CONSULTATION REPORT

Report on the public consultation regarding the proposal of amendments of the T&C BRP in the context of the connection to European Balancing Platforms

September 18th 2023

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1. Introduction

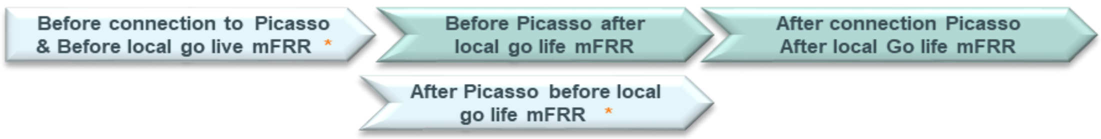
Elia organized a public consultation **from 12th July 2023 to 28th August 2023** regarding the proposal of amendments to the Terms and Conditions for Balance Responsible Parties (hereafter referred to as “T&C BRP”) in the context of the connection to the European Balancing Platforms.

The reasons to amend the T&C BRP are twofold:

- On the one hand, they follow CREG’s request in decision (B) 2554 of 17 May 2023 to describe the components for the calculation of the Imbalance price (IP) in the T&C BRP. Therefore on one hand, the formulas of the main imbalance price components (MIP/MDP) that were until now described in the Balancing rules were moved in the T&C BRP, and on the other hand, the formula of the imbalance price additional component (i.e. the “alpha parameter”) that is set by the Tariffs has been copied in this T&C BRP to provide a complete view of the imbalance pricing formula.
- And on the other hand, they relate to the future participation of Elia to the EU balancing platforms for the exchange of mFRR and aFRR balancing energy (first MARI for mFRR and then PICASSO for aFRR), for which the formula for the calculation of the Imbalance price has to be reviewed;

In practice, the **amendments proposed** to **this T&C BRP concern the introduction of a new Article 30** describing the different components serving for the calculation of the Imbalance price. In order to be complete and consider all possible cases, the article 30 describes the following situations :

i. Art. 30.2: Before local mFRR Technical Go-Live[1] and before connection to PICASSO (currently expected to last until February 24)
ii. Art. 30.3: Before local mFRR Technical Go-Live but after connection to PICASSO (note that this situation is not expected in current planning and is described for the sake of completeness and to anticipate possible changes in planning).
iii. Art. 30.4: After local mFRR Technical Go-Live but before connection to PICASSO (currently expected to last from February 2024 until June 2024)
iv. Art. 30.5: After local mFRR Technical Go-Live and after connection to PICASSO (currently expected to start in June 2024)



[1] This is a key preparatory step for the connection to MARI, where all the local adaptations are made and where mFRR is activated similarly as if Elia is connected to MARI with all ATCs set to zero.

The proposed amendments to the T&C BRP are coherent with the following documents:

- the applicable Tariffs (currently under revision for the tariff period 2024-27 conform the Tariff methodology – see **public consultation**) and the **Tariff methodology for 2024-27**,
- the currently applicable **Balancing Rules (dated 28/05/2020)** for the description of the situation targeted in point (i) above, and
- the Balancing Rules modified in the context of the connection to the EU aFRR balancing platform (submitted by Elia on 13/05/2022 and approved by **CREG decision (B)2433** of 19/07/2022 and **CREG decision (B)2554** of 17/05/2023) for the situations targeted in point (ii) and (iv).

Besides, the modifications proposed in the T&C BRP have been presented and discussed with the market parties during the Working Group Balancing of 26th June 2023.

In its decision (B) 2554 dated 17/05/2023, CREG decided to partially cancel its decision (B)2433 dated 19/07/2023 about the Balancing Rules (and more specifically, to remove its request for amendment of the T&C BRP) and to totally cancel its decision (B)2497 dated 09/03/2023 about the T&C BRP where CREG had integrated the components for the calculation of the imbalance price. In this decision (B)2554, CREG however asks Elia to submit a new revision of the T&C BRP for 18/09/2023 at the latest, taking into account CREG's considerations as explained in paragraphs 40 to 44 and in paragraphs 45 to 47 of its decision. CREG specifies that, if Elia does not agree with the comments formulated by CREG in these paragraphs, it should provide a reasoned and thorough answer.

Since Elia could not agree with all the requests from CREG expressed in the aforementioned paragraphs, it thoroughly motivated the reasons why it could not agree with them in an accompanying note that was also submitted to public consultation. In this accompanying note, Elia namely explained why it is convinced that CREG's requirements would endanger grid security and how this conviction is shared by international experts whose opinions were annexed to the note.

The purpose of this report is to consolidate the feedback received from the public consultation, while at the same time reflecting Elia's position on these reactions and to propose, where relevant, adaptations of the proposal of amendments. Besides, when preparing the submission of the proposal of amendments, Elia identified some typos in Article 30 of the T&C BRP. Since it has no impact on the content of the proposal, Elia will correct these typos in the version that will be submitted to the CREG without organizing a new public consultation.

2. Feedback received

In response to the public consultation, Elia received non-confidential answers from the following parties:

1) Belgian Offshore Platform
2) Centrica
3) FEBEG
4) FEBELIEC

All the answers received are available in the Annexes of this report. These non-confidential reactions, together with the consultation report, will be made available on Elia's website.

3. Instructions for reading this document

This consultation report is structured as follows:

- Section 1 contains the introductory context,
- Section 2 gives a brief overview of the responses received,
- Section 3 contains instructions for reading this document,
- Section 4 discusses the various comments received during the public consultation and Elia's position on them,
- Section 5 discusses the next steps,
- Section 6 contains the Annexes of the consultation report.

This consultation report is not a 'stand-alone' document but should be read together with the proposal submitted for consultation (and its accompanying notes), the reactions received from the market participants (annexed to this document) and the final proposal submitted for validation to the CREG.

Section 4 of the document is structured as follows:

- The comments received by the different stakeholders have been clustered by topic. Each subsection addresses one such cluster;
- Each subsection consists in the following table, with additional information on the content per column below.

Subject/Article/Title	Stakeholder	Comment	Justification
A	B	C	D

A. Subject matter covered by the various responses received.
B. Stakeholder providing the comment.
C. Description of the comment received.
D. Elia's answer to the comment, including arguments as to why a comment was or was not included in the final proposal.

4. Comments received during the public consultation

4.1 General positioning with respect to Elia's proposal

This section provides an overview of the general reactions and concerns of market players that Elia received to the document submitted for consultation.

SUBJECT	STAKEHOLDER	FEEDBACK RECEIVED	ELIA'S VIEW
General position towards Elia's proposal of amendments of the T&C BRP	BOP	*BOP calls for a continuous monitoring of the imbalance price, to assess its volatility and predictability, as these factors underpin the incentive-value of the imbalance price. Any imbalance price design should be evaluated on these criteria.* ***From a theoretical perspective****, BOP therefore opposes the excessive price caps on the new platforms but* ***can support measures such as the dead band*** *that would smoothen price formation.* **For a more informed positioning however, BOP would require monitoring of actual (price) data**.	Elia thanks all respondents for their participation to the public consultation and for their feedback regarding Elia's proposal for the evolution of the Imbalance Price formula in the context of the connection to the European Balancing platforms. Elia understands that: - FEBELIEC fully supports Elia's proposal - FEBEG strongly wishes to start with an Imbalance price formula reflecting a compromise between the different stakeholders, in order to be able to continue the prudent journey towards a fully integrated European Balancing market without unnecessary delays. Therefore, even though not its preference[2], FEBEG agrees to go live with
	Centrica	*Centrica* ***supports the consolidation of Imbalance Price related aspects in the T&C BRP*** *Centrica kindly* ***requests Elia to provide clarification*** *regarding the CBMP, VoAA, floor/cap application, Intraday indexed Imbalance Price, redispatching bids and alpha parameter*	

[2] Which remains the compromise proposal as it was detailed in last FEBEG and FEBELIEC 's common reply to the consultation initiated by the CREG (i.e. FEBEG and FEBELIEC's position regarding the consultation on the review of the "T&C BRP" in the context of the integration of the calculation of the imbalance price dated of 06/02/2023)

		Centrica ***encourages Elia to avoid complexity in the Imbalance Price calculation*** *and increase resilience against gaming through robust monitoring mechanisms*	the Imbalance Price formula as proposed by Elia provided that Elia commits to testing alternative price formulas once relevant dataset is available, and to investigating and implementing mitigation measures to tackle the risk of high imbalance price set by aFRR in case of lack of ATC's. - From a theoretical perspective, BOP can support some measures (such as the dead band) proposed by Elia to make the Imbalance Price less volatile and more predictable and to avoid excessive and unnecessary price volatility increases when connecting to the European Balancing platforms. However, Elia understands that BOP would require actual price data for a more informed position and therefore calls for a continuous monitoring of the Imbalance Price and an evaluation of the Imbalance Price design based on the aforementioned criteria. - Finally, Centrica merely asks for clarifications about some elements of the Imbalance Price formula and encourages Elia to strike a balance between complexity and effectiveness when it comes to mitigate the risk of price manipulation (namely through the manipulation of the Value of Avoided Activation – VoAA). From this feedback, Elia concludes that no stakeholder objects to the Imbalance Price formula as proposed by Elia. Contrariwise, many stakeholders strongly wish to start with a formula, such as the one proposed by Elia, resulting from a compromise between the needs of the different stakeholders in order to be able to continue the EU balancing market integration, while, at
	FEBEG	*FEBEG* ***expresses deep concerns about the ongoing absence of consensus*** *within Belgium among ELIA, CREG, and market participants regarding the balancing philosophy. Specifically, the* ***difficulty to find a compromise around the calculation of imbalance settlement prices*** *in the long term. FEBEG is* ***troubled by the lack of progress in this matter, despite concerted efforts and attempts at reaching middle-ground compromises. This impasse is worrisome as it sends a very undesired signal to the market****.* *[…]* *The imbalance price formula outlined in the T&C BRP, reflecting a lengthy and debated compromise,* ***seeks an equilibrium between coupling with European platforms, mitigation measures for both TSOs*** *(cap and floor, deadband)* ***and BRPs*** *(price cap and deadband) thereby circumventing undesirable effects due to still-incomplete market integration (including insufficient cross-border capacities within the balancing timeframe and the lack of liquidity of the Belgian FRR markets).* ***FEBEG firmly believes that Belgium should continue its prudent and pragmatic steps toward a fully integrated European balancing market without unnecessary delays****. It is important to note that this feedback should not bring prejudice to previous reactions submitted by FEBEG to previous consultations.* ***FEBEG's primary objective is to start with a compromise*** *(a stance positioned as a middle ground meeting the diverse demands of the different stakeholders). This approach aims to* ***initiate progress and, with time, refine the imbalance price formula based on the insights gained*** *from factors such as integration with EU platforms, increased market liquidity, increase of non-contracted energy bids enabled through iCAROS implementation, and other pertinent elements, and overall based on the*	

		availability of more data to analyze how markets behave once coupled through the European Balancing platforms. ***If the compromise proposal as it was detailed in last FEBEG and FEBELIEC 's common reply to the consultation initiated by the CREG – which would still be FEBEG's preference – is not retained, FEBEG can agree to go live with the imbalance formula as proposed by ELIA in the current proposal submitted to consultation, under the following conditions:*** ***1. Commitment to Test Alternative Price Formulas*** *2.* ***Commitment to investigate and implement mitigation measures to tackle the risk of high imbalance price set by aFRR in case of lack of ATC's***	the same time, calling for a monitoring/evaluation of this formula that could in turn potentially lead to evolutions of this formula. Elia shares the objective to make progress in this dossier so that the connections of Belgium to the European balancing platforms are not hindered by complex discussions over the principles of the evolution of the Imbalance Price formula - which will most likely become much easier upon existence of data and actual experience. Therefore, Elia confirms its intention to monitor the imbalance price evolution after the connection to the European Balancing platforms, and to evaluate the proposed compromise for the Imbalance Price formula according to an evaluation plan that will be discussed and agreed on with the stakeholders prior to the connection to these platforms. As the other stakeholders, Elia hopes that, provided this commitment to evaluate and, when needed, adjust the Imbalance Price formula, its compromise proposal will be approved, so that it can be used as starting point for the connection to the European balancing platforms and, by this, end the current deadlock situation.
	FEBELIEC	*Febeliec wants to* **voice its support to the Elia proposal***, as it provides a good compromise which was discussed at great length during the meetings of the WG Balancing.* (Regarding the cap and floor, the dead band concept and the alpha) *Febeliec* ***considers all three components to be quintessential elements of a future-proof modification of the T&C BRP*** *to ensure that Elia can maintain the balance in the Belgian perimeter without an undue increase of the overall system costs or perverse effects which could have a negative impact on the participation of market parties to the balancing markets and thus negatively impact market functioning.*	

4.2 General objectives and features of a good imbalance price

SUBJECT	STAKEHOLDER	FEEDBACK RECEIVED	ELIA'S VIEW
On the need for a clear implicit price signal	BOP	*In an energy market dominated by renewables,* ***market-access to flexibility at reasonable and predictable prices, is crucial****. BOP recognises that Elia has pushed for certain reforms to attract additional flexibility (e.g., reforms of the mFFR and aFRR products). But* ***in order to ensure that new and potentially smaller players can enter this market, the complexity must be managed****.*	Elia thanks BOP for the acknowledgment of the implemented reforms. Elia shares BOP's opinion that complexity must be manageable to ensure that all the flexibility can participate in the balancing of the system. However, part of the complexity linked to the participation in FRR services is inherent to the products themselves and, even more importantly, to the EU balancing platforms. Even though Elia has intensively been working and will continue working on the reduction of the entry barriers for the participation in FRR services, it will never be possible to reduce this complexity to zero. For this reason, Elia believes that it has to offer, in addition to the efforts made in order to reduce entry barriers to FRR products, another possibility to assets to participate in the system by implicitly reacting to a clear price signal. This explains why Elia is investing so many efforts in developing an as clear[3] as possible Imbalance Price signal, aiming at triggering a safe and efficient reaction from the BRPs. This is also the reason why Elia would like to initiate discussions[4] about further possible evolutions of

[3] i.e. A signal which is self-sufficient, stable, predictable (known as soon as possible),…

[4] Note that the discussions on this topic are planned during the three CCMD workshop organized by Elia on Sept 27th, Nov 14th and Dec 18th

			the Imbalance Price towards a clear, reasonable and predictable "real-time price".
On the general objectives and features of a good imbalance price	BOP	*The imbalance price is a tool that is predominantly aimed at* ***providing a correct incentive to BRPs to assist in solving a market imbalance****. Under normal market circumstances, the imbalance price will reflect the price at which Elia, as the actor of last resort, can solve the imbalance. If the market can do so cheaper, it will, if not, Elia resolving the imbalance is the most economically efficient solution.* *For the imbalance to provide a correct incentive, it must (i)* ***reflect the market imbalance that is to be solved****, and (ii)* ***acts as a proper short-term incentive for BRPs that have the ability to react to do so, and provide a proper long-term incentive for BRPs to develop flexibility if required.*** *Without negating a BRP's inherent responsibility to -as much as possible- limit its' imbalance, imbalances are an inherent and unavoidable part of an electricity system driven by weather-dependent energy sources, and our system needs to be able to deal with such imbalances. The imbalance price* ***should therefore not be seen as a punishment for (potentially unavoidable) individual BRP's imbalances****, but much more as* ***a guide for the market to respond correctly to these imbalances on an aggregated level****.* *Thus, an imbalance price should, in our opinion, have the following characteristics:* - ***Limited volatility, without excesses (in either direction)****: over and above a certain price level (or under and below), excessive imbalance prices are merely penalties for technologies that might not even be able to respond to the signal due to technical limitations,*	Elia shares BOP's view regarding the main objectives and features of the Imbalance Price. However, Elia would like to nuance the fact that *"under normal market circumstances, the imbalance price will reflect the price at which Elia can solve the imbalance"*. Elia does not know what BOP means by *"normal market circumstances"* but it would like to insist that there is no one-to-one relation between the Imbalance Price at which Belgian BRPs are settled (which is a uniform price per energy unit) and the prices at which FRR service providers are remunerated, which might be very different due to the technicalities of FRR products and to the unharmonized use of these products throughout Europe. According to Elia, BOP statement would only be true under *ideal* market conditions where the aFRR and mFRR clearing prices would converge (or be close enough to each other). Aside from this nuance, Elia fully agrees with BOP's opinion and it would like to draw BOP's attention on the fact that some elements of its proposal were precisely introduced to meet (or come closer to) the objectives listed by BOP. For instance, the purposes of the dead band are: - To prevent Imbalance Prices that are very punitive for potentially unavoidable individual imbalances whereas the system is correctly balanced at an aggregated level;

		rather than incentives. BOP therefore calls for reasonable floors and caps to the imbalance prices, to avoid significant price increases when connecting to the EU platforms. Excessively high prices merely increase the risk for market actors (and thus increase the price for end-consumers), and do not necessarily incentivize new investments in flexible assets, as long-term asset investment decisions are not made on price spikes but on consistent averages. Excessive prices can thus lead to the contradictory results of having less flexibility available, and disproportionally punishing BRPs with renewable energy portfolios. - ***Understandable and predictable price formation****: the right information should be given to market actors so that they can anticipate the evolution of the market problem and thus the price evolution. This is crucial if the price is to incentivise appropriate (re)action on a quarter-hourly basis.* […] *We support Elia's observation that a long-term vision with regards to the imbalance price formation needs to be developed, taking into account connection to both Mari and Picasso*	- To make the Imbalance Price much more stable (and hence predictable) for small system imbalances; - To get rid of the aFRR non-convexities and the extreme prices that are observed on the aFRR European platforms given excessively high price caps on the aFRR bids. Elia's Imbalance Price proposal as described in the consulted T&C BRP seeks an equilibrium between the demands of the different stakeholders while taking into account the current EU regulation on the matter. This way, Belgium will hopefully be able to connect without unnecessary delay to the European balancing platforms (and hence benefitting from this integration) while mitigating some of the risks for both the BRPs - by limiting their exposure to extreme and unrepresentative prices - and the TSO – by avoiding negative impact on grid security. However, Elia repeats its willingness to engage discussions about further possible evolutions of the Imbalance Price towards a robust "real-time price" that would better meet the objectives mentioned by BOP (and this even if these evolutions require adaptations or different interpretation of the EU regulation). These discussions will be held with the market parties in the context of the CCMD workshops as from Sept 27th 2023.
	Centrica	*To maintain the integrity of the Imbalance Price and mitigate the risk of manipulation, it is essential to strike a balance between complexity and effectiveness.*	Elia generally agrees that the complexity of the Imbalance Price should be managed so it can effectively provide a clear price signal to the market. However, the main purpose of the Imbalance Price is above all to provide correct price incentives to the market and a fortiori to avoid providing perverse incentives to market parties.

4.3 Components of the Imbalance Price formula

A. aFRR component of the Imbalance Price formula

SUBJECT	STAKEHOLDER	FEEDBACK RECEIVED	ELIA'S VIEW
Formula for the calculation of aFRR component in case Elia is disconnected from the aFRR-platform	FEBEG	*FEBEG's initial understanding was that all optimization cycles within an Imbalance Settlement Period (ISP) would contribute to the calculation of the Imbalance Price (MIP/MDP), regardless of the activated aFRR energy bid's direction or the system imbalance's sign within that ISP. However, the provided formulas appear to deviate from this principle in situations where ELIA is disconnected from the aFRR platform. Specifically, the formula outlined in the T&C BRP proposes that MIP (respectively MDP) should solely incorporate optimization cycles with upward (respectively downward) aFRR activated bids. FEBEG's standpoint is that all optimization cycles should be included, likewise other scenarios where ELIA is connected to the aFRR platform.*	Even though the motivation for modifying the currently applicable aFRR component formula is much less obvious for situations where Elia is disconnected from the aFRR platform, Elia understands FEBEG's standpoint and will adapt the formula accordingly in the T&C BRP that it will submit to the CREG. The formula will be adapted in the following way for situations where Belgium has already accessed Picasso but is temporarily disconnected from the platform : - formula for aFRR component in the consulted version (MIP): $$\frac{\sum_{ts\ where\ Global\ CT>0_{j\in ISP}}\left(Global\ CT_{ts,j} * MP_{aFRR\,ts,pos,j}\right)}{\sum_{ts\ where\ Global\ CT>0_{j\in ISP}}\left(Global\ CT_{ts,j}\right)}$$ - suggested adapted formula for aFRR component in the version proposed for approval (for both MIP and MDP) : $$\frac{\sum_{ts\ \in ISP}\left(abs(Global\ CT_{ts}) * MP\_aFRR_{ts}\right)}{\sum_{ts\ \in ISP}\left(abs(Global\ CT_{ts})\right)}$$

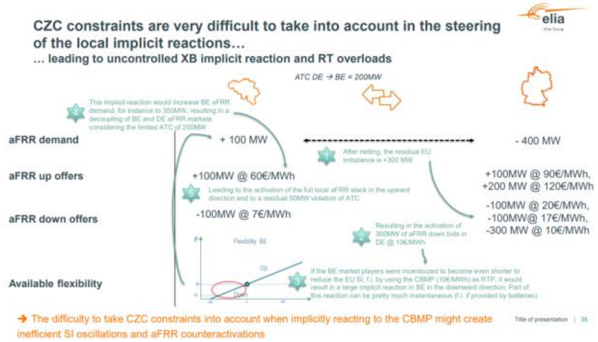
B. mFRR component of the Imbalance Price formula

SUBJECT	STAKEHOLDER	FEEDBACK RECEIVED	ELIA'S VIEW
Definition of mFRR satisfied demand	ELIA	*N.A.*	While preparing the submission of the proposal of amendments of the T&C BRP, Elia realized that there was an ambiguity regarding the way the Imbalance Price would be (or not be) impacted by the elements for regulation activated at Elia's request in the framework of the mFRR sharing agreements between TSOs. This ambiguity comes from the current definition of "mFRR satisfied demand" and Elia therefore proposes to adapt the definition in the following way (as highlighted in yellow) to resolve this ambiguity; - Definition of the consulted version: **mFRR Satisfied Demand**: The sum of the part of ELIA's mFRR demand that is satisfied by the mFRR-Platform (excluding mFRR demanded by ELIA on request of another TSO in application of an mFRR Sharing Agreement) and the part of ELIA's mFRR demand that is covered by mFRR Sharing Agreements. In case Elia is disconnected from the mFRR Platform, the mFRR Satisfied Demand is the sum of the (local) activations of mFRR (excluding mFRR activated by ELIA on request of another TSO in application of an mFRR Sharing Agreement) and the part of Elia's mFRR demand that is covered by mFRR Sharing Agreements. This value is expressed in MW. - Definition of the version proposed for approval :

			mFRR Satisfied Demand: In case Elia is connected to the mFRR Platform, the part of ELIA's mFRR demand that is satisfied by the mFRR Platform (excluding mFRR demanded by ELIA on request of another TSO in application of an mFRR Sharing Agreement). In case Elia is disconnected from the mFRR Platform, the "mFRR Satisfied Demand" is the sum of the local activations of mFRR (excluding mFRR activated by ELIA on request of another TSO in application of an mFRR Sharing Agreement). In any case, the part of Elia's mFRR demand that is covered by mFRR Sharing Agreements is excluded from the "mFRR Satisfied Demand". This value is expressed in MW. With this adaptation, Elia hopes to clarify that the elements for regulation activated at Elia's request in the framework of the mFRR sharing agreements between TSOs will no longer influence the Imbalance Price after connection to the EU mFRR platform (in accordance with ISH). For the sake of clarity, this modification does not impact the proposal or the Imbalance Price formula at all : it only aims at clarifying things that are excluded from the Imbalance Price calculation.

C. Use of CBMP in the Imbalance Price formation

SUBJECT	STAKEHOLDER	FEEDBACK RECEIVED	ELIA'S VIEW
On the relation between Imbalance price and remuneration of Balancing Service Providers	BOP	*Under normal market circumstances, the imbalance price will reflect the price at which Elia, as the actor of last resort, can solve the imbalance. If the market can do so cheaper, it will, if not, Elia resolving the imbalance is the most economically efficient solution.* *[…]* *We also understand that not all European countries support a further development of intraday and real time market integration. This already today leads to suboptimal conditions in the market, such as limited intraday ATC availability. A European wide supported approach seems to us a prerequisite for Belgium to use harmonized imbalance prices. Otherwise, Belgian market actors will bear the cost of the inefficiencies that arise- that is not at all their responsibility.*	First of all, as explained above, Elia would like to nuance BOP's statement that *"under normal market circumstances, the imbalance price will reflect the price at which Elia can solve the imbalance"* (see Elia's answers in section 4.2). Secondly, Elia understands that both BOP and FEBEG acknowledge the need for further development of market integration in order to efficiently translate the clearing prices of the European platforms in imbalance settlement prices based on harmonized principles (with the objective to ensure the most efficient dispatch at European level).
	FEBEG	*FEBEG believes that – in a European integrated balancing market - the value of energy towards real-time should be defined by the price formation on the EU platforms and translated in imbalance settlement prices based on harmonized principles. TSOs should refrain from integrating local particularities in the imbalance settlement price calculation for their balancing zone as these could de-optimize the functioning of the European balancing market.* *We are indeed in favour of a swift progression towards a well-functioning and seamlessly integrated European balancing market. Despite the above principle of a free price formation at the EU level, we are open to accepting mitigating measures, on the condition that this would facilitate the coupling with European balancing platforms. […] The imbalance price formula outlined in the T&C BRP, reflecting a lengthy and debated compromise, seeks an equilibrium between coupling with European platforms, mitigation measures for both TSOs (cap and floor, deadband) and BRPs (price cap and deadband) thereby*	Elia appreciates that stakeholders are open to accepting mitigation measures (consisting in deviating from the clearing prices of the EU platforms under specific circumstances) that are deemed as necessary to circumvent undesirable effects for both BRPs (e.g. extreme and unrepresentative prices) and TSOs (e.g. endangerment of grid security) due to missing integration/harmonization of real-time balancing mechanisms.

		circumventing undesirable effects due to still-incomplete market integration (including insufficient cross-border capacities within the balancing timeframe and the lack of liquidity of the Belgian FRR markets).	
	Centrica	*Elia has raised an important concern regarding the Cross-Border Marginal Price (CBMP) and its potential decorrelation from the Belgian System Imbalance, which may incentivize BRPs to aggravate the Belgian situation. To gain a comprehensive understanding of this scenario, we kindly request Elia to provide more concrete and quantified scenarios, elaborating on the high-level description provided in the explanatory note.*	Elia refers to the concrete and quantified scenarios provided by international experts and shared with the market in Elia's answer to CREG public consultation on the T&C BRP[5], and annexed to the accompanying note of the public consultation at stake. Such a quantified scenario developed by Elia can also be found in the slides[6] presented in the Workshop on System Balancing Philosophy of 20th January 2022. 

5 Available here : ELIA answer to CREG public consultation regarding modifications in the TC BRP by the CREG

6 Available here : 20220120 Workshop on System Balancing Philosophy (elia.be)

D. Introduction of cap/floor in the Imbalance Price formula

SUBJECT	STAKEHOLDER	FEEDBACK RECEIVED	ELIA'S VIEW
On the introduction of cap and floor as mitigation measure for TSO	FEBELIEC	*Febeliec **fully supports** the reasoning behind and the application of a cap and floor concept (to avoid perverse effects in imbalance price formation)*	Elia thanks FEBELIEC for its support.
	FEBEG	*The imbalance price formula outlined in the T&C BRP, reflecting a lengthy and debated compromise, seeks an equilibrium between coupling with European platforms, mitigation measures for both TSOs (**cap and floor**, deadband) and BRPs (price cap and deadband) thereby circumventing undesirable effects due to still-incomplete market integration (including insufficient cross-border capacities within the balancing timeframe and the lack of liquidity of the Belgian FRR markets)*	Elia appreciates that FEBEG considers the cap and floor as mitigation measures for TSO that allow circumventing undesirable effects on grid security, and that FEBEG is open to accepting these mitigation measures in the Imbalance Price formula that will be used as starting point to connect to the EU balancing platforms.
On the introduction of cap and floor as mitigation measure for BRPs	BOP	*Over and above a certain price level (or under and below), excessive imbalance prices are merely penalties for technologies that might not even be able to respond to the signal due to technical limitations, rather than incentives. BOP therefore calls for reasonable floors and caps to the imbalance prices, to avoid significant price increases when connecting to the EU platforms.*	Elia agrees with BOP that the Imbalance Price should aim at providing a clear price signal to the market and that when the Imbalance Price exceeds certain price level, this objective is no longer met (at that moment, the Imbalance Price does no longer reasonably reflect the true value of real-time energy). However, Elia would like to clarify that it is not the purpose of the caps and floors, as introduced in the Imbalance Price formula to prevent excessively high Imbalance Prices (that are not representative of the real-time value of energy). Instead, to limit the occurrence of excessive Imbalance Prices, Elia investigated two mitigation measures : - The introduction of a dead band that, in the future, could even be extended/sophisticated to further

			limit the impact of unrepresentative (and sometimes extreme) aFRR prices on the Imbalance Price. Elia refers to the next section of this report for more information regarding the dead band. - The application of a lower price cap for the Belgian aFRR market (than the current technical price cap which is set at 15k€ at European level). Elia refers to section 4.5 of this report for more information regarding these high prices mitigation measures.
Rules for applying the cap and floor	Centrica	*There is a lack of clarity in the current documentation regarding the applicability of the proposed cap and floor. It is not clear whether they apply in all situations or solely when Belgium and Europe have opposite system imbalances (cf. table below).* *Centrica believes that applying the cap and floor when the Belgian and European systems are in the same direction is unnecessary and would result in an increase in the Imbalance Price. We recommend a careful review and clarification of the rules to ensure that the cap and floor are appropriately applied.*	The cap and floor apply in all situations where the clearing prices from the EU balancing platforms would otherwise provide an incentive to BRPs to aggravate the imbalance of the Belgian LFC area, which corresponds most of the time to situations where Belgian LFC area and the rest of the European uncongested area have imbalances in opposite direction. However, even though it is not the most likely situation, it is not excluded that the cap (resp. the floor) applies while both the Belgian LFC area and the European uncongested area have a surplus (resp. a shortage) of energy. If Belgium is long (SI>25MW) and the aFRR/mFRR components, calculated based on the clearing prices of EU balancing platforms, are above the cap, be it because the uncongested area has an energy shortage <u>or</u> because lots of expensive production units were running in the neighbouring countries at the end of their local Intraday market and can hence be activated in the downward direction via aFRR or mFRR platforms at a relatively high clearing price, then the cap will set the Imbalance Price.

			If Belgium is short (SI<25MW) and the aFRR/mFRR components, calculated based on the clearing prices of EU balancing platforms, are below the floor, be it because the uncongested area has an energy surplus <u>or</u> because lots of cheap flexibility is available in the neighbouring countries at the end of their local Intraday market and can hence be activated in the upward direction via aFRR or mFRR platforms at a relatively low clearing price, then the floor will set the Imbalance Price. The application of the cap and floor in all situations where the clearing prices from the EU balancing platforms would otherwise provide an incentive to BRPs to aggravate the imbalance of the Belgian LFC area is necessary to avoid negative impacts on the system (going from real-time congestions to saturation of EU aFRR reserves, as explained in **<u>Elia's answer to CREG's public consultation on the T&C BRP</u>**).

E. Introduction of a dead band in the Imbalance Price formula

SUBJECT	STAKEHOLDER	FEEDBACK RECEIVED	ELIA'S VIEW
On the introduction of a dead band as mitigation measure for both BRPs and TSO	FEBELIEC	*Febeliec* ***fully supports*** *the reasoning behind and the application of* […] *the deadband concept (which its considers an essential component to ensure that no over/undershooting is taking place by BRPs and that the Belgian system imbalance would result in wild oscillations around a balanced position in some cases)*	Elia thanks FEBELIEC for its support.

	FEBEG	*The imbalance price formula outlined in the T&C BRP, reflecting a lengthy and debated compromise, seeks an equilibrium between coupling with European platforms, mitigation measures for both TSOs (cap and floor,* ***deadband****) and BRPs (****price cap*** *and* ***deadband****) thereby circumventing undesirable effects due to still-incomplete market integration (including insufficient cross-border capacities within the balancing timeframe and the lack of liquidity of the Belgian FRR markets).* *[…]* *Transitioning towards a mechanism where the imbalance price component for aFRR will be solely set by the highest price, exposes BRPs to extreme price signals.* *[…]* *In the meantime, Elia should investigate and implement – at the moment of the go-live to Picasso - mitigating measures that solve the issue of these extreme prices incurred by the Belgian BRPs*	Elia appreciates that FEBEG considers the dead band as a mitigation measure for both BRPs (by preventing Imbalance Prices that are very punitive for potentially unavoidable individual imbalances whereas the system is correctly balanced at an aggregated level; and, to a certain extent, by getting rid of the aFRR non-convexities and the extreme prices that are observed on the aFRR European platforms due to the current excessively high price caps on the aFRR bid) and TSO (by making the Imbalance Price much more stable for small system imbalances, hence preventing the occurrence of system oscillations). Elia understands that FEBEG accepts these mitigation measures in the Imbalance Price formula that will be used as starting point to connect to the EU balancing platforms. Elia also notes that FEBEG requires it to investigate and implement – at the moment of the connection to Picasso - mitigation measures that solve the issue of extreme Imbalance Prices resulting from the transition towards Picasso (where a pay-as-cleared mechanism and a high technical price cap apply). Elia would like to repeat that the dead band already offers such a mitigation measure, which could evolve to become even more efficient based on experience feedback. Aside from the dead band, Elia is also investigating other high prices mitigation measures, such as the possibility to apply a lower price cap on the (Belgian) aFRR market. Elia refers to section 4.5 of this report for more information regarding these high prices mitigation measures. However, Elia would like to clarify that this price cap would apply on the aFRR bid and not on the Imbalance Price itself. The price cap is therefore not part of

			the Imbalance Price formula proposed by Elia, contrary to what FEBEG seems to suggest in its comment.
	BOP	*The imbalance price should therefore not be seen as a punishment for (potentially unavoidable) individual BRP's imbalances, but much more as a guide for the market to respond correctly to these imbalances on an aggregated level.* *[…]* *Over and above a certain price level (or under and below), excessive imbalance prices are merely penalties for technologies that might not even be able to respond to the signal due to technical limitations, rather than incentives.* *[…]* *From a theoretical perspective, BOP therefore opposes the excessive price caps on the new platforms but* ***can support measures such as the dead band*** *that would smoothen price formation.*	Elia shares BOP's view and would like to insist that the dead band precisely aims at preventing Imbalance Prices that are very punitive for potentially unavoidable individual imbalances whereas the Belgian system is globally correctly balanced; and, to a certain extent, at getting rid of the aFRR non-convexities and the extreme prices that are observed on the aFRR European platforms.

F. Use of VoAA as a proxy of the ID index

SUBJECT	STAKEHOLDER	FEEDBACK RECEIVED	ELIA'S VIEW
On the definition of VoAA	Centrica	*The amended T&C BRP defines the Value of Avoided Activation (VoAA) for aFRR up and down as the price of the first Energy Bid in the local merit order list available for upward and downward regulation, respectively.*	As defined in the T&C BRP, the VoAA corresponds to the price of the first FRR Energy Bid for regulation in a given direction for a given Imbalance Settlement Period, considering both aFRR and mFRR LMOLs available **at the moment of the Balancing Energy Gate Closure Time (i.e. 25 minutes**

		Centrica seeks clarification on how this definition accounts for partial activations or activations that occur within an Imbalance Settlement Period (or quarter-hour). It remains unclear whether such bids are considered available and taken into consideration for the VoAA or not.	**before the real-time).** This value is therefore calculated **before any FRR activation** which makes the cases of partial activation or activations that occur within the ISP irrelevant.
On the reason for using the VoAA instead of an ID index	Centrica	*We acknowledge Elia's aspiration for the Imbalance Price to align with the last intraday index when the Belgian system is reasonably balanced. However, Elia expresses concerns about the current robustness of the 'ID1' index, which is the weighted average price of all continuous trades executed on the exchange within the last trading hour.* *Centrica invites Elia to provide further insights into the specific changes necessary to enhance the robustness of the Intraday index. Furthermore, we are keen to gain a better understanding of the process that would facilitate a transition from the VoAA to an Intraday index-based Imbalance Price. Clear explanations about the steps and timeline involved in this transition are required to prepare and adapt accordingly.*	Elia confirms its concerns related to the robustness of the ID1 index. Importantly, those concerns do less relate to the practicalities of the calculation of the indices than to the level of liquidity of the Belgian intraday market, which remains relatively low. As an illustration, the **methodology** used by EPEX defines the index "BE IDC ID1 15 minutes" as the volume-weighted average of the prices of all trades of a 15 minutes contracts taking place on the Belgian intraday market during the last hour time window before start of delivery. Though, when the traded volume to be used for this calculation is limited to less than 10MW, the index is instead calculated based on fallbacks using alternative indices. In practice, it can easily be observed that such fallbacks are frequently used for the Belgian indices, especially on the ID1 15 minutes indices. Unfortunately, it is not because the volume traded on the Belgian Intraday market during the last hour is low or inexistent that the fallbacks (which use the traded volume over a longer time period) are representative of the last market equilibrium. Indeed, it can be that significant balancing events occurred during the last hour before delivery, but that BRPs made adjustments within their portfolio to come back to their equilibrium without making "intra-portfolio" trades (at least as long as the Belgian ID market is not very liquid). In this case, the ID1 index cannot be representative of the last

			market equilibrium. However, the adjustments made by the BRPs in their portfolio having an impact on the FRR bids submitted by the associated BSPs, the VoAA can be impacted by these physical adjustments performed during the last hour before delivery and hence better reflects the last market equilibrium than ID1. The limited liquidity of the Belgian intraday market (as notably illustrated by the need to frequently use the “fallback index calculation”) is the primary concern in terms of robustness of intraday indices for Elia. Unfortunately, no concrete steps (or timeline) can be depicted at the moment to address such a concern, as the liquidity is a function of the collective behavior of the market, over which Elia has limited direct control. Elia is convinced that such an improvement of the Belgian intraday market liquidity will occur in the future. However, at this stage, Elia cannot provide precise metrics that assess if the liquidity is sufficient to consider the relevant indices robust enough to be used in the Imbalance Price formula. Separately, it is also to be noted that a single intraday index that represents the entire Belgian intraday market of all NEMOs would be the most relevant. Meanwhile, Elia maintains its proposal to use VoAA as the best possible and robust proxy of the last market equilibrium and as a basis for the calculation of the dead band and the cap/floor. Besides, Elia would like to remind that the current EU regulation (and more specifically EBGL and ISH) uses the VoAA as boundary conditions instead of an ID index. Therefore the

			compliancy of the VoAA is more obvious under the current legislation that the one of the ID index.
On the possibility for VoAA and hence Imbalance price manipulation	Centrica	*We recognize that the proposed floor and cap calculation aims at preventing manipulation. Including prices from both the aFRR up/down and mFRR up/down merit order lists makes it more difficult to manipulate the VoAA by submitting low dummy bids in one reserve, thus safeguarding the Imbalance Price from certain forms of manipulation.* *However, we share concerns regarding the potential creation of new gaming opportunities. For example, BRPs with long positions may have an incentive to increase the floor through high dummy bids in the merit order. This would result in a higher Imbalance Price for a BRP with a long position if the Marginal Incremental Price (MIP) sets the price (i.e., if Belgium is short).* *To maintain the integrity of the Imbalance Price and mitigate the risk of manipulation, it is essential to strike a balance between complexity and effectiveness. Keeping a simpler Imbalance Price calculation may avoid unintended side-effects, while potential manipulation could still be addressed by carefully monitoring bidding behavior, implementing robust surveillance mechanisms, and introducing clear guidelines on bid submission.*	Elia generally agrees that the complexity of the Imbalance Price should be managed so it can effectively provide a clear price signal to the market. However, the main purpose of the Imbalance Price is above all to provide correct price incentives to the market and a fortiori to avoid providing perverse incentives to market parties. Elia believes that the proposed formula for the calculation of the cap and floor does not overly complexify the Imbalance Price design, whereas it allows discouraging obvious Imbalance Price manipulation. Indeed, if the floor was set by the VoAA in the positive direction, and the cap by the VoAA in the negative direction, then a BSP which is associated to a BRP who usually contributes to the system imbalance would have strong incentive to set one dummy bid at a very low price in the upward direction and one dummy bid at a very high price in the downward direction to make sure that the Imbalance Price, when set by the cap/floor, is advantageous for the BRP. By defining the floor as the max of the VoAA in both direction, and the cap as the min of the VoAA in both direction, a BSP who would try to make the floor more advantageous (i.e. lower) for a BRP with a negative imbalance, by submitting a dummy bid at very low price in the upward direction, would automatically make the cap less advantageous (i.e. lower) for a BRP with a positive imbalance, and vice-versa. This makes

			price manipulations much riskier for BRPs who usually contribute to the system imbalance and hence also much less likely. In the situation suggested by Centrica, the BSP tries to make the floor more advantageous (i.e. higher) for a BRP with a positive imbalance, by submitting a dummy bid at high price in the downward direction. This type of manipulation can only be beneficial if the BRP is sure, at the moment when its associated BSP submits its offers (i.e. 25 minutes before real-time), that he will be able to help the Belgian system in real-time (i.e. that the BRP will be long and that Belgium will be short in real-time). Besides this tentative of manipulation only presents an added value for him if the clearing prices of the platforms are below the price of the dummy bid that the BSP submitted. If the BRP does eventually not manage to help the system in real-time, he will be (at least[7]) exposed to the high floor that his associated BSP has set. This way, the BRP is penalized by his own manipulation attempt. If Belgium is eventually long or if the clearing prices of the EU balancing platforms are higher than the artificially high floor set by the BSP, then the manipulation tentative barely has any effect on the BRP invoice. A BRP who has enough flexibility to be sure he will help the system in real-time (and hence benefit from this type of price manipulation) does not need to take the risk to manipulate the values of the cap and floor : he 'd better adjust his behavior depending on the real-time imbalance situation of the

[7] i.e. if the Imbalance Price is set by the floor because, for instance, the uncongested area is long at that moment

			LFC area and of the uncongested area. The price manipulation considered in Centrica's example is therefore deemed much less likely. To conclude, Elia deems that its proposed definitions for the cap and floor discourage the most plausible price manipulations and that the likelihood (as well as probability to succeed) of the residual possible price manipulations does not justify additional complexity in the design.

G. Alpha component

SUBJECT	STAKEHOLDER	FEEDBACK RECEIVED	ELIA'S VIEW
On the need for an additional component	FEBEG	*FEBEG has consistently stressed that the inclusion of activated FRR energy bids, solely, in the calculation of imbalance prices is crucial. Introducing additional components such as alpha distorts the market by diminishing the ability of imbalance prices to reflect real-time energy value. This, in turn, could undermine the essential signaling function of an efficient imbalance settlement price.*	Elia does not agree with FEBEG's reasoning and refers to the **explanatory note** (section 7.2) of the consultation at stake for the rationale behind the alpha component. Elia would also like to remind that it did not adapt the formula for the calculation of the alpha component but only copied this formula (which is primarily described in the Tariff Proposal) in the T&C BRP.
	FEBELIEC	*Febeliec fully supports the reasoning behind and the application of […] the alpha factor (as its reason for existence, the observation of sustained periods with substantial imbalances and hardly any (re)actions from BRPs can still be observed in the balancing markets)*	Elia thanks FEBELIEC for its support.

On the formula for the calculation of the alpha parameter	Centrica	*The alpha parameter aims to provide an additional incentive to address structural imbalances. Section 30.6 of the proposed T&C BRP mentions that this alpha parameter is expressed in EUR/MWh.* *However, we have identified potential issues with the formulas for the correction parameter cp. It appears that they mistakenly refer to αISP instead of cp. Indeed, the formulas determine a value between 0 and 1, which should apply to the correction parameter cp and not the alpha parameter αISP. Additionally, there seems to be a missing equal sign in the formula 'cp = (400 – MIPISP) / 200'.* *To ensure accurate calculations, we kindly ask Elia to clarify the formulas for the correction parameter cp as well as the alpha parameter αISP.*	Elia agrees with Centrica's observations and suggests to adapt identified typos in the definition of the correction parameter as highlighted in yellow : cp (i.e. correction parameter) is determined by the value of Marginal Incremental Price (MIP) and Marginal Decremental Price (MDP) such that - If System Imbalance$_{ISP}$ ≤ 0 then • If MIP_{ISP} > 400 EUR/MWh then cp = 0 • If 200 EUR/MWh < MIP_{ISP} ≤ 400 EUR/MWh then cp= (400 − MIP_{ISP})/ 200 • If MIP_{ISP} ≤ 200 EUR/MWh; cp = 1 - If System Imbalance$_{ISP}$ > 0 then • If MDP_{ISP} ≥ 0 EUR/MWh then cp = 1 • If -200 EUR/MWh ≤ MDP_{ISP} < 0 EUR/MWh then cp = (MDP_{ISP} + 200)/ 200 • If MDP_{ISP} < -200 EUR/MWh then cp = 0

H. Items excluded from the Imbalance Price

SUBJECT	STAKEHOLDER	FEEDBACK RECEIVED	ELIA'S VIEW
	Centrica	*Centrica acknowledges the proposed clarifications in the T&C BRP regarding the exclusion of balancing energy bids activated for purposes other than balancing from the calculations of the Marginal Incremental Price (MIP) and the Marginal Decremental Price (MDP). The explanatory note also indicates that all activations of mFRR for purposes other than balancing (e.g., redispatching) do not impact the imbalance price.* *To ensure a comprehensive understanding, we kindly request Elia to provide further clarification on whether this refers to mFRR activations to compensate for redispatching bids, referred to as 'compensation bids' in section 6.2 of the explanatory note related to T&C OPA and SA1? Or if it pertains to the activation of redispatching bids themselves?*	By "activations of mFRR for purposes other than balancing " we mean mFRR bids that are activated for redispatching purposes (and hence for which the location of the asset is important), as described in the T&C BSP mFRR. It therefore does not include the so called "compensation bids" for which the location of the asset does not matter. These compensation bids are indeed to be considered as mFRR bids activated **for** balancing purposes since they aim at solving an imbalance (even though created by the TSO and hence not linked to a specific BRP portfolio). The mFRR bids that are activated for compensation purposes are therefore not excluded from the calculation of the MIP/MDP, which is consistent with the fact that these bids were activated to solve an imbalance and should hence be reflected in the price signal that Elia provides to the BRP to balance the system (in a reactive balancing model). To this extent and for the sake of completeness, any action performed by the TSO that requires a compensation (such as the activation of a RD energy bid, activation tests, etc.) may **indirectly** impact the Imbalance Price (since it impacts the SI and hence the mFRR demand of Elia and therefore possibly also the mFRR Marginal Price), and this even though the price of the activated RD bid is excluded from the calculation.

			In order to avoid any confusion in the T&C BRP, Elia suggests to adapt the paragraph mentioning the prices to be excluded from the calculation of the MIP as highlighted in yellow here below (similar adaptations will of course also be proposed for the calculation of the MDP): " The following items are excluded from the Marginal Incremental Price: - The prices for the regulation from the IN-Platform; - The price of the balancing energy bids activated for other purposes than balancing (according to the applicable T&C BSP); - The price of the RD energy bids (even when they are activated in accordance with the LFCBOA) - The activation of FCR; - Prices defined in bilateral contracts in the framework of mFRR sharing agreements between neighboring TSOs (whether at the request of ELIA or at the request of the neighboring TSO).

4.4 Evaluation plan

SUBJECT	STAKEHOLDER	FEEDBACK RECEIVED	ELIA'S VIEW
On the need to monitor, assess and when needed adjust the Imbalance Price formula	*FEBEG*	*FEBEG's primary objective is to start with a compromise (a stance positioned as a middle ground meeting the diverse demands of the different stakeholders). This approach aims to initiate progress and, with time, refine the imbalance price formula based on the insights gained from factors such as integration with EU platforms, increased market liquidity, increase of non-contracted energy bids enabled through iCAROS implementation, and other pertinent elements, and overall based on the availability of more data to analyze how markets behave once coupled through the European Balancing platforms.* *FEBEG can agree to go live with the imbalance formula as proposed by ELIA in the current proposal submitted to consultation, under the following conditions:* *1. Commitment to Test Alternative Price Formulas* *FEBEG appreciates the commitment made by Elia in the chapter 9 of the explanatory note to come up with an evaluation plan by the connection to MARI and a potential review of the IP calculation after the connection to the balancing platforms. It is indeed necessary to factually confirm the relevance of the safeguards added in the IP calculation such as cap, floor, deadband and possibly relax or decommission them.* *FEBEG wishes to be specific on this commitment and expects a testing – along with studies and presentation of the learning made – which should include:* *A.Test IP formula without deadband;* *B.Test IP formula without cap and floor using VOAA;* *C.Test IP formula without deadband and without cap and floor using VOAA*	Elia reiterates its intention to periodically review the structure and parameters of the imbalance pricing formula, in consultation with all involved stakeholders, in order to continuously improve this formula in light of observation and experience, with the objective of striking the right balance between operational risks and overall economic efficiency. It also confirms and repeats its commitment to discussing with market parties and CREG in order to develop an evaluation plan of the Imbalance Price formula before the connection to MARI. However, Elia remains convinced that the evaluation procedure should first be further developed and discussed with the stakeholders before fixing its detailed modalities and can therefore not be included now in the implementation plan of the <u>ongoing</u> revision of the T&C BRP. Elia indeed appreciates FEBEG's inputs regarding this procedure and will definitely consider this input as starting point for the discussions to be held with the market parties. However, Elia believes that some aspects of this procedure should be further clarified in order to build a robust evaluation plan. For instance, FEBEG asks that the test is based on a relevant data set of 12 months. Elia believes that the 'relevance" of the data set should be further discussed : does the relevant observation period start once Belgium is connected to one EU balancing platform? To both of them? Or once some critical neighboring countries connect to these platforms?

		For the avoidance of doubt, FEBEG asks that this test contains at least an analysis on a relevant dataset of 12 months, the output of the tests should be twofold: *(i) Present what the imbalance price would have been in the alternative scenario's over those 12 months* *(ii) Evaluate the delta and if possible impacts on BRPs reaction (what if analysis)* *The analysis should be organized in a transparent and fair way with the practical modalities and parameters being defined in cooperation with market-parties and the results should be presented to the stakeholders and trigger a recommendation that is publicly consulted. FEBEG has the strong conviction and agrees with Elia's viewpoint in its explanatory note that each future and further changes to the imbalance price formula are based on such an analysis. FEBEG also strongly supports and looks forward to participating to the evaluation plan as referred to in the chapter 9 of the same document which we quote: "Practically, Elia commits to discuss with market parties and CREG in order to propose an evaluation plan by the connection to MARI on how to best execute such periodical reviews".* *Initially, FEBEG expected the commitment from ELIA regarding the testing of alternative price formulas to be part of the T&C. FEBEG kindly urges Elia to incorporate this commitment, alongside the specified procedures described in this answer, in the T&C, or alternatively for the CREG to list it as conditions for the acceptance of the T&C.*	Besides, Elia strongly appreciates the approach suggested by FEBEG, relying on "what if analysis" and not on a "real-life trial and error" process. Elia indeed strictly opposes such "trial and error" process that would jeopardize the grid security. Elia therefore suggests to adapt the implementation plan of the T&C BRP as highlighted in yellow : (1) These T&C BRPs shall take effect after their approval by the relevant regulatory authorities and together with the entry into force of the T&C BSP mFRR developed in the context of the accession to the mFRR-Platform and the next amendment to the Balancing Rules prepared for this same purpose. (2) Elia commits to developing a plan for the evaluation of the rules for calculating the Imbalance Price (including the testing of alternative price formulas) in collaboration with the market parties and before the first (aFRR or mFRR) EU Go-Live. This evaluation plan will be discussed in the Working Group Balancing meetings. Once the members of the Working Group Balancing agree on a plan, it will be sent for approval to the CREG. The evaluation period will start as soon as Belgium is connected to one EU balancing platform. The purpose of the evaluation plan will be to assess whether some components of the Imbalance Price are irrelevant and can hence be omitted, or whether they can be improved and to propose the (possibly gradual) removal of the irrelevant components or their improvement where deemed appropriate while safe for the system security. This assessment will be done based on a "what if analysis". Depending on the procedure specified in the evaluation plan developed with the stakeholders, Elia could already propose some adjustments in the rules for calculating the Imbalance

			Price in a next revision of the T&C BRP[8], in order to make these rules more flexible for possible evolutions. For instance, specific values, such as the width of the dead band, could be parametrized instead of being set to 25MW in the current proposal.
	BOP	*BOP calls for a continuous monitoring of the imbalance price, to assess its volatility and predictability, as these factors underpin the incentive-value of the imbalance price. Any imbalance price design should be evaluated on these criteria.*	Elia confirms its intention to organize a periodic monitoring of the Imbalance Price and to assess its performance against different criteria, among others those identified as critical in BOP's answer. The frequence and format of the evaluation will be discussed with the market parties in the context of the development of the evaluation plan.

4.5 Approach for connecting to EU BAL platforms and related mitigation measures

SUBJECT	STAKEHOLDER	FEEDBACK RECEIVED	ELIA'S VIEW
On the roadmap for the connection to EU balancing platforms.	*FEBEG*	*FEBEG members, as well as other stakeholders, have invested considerable time and effort in designing and implementing connections to the European integrated balancing market. These stakeholders share a common goal: to realize the advantages of integrating and harmonizing balancing markets across Europe, which should ultimately be beneficial for the market and all the grid users.* *[…]*	Elia confirms its willingness to connect to the European balancing Platforms without unnecessary delay and hopes that its compromise proposal will be approved, so that it can be used as starting point for the connection to the European balancing platforms - in a way that is secure for the grid - and, by this, end the current deadlock situation.

[8] Note that revisions are already foreseen in 2024 for other topics such as multiple BRPs.

	BOP	*BOP calls for more visibility on all regulatory or market changes ahead, and a more incremental approach to changes, allowing the market to learn, and to adopt gradually. A conservative implementation timeline of all related changes (to Picasso, Mari, and iCAROS) is therefore supported* *[…]* *It seems to us that there are still many uncertainties about the introduction, detailed working and outcome of the European reserve platforms (both MARI and PICASSO). We propose to continue to carefully evaluate and discuss the ongoing evolutions (f.i. regarding the timing and connection of the other connecting countries) in the workings groups before making firm decisions on connecting Belgium to the EU platforms.*	Elia thanks BOP for the acknowledgment of the implemented reforms and their impact on the development of liquidity. While the timeline of the changes is indeed challenging, Elia emphasizes that they are needed to even further develop the mFRR and aFRR energy products as well as to comply with EBGL provisions (as the derogation to connect to the European platforms ends in July 2024). For this reason, Elia has been working in close collaboration with market parties and with the regulator in order to define the roadmap for the evolutions in the balancing markets, including an incremental approach, where possible, and significant time between the finalization of the design and the planned go live dates. Based on the decision taken end of 2022 in regards with the connection to the aFRR-Platform, the roadmap has been updated early 2023 based on the feedbacks received from the market parties. Finally, Elia reminds that the market risks related to the connection to the aFRR-Platform have been carefully evaluated and that those risks are being tackled, taking into account the connection of other countries. This will be discussed further during the stakeholder workshops for aFRR in September and October. It's worth noting that similar market risks have not been identified for the connection to the mFRR-Platform.
On the need for high prices mitigation measures	FEBEG	*FEBEG can agree to go live with the imbalance formula as proposed by ELIA in the current proposal submitted to consultation, under the following conditions:* *1.[…]* *2. Commitment to investigate and implement mitigation measures to tackle the risk of high imbalance price set by aFRR in case of lack of ATC's*	Elia confirms its willingness to connect to the aFRR-Platform and fully understands the concerns expressed by FEBEG and BOP and the call for mitigation measures to prevent the occurrence of extreme prices in situations of limited or no ATCs.

		FEBEG repeats its strong willingness to connect to MARI/PICASSO as soon as it is possible. Nevertheless FEBEG wants to point out that, for aFRR, when we fall in a local merit order, there is very little liquidity because the Belgian aFRR merit-order is significantly smaller than in other EU countries which risks to lead to high imbalance prices for BRPs. *Effectively, this lack of liquidity causes already higher prices today, even with a weighted average of the activated bid prices. Transitioning towards a mechanism where the imbalance price component for aFRR will be solely set by the highest price, exposes BRPs to extreme price signals.* *With the increase of renewable generation in the coming years, the imbalance will increase leading to more frequent activations. As a result, the end of the Belgian merit-order will be reached several times.* *Sufficient liquidity and availability of ATCs is key to ensure a successful European integration for the aFRR market. FEBEG is of the opinion that:* *- Elia should work on removing possible barriers preventing more aFRR energy bidding today and increasing liquidity in the local aFRR merit order.* *- In the meantime, Elia should investigate and implement – at the moment of the go-live to Picasso - mitigating measures that solve the issue of these extreme prices incurred by the Belgian BRPs. At least, a temporary price cap on the Belgian aFRR energy bids should be implemented to prevent a strong increase of the activation costs and BRP costs. The temporary price cap can be re-evaluated every x months when observed prices are getting better due to more batteries, for instance, offered in aFRR.*	First of all, Elia ensures that intense discussions are taking place with the Belgian regulator on local mitigation measures, as well as with other TSOs, NRAs and with ACER to define and implement mitigation measures at European level. It is to be noted that, as mentioned by BOP, the observation round performed in 2022 was focused on the aFRR market. BOP opposes in its response to excessive price caps on the new platforms in general (hence including MARI). It should be noted that similar simulations have not been performed for the mFRR because no risk of significant cost increase of activations has been identified for the connection to the mFRR-Platform, even with a price cap at 15.000€/MWh, our local design being already very close to the target design (marginal price, price cap of 13.5k€/MWh) Therefore, while a lower price cap appears to be needed and justifiable for the Belgian aFRR market, Elia wishes to preserve in the mFRR market a greater latitude for the participation of all sources of flexibility, including the most expensive, as these could prove useful in the most severe cases of imbalance. This topic will be discussed with market parties in aFRR stakeholder workshops in September and October. Besides, Elia would like to point out that, next to these mitigation measures that are not linked to the Imbalance Price formula, the dead band as proposed in T&C BRP also partly accommodates the request of FEBEG to attenuate extreme prices stemming from aFRR. It is therefore difficult to understand why FEBEG considers the high prices mitigation
	BOP	*Based on Elia's observation round performed in Q3 2022, it appears that the change from paid-as-bid to paid-as-cleared, and the increase of the price cap from +-1,000 EUR/MWh to +-15,000 EUR/MWh for local aFRR bids has a much larger impact than the new imbalance price calculation (and whether or not such calculation introduces a dead band and or a cap/floor). […] From a theoretical perspective, BOP therefore opposes the excessive price caps on the new platforms*	

			measures as a condition for accepting to go-live with the Imbalance Price formula proposed by Elia instead of with FEBEG's preferred formula, as it was detailed in last FEBEG and FEBELIEC 's common reply to the consultation initiated by the CREG, since the latter does not include the dead band, and hence precisely makes BRPs' exposure to extreme Imbalance Prices more important than with Elia's proposal. Even though Elia strongly commits to continue investigating and discussing high prices mitigation measures, this commitment will not be included in the T&C BRP since, aside from the dead band, the other investigated mitigation measures are not related to the Imbalance Price formula but rather to the T&C BSP or to European framework. Besides, in order to avoid unnecessary delay for the connection to the EU balancing platforms, it seems more logic and pragmatic to consider those mitigation measures as pre-requisite for the connection to Picasso and not as a condition for the approval of the T&C BRP, knowing that the connection to MARI (which can only happen once the T&C BRP is approved) will likely happen before the connection to Picasso, and that the mitigation measures required by FEBEG only target Picasso, and not MARI.

4.6 DA Balance obligation

SUBJECT	STAKEHOLDER	FEEDBACK RECEIVED	ELIA'S VIEW
Relaxation of the DA Balance Obligation	*FEBELIEC*	*Considering the relaxation of the day head balance obligation for BRPs, Febeliec understands that this should result soon in the de facto abolition of this obligation yet remains very worried about this evolution as it considers his to undermine the central role of the obligation to be balanced for BRPs, with Elia only being responsible for the residual system imbalances. Febeliec insists that a very strict monitoring of the impact of this relaxation is maintained and that if any negative influence should be detected of this relaxation, that this would again be introduced or alternative solutions applied in order to avoid any negative impact on the overall system costs and the invoices of Elia grid users*	Elia would like to highlight that the proposal for amendment of the T&C BRP comprises no change to the implementation plan of the relaxation of the day-ahead balance obligation (as introduced in the T&C BRP that entered into force in December 2021). In this regard: • The current proposal for amendment does not contain an abolition of the day-ahead balance obligation. Indeed, following the evaluation performed by Elia in July 2023, the maximum authorized day-ahead imbalance that can be taken by a BRP remains at 100% of the size of its portfolio. • The implementation plan related to the progressive relaxation of the day-ahead balance obligation foresees both evaluations of the potential impact of the relaxation of the day-ahead balance obligation and a possibility to decrease the maximum authorized relative day-ahead imbalance at any moment in case a significant negative impact on the reliability, safety or efficiency of the grid would be detected. As such, Elia believes the concerns of FEBELIEC are currently well addressed. Nevertheless, if at a certain moment there is a proposal to fully abolish the day-ahead balance obligation, Elia will discuss with the market and take into account the concerns voiced by FEBELIEC.

5. Next steps

On the basis of the reactions received from market players and its views, as set out in this consultation report, Elia suggested some adaptations to the T&C BRP. The new proposal of amendments of the T&C BRP, together with the consultation report and all received responses are submitted to the CREG.
After submission to the CREG, the new proposal of amendments of the T&C BRP and the consultation report are published on Elia's website.

As a next step Elia will initiate discussions with the market parties regarding the evaluation plan for the Imbalance Price formula.

6. Attachments

The non - confidential reactions Elia received to the document submitted for consultation:

1) BOP
2) Centrica
3) FEBEG
4) FEBELIEC

Contact

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Feedback in response to the public consultation on the proposal of amendment of the T&C BRP

In this reaction, Belgian Offshore Platform responds to the public consultation on the proposal of amendment of the T&C BRP as launched by Elia on the 12th of July 2023.

1. Long term visibility of regulatory and market changes is key

Even though BOP has not been overly involved in the technical details of the dossier in the past we do wish to express and repeat a few generic remarks.

In an energy market dominated by renewables, market-access to flexibility at reasonable and predictable prices, is crucial. BOP recognises that Elia has pushed for certain reforms to attract additional flexibility (e.g., reforms of the mFFR and aFRR products). But in order to ensure that new and potentially smaller players can enter this market, the complexity must be managed.

BOP calls for more visibility on all regulatory or market changes ahead, and a more incremental approach to changes, allowing the market to learn, and to adopt gradually. A conservative implementation timeline of all related changes (to Picasso, Mari, and iCAROS) is therefore supported.

2. General concept of imbalance prices

The imbalance price is a tool that is predominantly aimed at providing a correct incentive to BRPs to assist in solving a market imbalance. Under normal market circumstances, the imbalance price will reflect the price at which Elia, as the actor of last resort, can solve the imbalance. If the market can do so cheaper, it will, if not, Elia resolving the imbalance is the most economically efficient solution.
For the imbalance to provide a correct incentive, it must (i) reflect the market imbalance that is to be solved, and (ii) acts as a proper short-term incentive for BRPs that have the ability to react to do so, and provide a proper long-term incentive for BRPs to develop flexibility if required.

Without negating a BRP's inherent responsibility to -as much as possible- limit its' imbalance, imbalances are an inherent and unavoidable part of an electricity system driven by weather-dependent energy sources, and our system needs to be able to deal with such imbalances. The imbalance price should therefore not be seen as a punishment for (potentially unavoidable) individual BRP's imbalances, but much more as a guide for *the market* to respond correctly to these imbalances on an aggregated level.

Thus, an imbalance price should, in our opinion, have the following characteristics:

- **Limited volatility, without excesses (in either direction)**: over and above a certain price level (or under and below), excessive imbalance prices are merely penalties for technologies that might not even be able to respond to the signal due to technical limitations, rather than incentives. BOP therefore calls for reasonable floors and caps to the imbalance prices, to avoid significant price increases when connecting to the EU platforms. Excessively high prices merely increase the risk for market actors (and thus increase the price for end-consumers), and do not necessarily incentivize new investments in flexible assets, as long-term asset investment decisions are not made on price spikes but on consistent averages. Excessive

prices can thus lead to the contradictory results of having less flexibility available, and disproportionally punishing BRPs with renewable energy portfolios.
- **Understandable and predictable price formation**: the right information should be given to market actors so that they can anticipate the evolution of the market problem and thus the price evolution. This is crucial if the price is to incentivise appropriate (re)action on a quarter-hourly basis.

Based on Elia's observation round performed in Q3 2022, it appears that the change from paid-as-bid to paid-as-cleared, and the increase of the price cap from +-1,000 EUR/MWh to +-15,000 EUR/MWh for local aFRR bids has a much larger impact than the new imbalance price calculation (and whether or not such calculation introduces a dead band and or a cap/floor).

BOP calls for a continuous monitoring of the imbalance price, to assess its volatility and predictability, as these factors underpin the incentive-value of the imbalance price. Any imbalance price design should be evaluated on these criteria. From a theoretical perspective, BOP therefore opposes the excessive price caps on the new platforms but can support measures such as the dead band that would smoothen price formation. For a more informed positioning however, BOP would require monitoring of actual (price) data.

3. Remarks related to EU harmonisation

It seems to us that there are still many uncertainties about the introduction, detailed working and outcome of the European reserve platforms (both MARI and PICASSO). We propose to continue to carefully evaluate and discuss the ongoing evolutions (f.i. regarding the timing and connection of the other connecting countries) in the workings groups before making firm decisions on connecting Belgium to the EU platforms.

We support Elia's observation that a long-term vision with regards to the imbalance price formation needs to be developed, taking into account connection to both Mari and Picasso. We also understand that not all European countries support a further development of intraday and real time market integration. This already today leads to suboptimal conditions in the market, such as limited intraday ATC availability. A European wide supported approach seems to us a prerequisite for Belgium to use harmonized imbalance prices. Otherwise, Belgian market actors will bear the cost of the inefficiencies that arise- that is not at all their responsibility.

centrica

Public consultation on the T&C BRP

28 August 2023

Executive summary

Centrica thanks Elia for the opportunity to provide comments on the consultation of the T&C BRP.

Key objectives of the amended T&C BRP is to prepare for the participation to the European platforms MARI and PICASSO, by describing the calculation of the Imbalance Price components, transferring certain components from the Balancing Rules, and incorporating the 'alpha' component from the Tariffs.

In this sense, Centrica would like to share following comments:

- We support the consolidation of Imbalance Price related aspects in the T&C BRP.
- We kindly request Elia to provide clarification regarding the CBMP, VoAA, floor/cap application, Intraday indexed Imbalance Price, redispatching bids and alpha parameter.
- We encourage Elia to avoid complexity in the imbalance price calculation and increase resilience against gaming through robust monitoring mechanisms.

Centrica supports the consolidation of Imbalance Price related aspects in the T&C BRP

We support the transfer of Imbalance Tariff components from the Balancing Rules to the T&C BRP. It is commendable that all aspects related to the Imbalance Price are now consolidated into one document. This simplification is much needed, as it previously caused confusion and complexity.

Centrica kindly requests Elia to provide clarification regarding the CBMP, VoAA, floor/cap application, Intraday indexed Imbalance Price, redispatching bids and alpha parameter

1. Cross-Border Marginal Price and aggravation of the system imbalance

One of the stated objectives of the new Imbalance Price formula is to benefit from the integration with the European platforms MARI and PICASSO without jeopardizing grid security.

Elia has raised an important concern regarding the Cross-Border Marginal Price (CBMP) and its potential decorrelation from the Belgian System Imbalance, which may incentivize BRPs to aggravate the Belgian situation. To gain a comprehensive understanding of this scenario, we kindly request Elia to provide more concrete and quantified scenarios, elaborating on the high-level description provided in the explanatory note.

centrica

2. Value of Avoided Activation and partial activations, or activations within the quarter-hour

The amended T&C BRP defines the Value of Avoided Activation (VoAA) for aFRR up and down as the price of the first Energy Bid in the local merit order list available for upward and downward regulation, respectively.

Centrica seeks clarification on how this definition accounts for partial activations or activations that occur within an Imbalance Settlement Period (or quarter-hour). It remains unclear whether such bids are considered available and taken into consideration for the VoAA or not.

3. Application of the cap and floor

There is a lack of clarity in the current documentation regarding the applicability of the proposed cap and floor. It is not clear whether they apply in all situations or solely when Belgium and Europe have opposite system imbalances (cf. table below).

Centrica believes that applying the cap and floor when the Belgian and European systems are in the same direction is unnecessary and would result in an increase in the Imbalance Price. We recommend a careful review and clarification of the rules to ensure that the cap and floor are appropriately applied.

	Belgium long	**Belgium short**
Europe long	*Does cap/floor apply?*	Cap/floor applies
Europe short	Cap/floor applies	*Does cap/floor apply?*

4. Intraday index-based Imbalance Price

We acknowledge Elia's aspiration for the Imbalance Price to align with the last intraday index when the Belgian system is reasonably balanced. However, Elia expresses concerns about the current robustness of the 'ID1' index, which is the weighted average price of all continuous trades executed on the exchange within the last trading hour.

Centrica invites Elia to provide further insights into the specific changes necessary to enhance the robustness of the Intraday index. Furthermore, we are keen to gain a better understanding of the process that would facilitate a transition from the VoAA to an Intraday index-based Imbalance Price. Clear explanations about the steps and timeline involved in this transition are required to prepare and adapt accordingly.

5. Redispatching bids

Centrica acknowledges the proposed clarifications in the T&C BRP regarding the exclusion of balancing energy bids activated for purposes other than balancing from the calculations of the Marginal Incremental Price (MIP) and the Marginal Decremental Price (MDP). The explanatory note also indicates that all activations of mFRR for purposes other than balancing (e.g., redispatching) do not impact the imbalance price.

To ensure a comprehensive understanding, we kindly request Elia to provide further clarification on whether this refers to mFRR activations to compensate for redispatching bids, referred to as 'compensation bids' in section 6.2 of the explanatory note related to T&C OPA and SA[1]? Or if it pertains to the activation of redispatching bids themselves?

6. Alpha parameter

The alpha parameter aims to provide an additional incentive to address structural imbalances. Section 30.6 of the proposed T&C BRP mentions that this alpha parameter is expressed in EUR/MWh.

However, we have identified potential issues with the formulas for the correction parameter *cp*. It appears that they mistakenly refer to α_{ISP} instead of *cp*. Indeed, the formulas determine a value between 0 and 1, which should apply to the correction parameter *cp* and not the alpha parameter α_{ISP}. Additionally, there seems to be a missing equal sign in the formula '$cp = (400 – MIP_{ISP}) / 200$'.

To ensure accurate calculations, we kindly ask Elia to clarify the formulas for the correction parameter *cp* as well as the alpha parameter α_{ISP}.

Centrica encourages Elia to avoid complexity in the Imbalance Price calculation and increase resilience against gaming through robust monitoring mechanisms

We recognize that the proposed floor and cap calculation aims at preventing manipulation. Including prices from both the aFRR up/down and mFRR up/down merit order lists makes it more difficult to manipulate the VoAA by submitting low dummy bids in one reserve, thus safeguarding the Imbalance Price from certain forms of manipulation.

However, we share concerns regarding the potential creation of new gaming opportunities. For example, BRPs with long positions may have an incentive to increase the floor through high dummy bids in the merit order. This would result in a higher Imbalance Price for a BRP with a long position if the Marginal Incremental Price (MIP) sets the price (i.e., if Belgium is short).

To maintain the integrity of the Imbalance Price and mitigate the risk of manipulation, it is essential to strike a balance between complexity and effectiveness. Keeping a simpler Imbalance Price calculation may avoid unintended side-effects, while potential manipulation could still be addressed by carefully monitoring bidding behavior, implementing robust surveillance mechanisms, and introducing clear guidelines on bid submission.

[1] https://www.elia.be/-/media/project/elia/elia-site/public-consultations/2023/20230606tc-opa-sa-coordination-rules---explanatory-document_v2.pdf

POSITION

Subject: FEBEG's position regarding the public consultation on the T&C BRP
Date: 28 August 2023

Contact: Jean-François Waignier
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Introduction

FEBEG thanks ELIA for the opportunity to give its inputs to ELIA's *Public consultation on the proposal of amendment of the T&C BRP*[1]. This document is not confidential.

Context

In the context of this consultation and specifically on the imbalance price calculation, FEBEG wants to repeat the considerations already shared in previous consultations:

- **FEBEG members**, as well as other stakeholders, **have invested considerable time and effort in designing and implementing connections to the European integrated balancing market.** These stakeholders share a common goal: to realize the advantages of integrating and harmonizing balancing markets across Europe, which should ultimately be beneficial for the market and all the grid users.
- **FEBEG expresses deep concerns about the ongoing absence of consensus within Belgium among ELIA, CREG, and market participants regarding the balancing philosophy.** Specifically, the difficulty to find a compromise around the calculation of imbalance settlement prices in the long term. FEBEG is troubled by the lack of progress in this matter, despite concerted efforts and attempts at reaching middle-ground compromises. This impasse is worrisome as it sends a very undesired signal to the market.
- **FEBEG believes that** – in a European integrated balancing market – **the value of energy towards real-time should be defined by the price formation on the EU platforms and translated in imbalance settlement prices based on harmonized principles. TSOs should refrain from integrating local particularities in the imbalance settlement price calculation** for their balancing zone as these could de-optimize the functioning of the European balancing market.

We are indeed in favour of a swift progression towards a well-functioning and seamlessly integrated European balancing market. Despite the above principle of a free price formation at the EU level, **we are open to accepting mitigating measures, on the condition that this would facilitate the coupling with European balancing platforms.**

[1] https://www.elia.be/en/public-consultation/20230712_public_consultation-on-the-proposal-of-amendment-of-the-tc-brp

General comments

The imbalance price formula outlined in the T&C BRP, reflecting a lengthy and debated compromise, seeks an equilibrium between coupling with European platforms, mitigation measures for both TSOs (cap and floor, deadband) and BRPs (price cap and deadband) thereby circumventing undesirable effects due to still-incomplete market integration (including insufficient cross-border capacities within the balancing timeframe and the lack of liquidity of the Belgian FRR markets). FEBEG firmly believes that Belgium should continue its prudent and pragmatic steps toward a fully integrated European balancing market without unnecessary delays.

It is important to note that this feedback should not bring prejudice to previous reactions submitted by FEBEG to previous consultations. FEBEG's primary objective is to start with a compromise (a stance positioned as a middle ground meeting the diverse demands of the different stakeholders). This approach aims to initiate progress and, with time, refine the imbalance price formula based on the insights gained from factors such as integration with EU platforms, increased market liquidity, increase of non-contracted energy bids enabled through iCAROS implementation, and other pertinent elements, and overall based on the availability of more data to analyze how markets behave once coupled through the European Balancing platforms.

Specific Comments on the follow -up and next steps

If the compromise proposal as it was detailed in last FEBEG and FEBELIEC 's common reply to the consultation initiated by the CREG[2] – which would still be FEBEG's preference – is not retained, FEBEG can agree to go live with the imbalance formula as proposed by ELIA in the current proposal submitted to consultation, under the following conditions:

1. <u>**Commitment to Test Alternative Price Formulas**</u>

FEBEG appreciates the commitment made by Elia in the chapter 9 of the explanatory note to come up with an evaluation plan by the connection to MARI and a potential review of the IP calculation after the connection to the balancing platforms. It is indeed necessary to factually confirm the relevance of the safeguards added in the IP calculation such as cap, floor, deadband and possibly relax or decommission them.

FEBEG wishes to be specific on this commitment and expects a testing – along with studies and presentation of the learning made – which should include:

A. Test IP formula without deadband;
B. Test IP formula without cap and floor using VOAA;
C. Test IP formula without deadband and without cap and floor using VOAA.

[2] We refer to the document *FEBEG and FEBELIEC's position regarding the consultation on the review of the "T&C BRP" in the context of the integration of the calculation of the imbalance price* dated of 06/02/2023.

For the avoidance of doubt, FEBEG asks that this test contains at least an analysis on a relevant dataset of 12 months, the **output of the tests should be twofold**:

(i) Present what the imbalance price would have been in the alternative scenario's over those 12 months
(ii) Evaluate the delta and if possible impacts on BRPs reaction (what if analysis)

The analysis should be organized in a transparent and fair way with the practical modalities and parameters being defined in cooperation with market-parties and the results should be presented to the stakeholders and trigger a recommendation that is publicly consulted. FEBEG has the strong conviction and agrees with Elia's viewpoint in its explanatory note that each future and further changes to the imbalance price formula are based on such an analysis. FEBEG also strongly supports and looks forward to participating to the evaluation plan as referred to in the chapter 9 of the same document which we quote: "*Practically, Elia commits to discuss with market parties and CREG in order to propose an evaluation plan by the connection to MARI on how to best execute such periodical reviews*".

Initially, FEBEG expected the commitment from ELIA regarding the testing of alternative price formulas to be part of the T&C. FEBEG kindly urges Elia to incorporate this commitment, alongside the specified procedures described in this answer, in the T&C, or alternatively for the CREG to list it as conditions for the acceptance of the T&C.

2. Commitment to investigate and implement mitigation measures to tackle the risk of high imbalance price set by aFRR in case of lack of ATC's

FEBEG repeats its strong willingness to connect to MARI/PICASSO as soon as it is possible. Nevertheless FEBEG wants to point out that, for aFRR, when we fall in a local merit order, there is very little liquidity because the Belgian aFRR merit-order is significantly smaller than in other EU countries which risks to lead to high imbalance prices for BRPs.
Effectively, this lack of liquidity causes already higher prices today, even with a weighted average of the activated bid prices. Transitioning towards a mechanism where the imbalance price component for aFRR will be solely set by the highest price, exposes BRPs to extreme price signals.

With the increase of renewable generation in the coming years, the imbalance will increase leading to more frequent activations. As a result, the end of the Belgian merit-order will be reached several times.

Sufficient liquidity and availability of ATCs is key to ensure a successful European integration for the aFRR market. FEBEG is of the opinion that:

- Elia should work on removing possible barriers preventing more aFRR energy bidding today and increasing liquidity in the local aFRR merit order.
- In the meantime, Elia should investigate and implement – at the moment of the go-live to Picasso – mitigating measures that solve the issue of these extreme prices incurred by the Belgian BRPs. At least, a temporary price cap on the Belgian aFRR energy bids should be implemented to prevent a strong increase of the activation costs and BRP costs. The temporary price cap can be re-evaluated every x months when observed prices are getting better due to more batteries, for instance, offered in aFRR.

Additional comments on the formula

Finally, there are two aspects that FEBEG would like to address:

1. FEBEG's initial understanding was that **all optimization cycles within an Imbalance Settlement Period (ISP) would contribute to the calculation of the Imbalance Price (MIP/MDP),** regardless of the activated aFRR energy bid's direction or the system imbalance's sign within that ISP. However, the **provided formulas appear to deviate from this principle** in situations where ELIA is disconnected from the aFRR platform. Specifically, the formula outlined in the T&C BRP proposes that MIP (respectively MDP) should solely incorporate optimization cycles with upward (respectively downward) aFRR activated bids. **FEBEG's standpoint is that all optimization cycles should be included, likewise other scenarios where ELIA is connected to the aFRR platform.**
2. **FEBEG has consistently stressed that the inclusion of activated FRR energy bids, solely, in the calculation of imbalance prices is crucial. Introducing additional components such as alpha distorts the market by diminishing the ability of imbalance prices to reflect real-time energy value**. This, in turn, could undermine the essential signaling function of an efficient imbalance settlement price.

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Febeliec answer to the Elia consultation on the proposal of amendments of the T&C BRP in the context of the connection to the balancing platforms

Febeliec would like to thank Elia for this consultation on its proposal of amendments of the T&C BRP in the context of the connection to the balancing platforms. Febeliec would like to refer also to its answer to previous consultations on this topic. Regarding the consultation at hand, Febeliec wants to voice its support to the Elia proposal, as it provides a good compromise which was discussed at great length during the meetings of the WG Balancing.

Febeliec **fully supports** the reasoning behind and the application of a cap and floor concept (to avoid perverse effects in imbalance price formation), the deadband concept (which its considers an essential component to ensure that no over/undershooting is taking place by BRPs and that the Belgian system imbalance would result in wild oscillations around a balanced position in some cases) and the application of the alpha factor (as its reason for existence, the observation of sustained periods with substantial imbalances and hardly any (re)actions from BRPs can still be observed in the balancing markets). Febeliec considers **all three components to be quintessential elements of a future-proof modification of the T&C BRP** to ensure that Elia can maintain the balance in the Belgian perimeter without an undue increase of the overall system costs or perverse effects which could have a negative impact on the participation of market parties to the balancing markets and thus negatively impact market functioning.

Considering the relaxation of the day head balance obligation for BRPs, Febeliec understands that this should result soon in the de facto abolition of this obligation yet remains very worried about this evolution as it considers his to undermine the central role of the obligation to be balanced for BRPs, with Elia only being responsible for the residual system imbalances. Febeliec insists that a very strict monitoring of the impact of this relaxation is maintained and that if any negative influence should be detected of this relaxation, that this would again be introduced or alternative solutions applied in order to avoid any negative impact on the overall system costs and the invoices of Elia grid users.