



WG Balancing of 9th December 2022

Hybrid meeting

09/12/2022



For a smooth teleconference with 30+ people ... Some rules apply

- Please put yourself on mute at any time that you are not speaking to avoid background noise.
- If you receive a call, please ensure that you do not put this meeting **on hold**.
 - You can quit and reconnect later on.
 - You will be muted or kicked out of the session, if necessary.
- You will be requested to hold your questions for the end of each presentation.
 - Should you have a question, please notify via Teams or speak out if you are only via phone.
 - Share your question (with slide number) in advance so all participants may follow
 - Before you share your question, please announce yourself.
- If you have a poor internet connection, please dial-in.
- Finally, please be courteous and let people finish their sentences.
 - It is practically impossible to follow when 2 people are speaking at the same time in a teleconference.



Agenda

Small adaptations:

- 10:30 – 11:00 EU Balancing Program update
- 11:00 – 11:30 aFRR Capacity Auctions: Return of Experience New Design
- 11:30 – 11:35 Results of the Public Consultation on Study on aFRR Activation Method
- 11:35 – 11:55 Results of the Public Consultation on Dynamic Procurement Study for FRR
- 11:55 – 12:00 Results of the Public Consultation on Combos
- 12:00 – 12:15 Study Evolution BRP Nominations – Feedback Following the Public Consultation
- 12:15 – 12:35 Follow-up on the BAL Incentive ‘Improvement of the Quality of Input Data Congestion Management

AOB:

- 12:35 – 12:55 Winter Plan
- 12:55 – 13:00 Feedback on Workshop Losses



Minutes of Meeting for approval

Minutes of Meeting of WG Balancing of 27th October 2022

- No comments or remarks from the stakeholders

Minutes of Meeting of Workshop Losses of 17th November 2022

- Attendance list corrected

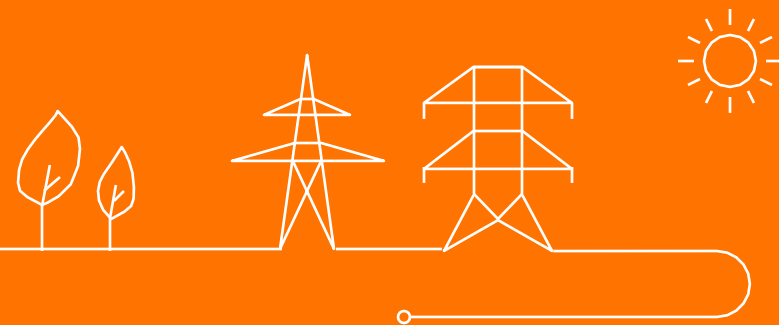
Suggestion to approve:

- The MoM of 27/10/2022
- The MoM of 17/11/2022



EU Balancing Program Update

Cécile Pellegrin



New information since November 2021

- aFRR Go live
 - Efforts needed (for ELIA and the market parties)
 - Delay of aFRR Go live step 2
 - Return of experience
- Feedbacks of Market participants and CREG
- Language rules for consultations – good qualitative translation in both national languages simultaneously and available during the legal period of the public consultation



Update of the Roadmap

- BSP/OPA/SA Testing environment for mFRR and iCAROS phase 1 deployed **from Late Q3 2022 on**
- **Local go live** of the new mFRR bidding and iCAROS phase 1 **Late Q3 2023**
- Connection to EU mFRR balancing energy platform **Q4 2023**





Way forward

Conditions to join

- ACER adapts the pricing methodology to set the price cap at +/-1.000€/MWh
 - This is uncertain in terms of planning and it seems improbable that this would be the first trigger
 - Assumption is therefore taken that planning for ELIA's accession to PICASSO will not be defined based on this trigger. In case it would be implemented in the short-term, the assumption will be reconsidered
- Or connection of RTE
 - Are there other conditions to be fulfilled before Elia's connection, knowing that there would be no local price cap?
 - Additional liquidity needed in the Belgian MO?
 - Criteria on ATC availability?
 - Others?
 - Attention points
 - Risk of shift in RTE's planning
 - Risk of non-fulfillment of other conditions
- Or reaching the Legal deadline (< 24/07/2024)
 - Evaluation to be organized by 15th of November 2023

} → What kind of analyses should be performed?
What are the needed available data ?

} → Risk of new impact on roadmap

→ On this basis most probable time window for PICASSO connection is Q1-Q2 2024

Stakeholders are invited to provide their feedbacks to ELIA on these different elements

Status and next steps

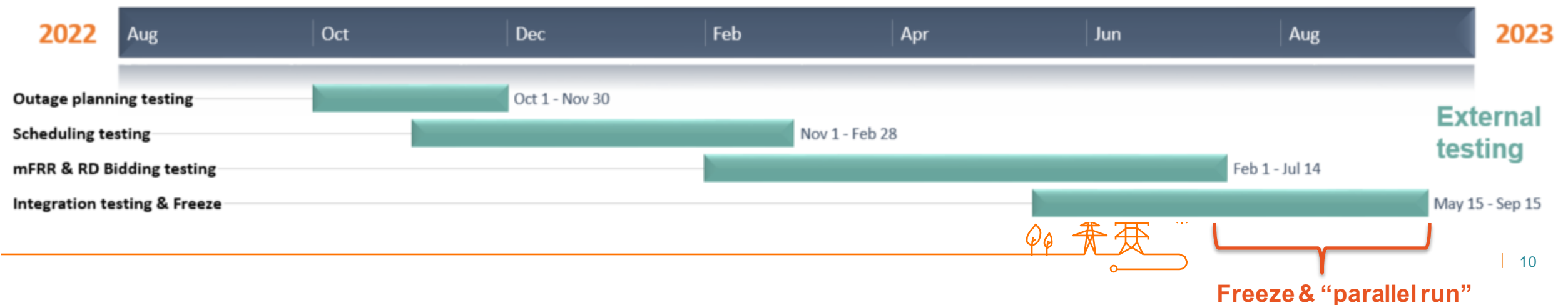
- Way forward was discussed during last WG BAL and Stakeholders provided complementary feedbacks to ELIA in the weeks following the meeting. The feedbacks focus mainly on planning. No new specific input were given concerning the conditions for the connection to PICASSO and/or the organization of the observation run.
- Feedbacks includes, among others:
 - Regrets that the recommendation for the connection to PICASSO could not be followed and towards the risks and uncertainties it creates
 - Worries towards the process, content and implementation of the balancing rules / Imbalance price and the impact it could have on the planning
 - Concerns about the feasibility of the timeline for the local go-live for MARI and iCAROS 1
 - Reminder of the importance of plannability
- Stakeholders asked during the WG BAL for an overview of what is expected for 2023 (including incentives).

Status and next steps

- ELIA is now, based on the different feedbacks and constraints, working on:
 - A concrete proposal for the connection modalities to PICASSO
 - A consolidated roadmap for 2023
- Consolidated roadmap will include
 - MARI, PICASSO, iCAROS phase 1
 - Other evolutions foreseen on balancing products
 - Balancing incentives
 - Considerations on the way forward for T&C BRP/ Balancing rules
- Results for both “deliverables” will be presented in next WG BAL.
- In the meantime, progress on the projects continues as foreseen.

External testing with market parties

- In order to be able to deliver the needed support to market parties, it's recommended not to have to discuss the different subjects in parallel. Therefore, ELIA proposes the introduction of a phased testing.
- It's therefore proposed:
 - To foresee a period of sequential testing of the different processes and not all at once. Starting with outage planning, then Scheduling tool, then RD & mFRR Bidding overlapping each with one month
 - To foresee, in addition, at the end, some time for the integrated testing and a freeze period
 - To organize a training session with the market parties (design reminders and deep-dives in implementation) at the beginning of the start of each testing period of a specific process
 - To support market parties with fixed slots of Q&A sessions (booking to be done via your KAM Energy)
- Following this phasing will allow ELIA to support market parties in the best way (ELIA will not be able to support actively each topic out of the concerned period)



External testing with market parties

	Focus period	Training session		Demo environment	Status of the testing
Outage planning testing	01/10 - 30/11/22	✓	03/10/22	✓ Available from info session on	Initial training session took place. Ad hoc additional information sessions are organized. Actual IT testing seems quite limited. If blocking issues or technical information is missing, please contact your KAM energy.
Scheduling testing	01/11 - 28/02/22	✓	07/11/22	✓ Available & support foreseen from info session on	Initial training session took place. Ad hoc additional information sessions are organized.
mFRR & RD bid submission & activation process*	01/02 - 14/07/23	mFRR & RD bid submission - basics	08/02/23	✓ Available & support foreseen from info session on	
		RD bid submission - advanced	Begin March 2023		
		RD activation process	End March 2023		
		mFRR bid submission - advanced	TBD with interval of min 3 weeks		
		mFRR activation process	TBD with interval of min 3 weeks		
Integration testing & Freeze	15/05 – 15/09/23	NA		NA	

*The external testing for mFRR and RD bid submission and activation process will be further detailed beginning of 2023.

Public consultation for T&C OPA, SA and coordination rules

Proposal regarding the timing of the Launch of public consultation regarding the modification of T&C OPA; T&C SA and coordination rules triggered by the go-live of iCAROS phase1 and draft proposal of the planning of iCAROS phase 2

- Opening of unofficial public consultation : target date End January 2023
 - T&C OPA in English
 - T&C SA in English
 - Coordination rules in English
 - Explanatory note T&C OPA, T&C SA & coordination rules
 - Planning iCAROS phase 2
- Second official upload : target date End February 2023 – one month of official public consultation starting from the moment of third official upload
 - T&C OPA in French and Dutch
 - T&C SA in French and Dutch
 - Coordination rules in French and Dutch



Others stakeholder management interactions



- Next interactions
 - Consolidated roadmap & proposal for the connection modalities to PICASSO
 - Feedback on the processing of the last comments received on the mFRR design note
 - BSP Facilitations



Contact persons



KAM Energy

Amandine Leroux / Arno Motté

IT questions

IT-ECL@elia.be with your KAM Energy in CC

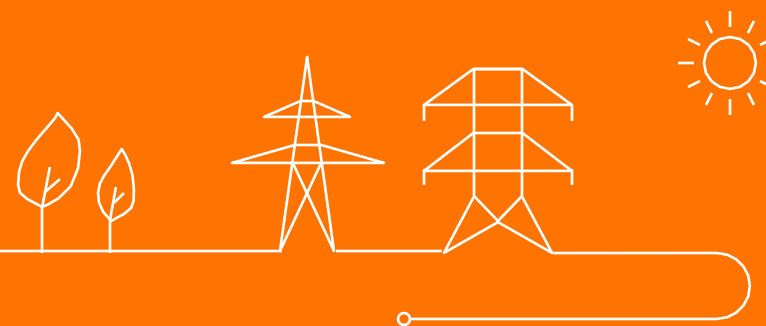
Implementation ad hoc sessions (on request)

- Q&A sessions dedicated to design and implementation questions
- IT questions & Live debugging sessions with ELIA IT-team



aFRR Capacity Auctions: Return of Experience New Design

Philippe Magnant



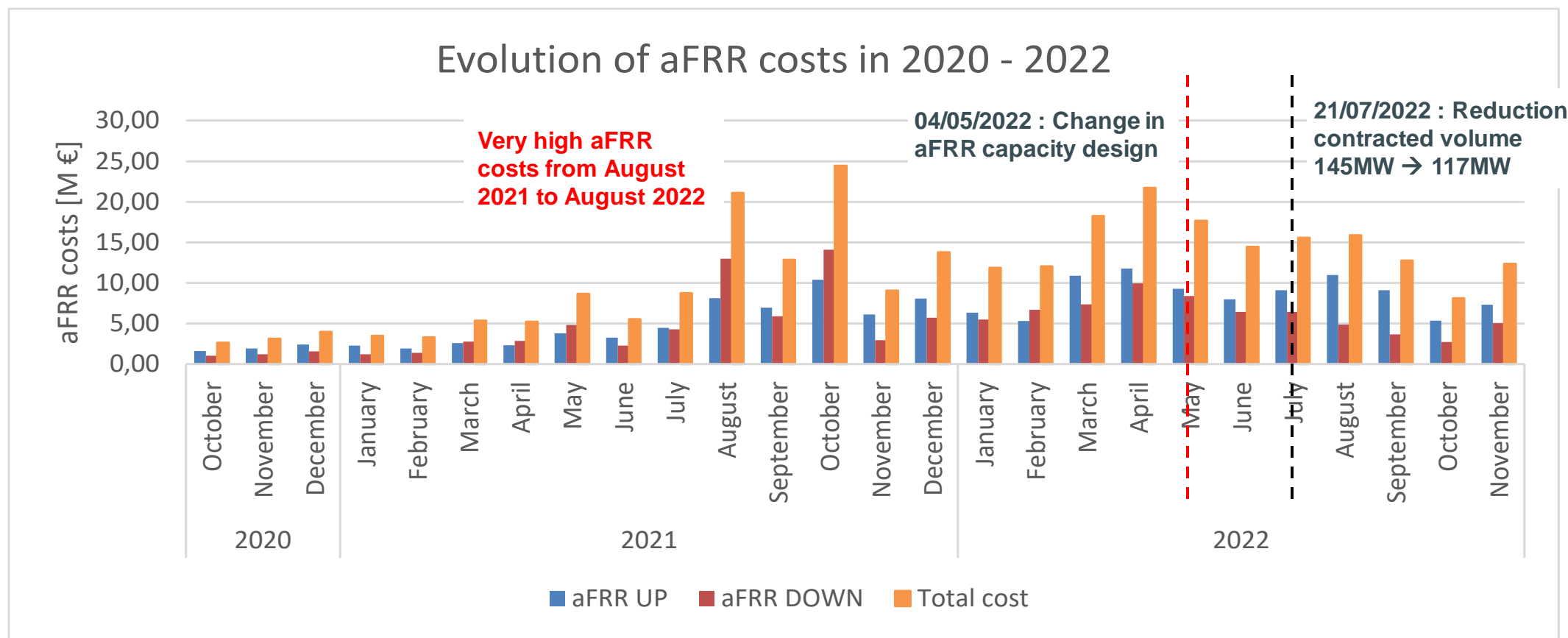
aFRR capacity auctions

Reminder of the high-level process



1. Bid submission – BSPs can offer “all-CCTU” and/or “single CCTU” bids
2. Creation of “virtual bids” by aggregating single CCTU bids in 24h bids
3. A 1st TCO run, which includes the virtual bids in addition to the all-CCTU bids, is used to:
 - ✓ Clear virtual bids selected in the TCO. These virtual bids are selected whatever happens in next steps
 - ✓ Determine for Up and Down the reference cost as the weighted average price
4. Clearing of virtual bids (\leq reference cost x 120%) in a merit-order selection
5. Clearing of remaining volume in a 2nd TCO

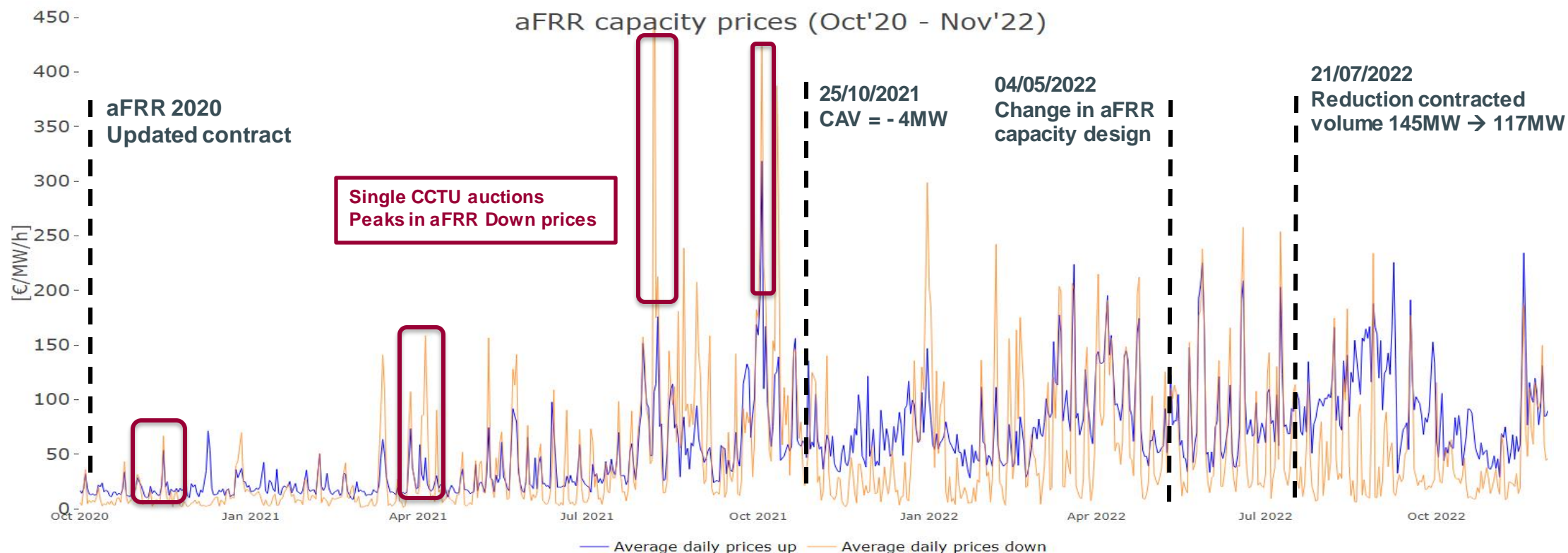
Evolution of aFRR costs 2020 – 2022



- As from August 2021, aFRR costs skyrocket and remain high during more than a year
 - Increase in gas prices as from August '21.
 - Energy crisis leading to strong increase in gas prices → aFRR mainly delivered by CCGTs (strongly correlated with CSS and gas prices)
- Downwards trend in aFRR after August '22, which was the peak in gas prices

aFRR capacity prices

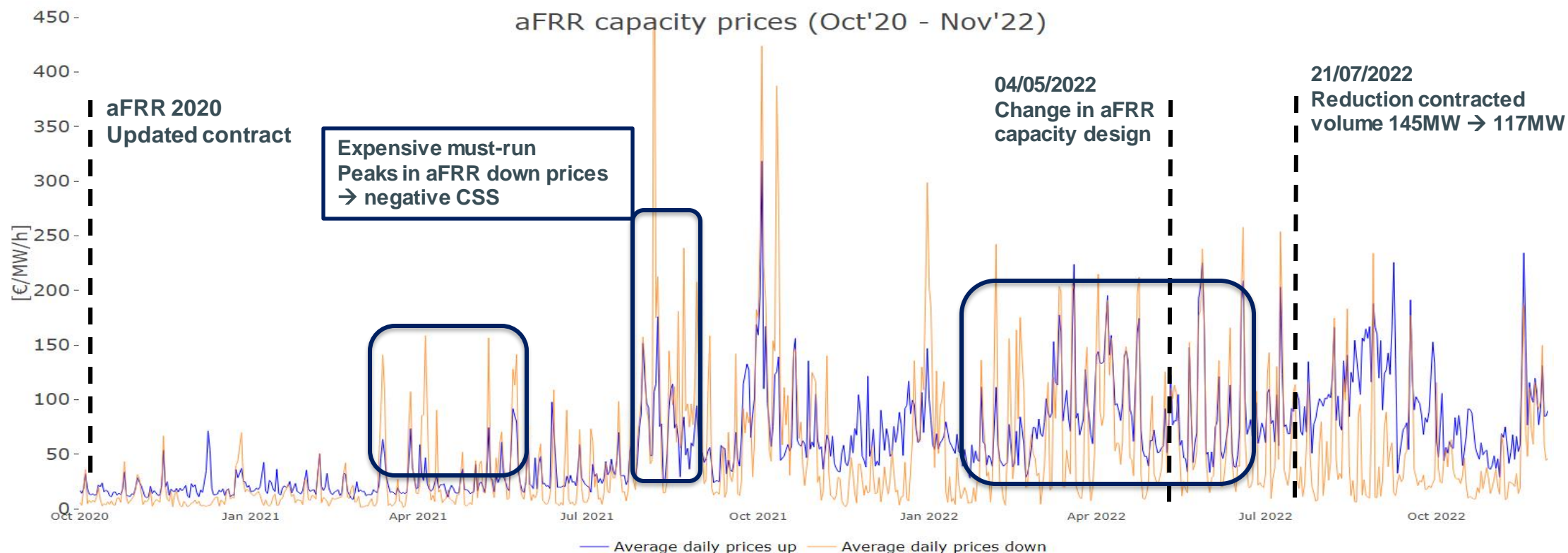
Main drivers



- End of 2020 and 2021, selection of aFRR capacity bids provided by non-running gas units in the per-CCTU auction
 - ➔ Start-up and must-run costs on fully divisible bids of 4-hour blocks
 - ➔ Very high costs of the per-CCTU auctions for a limited amount of MWs
- **No design-related price spikes since the new design**

aFRR capacity prices

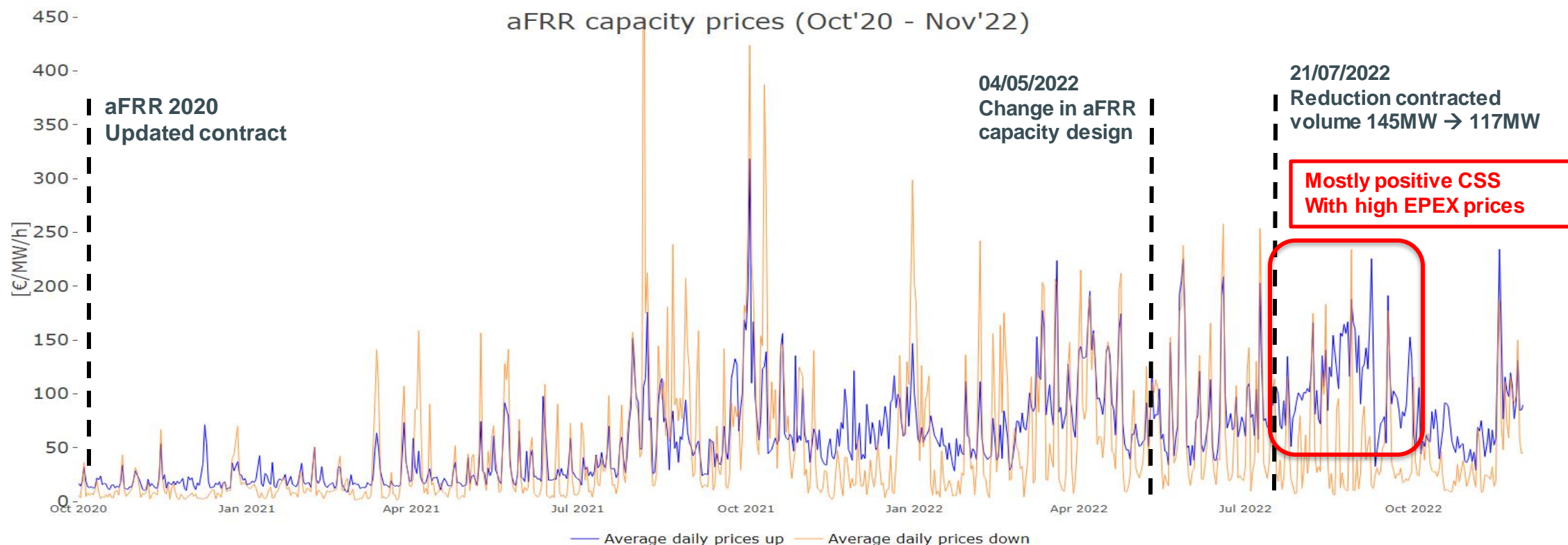
Main drivers



- Evolution of aFRR capacity prices driven by several parameters
- **Main driver:** aFRR capacity prices strongly correlated with the CSS
 - High aFRR DOWN capacity prices driven by must-run costs due to negative CSS
 - From Aug'21 to Jul'22, CSS always negative in monthly average. Combined with high gas prices, this leads to very high aFRR costs

aFRR capacity prices

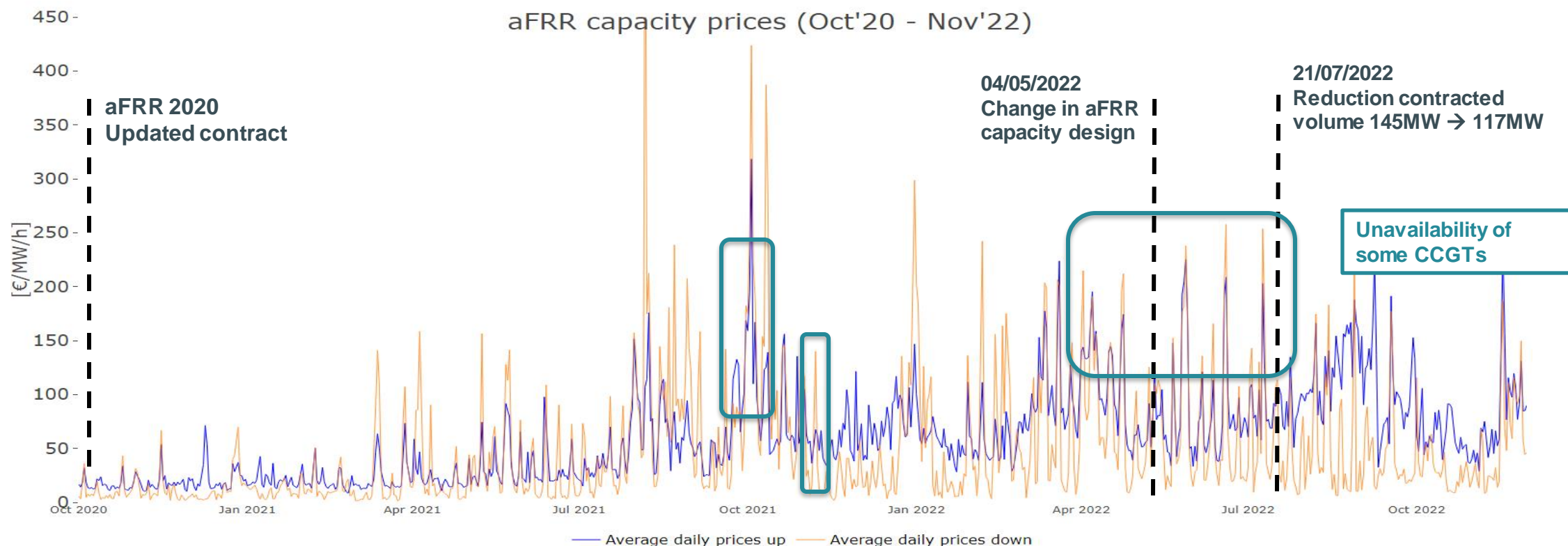
Main drivers



- Evolution of aFRR capacity prices driven by several parameters
- **Main driver:** aFRR capacity prices strongly correlated with the CSS – case of positive CSS, combined with high EPEX prices
 - ➔ From Aug'22 to Oct'22, CSS mostly positive and EPEX prices are high
 - ➔ Leads to increase in aFRR UP capacity prices

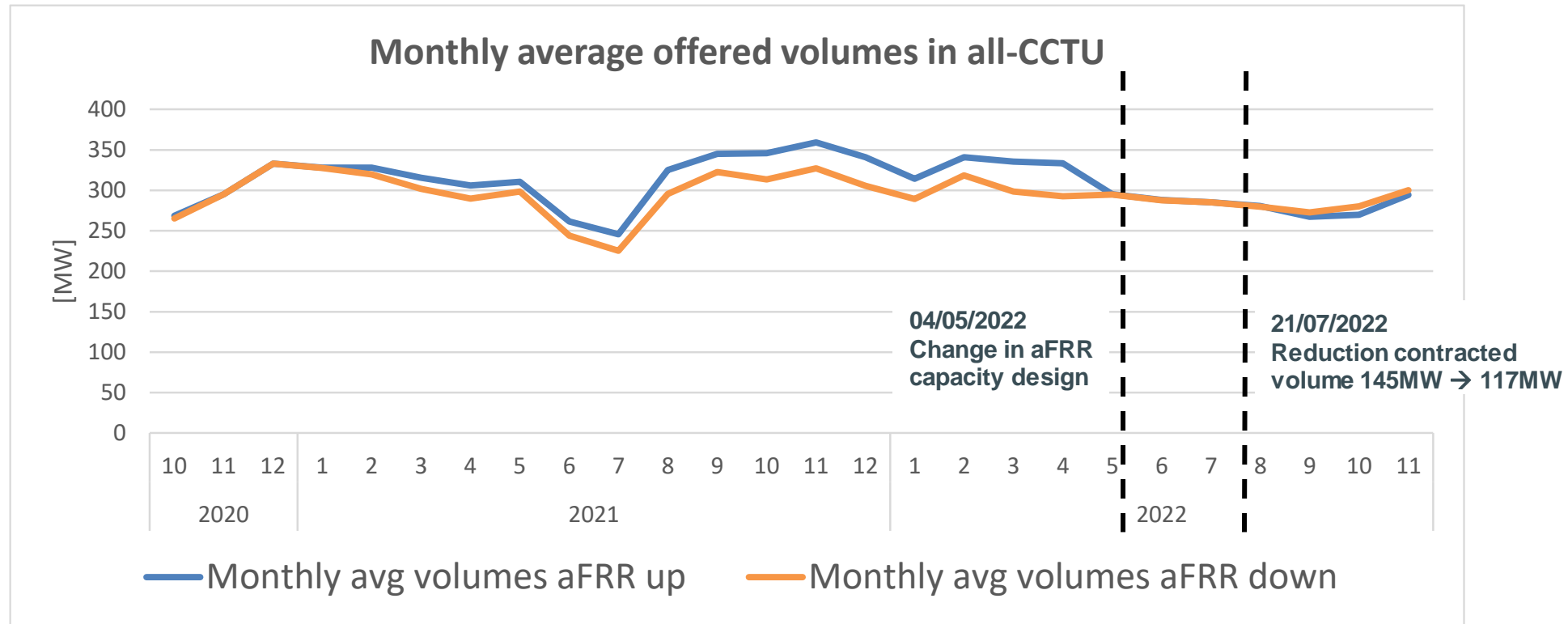
aFRR capacity prices

Main drivers



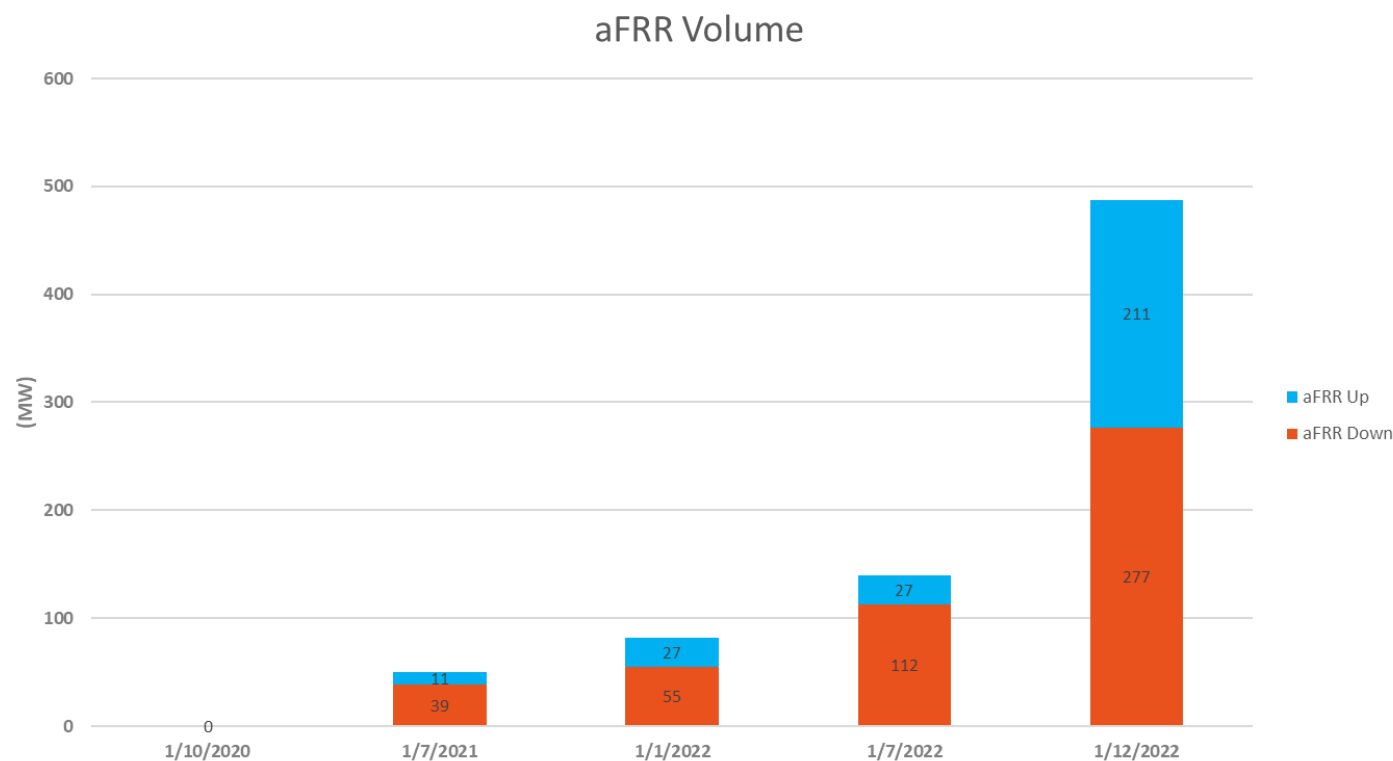
- Evolution of aFRR capacity prices driven by several parameters
- Other driver: market is opened, but CCGTs still set the price in the aFRR capacity auctions
 - High prices also due to **unavailability of the CCGTs**

Evolution of liquidity in all-CCTU



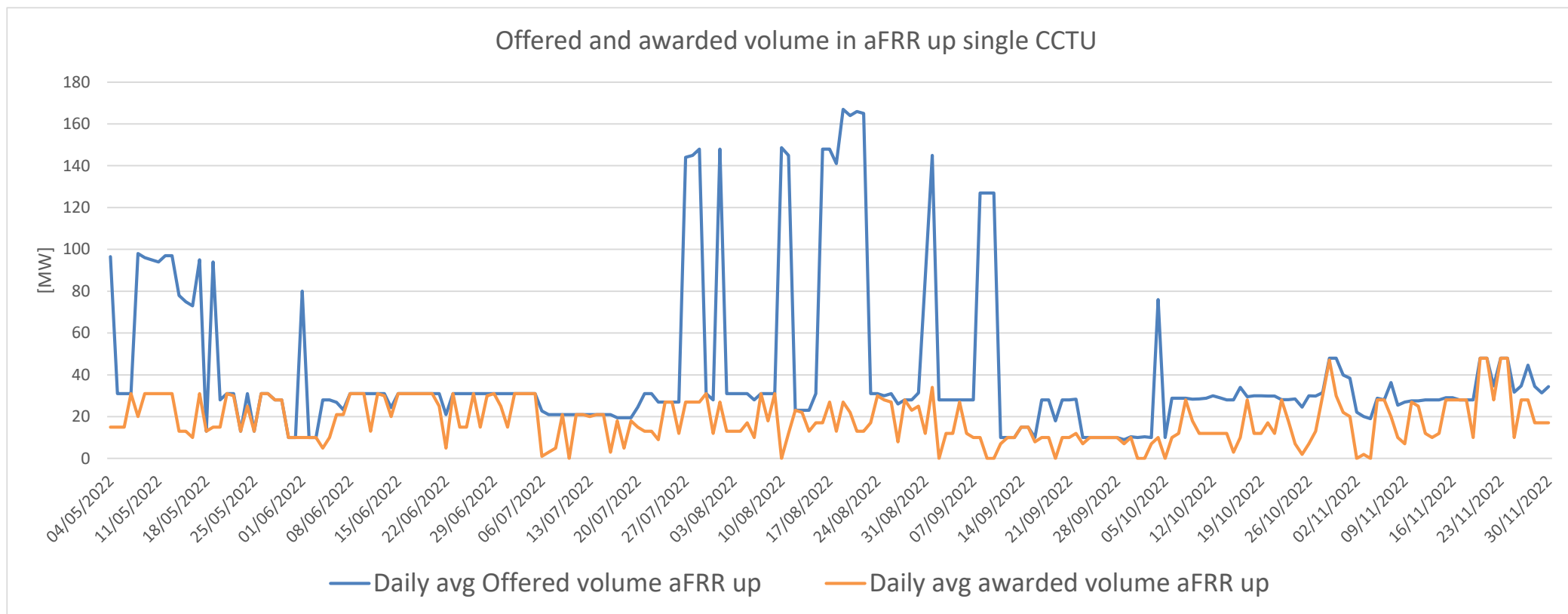
- Offered volumes in all-CCTUs slightly lower as from the new design → mainly for the offered volumes in aFRR UP
- No significant transfer of liquidity from all-CCTU to single CCTU since the new design has been implemented
 - No significant impact of the new design on the liquidity in all-CCTU
- No clear indication that the reduction of the contracted volume (as from 21/07) impacts the offered volumes (both directions) in all-CCTU

Evolution of liquidity in per-CCTU: prequalified volumes



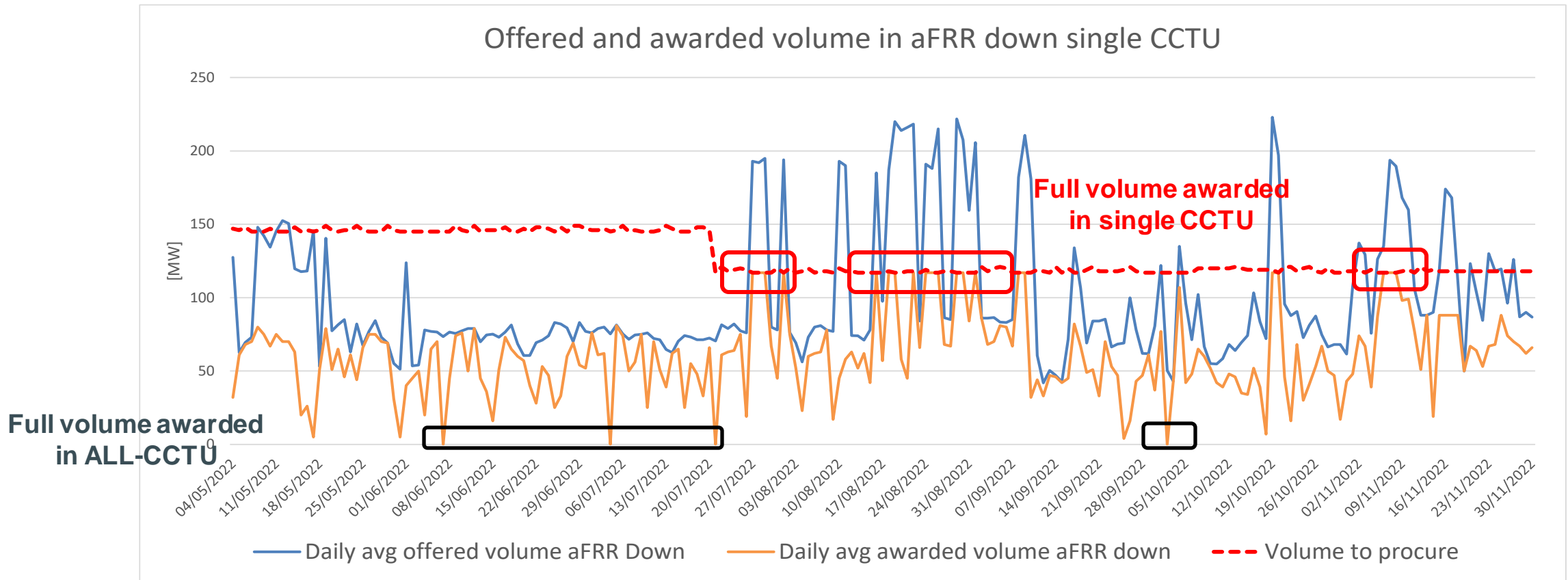
- Volumes offered in single-CCTU don't give the full picture of the evolution of liquidity
 - ✓ Before the new design, volumes that were not selected in the all-CCTU auction had to bid in the per-CCTU auction
 - ✓ Since the new design, CCGTs have the possibility to bid in single-CCTU
- Evolution of prequalified volume provides a valuable insight on the evolution of liquidity, even though this is a maximum value that should be considered with caution
- **The liquidity in the aFRR market is developing significantly** since the opening of the market

Offered and awarded volume aFRR up / CCTU



- **44 %** of the offered volumes in single CCTU is awarded since the new design, representing 14% of the volume to procure
- The volumes offered in single CCTU represent 32% of the volume to procure
- Small deviations in the volumes offered among CCTUs of a same delivery day

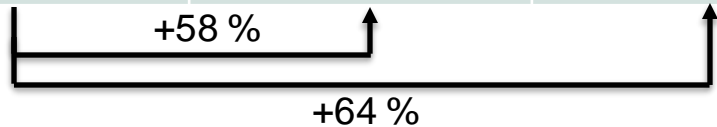
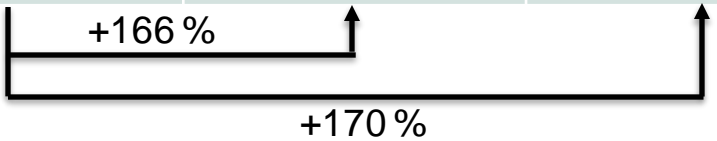
Offered and awarded volumes aFRR down / CCTU



- 61% of the offered volumes in single CCTU is awarded since the new design, representing 47% of the volume to procure
- More deviations in the volumes offered among CCTUs of a same delivery day, due to the diversity of technologies
- Increase in the offered liquidity in single CCTU down as from August, with some days where the full volume is awarded to single CCTU bids
- The new design allows to select the most economic bids between all-CCTU and single CCTU (with some advantage to single CCTU bids) based on market conditions of that day

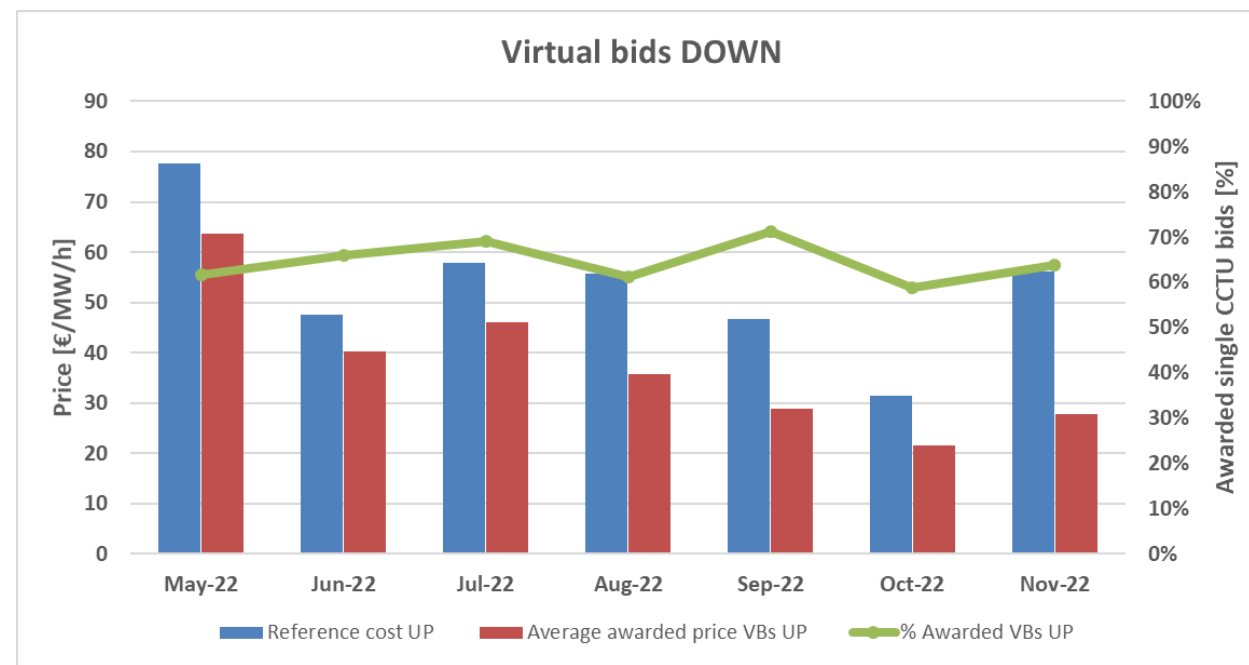
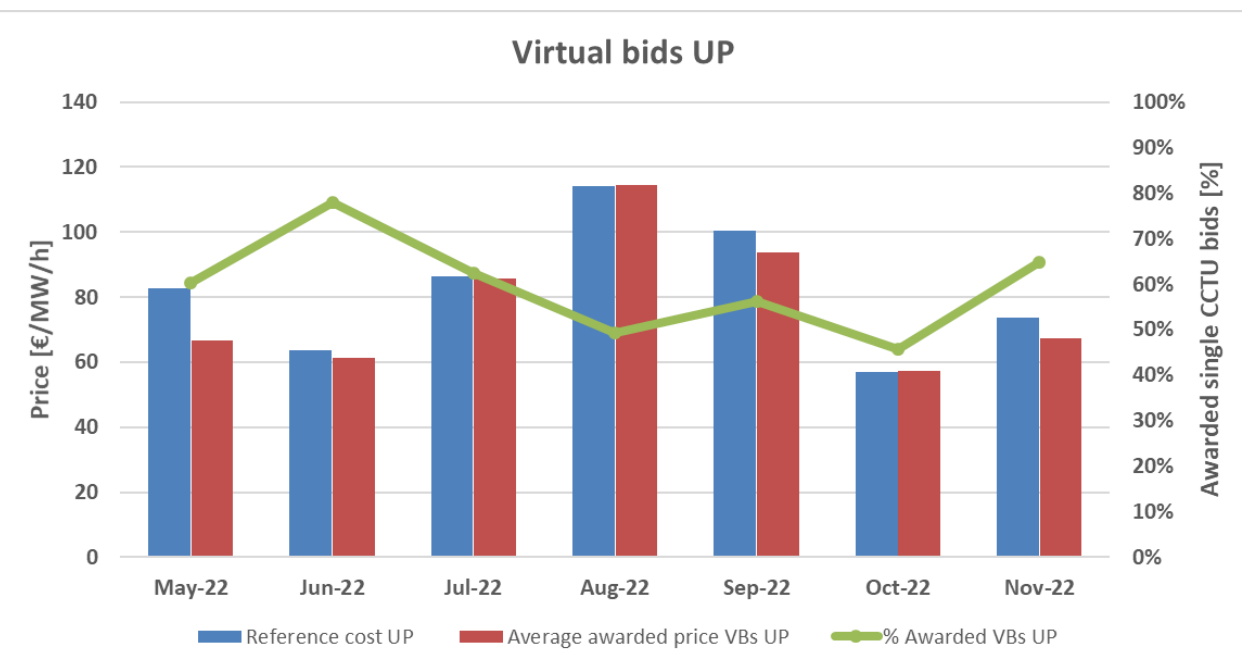
Impact of step 2 on virtual bids selected

- Average volumes of virtual bids selected in the different steps of the auction since the go-live (until end of 10/22)

Volume UP after step 1 [MW]	Volume UP after step 2 [MW]	Volume UP after step 3 [MW]	Volume DOWN after step 1 [MW]	Volume DOWN after step 2 [MW]	Volume DOWN after step 3 [MW]
10,7	17,0	17,6	21,6	57,0	58,3
					

- ➔ Virtual bids are selected in the 1st TCO
- ➔ The merit-order selection is however considered necessary in order to:
 - ✓ Award competitive single CCTU bids
 - ✓ Continue stimulating the development of liquidity in the aFRR market

Virtual bids vs. reference cost

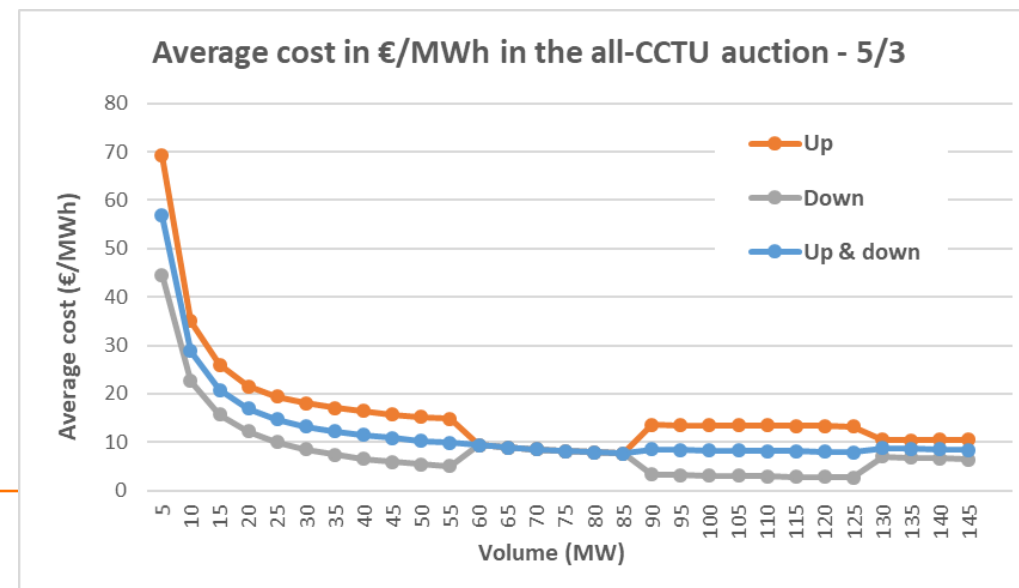


- Reminder: the reference cost does not include the 120% RC factor
- While the reference cost could appear to be well estimated, particularly in UP, the ratio of awarded virtual bids indicates a frequent overestimation

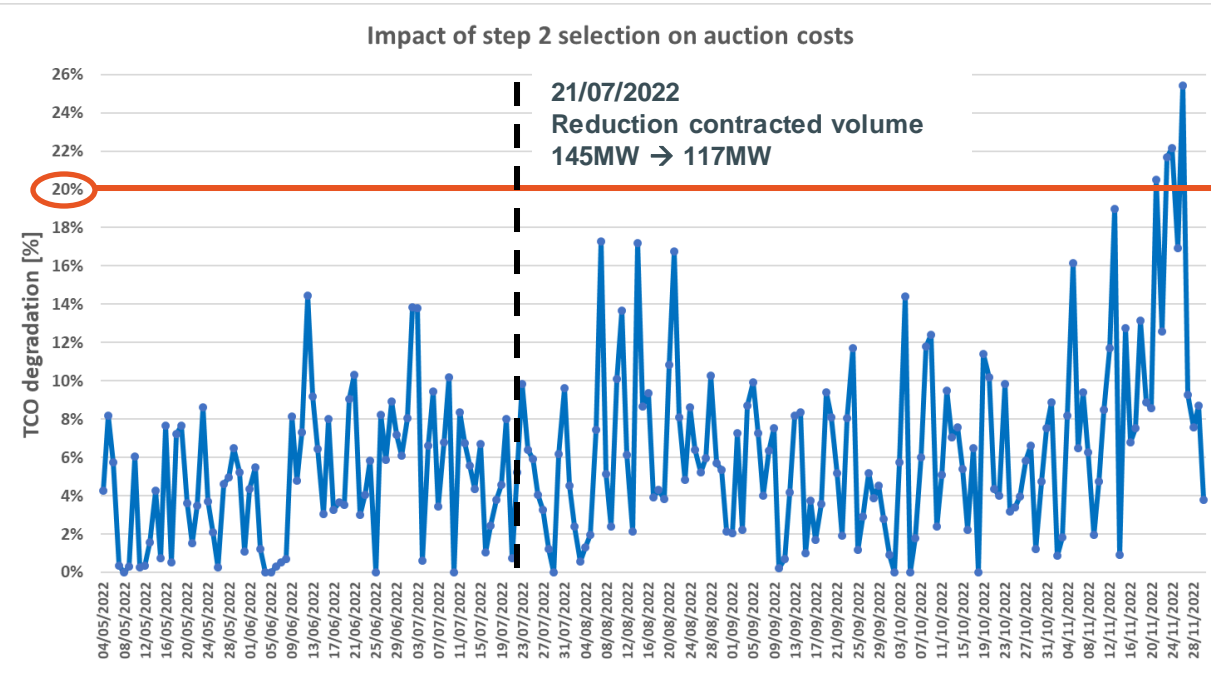
Impact of step 2 selection on auction costs

Reminder of the context

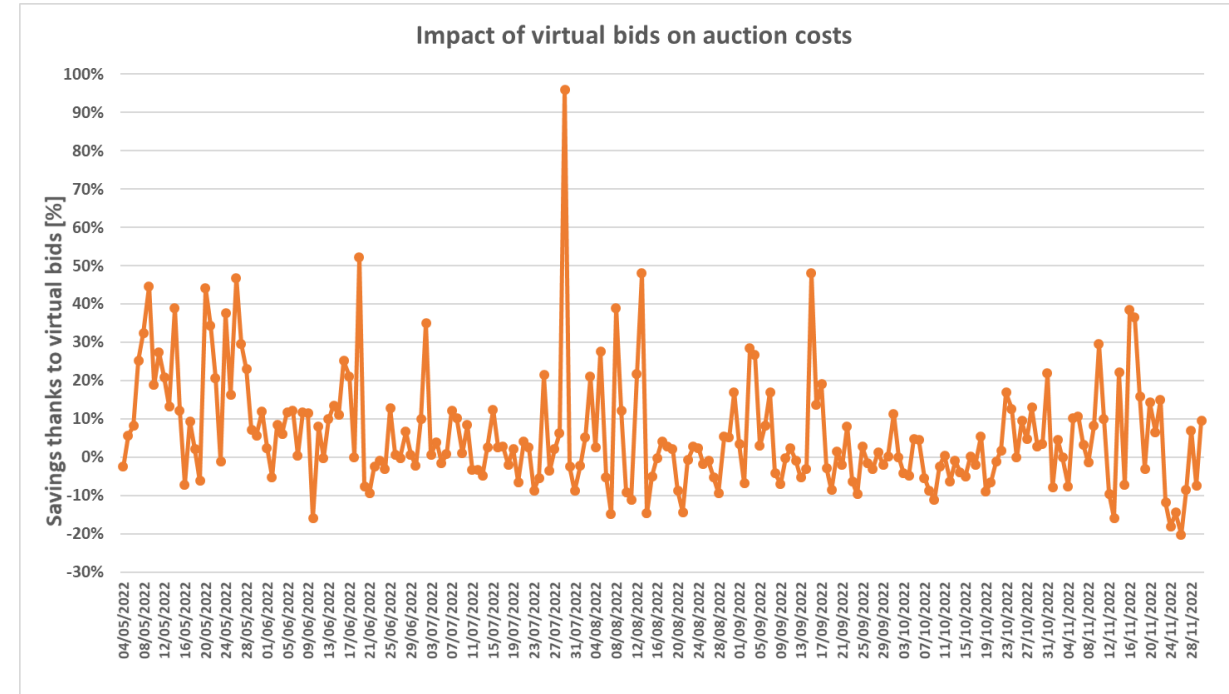
- When insufficient volumes are available to cover the full capacity to be contracted, the selection of single CCTU bids could lead to a significant degradation of the results of the TCO, increasing the costs for the system
- For that purpose, Elia intends to implement a budget cap with following principles
 - ✓ The cap on the TCO degradation is set at 1,2 x “average cost of the 1st all-CCTU run”. This cap is not directional, only the total cost of the auction is considered
 - ✓ The volume of single CCTU bids selected is restricted by the cap on TCO degradation
- The need for cap on TCO degradation as of the go-live is not demonstrated and requires design choices and algorithm modification
 - ➔ In order to not delay the implementation, the budget cap should be implemented in a 2nd stage, based on a monitoring of the market conditions



Impact of step 2 selection on auction cost... vs. savings related to virtual bids



- Computation: cost increase between step 1 and step 3
- The average TCO degradation since the go-live is 6%; the 20% threshold has been exceeded for the 1st time end of November
- Reduction of contracted capacity and increase of prequalified volumes bidding in single CCTU increase the risk of reaching the threshold



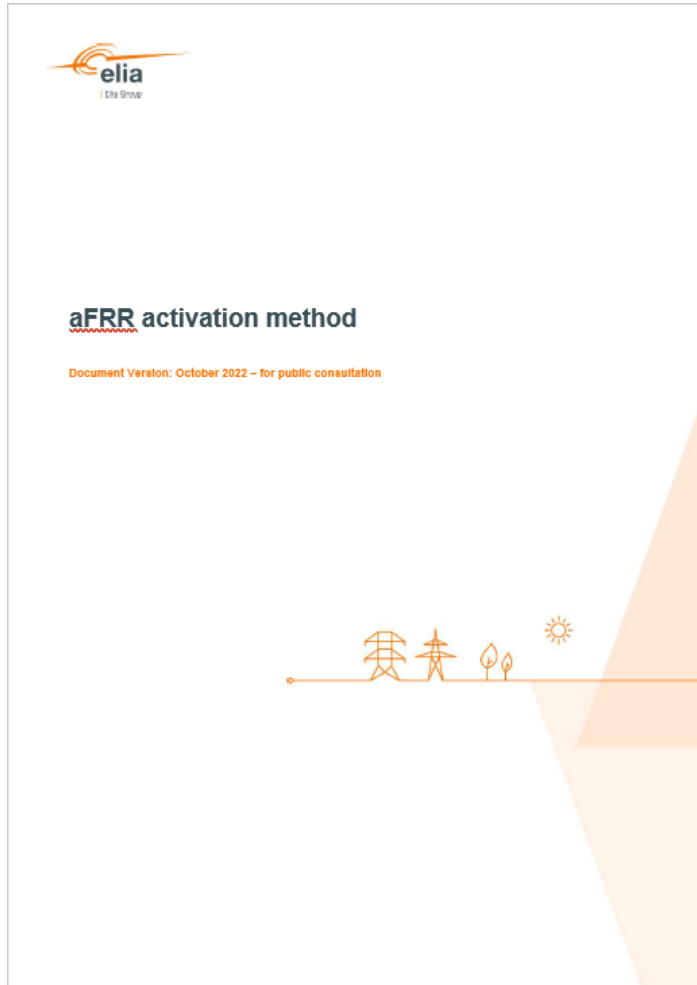
- Computation: cost difference between step 3 and the auction results without virtual bids (only all-CCTU bids considered). A positive value indicates savings thanks to virtual bids
- The average savings since the go-live is 8% (despite the TCO degradation due to selection of virtual bids in step 2)

Study on the aFRR Activation Method

Results of the Public Consultation
Philippe Magnant



Public consultation on the study on the aFRR activation method



- *Elia organized a public consultation on the study on the aFRR activation method from 20th of October 2022 to 20th of November 2022*
- *Elia received non-confidential answers from:*
 - *BSTOR*
 - *Centrica Business Solutions*
 - *FEBEG*
 - *Febeliec*
- *In addition, Elia received a confidential answer to the public consultation*



Public consultation on the study on the aFRR activation method

FEEDBACK RECEIVED	ELIA'S ANSWER
<ul style="list-style-type: none">• BSTOR souhaite apporter son soutien à la proposition d'Elia, tant sur le fait d'offrir l'opportunité aux BSP de réagir plus rapidement au signal aFRR que le FAT, que sur la méthodologie proposée pour définir le volume éligible à rémunération additionnelle correspondante, que pour le plan d'implémentation proposé. BSTOR souhaite remercier Elia pour la qualité de l'étude et le pragmatisme des solutions proposées.• CBS welcomes Elia's proposal to allow for asymmetric ramps, as this opens the door for EMS optimization and overall higher efficiency.• CBS takes note of Elia's argument regarding the impact of faster aFRR activation on DFDs and points out that considering faster FCR incentives could also be a way to act efficiently on DFDs.	<ul style="list-style-type: none">• Elia thanks BSTOR for the feedback provided.• Elia thanks CBS for the feedback provided. The asymmetric ramps are indeed meant to improve the EMS of assets with LER, while respecting the minimum Full Activation Time.• Elia takes note of the point raised by CBS and refers to its answer on the public consultation on Elia's study on DFDs in 2020.



Public consultation on the study on the aFRR activation method

FEEDBACK RECEIVED	ELIA'S ANSWER
<ul style="list-style-type: none">Overall FEBEG welcomes the alternative approach proposed by ELIA. Referring to the possibility of having a separate FAT for the activation and deactivation phase, FEBEG is not against this additional option as there are multiple cases where this could be interesting. However FEBEG would like to ensure good comprehension and confirmation on the following:<ul style="list-style-type: none">The “FAT_{energy bid}” will never be considered as selection criterion for the bids in the aFRR auctionsThe “control target” approach will not aggravate the jumps in the activation signals followed by assets which do not have the technical capability to react faster (CCGT's). In fact, the fast regulation of the grid, thanks to fast reaction from assets (FAT<7,5min), could probably lead to jumps of aFRR signal which is followed by a CCGT during the quarter of hour before the latter reaches the control target	<ul style="list-style-type: none">Elia confirms that it's not the intention to use the “FAT_{energy bid}” as a selection criteria in the aFRR auctions. In the proposal made by Elia, there is no information / commitment on the “FAT_{energy bid}” provided by the BSP in the aFRR capacity auctions, as this is an optional bid characteristic of the aFRR energy bidsElia does not expect an impact of faster activation of some aFRR energy bids on the amount of jumps.

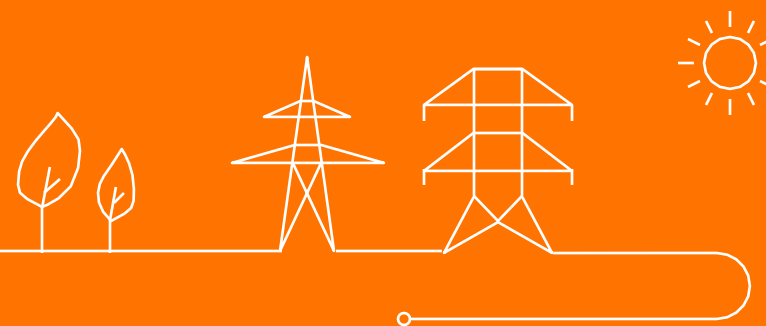


Public consultation on the study on the aFRR activation method



FEEDBACK RECEIVED	ELIA'S ANSWER
<ul style="list-style-type: none">• Febeliec wonders what the added value is for consumers. The document clearly indicates the added value for BSPs who are able to react with a full activation time (FAT) of less than 7,5 minutes, as they would (as also clearly indicated in the quantitative examples) earn more revenue. However, benefits for consumers that would compensate for the increased costs (as higher revenues for BSPs are equal to higher costs for consumers via the grid tariffs and/or the imbalance tariff) seem almost non-existent. At best, there could be an implicit improvement in the ACE of Elia. However, as the ACE of Elia is currently already well within the required range, there would not be any additional value for consumers.• Concerning penalties, Febeliec wonders how these would applied under the proposal of Elia, as it is essential that penalties provide the correct (dis)incentives to avoid perverse effects.	<ul style="list-style-type: none">• Elia acknowledges that the direct impact of the design modification proposed benefits to the BSPs and to Elia's regulation quality. However, the positive consequences, for instance on the additional possibilities to manage the state of charge of DPs with Limited Energy Reservoir, are expected to eventually benefit to the end consumer by increasing the liquidity and prices on the aFRR product. In addition, Elia is of the opinion that it can't be the objective to artificially delay the reaction of units which are capable of reacting faster.• Regarding the penalties, Elia agrees that the design of the penalties needs to ensure the avoidance of perverse effects. Elia believes this is the case in the proposal, the existing design being unaffected:<ul style="list-style-type: none">• A tolerance band is computed around the calculated aFRR Requested, exactly as it is currently done, but around an aFRR Requested signal which is more reactive.• The permitted deviation is unaffected (calculation according to annex 13.B of the T&C BSP aFRR).

Study on Procurement Strategies for a Dynamic Calculation of FRR Means

Results of the Public Consultation
Kristof De Vos



Planning

-  Working group balancing
-  Milestone or deliverable



Kick off

- Present objective, scope and planning
- Collect potential feedback / expectations from market parties

Workshops

- Workshop 1 to discuss possible solutions for a dynamic procurement and market impact
- Workshop 2 for in depth discussion of feedback of the market parties

Preliminary report and public consultation

- Analysis of the consequences for the procurement strategy and recommendations
- Analysis of the evolution of local and cross-border volumes (to the extent possible)

Final report

- Update of the study
- Consultation report

Recommendations presented in the study

- **Elia’s ambition remains to limit procurement to the extent possible as soon as there is sufficient flexibility in the system following the integration of sufficient decentral flexibility in the system (need for CCMD)**

- **Until that time, it is confirmed that a partial procurement strategy can be considered to reduce balancing capacity requirements although such strategy requires a good management of operational and market stability risks. Elia proposes to :**
 - Confirm and continue implementation roadmap as foreseen to capture impact of system evolution on volumes in 2025 when disposing of sufficient reliable data based on explicit bidding (after the implementation of MARI in 2023)
 - Sufficient reliability and volumes could justify to implement a partial procurement strategy (as from 2027, the soonest)

- **Meanwhile, Elia continues to focus on :**
 - Facilitating market access for all technologies
 - Managing expected system imbalance increase
 - Maintaining contribution of cross-border flexibility (following implementation MARI)

Summary of the public consultation

Answers of FEBEG and FEBELIEC



FEBEG

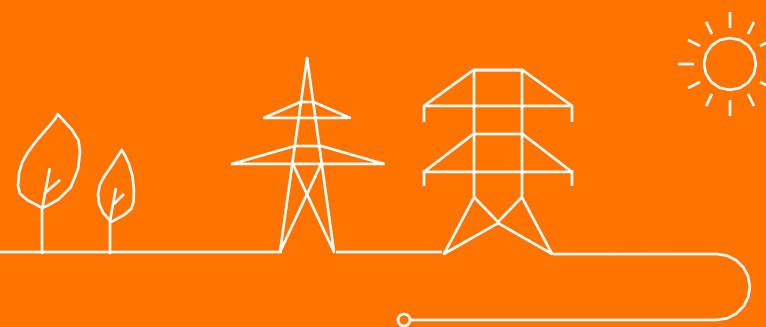
- Believes that a quantitative study is needed to provide more robust conclusions and recommendations and such will need to rely on representative datasets (taking into account recent / upcoming evolutions as well as the changing nature of the market)
- Remarks that reserve sharing is still considered 'static' and does not take into account regionally correlated events (cf. Winter plan)
- Stresses that assessment of available non-contracted balancing energy bids may depend as well on the procurement strategy (cf. CCGTs)
- Asks if the costs of using a 99% reliability level are taken into account in the analysis
- Worried by trend to decrease procurement cost and cost of increased balancing costs (units falling outside procurement are typically those with low activations costs)
- Worried by Security of Supply (and costs for the CRM)
- Stresses the need for market stability and long-term regulatory framework (lowering reserves is a discouraging message for participation in balancing and adequacy)
- Agrees on the implementation planning in light of obtaining representative data after accession to the EU platforms
- Is worried by the trend to constantly decrease procurement while balancing cost is a major concern (cf. aFRR)

FEBELIEC

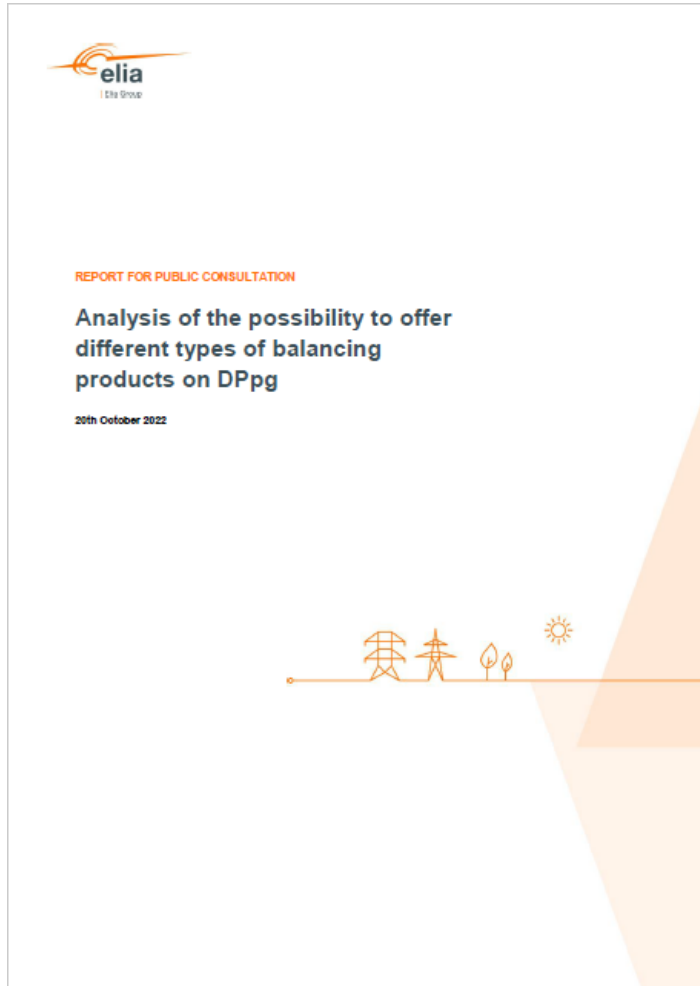
- Feels that BRPs need to be sufficiently exposed to total balancing costs, including the reservation cost
- Is negatively surprised that Elia does not foresee any robustness checks before 2025 and does not consider implementation before 2027
- Considers the study is very much skewed towards risks, without identifying and quantifying sufficiently the benefits of a different procurement strategy for FRR means (e.g. participation in EU balancing markets)
- Doubts that market parties which would not be selected in capacity reservation auctions would leave the market and no longer offer their energy as too conservative (in light of the very attractive opportunities in the balancing energy markets at this moment).

Feedback on Public Consultation on Combo on DPpg

Thomas Oldenhove



Public consultation on the combo on DPpg



- Elia organized a public consultation on the analysis of the possibility to offer different types of balancing products on DPpg from 20th of October 2022 to 20th of November 2022
- Elia received non-confidential answers from:
 - Febeliec
 - FEBEG
 - Centrica Business Solutions



General feedback

- Priorities to develop the combos aFRR/mFRR and FCR/aFRR, as identified by Elia, are confirmed.
- The proposed design for the combo aFRR/mFRR does not raise any questions.
- In general, the proposed improvements to the combo FCR-aFRR are supported provided that the tolerance bands are correctly set (design clarifications needed).
- Market parties confirmed that the usage of RPU/RPG concepts from SOGL (RPU/RPG defined in a static way) would lead to either increased administrative costs or a loss of MWs.



Specific feedback on combos

FEEDBACK RECEIVED	ELIA'S VIEW
<ul style="list-style-type: none"> • Febeliec insist that all combos are enabled, as for example a combo activation of FCR and aFRR could bring much needed liquidity in these markets. The same applies for the combo activation of aFRR and mFRR. • CBS confirms that unlocking the aFRR/mFRR combo is of high interest. 	<ul style="list-style-type: none"> • Elia takes note of stakeholders' support about the design of aFRR-mFRR combo and the support for the implementation priority.
<ul style="list-style-type: none"> • CBS does not support the modification proposed for the FCR/aFRR combo, as it risks exposing BSP to unjustified penalties in one of the two products. 	<ul style="list-style-type: none"> • Elia acknowledges CBS's concern and already identified in the report the need to develop a design on the tolerance band (Elia's intent is to redefine this during implementation); The objective is indeed not to penalize a BSP which would respect both tolerance bands.
<ul style="list-style-type: none"> • CBS proposes alternative option to the combo design for FCR/aFRR known as virtual split of delivery points. 	<ul style="list-style-type: none"> • Elia acknowledges that the alternative proposal of allowing a virtual split of DPs would have some advantages, not only for the aFRR/FCR combo but also for other cases. It raises however several questions related to the design and the exchange of data between Elia and the BSP, so additional analysis will be necessary to assess properly this alternative.
<ul style="list-style-type: none"> • Regarding balancing products and the supply of energy to DA/ID : While Febeliec could maybe not oppose the recommendation not to prioritize the implementation of this combo, it insists that the work on the conceptual and regulatory framework should be continued. 	<ul style="list-style-type: none"> • Regarding balancing products and the supply of energy to DA/ID (combo FCR is allowed), a design (mFRR/DA-ID) has been proposed by Elia but Elia recommends to not prioritize as the potential increase of liquidity is uncertain due to no participation of FSP in DA/ID market.

Specific feedback on the use of SOGL concepts RPU/RPG

FEEDBACK RECEIVED	ELIA'S VIEW
<ul style="list-style-type: none"> Regarding the potential to move to SOGL concepts of RPU - RPG, FEBEG acknowledge that such a move would lead to significant changes of the current T&C's CBS confirms that loosing flexibility during prequalification and bidding of aggregated pools if we rely on static RPU/RPG definitions would lead to either increased administrative costs or a loss of MWs. CBS supports the status quo to maintain the current flexibility BSPs have with regards to prequalification and pool operation. 	<ul style="list-style-type: none"> Elia takes note of stakeholders' support about the significant changes in T&C's and the potential loss of liquidity that the alignment of Belgian concepts of DP_{su} and DP_{pg} with the concept of RPU-RPG of SOGL would cause. Elia emphasizes that the current concept of Delivery Point offers additional flexibility to the BSPs in terms of prequalification but also in managing their portfolio compared to a model where RPU and RPG would be defined in a static way.



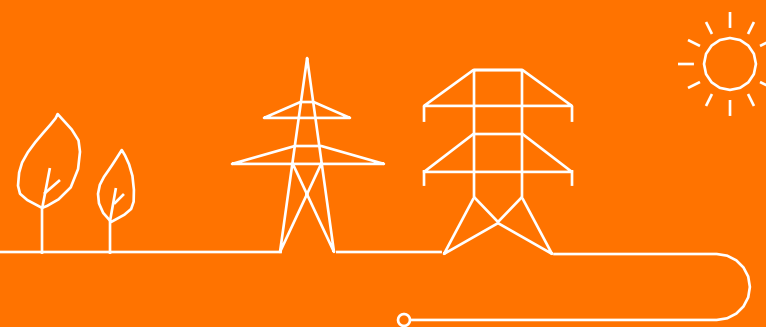
Specific feedback from FEBEG

FEEDBACK RECEIVED	ELIA'S VIEW
<ul style="list-style-type: none"> • FEBEG regrets that this analysis focuses on what could be improved for DPpg while some elements of the current balancing market design could also be improved to the benefits of DPsu. 	<ul style="list-style-type: none"> • Elia reminds that the scope of the study focused on combo on DPpg, as for DPsu the combo are already authorized. In addition the improvements for the combos on DPpg, if relevant, could also be used for DPsu.
<ul style="list-style-type: none"> • The concepts of DPsu and DPpg should evolve and converge when it comes to the rights and obligations imposed to the delivery points. 	<ul style="list-style-type: none"> • Regarding the evolution of concepts of DPsu and DPpg, Elia considers this comment as out of scope of the present study and recommends FEBEG to address it during the ad hoc market design discussions.

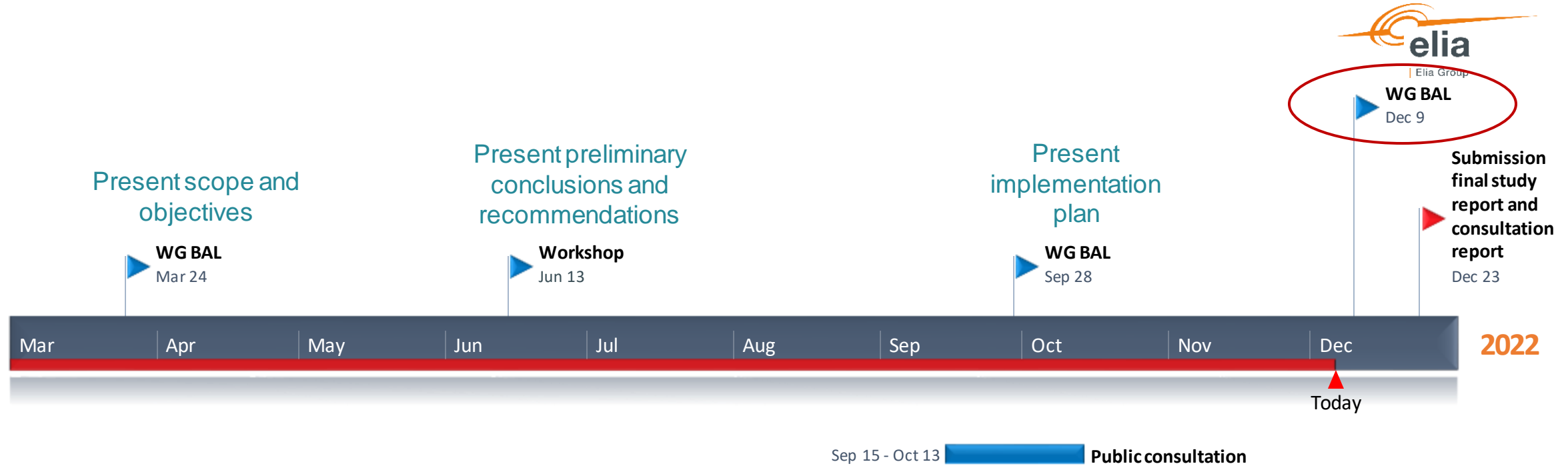


Balancing Incentive Study on the Evolution of the BRP Nominations

Public Consultation Feedback
Kris Poncelet



2022



Objective today

Provide a summary of the feedback on the main recommendations of the study as well as the implementation plan

Overview response public consultation

Elia received non-confidential answers from:

- FEBEG
- Febeliec
- + 1 anonymous response

Next steps

Elia will finalize the study and the consultation report with detailed responses to all comments and publish it on the website by end of this year

Main feedback on the proposed target design for the BRP Nominations

Recommendation	Feedback market	Elia's response
<p>Evolve towards Offtake and Injection Nominations submitted by the BRP that:</p> <ul style="list-style-type: none"> • Include injections and offtakes related to assets providing MW Schedules (to enable a clean split between BRP and SA) • Represent the total injections and total offtake in the portfolio of the BRP within the Belgian zone (pure simplification) 	<ul style="list-style-type: none"> • Stakeholders generally support the target design proposed by Elia • FEBEG: requests certain clarifications on the remaining use of the BRP Nominations, the liabilities for BRPs and the roles, responsibilities in case different parties would take up the role of BRP and SA 	<ul style="list-style-type: none"> • The Nominations would remain to be used for the DA adequacy assessment and the publication of indicators on DA imbalances • The proposal involves a simplification of the nominations but does not encompass a change in responsibilities or liabilities for the BRP • The proposal aims at ensuring independence between SA and BRP in terms of the nomination/scheduling process)
<p>Transfer the responsibility for providing information on the expected offtake of demand facilities from the BRP to the SA in line with SOGL</p>	<ul style="list-style-type: none"> • Stakeholders generally support the target design proposed by Elia • Febeliec stresses that any additional information should only be requested when a clear added value for the system is identified 	<ul style="list-style-type: none"> • The study on the improvement of the quality of input data for congestion management has demonstrated the added value of receiving forecasts of the offtake of demand facilities • The recommendation does not necessarily involve requesting additional information but rather to transfer the responsibilities from the BRP to the SA in line with SOGL

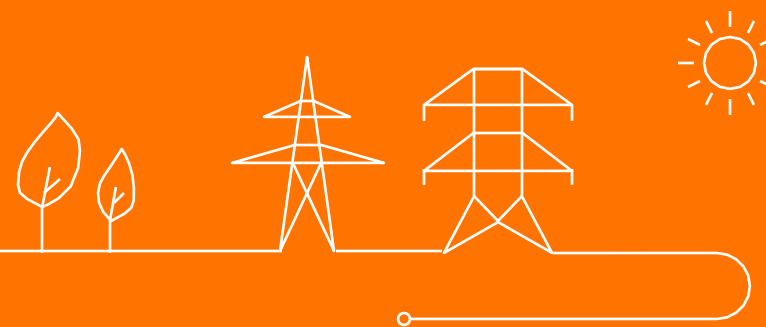
Main feedback on the proposed implementation plan

Recommendation	Feedback market	Elia's response
<ul style="list-style-type: none"> • Elia proposed an implementation plan consisting of two steps 1. Perform the minimal required amendments to enable an SA ≠ BRP in the next revision of the T&C BRP (2023) 2. Implement the proposed target design with total offtake/total injection Nominations with iCAROS phase 2 	<ul style="list-style-type: none"> • Febeliec supports the proposed implementation plan if sufficient time is foreseen to co-create and clarify the design for MW Schedules for demand facilities • FEBEG recommends no intermediate steps for the implementation by synchronizing developments with iCAROS phase 2 	<ul style="list-style-type: none"> • Elia acknowledges that sufficient time is needed for clarifying and implementing the proposed target design and welcomes feedback on the planning on iCAROS phase 2 (public consultation targeted Q1 2023) • NEW: Elia proposes to implement the target design for the BRP Nominations in iCAROS phase 2 (together with the split BRP-SA) taking into account: <ul style="list-style-type: none"> • The feedback received • The other complexities to enable a split between the BRP and SA role • The absence of clear benefits or expected use of the ability to assign an SA ≠ BRP before iCAROS phase 2,

Improvement of the Input Data Quality for Congestion Management

CREG Incentive 2022

Cindy Bastiaensen



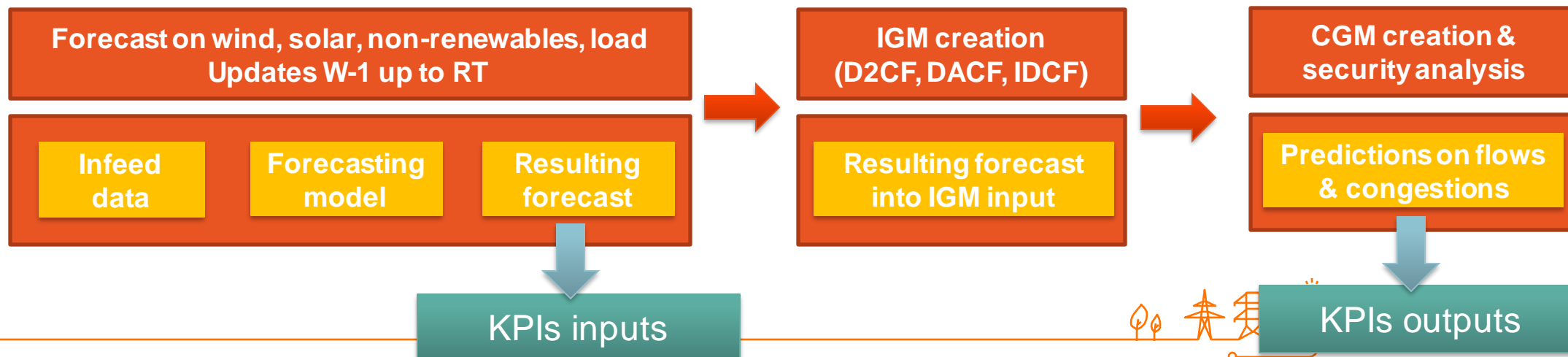
Incentive 2022: goal

- ✓ Transparency on current IGM and CGM modelling practices
- ✓ Transparency on forecast quality of input and output data
- ✓ Root-cause analysis on deviations in forecast compared to Real Time

- Workshops with universities & market parties (June '22)
- Report: public consultation (June '22)



Look into solutions to improve the forecasts
 → Short-term implementation
 → Long-term roadmap



Next steps

- 23/12 : Final report & consultation report publication
 - Report will include roadmap
- 23/01 15:00-17:00 : Workshop @ EMP
 - Focus on explanation of the roadmap -> today some teasers will be presented (see next slide)
 - Question: any particular need to cover? Additional clarification needed?
 - Question: is this date ok?
- Next years: follow-up on roadmap
 - Question: any need to present on yearly basis what is done?



Roadmap

Work ongoing



Improve input quality

- 2022:** PV total estimation (Monthly updates), Cadasters updates (On demand updates (quasi-automatic)), Increase metering ratio, open positions influence on net positions.
- 2023:** Industrialisation of data quality checks PISA, Onshore wind metering, Onshore cadaster quality checks, Higher data quality (metering, capacities etc.).
- 2024:** Forecast quality tracking, Communication type B, Simplified RT data exchange, Centralization/alignment assets data, off shore maintenance, Raise awareness at regional level, surveys, action plans.
- 2025:** Quarterly computation of RMSEs on congested elements, Live tracking via AI/ML tool, All unit > 5MW have RT meas., EMS=PF.
- 2026:** Shadow IGMs? (Highly uncertain).

Build-in AI/ML models & Live data quality monitoring

- 2023:** Accumulate XP and know ledge on batteries behavior, IT integration (Complex integration), Initiation phase.
- 2024:** Large units, Live monitoring, Largest loads.
- 2025:** In-house total load forecast, Ramping-up of individual forecasts, For aggregated forecasts (wind, PV, ...), Those not having qualitative schedules.
- 2026:** Real-time data as input, Live monitoring, Schedules* small units, Using schedules for DA, Real-time meas. as input, Hourly updates of forecasts.

No regrets

- 2022:** Upgrade existing logic, Large ind. loads schedules, Studies & PoCs "smart IGMs".
- 2023:** Reference days, from profile to individual forecasts, timers, weights, internal tool upgrade, ...
- 2024:** Those with same granularity and of good quality, Irradiation as input, Reference season depends on irradiation on top of temperature, Forec. split by elec. zones, Better/easier diagnosis on congestions.

External providers

- 2022:** Tender PV forecast, Trial-phase new offshore provider.
- 2023:** Correct bias & improve storm forecasts + hourly updates, Studies univ. /w ind connect, Revamping Ampacimon forecast, Higher ratings in ID/DA to be foreseen + deployment on all equipped lines.
- 2024:** DLR in-house forecast, If added-value (quality or €).
- 2025:** Tender total load forecast, Taking into account user to grid, EVs, etc.
- 2026-2027:** Regular call for tender for each forecast every 3 to 5 years.

Synchronization load and gen model in Power Factor

- 2023-2024:** Automating & smoothing of process, From less than 1 to 2 or 3 full synchronizations/year per year.
- 2025-2027:** New sync process, Updates on demand, EMS/PFactory comparison, Regular sanity checks of PFactory model.



AOB - Winter Plan (250 MW)

Status and Communication Plan

Kristof De Vos



AOB – Winter plan

Status and communications

1. *After presentation in the WG BAL of September 15, 2022, and a public consultation, Elia submitted the proposal for a modification of the LFC Means to CREG on October 21, 2022.*
2. *Elia provided all the required inputs to implement a bidding obligation by means of a Royal Decree in line with Article 32 of the Electricity Law to the Government*
3. **After approval of the LFC Means, Elia will implement communicate as soon as possible on the implementation plan :**
 1. WG BAL via e-mail
 2. BSPs via bilateral communications (contract manager, key account manger)

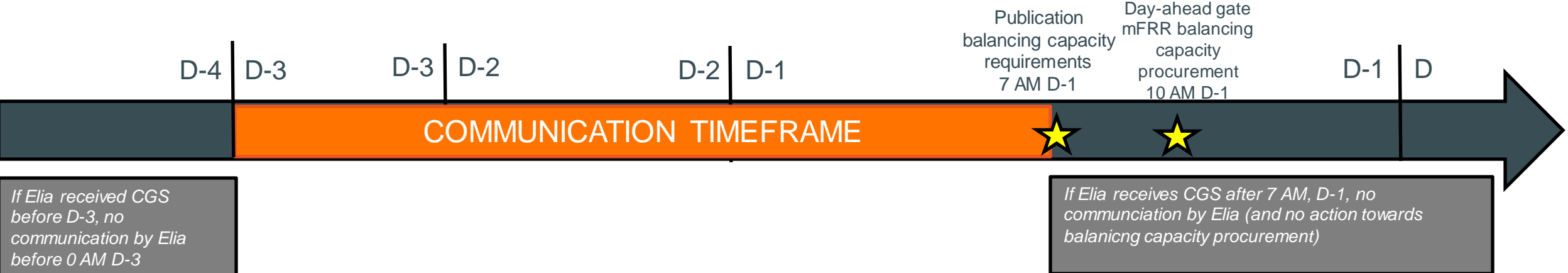
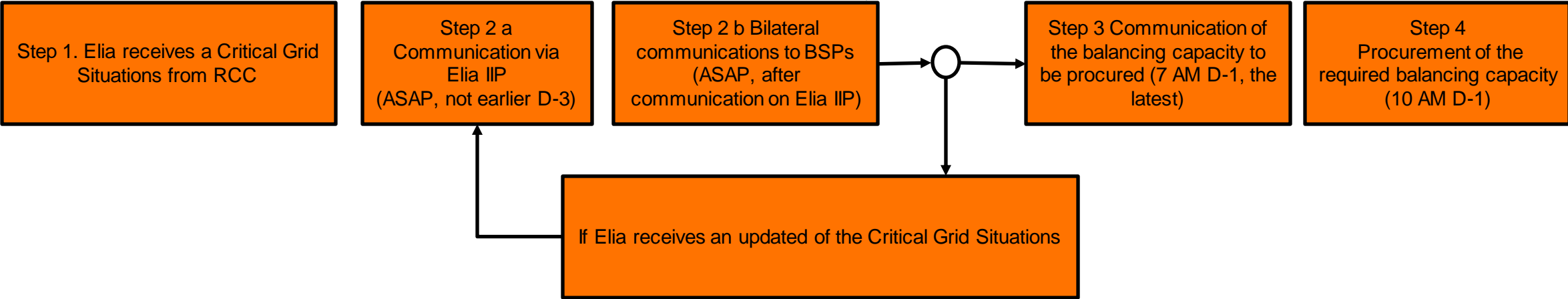
If the adoption of the Royal Decree with the bidding obligation happens after the approval of the LFC Means, an additional communication will follow on the implementation of the bidding obligation

A dynamic increase of the mFRR balancing capacity to be procured with 250 MW (following the reduction of the sharing contribution to 0 MW during a Critical Grid Situation in neighboring countries).

A bidding obligation for large coordinable units to offer mFRR during the first gate of the day-ahead balancing capacity tender (to facilitate liquidity during tight market conditions)

As of the moment a (update of) critical grid situation is published on IIP, Elia will make best effort, as performed in case of 2nd gate in capacity auction, to :
1. Foresee the usual e-mail communication (Contracting_AS@elia.be)
2. Foresee the usual bilateral contact between contract manager and KAM Energy

Trigger Communication Plan



AOB - Feedback on Workshop Losses (17/11)

Jan Voet



17/11 Workshop on 2022 Balancing incentive related to grid losses compensation approach

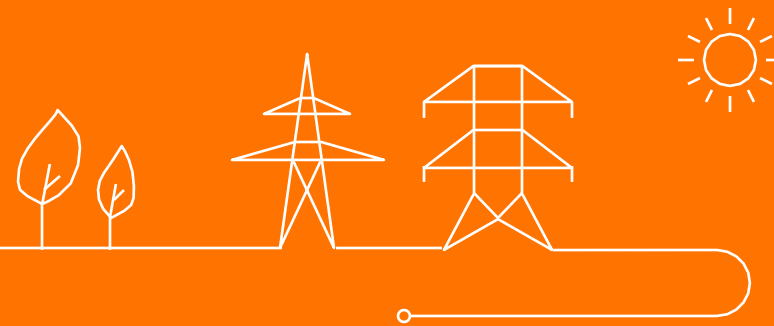
- *Context:* 2022 Balancing incentive by CREG on Elia on grid losses compensation in general dealing with 2 research questions:
 - What is the relevance of developing a short-term procurement component based on short-term forecasting as part of the compensation approach?
 - To what extent is the procurement by Elia on both federal and regional losses more efficient compared to today's setup?
- Beyond the scope of the incentive, Elia organized on 17/11 a workshop with WG BAL members to discuss:
 - Elia's 30/6 study report
 - Results from 3-month POC on losses forecasting
 - Contours of the implementation plan Elia will submit to CREG by 15/12
- The workshop provided for an interesting discussion that:
 - Increased the general understanding across stakeholders on the matter
 - Allowed all stakeholders to express their viewpoints and raise their concerns and questions on Elia's analysis and proposals feeding, thereby enriching and feeding next steps and debate on the topic
 - Indicated that stakeholders wish to remain informed and involved in the next steps, amongst others with respect to the framework within which Elia would operate for short-term procurement.



→ Elia intends to keep stakeholders in the loop via WG BAL and/or WG Belgian Grid

AOB – Next WG Balancing

Loup Vanderlinden



Next WG Balancing

Small changes foreseen:

- WG Balancing 02/02/2023 14:00 – 18:00
- WG Balancing ~~21/03/2023 14:00 – 18:00~~ ⇒ 22/03/2023 09:00 – 13:00
- WG Balancing 16/05/2023 14:00 – 18:00
- WG Balancing 29/06/2023 14:00 – 18:00
- WG Balancing ~~26/09/2023 14:00 – 18:00~~ ⇒ 27/09/2023 09:00 – 13:00
- WG Balancing 14/11/2023 14:00 – 18:00

