a transparent process, be stable over time and ensure proper regulatory oversight.

Respondents' views	ACER views
(3000 €/MWh in summer 2019); with such a high price limit it is impossible to estimate the balancing costs when financing a project, particularly for wind power projects (Finnish Wind Power Association). 1 respondent is opposed to the value as extremely high imbalance price may cause problems with margins (collaterals) of BRPs (Slovenská elektrizačná prenosová sústava, a.s.). 1 respondent states that the definition of a fixed value for a technical process will lower the flexibility of the TSOs to react on potential issues (ENTSO-E).	The Agency also understands that these limits are purely technical and in principle should not affect the financial obligations of the BSPs or BRPs, yet this issue may indeed need to be revisited. The Agency considers that if intraday price limits restrict free price formation, the automatic adjustment mechanisms will automatically increase those limits such that they will be automatically increased and then this behaviour should not occur.
1 respondent believes that the proposal contradicts Article 10.1 of Regulation 2019/943 banning all bidding or clearing limits in all timeframe; ACER should seek reassurance from the European Commission that an extension of the scope of article 10.2 of Regulation 2019/943 to TSOs for the balancing timeframe would be acceptable (EFET). The limit should be above most current assumptions on the value of lost load and should not restrict balancing energy market prices: shall only be on clearing prices (not bidding prices), justified for technical reasons (algorithm functioning), and take account of the value of lost load. If this technical price limit is established, ACER should make sure that the any measures further restricting balancing energy prices, bidding or clearing, directly or indirectly, are removed in all Member States (EFET). 1 respondent believes that the proposal contradicts Article 30(2) of the EB Regulation allowing limits "in case TSOs identify that technical price limits are needed for efficient functioning of the market". (GAS NATURAL COMERCIALIZADORA)	The Agency does not share the view that the introduction of technical price limits in accordance with Article 30(2) of the EB Regulation contradicts Article 10(1) of the Regulation (EU) 2019/943. The latter specifies that there should be neither a maximum nor a minimum limit to the wholesale electricity price, for all timeframes, *"without prejudice to the technical price limits which may be applied in the balancing timeframe and in the day-ahead and intraday timeframes in accordance with paragraph 2"*. The Agency understands that the reference to paragraph 2 applies only in "the day-ahead and intraday timeframes" preceding it, and not "in the balancing timeframe". Therefore, the Agency understands that Regulation (EU) 2019/943 does not restrict the possibility, provided by the Article 30(2) of the EB Regulation, of introducing technical price limits in the balancing timeframe.

Respondents' views	ACER views
Question 7: Do you agree with aligning the pricing in these two cases as proposed by the Agency? If not, please specify and justify your preferred solution. *(The Proposal on pricing methodology identified two cases where accepted volume from an aFRR bid is priced differently to CBMP:* *1. The first case is a general one, specified in the Articles 3(5) and 3(6) of the Proposal on pricing methodology, where the general pay-as-bid rule is described for each positive accepted volume with a bid price higher than the CBMP (and negative energy volume with bid price lower than the CBMP, respectively).* *2. The second case is specified in Article 7(6) of the Proposal on pricing methodology and refers to the accepted bid energy volume from aFRR bid that has no bid price for the respective BEPP. In this latter case, each TSO, according to the Proposal on pricing methodology, will ensure the pricing of this bid in accordance with the terms and conditions for BSPs.)*	
28 respondents provided an answer to this question.	
17 respondents agree with aligning pricing as proposed by the Agency (AIGET, CEZ, Danish Energy, EDF, Edison S.p.A., Enel, Energy Norway, Fortum Power and Heat Oy, GAS NATURAL COMERCIALIZADORA, illwerke vkw AG, Next Kraftwerke, Oebb Infrastruktur AG, Slovenská elektrizačná prenosová sústava, a.s., Slovenské elektrárne, Swedenergy, Wien Energie GmbH)	The Agency agrees.
2 respondent clarify that they support that aFRR bids are settled at the MTU CBMP or the bid price, whichever is the highest, during deactivation (Danish Energy, Energy Norway).	The Agency agrees.
1 respondent clarifies that one must ensure that, at any time, the BSP remuneration covers at least the costs of the delivered energy to prevent BSPs to set mark-ups in order to ensure proper remuneration of delivered energy (EDF).	The Agency agrees. Indeed, with the amended pricing methodology, the price will be at least (for positive balancing energy) the bid price of the BSP, hence ensuring the coverage of the costs.
1 respondent supports the approach but states that ideally all regulating energy should be marginally priced and not in any case pay-as-bid (Fortum Power and Heat Oy).	The Agency agrees in principle, and considers that the energy during deactivation should also be marginally priced. However, since no selection of the specific bid

Respondents' views	ACER views
	took place, the Agency considers that it does not violate the marginal pricing rule.
1 respondent, although supporting the approach, underlines that (i) when accepted volume of aFRR bid will be settled at a price equal to CBMP of the given optimisation cycle or its bid price, there will be no possibility for BSPs to react faster in deactivation process, and (ii) in situations when signals for deactivation and for activation in opposite direction are simultaneous, the volume determination task is unnecessarily complex (Slovenská elektrizačná prenosová sústava, a.s.).	The Agency's main motivation for defining the rule in the pricing methodology was to have a harmonized approach. The concerns raised could be solved with national rules on defining the volume of delivered energy and potential penalisation/reward scheme if deactivation is slow/fast.
10 respondents agree with the principles under conditions (ACM, Association of Energy Users in Finland, BDEW, EnBW Energie Baden-Württemberg AG, Energie-Nederland, ENTSO-E, Eurelectric, PGE Polska Grupa Energetyczna S.A., TenneT Netherlands, TIWAG-Tiroler Wasserkraft AG).	See reactions below.
1 respondent considers that pricing during deactivation or due to non-selection of bids by the algorithm does not occur with ISP pricing as then the volume delivered in in the whole ISP would receive the marginal balancing energy price in that direction for that ISP (ACM).	The Agency agrees that this problem is no longer relevant for deactivation within the same ISP, but still persist when deactivation continues in the next ISP.
1 respondent supports, when deactivation leads to volume delivered in the next ISP in which the BSP has not provided a bid, a provision where the BSP receives the highest of 1) his own bid price from the previous ISP and 2) the marginal price in the subsequent ISP for positive BE (and the lowest value in the case of negative BE) (ACM).	The Agency agrees with this approach and it is included in Article 7(8) of the pricing methodology.
3 respondents note that applying the FAT-BEPP approach (see question 2), no further alignment between the described cases and no distinction between CBMP and bid price would be required (BDEW, EnBW Energie Baden-Württemberg AG, TIWAG-Tiroler Wasserkraft AG).	The Agency agrees that no alignment would be required, but the definition of a price for the deactivation during a validity period with no valid bid would still be required.
2 respondents note that the issue is relevant in the context of a BEPP of 4 seconds, but solved in the context of a BEPP/MTU equal to the ISP (Energie – Nederland, TenneT Netherlands).	The Agency agrees that no alignment would be required, but the definition of a price for the deactivation during a validity period with no valid bid would still be required.

Respondents' views	ACER views
1 respondent notes that the motivation to define the provisions for the second case on national level is to enable a consistent treatment of this case taking into account the determination of the settlement volumes, imbalance settlement volumes and penalties, which are defined by the national terms and conditions in accordance with the EB Regulation; the respondent would rather tackle this issue as part of the process for further harmonisation (ENTSO-E).	The Agency agrees that since the volume determination is a national issue, further harmonisation would be required. The Agency takes note of this comment for the future work that needs to be done in harmonisation.
2 respondents believe that the rationale for not applying "pay-as cleared" for all the energy delivered should be detailed and justified (Eurelectric, PGE Polska Grupa Energetyczna S.A.).	The Agency considers that pay-as cleared principle is fully respected, in this case however the concerned bids have not been cleared, yet still deliver balancing energy.
2 respondents disagree with the proposal (Energie AG Oberösterreich Trading GmbH, UPM-Kymmene Oyj)	The Agency disagrees.
1 respondent supports 1 price per ISP (Energie AG Oberösterreich Trading GmbH).	The Agency disagrees.
1 respondent is opposed to not taking the bid into account when setting the CBMP price. Market participants should always receive at least the price they bidded for if the bid is accepted. Otherwise pricing is not transparent and sets market participants in an unequal playing-field (UPM-Kymmene Oyj).	The Agency understands that the bid was taken into account in the optimization, but it was not selected by the AOF, hence it is deactivated. Therefore, it cannot affect the cross-border marginal price.
Question 8: Please comment on other topics indicating clearly the related Article, paragraph and sub-paragraph of the Proposal on pricing methodology.	
10 respondents provided an answer to this question	
1 respondent states that correct price formation will not happen as long as local imbalance considerations are leading for individual TSOs (Energie-Nederland).	The Agency agrees, yet it note that cross-border propagation of imbalance signals is very much conditional on real-time congestion management, namely occurrence of internal congestions. Until bidding zones can really be considered as safe copper plates, TSOs will need to maintain local control on imbalance price signals and behaviours.

Respondents' views	ACER views
1 respondent states that EBGL and SOGL require TSOs to apply a reactive more than proactive approach to balancing. The articles in SOGL on the FRR-process (143-145 SOGL) and the RR-process refer to the control target of reducing the FRCE to zero within the time to restore frequency. There is limited room for including forecasting of the FRCE into these processes mainly because forecasting would distort the functioning of ID markets, especially when these are still open (i.e. if forecasting occurs prior to the (local) ID Gate Closure Time). Also the RR-process – although optional for TSOs to use – requires to progressively restore activated FRR which is clearly indicating a more reactive than pro-active approach (ACM). This observation is further shared by 1 respondent, further stating that imbalance settlement should be based on the marginal price of these activations where an entire region is being considered, in line with the day-ahead and intraday market. (Energie-Nederland).	While, the Agency generally has sympathy with reactive process, it notes that transition to reactive process is evolutionary process where TSOs need to gain more experience with integrated markets, more experience with real-time congestion management, real-time price signals. Thus, the Agency will continue establishing rules, which encourage TSOs to gradually test and adopt more reactive approaches, but it is unable to prescribe this shift in a legally mandatory way. Regarding the impact on the imbalance settlement this will be discussed and decided in the context of the methodology pursuant to Article 52(2) of the EB Regulation.
2 respondents consider that rules for specific balancing products which are to be converted to standard balancing products are missing (CEZ, EFET). These bids will be governed by different terms and conditions, set at national level (EFET). They should be designed in a way which ensure level-playing field among BSPs from respective Member States (CEZ).	The Agency notes that these rules are out of the scope of the pricing methodology. They will be developed and approved nationally in the context of the methodology pursuant to Article 26(1) of the EB Regulation.
1 respondent is opposed to the use of elastic demand (for RR and mFRR); the volume should be the sole indication of balancing energy needs. Such element presents clear interference of TSOs (as regulated subjects) in the market (CEZ).	The use of the elastic demand is out of the scope of the pricing methodology; it is further specified in the implementation framework for mFRR.
On Articles 4, 5 and 6 of the proposal, 1 respondent believes that BEPP should take account of imbalance settlement period – final target should definitely be 15 minutes in line with 15 minutes ISP. At the same time, derogations till 15 mins ISP is implemented in all LFC areas should still be possible (CEZ).	The Agency understands that the determination of the MTU should not be restricted by the duration of the ISP, but be compliant with the principles set in Article 30(1) of the EB Regulation.

Respondents' views	ACER views
On Article 10 of the proposal, 1 respondent, on implementation timeline, believes that due to the lack of homogeneity and competition in several balancing service markets and the uncertainty about future development, pay-as-cleared pricing could increase market inefficiencies compared to other pricing schemes. Therefore, this respondent suggests to insert a paragraph in Article 10, which obliges the TSOs to evaluate the efficiency of pay-as-cleared for the different balancing products after one year of application of pay as cleared. In case all TSOs identify inefficiencies in the application of pay-as-cleared, they could do an analysis and propose an alternative pricing methodology (In accordance with Article 30 (5) of the EB GL) (Next Kraftwerke).	The Agency agrees with the need to monitor the efficiency of the balancing markets, as also required by Article 59(4)(e) and (f) of the EB Regulation. Additionally, the Agency has included in the Implementation Frameworks (Article 13(2)) an obligation to the TSOs, in case inefficiencies are identified in the annual report, to include a recommendation on how to handle the identified issues. Finally, the efficiency of the pricing method for aFRR pursuant to Article 30 of the EB Regulation is explicitly mentioned as one of the elements that should be annually assessed and reported (Article 13(1)(f) of the aFRR Implementation Framework).
On points 2.5 and 7.2. of the explanatory note that submitted by the TSOs together with the pricing Proposal, 2 respondents note that the specific issues of central dispatching models are not covered by the Proposal, yet they are addressed in the explanatory note. The respondents stress that provisions concerning specific issues of central dispatching model are important and should be in the Proposal. Further, respondents stress that BSPs from countries with central dispatching model should not be discriminated against other BSPs, which would be the case if the different pricing is used for both types of dispatching models. BSPs from countries with central dispatching model should be priced with the CBMPs from relevant platforms (or pay-as-bid if applicable) and the TSO should only be an intermediary instead of creating own pricing rules (PGE Polska Grupa Energetyczna S.A., Polish Power Plants Association).	The Agency understands that the integrated scheduling process bids are covered by the current pricing methodology through the linking to their underlying balancing energy product. Indeed, the Agency agrees that there should be no discrimination in the platforms, and this is ensured once the integrated scheduling process bids are converted into standard balancing energy product bids.

3 List of respondents

Organisation	Type
ACM	NRA
AIGET	Energy company
Association of Energy Users in Finland	Association
Austrian Windenergy Association	Association
BDEW	Energy company
CEZ	Energy company
Danish Energy	Association
EDF	Energy company
Edison S.p.A.	Energy company
EFET	Association
EnBW Energie Baden-Württemberg AG	Energy company
Enel	Energy company
Energie AG Oberösterreich Trading GmbH	Energy company
Energie-Nederland	Energy company
Energy Norway	Energy company
ENTSO-E	Association
Eurelectric	Association
Finnish Energy	Energy company

Organisation	Type
Finnish Wind Power Association	Association
Fortum Power and Heat Oy	Energy company
GAS NATURAL COMERCIALIZADORA	Association
IFIEC Europe	Association
illwerke vkw AG	Energy company
Metsä Group	Energy company
Next Kraftwerke	Energy company
Oebb Infrastruktur AG	Railway company
Orsted Nesa	Energy company
PGE Polska Grupa Energetyczna S.A.	Energy company
Polish Power Plants Association	Association
RWE Supply & Trading GmbH	Energy company
Slovenská elektrizačná prenosová sústava, a.s.	TSO
Slovenské elektrárne	Energy company
Swedenergy	Association
TenneT Netherlands	TSO
TIWAG-Tiroler Wasserkraft AG	Energy company
UPM-Kymmene Oyj	Energy company
Wien Energie GmbH	Energy company