



# WG Balancing of 27<sup>th</sup> September 2023

Hybrid meeting

27/09/2023



## 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

- 09:30 – 10:25 : EU & BE Balancing Program Update  
Including Feedback workshop on aFRR evolutions and connection to PICASSO
- 10:25 – 10:40: T&C BRP – Evaluation of the impact of the relaxation of the day-ahead balance obligation
- 10:40 – 10:55: BRP perimeter adjustments – feedback public consultation
- 10:55 – 11:10: Winter Plan Balancing – feedback public consultation
- 11:10 – 11:25: Summary of yearly reporting on FRR dimensioning



# Minutes of Meeting for approval

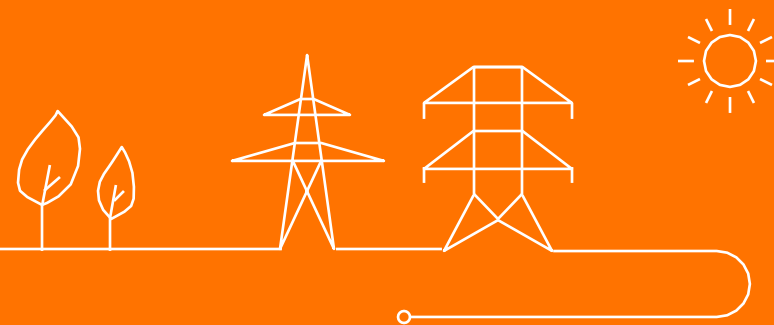
Minutes of Meeting of WG Balancing of 29<sup>th</sup> June 2023

- **Suggestion to approve:**
- The MoM of 29/06/2023



# EU & BE Balancing Program Update

Cécile Pellegrin

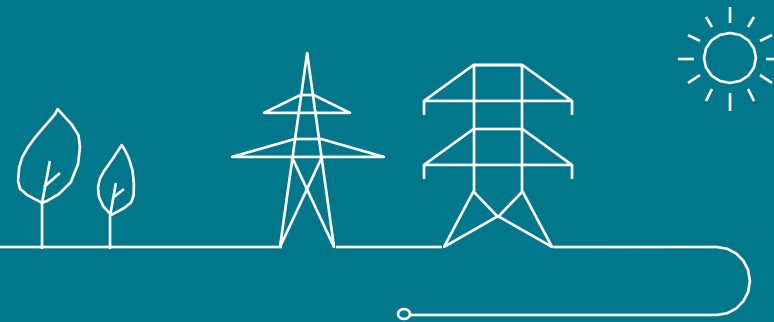




## Agenda of today's presentation

- MARI, PICASSO & iCAROS
  - Closed public consultations
  - Stakeholder management interactions
- aFRR Evolutions
- aFRR capacity auctions - TCO degradation cap
- Coming stakeholder management interactions

# Closed public consultations



## Public consultation in the framework of the MARI and iCAROS projects

### MARI

- Public consultation occurred between 05/07/23 and 30/08/23
- ELIA received feedbacks from Centrica, FEBEG & FEBELIEC

### iCAROS

- Public consultation occurred between 06/06/23 and 25/08/23
- ELIA received feedbacks from BOP, Centrica, Eneco, FEBEG, FEBELIEC and Zandvliet Power for the iCAROS Project

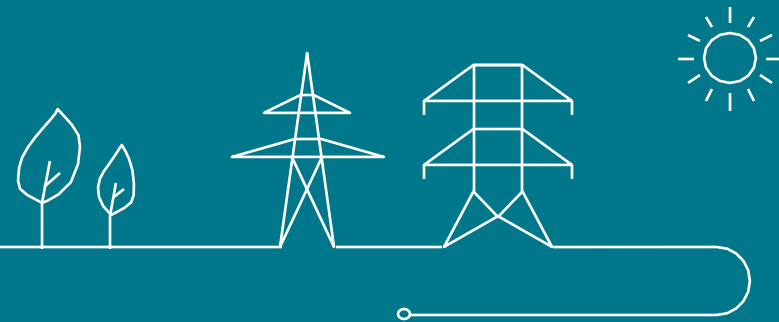
- **ELIA thanks all the market parties for their feedback**
- An **info session** for MARI & ICAROS has been planned **on 12/10/2023** (1PM) with the purpose to
  - Go through the main feedbacks received
  - List the impacts on the T&C OPA, SA & mFRR as the Balancing Rules and/or the Coordination Rules
  - Explain why certain requests have not led to document adaptations
- Answers to public consultation and updated version of T&C OPA, SA & mFRR as the Balancing Rules and the Coordination rules planned to be published in October





# PfA T&C BRP in the context of connection to EU balancing platforms

Caroline Bosschaerts



# Proposal of Amendments of the T&C BRP in the context of connection to EU Balancing Platforms



Public consultation from **12 July 2023** until **28 August 2023**

Proposed changes to the T&C BRP :



1. The formulas of the **main imbalance price component** were **moved from the Balancing Rules to the T&C BRP** and the **additional component** (alpha parameter) that is set by the Tariffs was **copied in the T&C BRP** to provide a complete view of the IP formula
2. Evolutions of the **calculation of the Imbalance Price** for the future **participation of Elia to the EU balancing platforms**

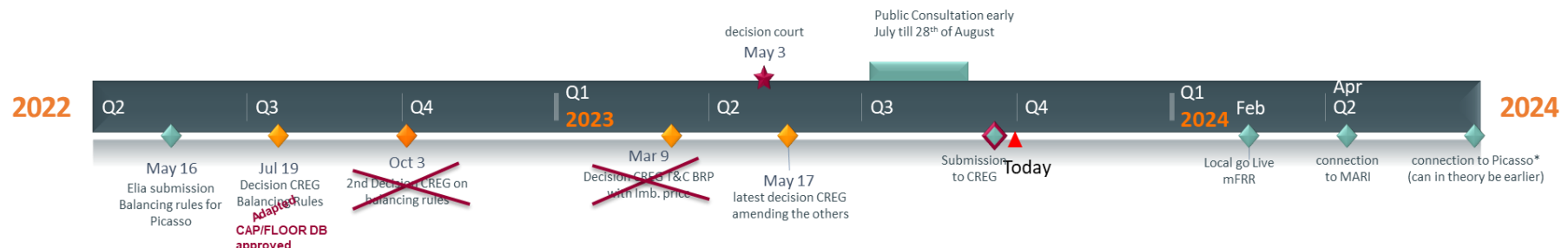
Four non-confidential answers received :



- Belgian Offshore Platform
- Centrica
- FEBEG
- FEBELIEC



Triggered some changes in the PfA w.r.t. public consultation (see next slides)



# General feedback from public consultation

Stakeholder	General feedback
<b>BOP</b>	Can <b>theoretically support</b> mitigation measures proposed by Elia in its proposal but would <b>require actual price data for a more informed position</b> and hence <b>calls for a monitoring</b> of the Imbalance Price design
<b>Centrica</b>	Merely <b>asks for clarifications</b> about some elements of the Imbalance Price formula and encourages Elia to <b>strike a balance between complexity and effectiveness</b> when it comes to mitigate the <b>risk of price manipulation</b>
<b>FEBEG</b>	Even though not its preference <sup>1</sup> , <b>FEBEG agrees to go live with the IP formula as proposed by Elia provided commitment</b> from Elia to <b>test alternative price formulas</b> (based on “what if analysis”) and to <b>investigate and implement high price mitigation measures</b> for connection to Picasso
<b>FEBELIEC</b>	Febeliec wants to <b>voice its support to the Elia proposal</b> , as it provides a <b>good compromise</b> which was discussed at great length during the meetings of the WG Balancing. Febeliec <b>fully supports the reasoning behind</b> and the application of a <b>cap and floor</b> concept, the <b>deadband</b> concept, and the application of the <b>alpha</b> factor.

No stakeholder objects to the Imbalance Price formula as proposed by Elia. Contrarywise, many stakeholders wish to use such “compromise” as starting point for the connection to the EU balancing platforms provided that the necessary monitoring/evaluation is put in place.



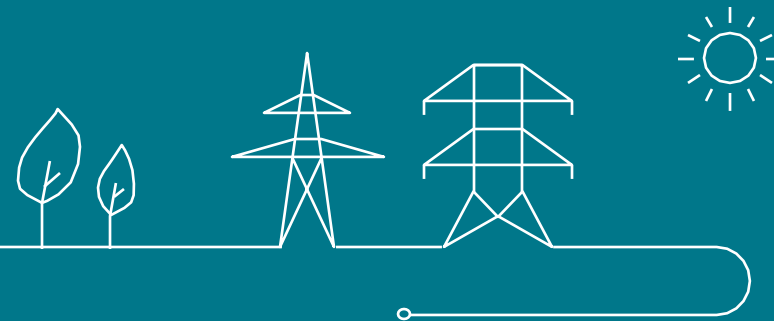
<sup>1</sup> Which remains the compromise proposal as it was detailed in last FEBEG and FEBELIEC 's common reply to the consultation initiated by the CREG

## Changes introduced in the PfA w.r.t. public consultation

Stakeholder	Comment	Impacted article	Modification
<b>FEPEG</b>	Requests a commitment from Elia regarding the testing of alternative price formulas as part of the T&C	Implementation plan	Elia added a commitment to develop a plan for the evaluation of the rules for calculating the Imbalance Price (including the testing of alternative price formulas) in the Implementation Plan of the T&C BRP
<b>FEPEG</b>	Requests to consider all the Optimization Cycles in the formula of the aFRR component when Elia is disconnected from the aFRR platform	Articles 30.3 and 30.5	<p>The formula of the aFRR component was adapted as follows when Elia is disconnected from the aFRR platform :</p> $\frac{\sum_{ts \in ISP} (abs(Global CT_{ts}) * MP_{aFRR_{ts}})}{\sum_{ts \in ISP} (abs(Global CT_{ts}))}$
<b>Centrica</b>	Identifies typos in alpha formula	Article 30.6	The typos identified by Centrica were corrected in article 30.6
<b>Centrica</b>	Requests clarifications about the items excluded from the IP formula	Articles 30.2 to 30.5	A reference was added to the T&C BSP to clarify the meaning of “balancing energy bids activated for other purposes than balancing”; the price of RD energy bids was added to the list of items excluded for the calculation of Imbalance Price
<b>N.A.</b>	When preparing the submission Elia identified typos and ambiguity in mFRR SD definition	Articles 1 and 30	<p>Typos were corrected.</p> <p>Definition of mFRR SD was adapted to clarify that mFRR demand covered by reserve sharing is excluded from mFRR SD</p>

# Stakeholder management implementation

Arno Motte



# BUSINESS TESTING PROTOCOLS WITH MARKET PARTIES

Tests		Type	What	Who	When	
iCAROS	iCAROS_1	Reproduction of <b>real situation</b>	<b>Update</b> of an Availability Plan	OPA	Day I	23/05/2023
	Day II				25/05/2023	
	Backup				01/06/2023	
	iCAROS_2		<b>Initialization</b> of Schedules & RD Energy Bids	SA OPA	Day I	10/10/2023
	Day II				11/10/2023	
	Backup				16/10/2023	
	iCAROS_3	<b>Updates</b> of Schedules & RD Energy Bids	SA OPA	Day I	17/10/2023	
	Day II			18/10/2023		
	Backup			23/10/2023		
	iCAROS_4	<b>Simulation</b> of scenario's	<b>Activations of RD, Return to Schedules Requests</b>	SA	Day I	24/10/2023
	Day II				25/10/2023	
	Day II				26/10/2023	
Backup	06/11/2023					
Back-up week 30/11 - 03/11/2023						

Tests		Type	What	Who	When	
MARI	MARI_1	Reproduction of <b>real situation</b>	<b>Initialization &amp; updates</b> of mFRR Energy Bids	BSP	Day I	07/11/2023
	Day II				08/11/2023	
	Backup				13/11/2023	
	MARI_2	<b>Simulation</b> of scenario's	<b>Activations of mFRR</b>	BSP	Day I	14/11/2023
					Day II	15/11/2023
					Day II	16/11/2023
					Backup	20/11/2023
Back-up week 20/11 - 24/11/2023						
iCAROS/MARI	iCAROS/MARI_1	Reproduction of <b>real situation</b>	<b>Initialization</b> of Schedules & RD/mFRR Energy Bids	BSP SA OPA	Day I	28/11/2023
	Day II				29/11/2023	
	Backup				04/12/2023	
	iCAROS/MARI_2	<b>Updates</b> of Schedules & RD/mFRR Energy Bids	BSP SA OPA	Day I	05/12/2023	
	Day II			06/12/2023		
	Backup			11/12/2023		
iCAROS/MARI_3	<b>Simulation</b> of scenario's	Combination of <b>activations</b> of mFRR, RD & <b>Return-to-Schedules Requests</b>	BSP SA	Day I	12/12/2023	
Day II				13/12/2023		
Day II				14/12/2023		
					Backup	18/12/2023

## Business testing protocols with market parties

- Documentation describing ICAROS testing protocols will be shared shortly (at the latest one week before testing)
- Subscribe to Business testing protocol days by contacting Arnaud Willem:
  - concerning ICAROS testing before 2/10.
  - concerning MARI testing before 31/10

**!!! Start of testing period as of 10 October !!!**



# Market party testing: Guidelines

## Individual testing:

- Possible in addition to obligated testing
- On request Meeting with experts (1<sup>st</sup> Thursday + 3<sup>rd</sup> Friday of the month)

Dedicated [MARI/ICAROS webpage](#) for implementation

## Communication, for questions on:

- contracts/obligation/design contact  
*KAM + Arnaud Willem*
- Implementation MARI/ICAROS contact  
*Arnaud Willem + IT\_ECL with KAM in cc*

## iCAROS / MARI: implementation, testing and Go-Live

The projects iCAROS and MARI are in implementation phase and (soon) testing phases with the SA(Scheduling Agent) / OPA(Outage Planning Agent) / BSP(balancing services providers) stakeholders and aiming for a Go Live in February 2024.

iCAROS  
MARI  
Market common Testing Roadmap  
Technical Guide update  
Other key documents  
Tools  
Contact your KAM Energy

### iCAROS:

Integrated Coordination of Assets for Redispatching and Operational Security (iCAROS) is a new way of working to ensure an efficient and modern Coordination and Congestion Management of system relevant assets of grid users. This in compliance with the European legislation.

### MARI:

The Manually Activated Reserves Initiative (MARI) Platform will allow the exchange of mFRR balancing energy between participating TSOs. The latest information and planning of the implementation of the platform can be found on the website of [ENTSO-E](#).

MARI will enhance the efficiency of the European balancing system and will benefit both TSOs and BSPs. TSOs will gain access to competitive mFRR balancing energy bids from outside their country, while BSPs will be able sell their mFRR balancing energy to all participating TSOs.

### Market common Testing Roadmap (details in the other key documents):

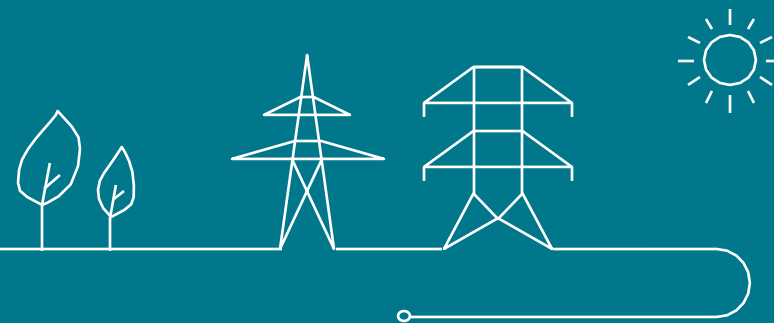
Elia has for objective to confirm a Go Live date on February 2024 after the successful common Tests with the currently active OPA/SA/BSP on the following dates.

Tests	Type	What	Who	When
iCAROS	ICAROS_1	Reproduction of real situation	Update of an Availability Plan	OPA Day I 23/05/2023 Day II 25/05/2023 Backup 01/06/2023
	ICAROS_2		Initialization of Schedules & RD Energy Bids	SA OPA Day I 10/10/2023 Day II 11/10/2023 Backup 16/10/2023
	ICAROS_3		Updates of Schedules & RD Energy Bids	SA OPA Day I 17/10/2023 Day II 18/10/2023 Backup 23/10/2023
	ICAROS_4	Simulation of scenario's	Activations of RD, Return to Schedules Requests	SA Day I 24/10/2023 Day II 25/10/2023 Day II 26/10/2023 Backup 06/11/2023
Back-up week 30/11 - 03/11/2023				



# aFRR Evolutions

Philippe Magnant



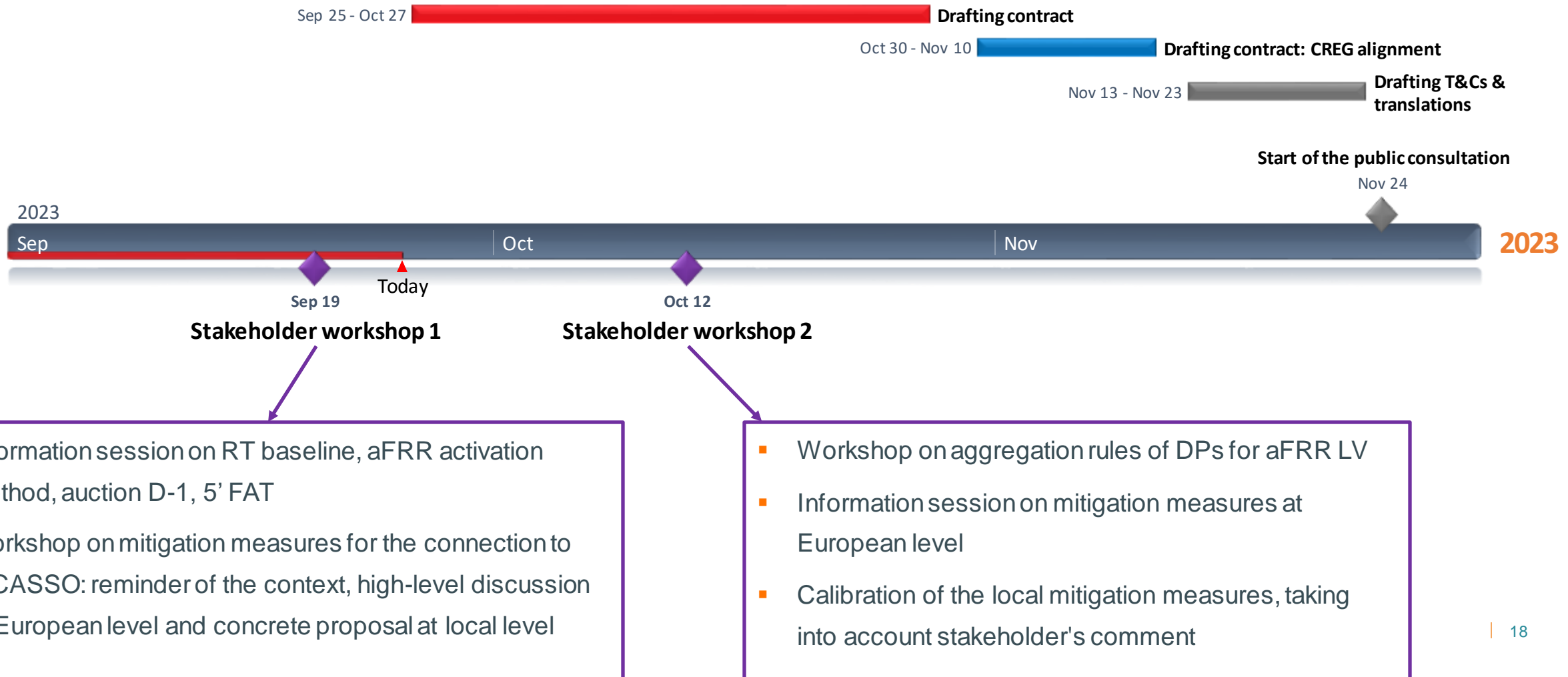


## Scope & planning – implementation impact for BSPs

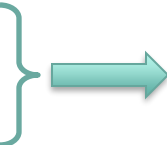
Design evolution	Implementation impact for the BSPs	Planning
Possible local mitigation measures for PICASSO	Will depend on the measures	12/06/2024
5' FAT (Full Activation Time)	Mandatory – possible impact on offered volumes	11/12/2024
Move aFRR capacity auction to D-1	Mandatory – operational impact	11/12/2024
Incentive 2021: RT baseline	Optional implementation	12/06/2024
Incentive 2022: activation method	Optional implementation	12/06/2024
CCMD: ind. correction model, opening LV	Optional implementation	12/06/2024

Dates modified in order to merge the go-lives of 2 changes related to the aFRR capacity auctions.

## Scope & planning – stakeholders interactions



## Proposal for the connection to the aFRR-Platform

- Elia confirms willingness to connect in June 2024, and this independently of
  - The evolution of the discussions on the European mitigation measures
  - The connection of RTE
  - The ATC sharing by TenneTNL

Even though those are planned close to our connection, the objective is to remove as much uncertainties as possible for our go-live date
- Elia plans to include a local price cap on Contracted aFRR Energy Bids in the Proposal for Amendment of the T&C BSP aFRR
  - Price level → use of the current price cap of +/-1.000€/MWh
  - Temporary character → the price cap would be applied for given period, extendable on the basis of analyses
- Elia will continue advocating for the implementation of mitigation measures at European level, with a particular emphasis on elastic demand
- For the period between Elia's connection and the implementation of elastic demand, Elia plans to propose to maintain the current price cap on all aFRR Energy Bids

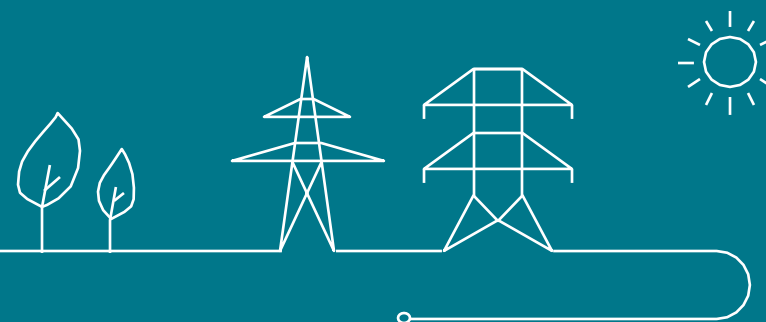


## Feedback requested to stakeholders

- Stakeholders are requested to provide feedback on the content of the 1<sup>st</sup> workshop of 19/9 by **Friday 29/9 EOD**
- The feedback can relate to the conditions to connect to the aFRR-Platform as well as to the other topics addressed
- The feedback will be taken into account towards the 2<sup>nd</sup> stakeholder workshop on 12/10

# aFRR capacity auctions TCO degradation cap

Philippe Magnant

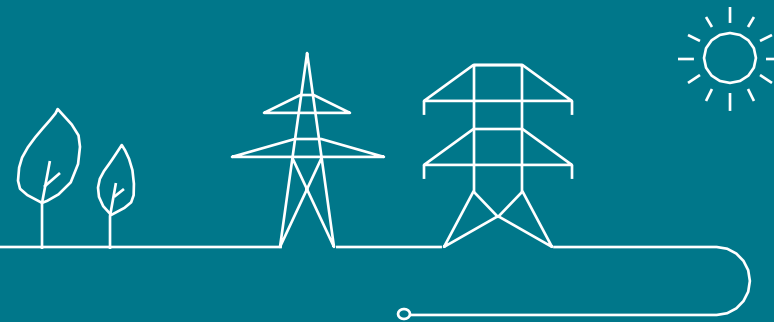


## aFRR capacity auctions: TCO degradation cap

- The **latest version of the T&C aFRR**, including changes on the aFRR Capacity Auction (**TCO degradation cap**), has been approved by the regulator on 10<sup>th</sup> of August and will **enter in to force as of delivery day 28<sup>th</sup> of September**.
- As a consequence the **aFRR Capacity auctions held as of 26<sup>th</sup> of September** (including) will be governed by the new BSP Contract aFRR.
- The consultation report and the updated version of the contract are available on the [webpage of the consultation](#).



# Coming stakeholder management interactions



# Coming stakeholder management interactions



- Next interactions

- Regular follow-up of implementation plans
- More information regarding the content and organization of the business testing protocol with service providers, where still applicable, will be communicated in due time directly to service providers and through WG Balancing
- Workshop / information session:
  - 12/10 – Stakeholder WS PICASSO - Calibration of the mitigation measures, taking into account stakeholder's comments
  - 12/10 – Info session on MARI/iCAROS consultation



## Contact persons



### **KAM Energy**

Amandine Leroux / Arno Motté / Nicolas Koelman

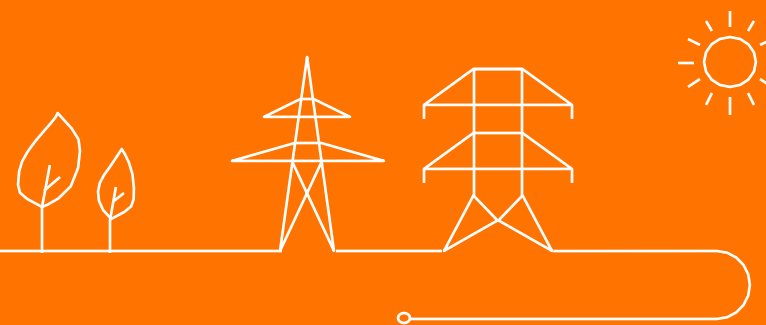
### **Implementation ad hoc sessions (on request)**

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



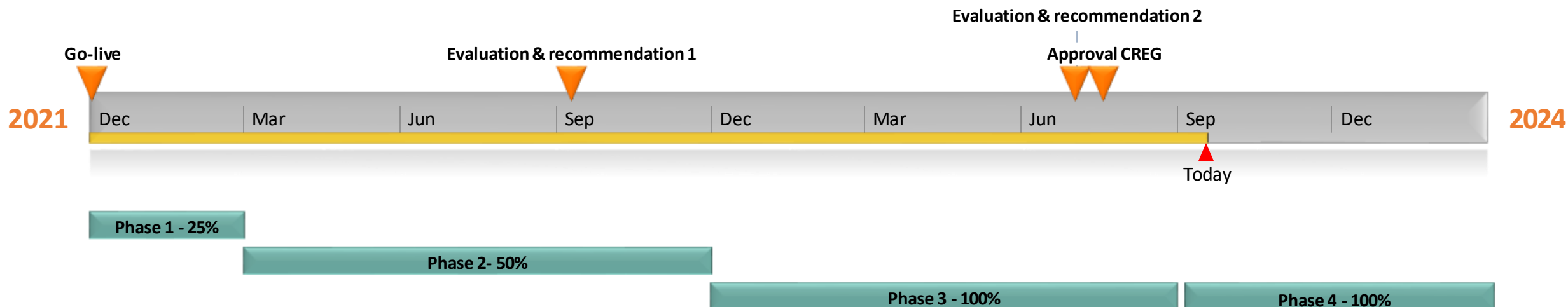
# Progressive relaxation of the day-ahead balance obligation – evaluation & recommendation end of phase 3

Kris Poncelet



# Context & objective

In December 2021, Elia started the progressive relaxation of the day-ahead balance obligation for BRPs according to the following implementation plan:



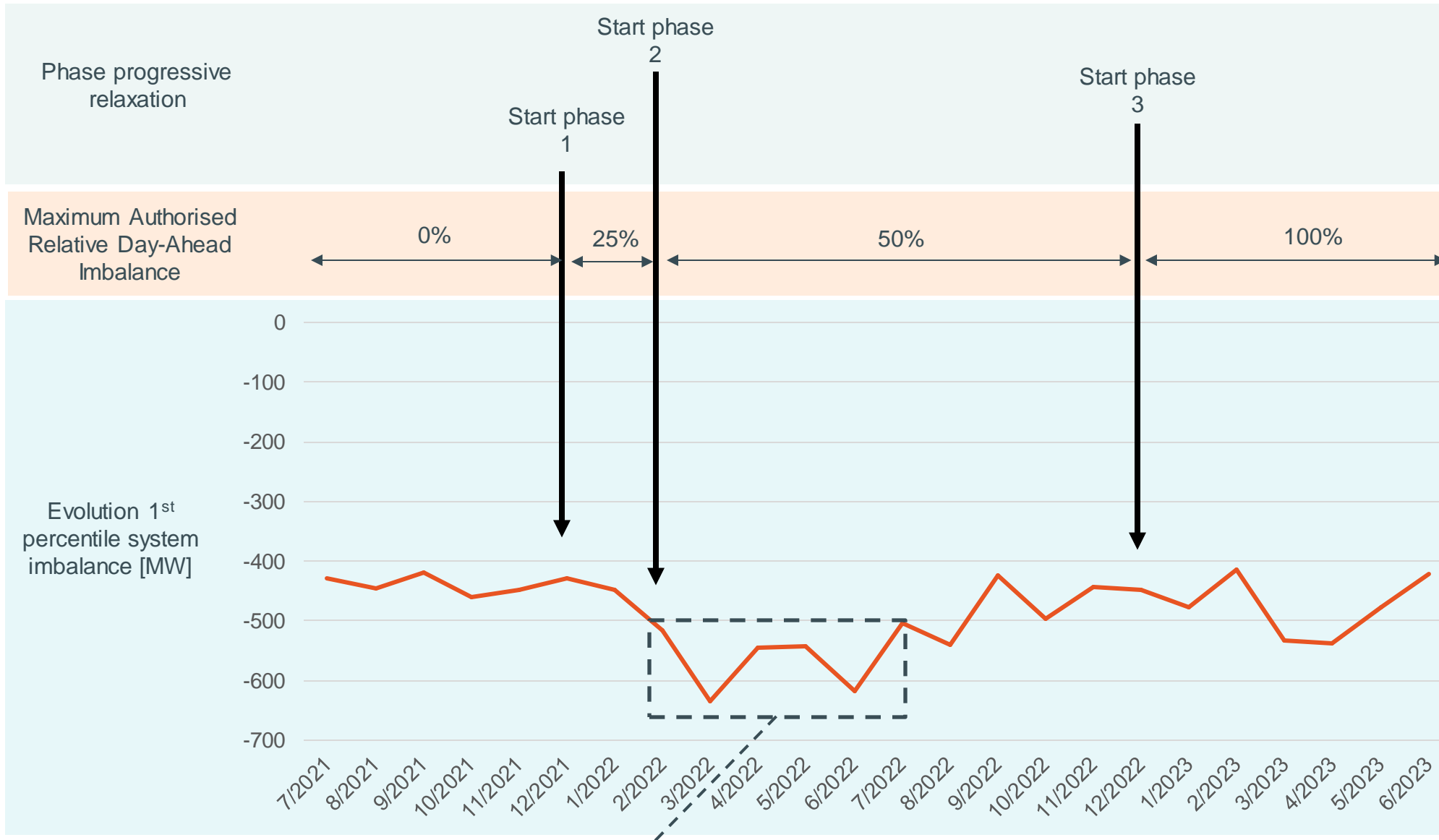
The **objective** of this presentation is to **present the results of the formal evaluation performed at the end of phase 3.**

Recall: The purpose of the evaluation is to confirm the assumption that the relaxation of the day-ahead balance obligation does not have a significant negative impact on the system imbalance.

## Key facts and figures

- The possibility to have DA imbalances was:
  - extensively used by a limited number of BRPs (mostly traders)
  - occasionally used by other BRPs
- The global DA imbalances remained very limited (compared to the sum of all BRPs portfolio):
  - Average global DA imbalance (since December 2021) is 16 MW, with a standard deviation of 143 MW
  - The 10th and 90th percentiles of the global DA imbalance are -111 MW and 168 MW
  - The 1<sup>st</sup> and 99<sup>th</sup> percentile of the global DA imbalances are -511 and 347 MW
- Trader BRPs who took open position in DA always managed to close their position before RT

# No degradation of the 1<sup>st</sup> percentile of the system imbalance is observed

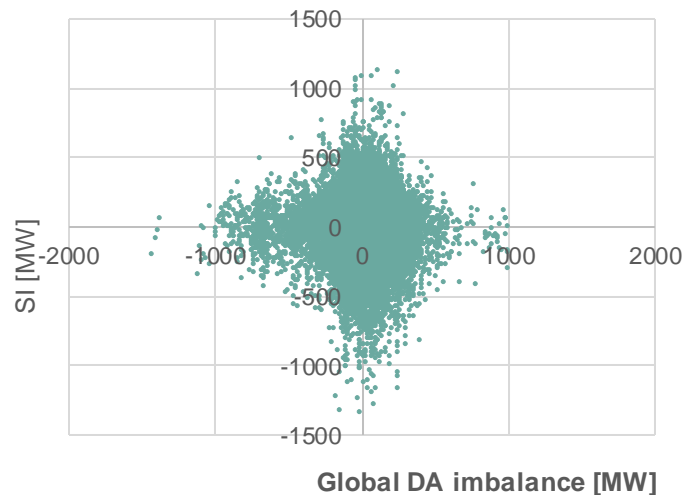


Temporary degradation due to factors not related to the DA balance obligation => See WG BAL of 15/9/2022



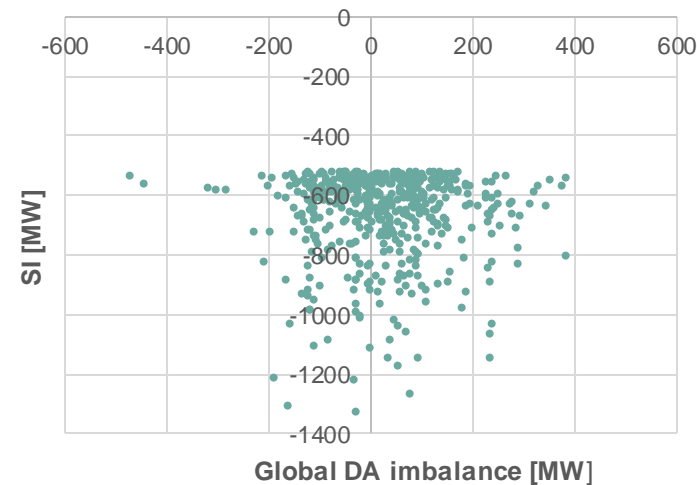
# No relation between the global day-ahead imbalances and the system imbalance is observed

All data



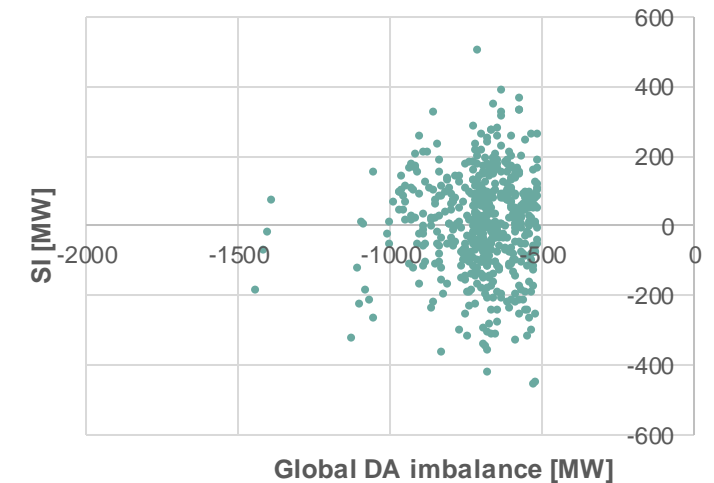
- No clear relation observed
- Correlation not significant (-0,03)

Highest negative SI



- Global day-ahead imbalances were limited in moments the highest negative SI values were observed
- Global day-ahead imbalances tend to be rather positive in these moments

Highest negative global day-ahead imbalance



- No abnormally high SI values observed when highest negative global day-ahead imbalances occurred
- SI distributed around 0 MW

## Elia's recommendation and next steps

- Elia has recommended to the CREG to continue to allow BRPs to have day-ahead imbalances up to 100% of the size of their portfolio.
- In July 2023, the CREG has approved Elia's recommendation

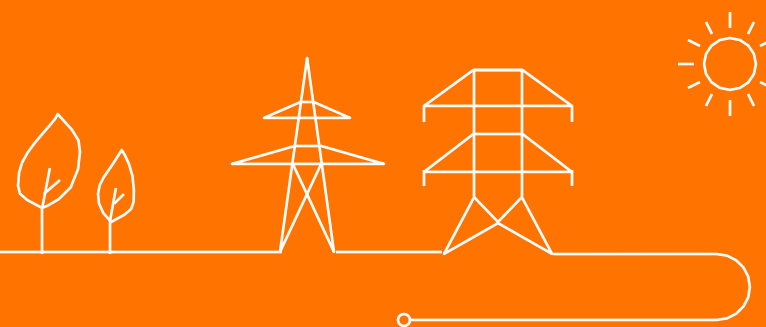


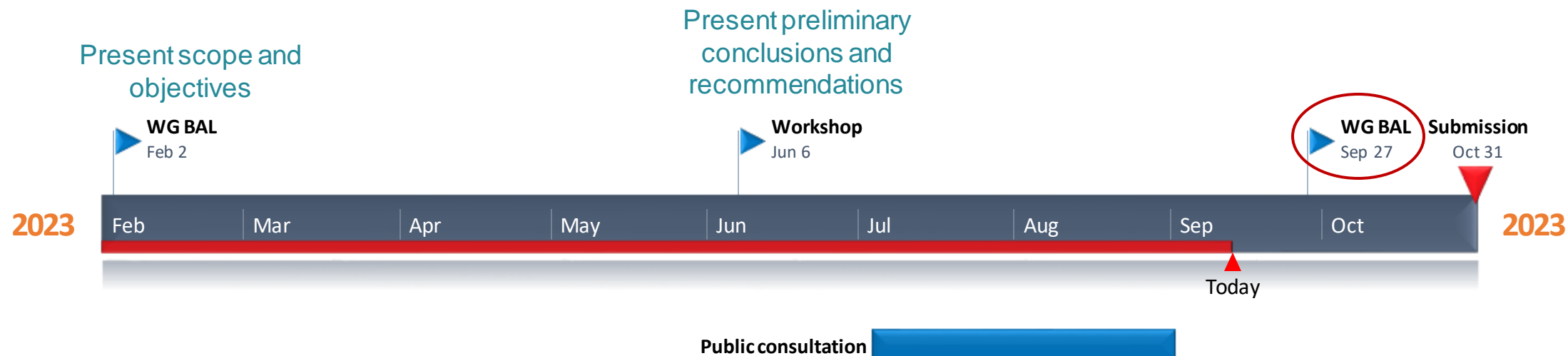
The maximal authorized day-ahead imbalance will remain at 100% of the size of the portfolio of the BRP, except if:

- An amendment to the T&C BRP would be proposed relative to the day-ahead balance obligation
- A significant negative impact on the reliability, safety or efficiency of the grid would be detected resulting from the relaxation of the day-ahead balance obligation, and in response to which Elia, with approval of the CREG, would reduce the maximum authorized relative day-ahead imbalance.

# Study on the BRP perimeter adjustments in case of activation of mFRR or redispatch energy bids Feedback Public Consultation

Kris Poncelet





## Objective today

Provide a summary of the feedback on the main recommendations of the study

## Overview response public consultation

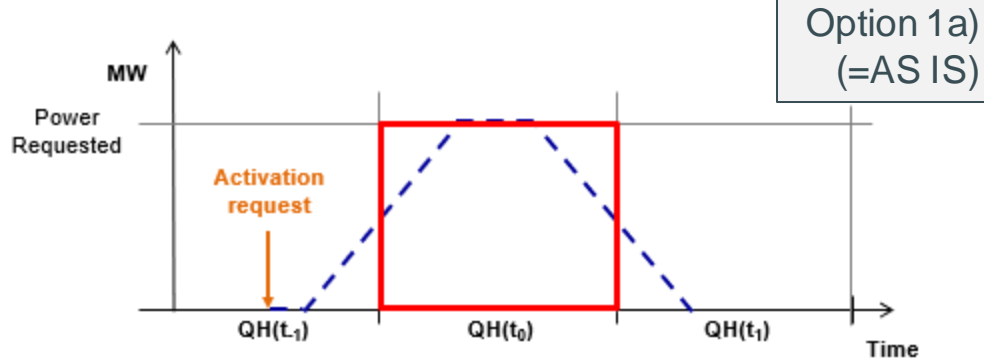
Elia received non-confidential answers from:

- CBS
- FEBEG
- Febeliec

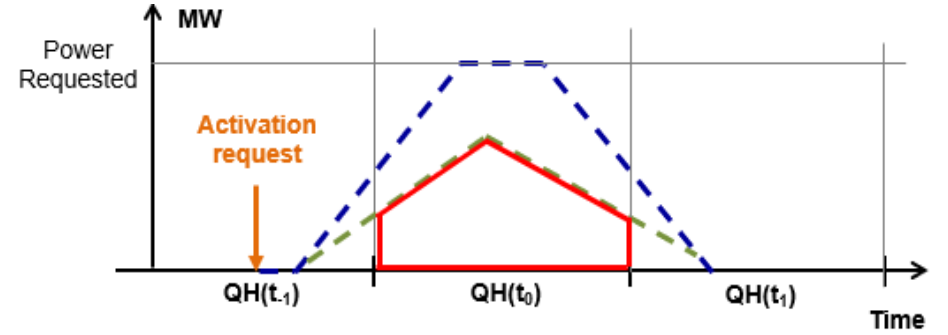
### Option 1: Adjustment with the Requested volume ( $-E_{Req}$ )

### Option 2: Adjustment with the Delivered volume ( $-E_{Del}$ )

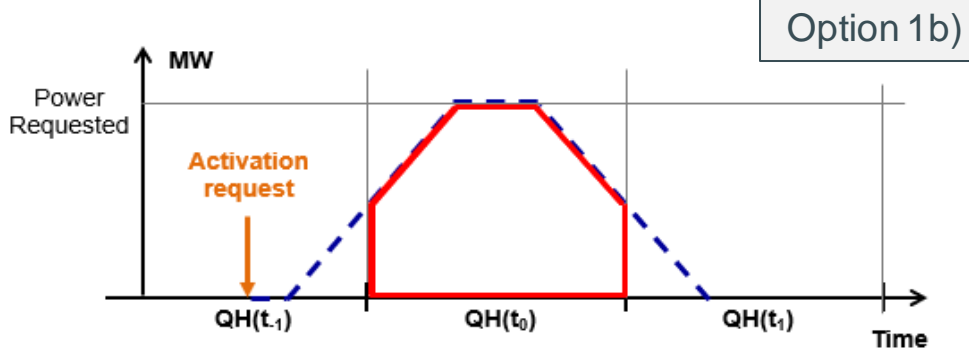
Without consideration of ramping profiles



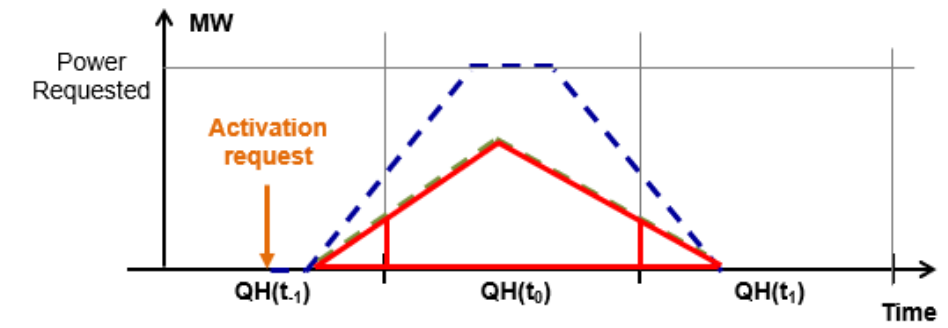
Option 2a)



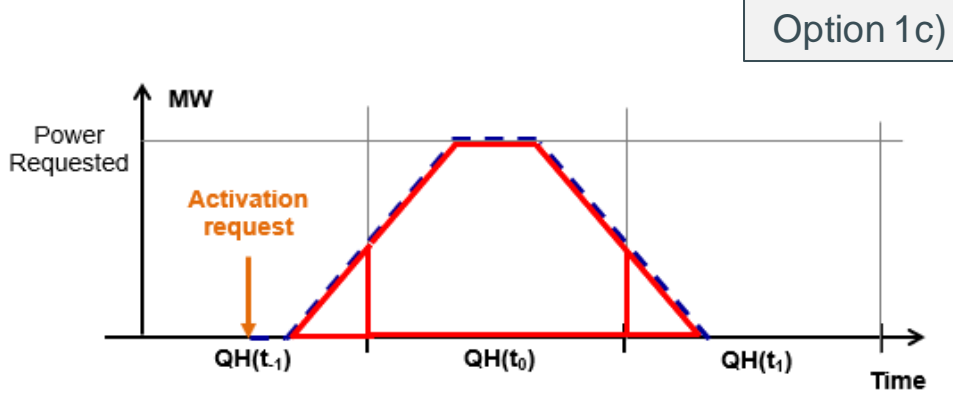
With consideration of ramping profile within the Qh of the activation



Option 2b)



With consideration of ramping profile within the Qh of the activation and the ramping Qhs



Perimeter adjustment(s)   
  Assumed activation profile   
  Actual activation profile

### Option 1: Adjustment with the Requested volume ( $-E_{Req}$ )

### Option 2: Adjustment with the Delivered volume ( $E_{Del}$ )

	1a) Block approach	1b) Req. profile during Qh of delivery	1c) Req. profile all Qhs	2a) Del. during Qh of delivery	2b) Del. during Qh of delivery and ramping Qhs
Balance responsibility	✓	✓	✓	✗	✗
Possibility to avoid incentives for not performing the activation	✓	✓	✓	✓	✓
Possibilities to split the roles BRP – SA/BSP	✓	✓	✓ / ✗	✓ / ✗	✓ / ✗
Impact of potential imbalances for the BRP <sub>FSP</sub>	✓ / ✗	✗	✓ / ✗	✗	✓
Implementation complexity	++	-	--	--	---
Compliance with the regulatory framework	✓	✓	✓	✗	✗

- CBS explicitly supports Elia's conclusion to rule out Option 1b
- Other respondents did not explicitly refer to Option 1b but expressed a preference for one of the other options

All respondents explicitly support Elia's conclusion to rule out the options based on the delivered volume

## Option recommended by Elia

### 1a) Block approach

✓
✓
✓
✓ / ✗
+++
✓

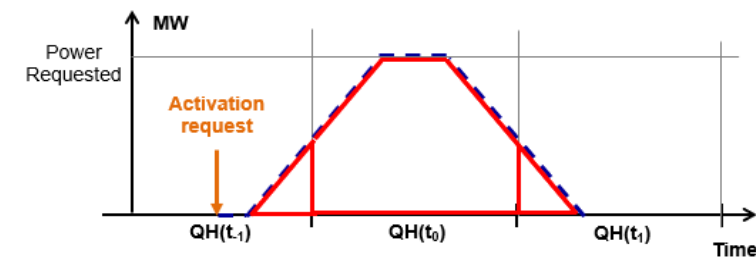
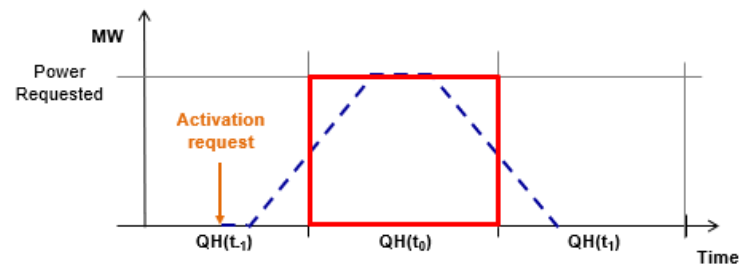
### 1c) Req. profile all Qhs

✓
✓
✓ / ✗
✓ / ✗
--
✓

**Elia recommends maintaining the block approach** (Option 1a) as Elia considers that there is **currently no sufficient motivation for adapting the block approach**

**Febeliec fully supports Elia's analysis** and considers the block approach the best approach for the perimeter adjustments.

**CBS and FEBEG** recognize the complexities and challenges related to Option 1c but nevertheless **urge Elia to reconsider Option 1c**



# Detailed comments

Recommendation	Feedback market	Elia's response
<p><b><u>Elia recommends maintaining the block approach</u></b> (Option 1a) as Elia considers that there is <b>currently no motivation for adapting the block approach</b>:</p> <ul style="list-style-type: none"> <li>• The block approach <b>enables providing the right incentives</b> for delivering the requested service</li> <li>• The block approach does <b>not directly impact the possibilities for splitting the roles</b></li> <li>• The block approach <b>could potentially introduce an imbalance in the perimeter of the BRP<sub>FSP</sub> but i) the financial impact of these potential imbalances is currently observed to be highly limited on average, and ii) potential imbalances cannot be avoided as long as mFRR remains an energy product.</b></li> </ul>	<p>FEBEG argues that a perfect activation should not result in exposure for the BSP/SA and its BRP</p>	<p>Elia reminds that mFRR is currently a quarter-hourly “energy product” where <b>different activation profiles can be followed that all respect the full activation time</b>. As a result, <b>small imbalances are inherent to the activation profile followed by the BSP/asset</b>.</p>
	<p>FEBEG indicates that the block approach does not seem suitable in a world with decorrelated balancing energy and energy bid prices</p>	<p>Elia confirms that there could be a decorrelation between imbalance prices and energy bid activations/prices in certain moments. However, Elia's analysis shows that such a <b>decorrelation would only decrease the average financial impact for the BRP</b> in case the assumed activation profile would be followed.</p>
	<p>CBS indicates that even a 2% increase in mFRR balancing energy costs is significant</p>	<p>Elia believes there is <b>no increase in balancing costs</b> to be expected as potential imbalance-related costs are already considered by the BSP and are expected to decrease with the new activation profile and the possible decorrelation of prices.</p>
	<p>CBS indicates that the imbalance-related costs for the BRP<sub>BSP</sub> can be higher in certain moments</p>	<p>Elia is convinced that <b>looking at specific moments does not provide a representative image of the impact</b> of the block approach. Indeed, counterexamples exist in which the imbalances that would be observed in case the assumed activation profile is followed would be beneficial to the BRP<sub>FSP</sub>.</p>



# Elia's recommendation following the public consultation

- **Elia maintains its recommendation to currently keep the block approach (Option 1a)** for the perimeter adjustments applied in case of mFRR or Redispatch energy bids.
  - the **potential benefits of Option 1c are highly uncertain as long as there is no strict control on whether BSPs/SAs follow the assumed activation profile**
  - **The potential benefits and impact of Option 1c are expected to be highly limited**
  - **Option 1c comes with a high level of complexity and fundamental challenges for ToE**
- **In case market parties would demonstrate in the future and based on clear evidence that -by exactly following the activation profile- that the financial impact increases and becomes significant, Elia is ready to re-investigate** the matter on moving towards option 1c, alongside necessary changes in the mFRR product design (profiled activation).
- **If Option 1c would be considered, Elia believes significant evolutions of the mFRR product would be necessary to enable Elia to monitor and calculate the delivered volume during the ramping periods (e.g., mFRR as a 4-second product).**

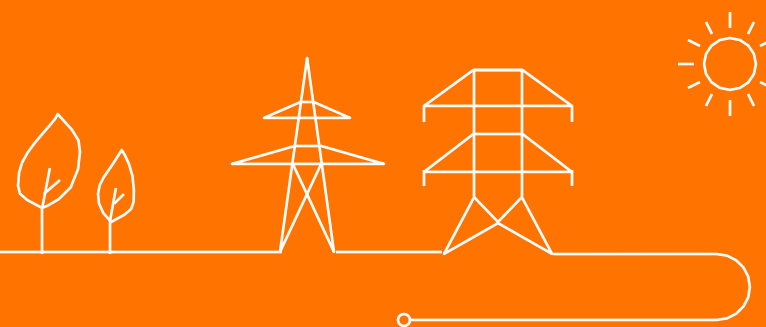
## Next steps

- Elia will finalize the study and the consultation report with detailed responses to all comments
- All documents will be published on the Elia website by end October



# Winter Plan Balancing - Feedback Public Consultation

Kristof De Vos



# Status Winter plan Balancing

1. Elia held a public consultation on its Winter Plan Balancing proposals between August 18 until September 15 :

1. Via a proposed modification of the LFC block operational agreement and the LFC Means
2. The reduction of sharing contribution during tight market conditions in FR / NL / DE / UK is specified in the LFC Means
3. A bidding obligation on mFRR balancing capacity during tight market conditions in BE / FR is specified in the LFC block operational agreement

2. Elia received two answers during the consultation :

## FEBELIEC

- **Not against bidding obligation** if taking into account technical limitations of assets
- **Worried about impact of removing additional capacity (250 MW) from day-ahead market** during tight market conditions in Belgium. Opposes to the ‘all or nothing’ approach of the 250 MW increase

### Out of scope

- Supports fixing and temporary maintaining the aFRR needs at 117 MW.
- Proposes to account remaining imbalance netting potential in mFRR
- Iterates point on filtering out exceptional data points for training dimensioning methods
- Iterates comments on mFRR FLEX phase out

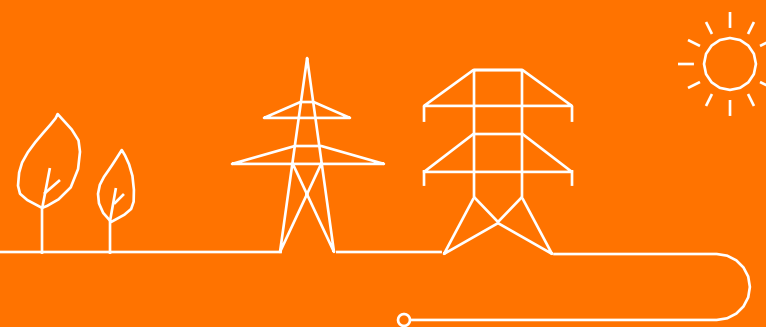
## FEBEG

- **Supports the implementation of a Critical Grid Situation (250 MW increase)** as an intermediate step toward dynamic FRR procurement,
- FEBEG opposes the continuous imposition of permanent obligations (**bidding obligation**) and can accept a temporary obligation for the upcoming winter only if it remains temporary and proportionate (not exceeding 250 MW on top of usual volumes offered).
- Regrets several short-notice measures (Winter plan and Incompressibility)
- Against maintaining the aFRR needs at 117 MW
- Supports the 5' aFRR FAT

3. Elia foresees to submit to CREG on September 29, 2023

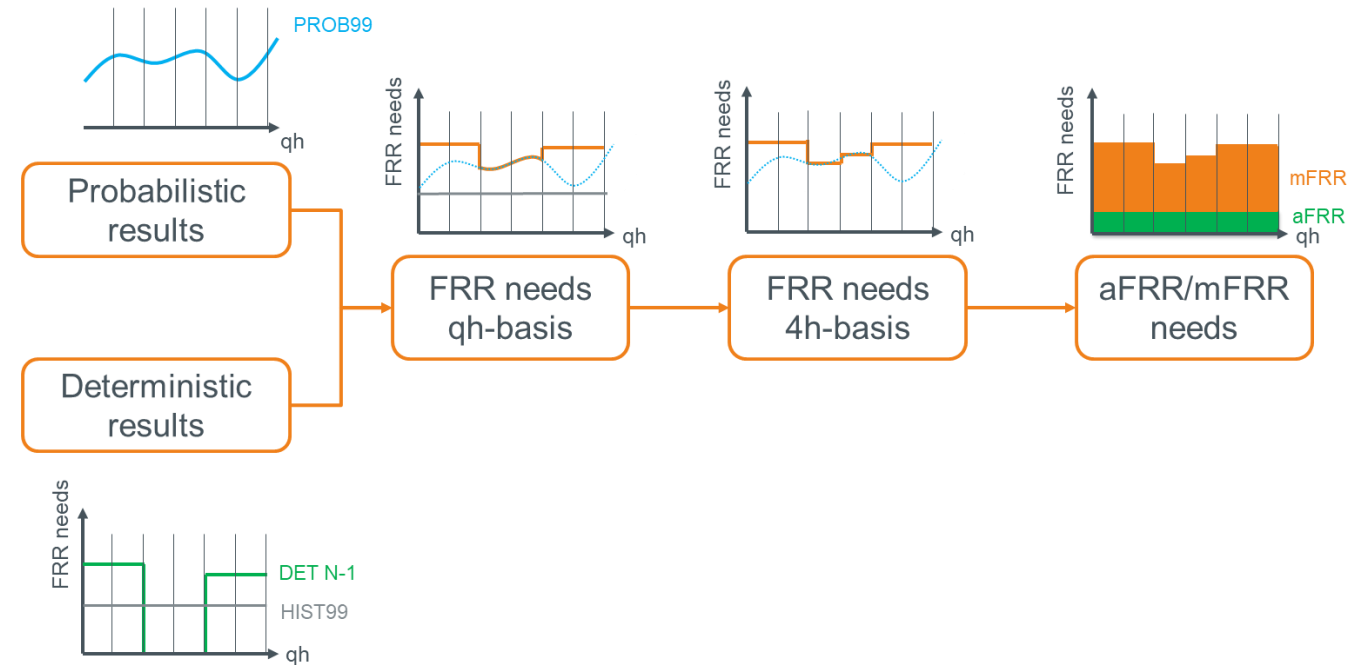
# FRR dimensioning - summary of yearly reporting

Kristof De Vos



# RECAP - Dynamic dimensioning methodology

- FRR reserve capacity is determined based on a probabilistic methodology in line with Article 157(2)b of the SOGL covering 99.0% of the LFC block imbalance risks
- It takes into account two deterministic thresholds :
  - Always larger than the dimensioning incident in line with Article 157(2)e and Article 157(2)f
  - Always covering 99.0% of historic LFC block imbalances in line with Article 157(2)h and Article 157(2)i
- The methodology is specified in the LFC block operational agreement and its explanatory note ([link](#))



The required positive and negative reserve capacity on FRR is calculated by Elia each day before 7 AM for every period of 4 hours of the next day

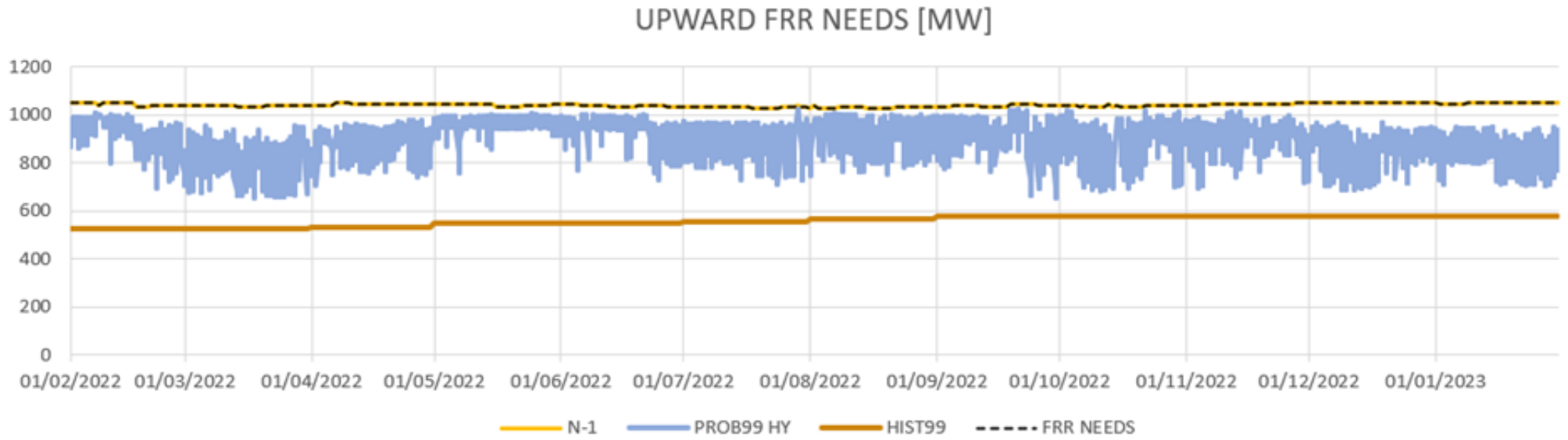
# Available information

- **Daily publication of the results (before 7 AM D-1):** final FRR needs and mFRR balancing capacity (to be procured)
- **Yearly analysis of the FRR needs and means :** assess whether the positive and negative FRR needs have been sufficiently covered by the resources available.
  - In line with regulatory framework : Article 6 of the LFC Means ([link](#))
  - Results of the analysis presented in the Working Group Balancing (cfr. next slides)

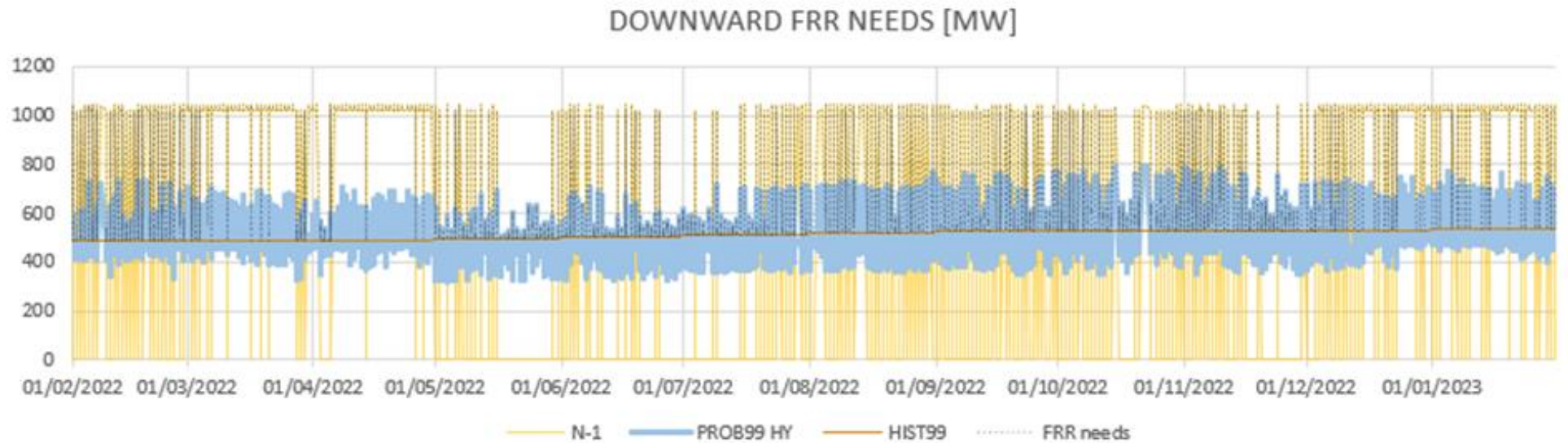
**Article 6 of the LFC Means** “Elia will carry out a yearly ex-post analysis in the first quarter of each year based on historical data from the precedent year on and assess whether the positive and negative FRR needs have been sufficiently covered by the resources available. For the purposes of this analysis, Elia will compare the results of the positive and negative FRR needs based on the methodology in the LFCBOA and compare this with the available resources of aFRR (contracted aFRR balancing capacity) and mFRR (non-contracted balancing energy offers and sharing of FRR reserves).”

## FRR needs

Upward FRR needs remain set by dimensioning incident (by largest nuclear generation unit)



Downward FRR needs are less frequently determined by dimensioning incident (by Nemo Link)





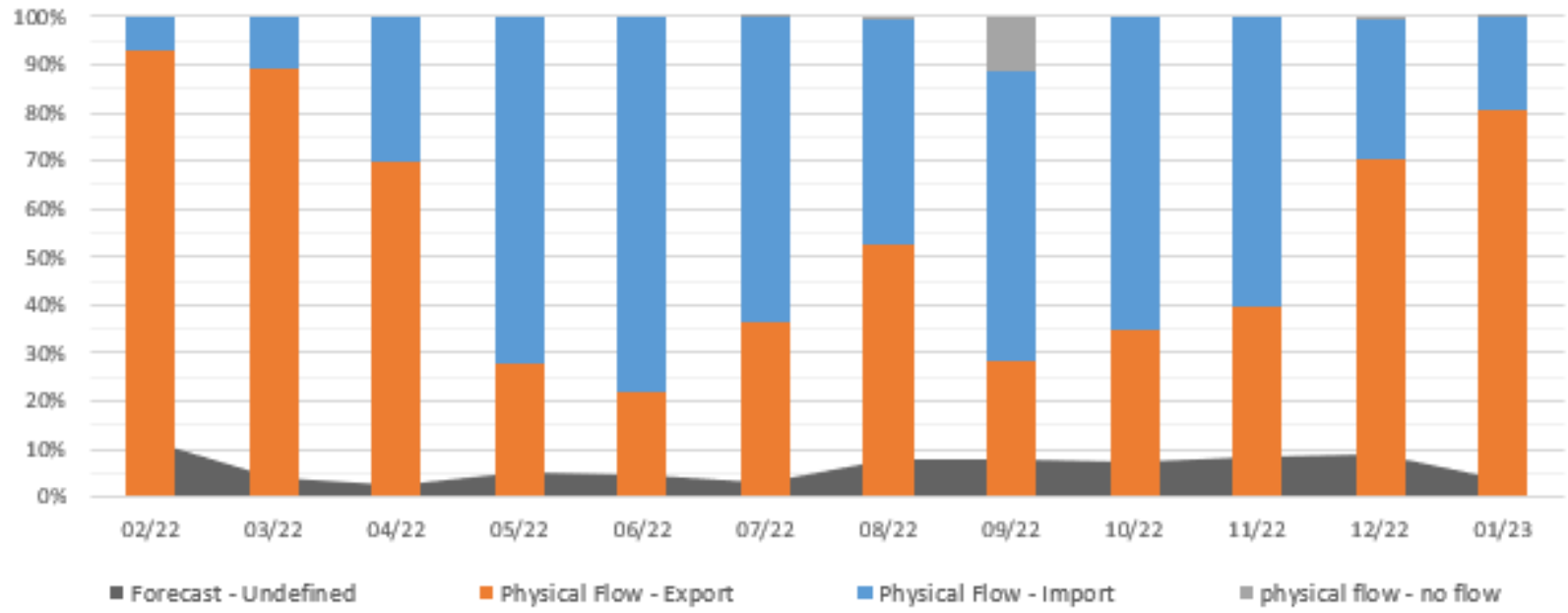
# Nemo Link

1. The informative forecasts, i.e. a forecast where Nemo Link is not predicted as “undefined” **increases to 93%** (compared to 84%)
2. The wrongful forecasts, i.e. situations where Nemo Link is predicted in import but observed in export or vice versa has nevertheless also **increased to 28%** (from 10.4% in the previous reporting period)

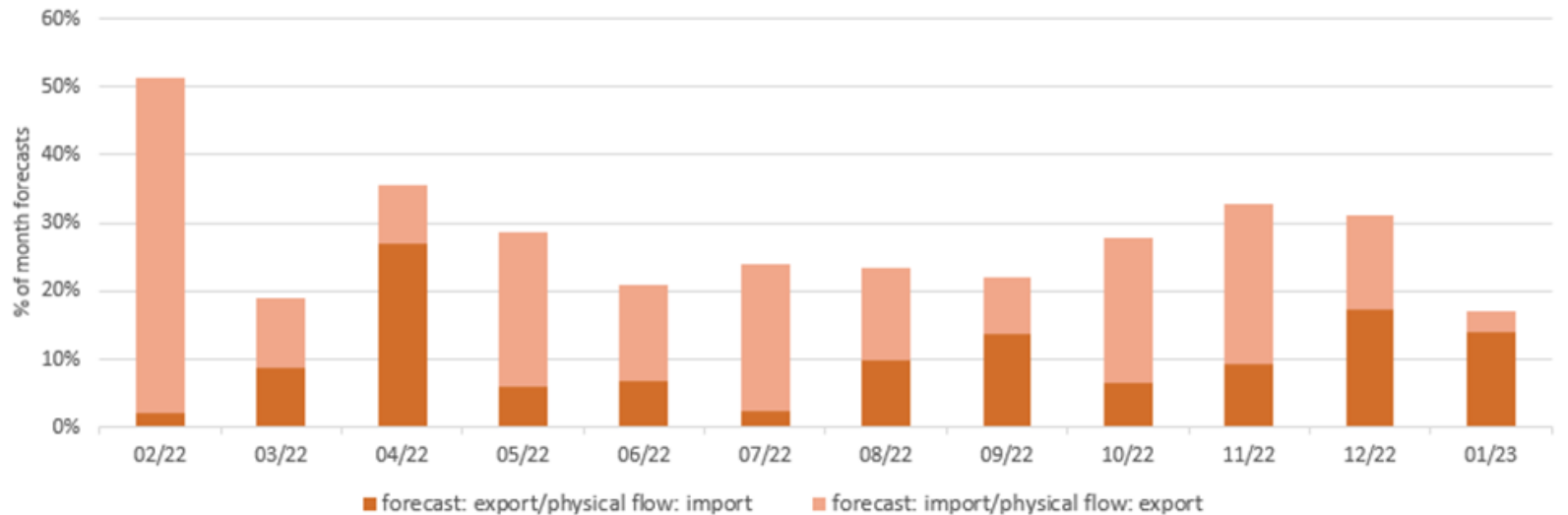
*The deterioration in performance is observed as from November 2021 following increasing price spread between UK/BE*

*Performance did not improve substantially with the new methodology as from April 2022 due to increased volatility on the Nemo Link flows.*

*Service provider improved algorithms during Summer. Elia is monitoring evolutions before considering methodology modifications.*



Wrongful forecasts

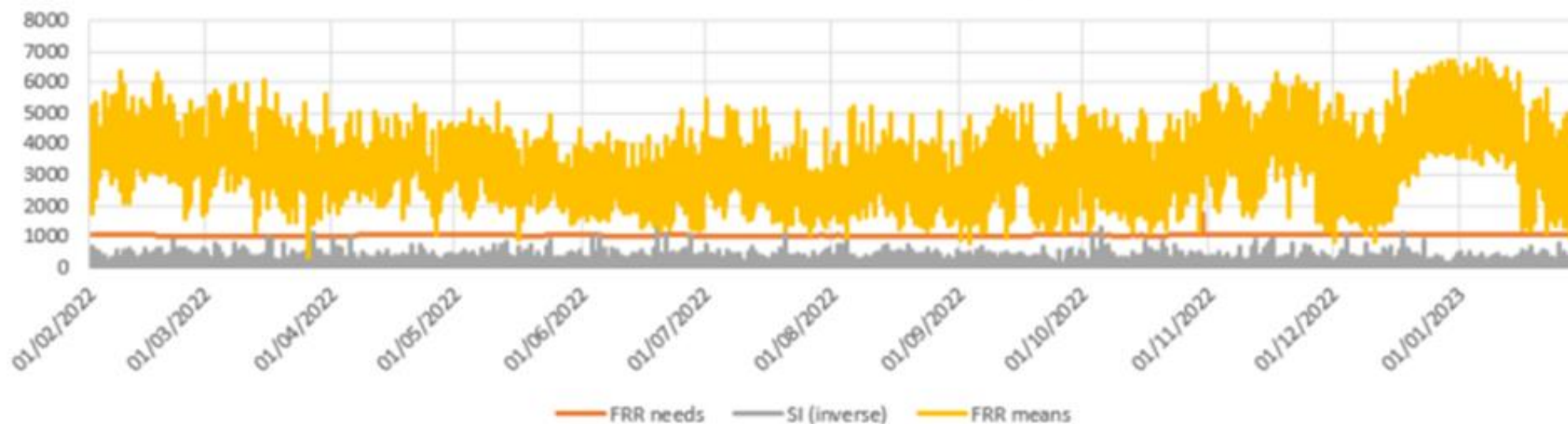


## Upward compliance

1. FRR means cover FRR need for 99.80% of the time (vs. 99.32% in the previous reporting)
2. FRR means cover SI for 99.99% of the time (vs. 100% in the previous reporting)
3. FRR needs cover SI for 99.99% of the time (vs. same in the previous reporting)

Periods in which the needs were not covered are related to periods with limited sharing availabilities

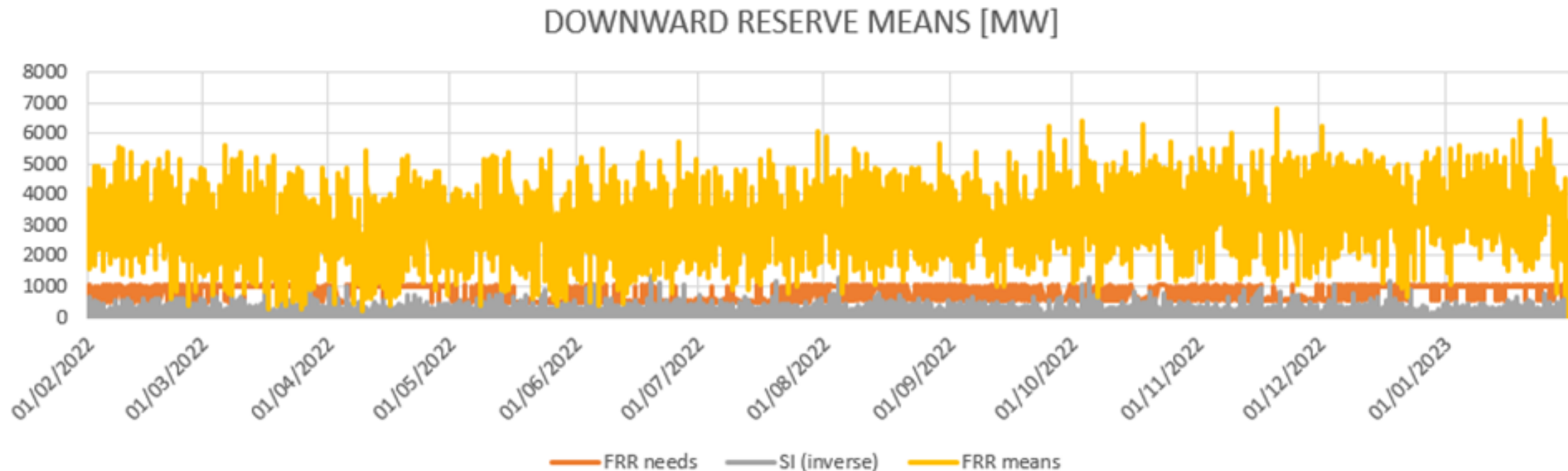
UPWARD RESERVE MEANS [MW]



## Downward compliance

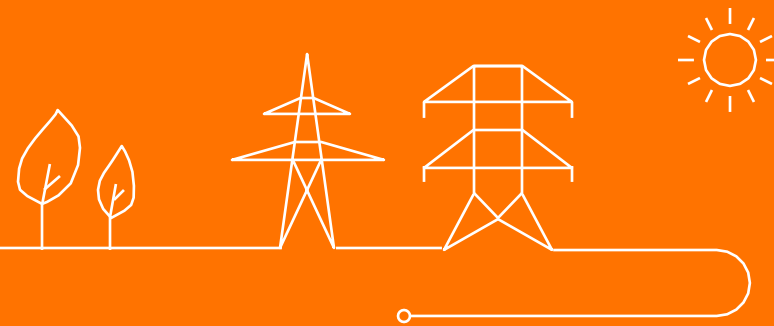
1. FRR means cover FRR needs for 98.83% of the time (vs. 97.70% in the previous reporting)
2. FRR means cover SI for 99.99% of the time (same as in previous reporting)
3. FRR needs cover SI for 99.42% of the time (vs. 99.99% in the previous reporting)

Periods in which the needs were not covered are related to periods with limited sharing availabilities and non-contracted balancing energy bids



# AOB – Next WG Balancing

Loup Vanderlinden



## Next WG Balancing

- WG Balancing 14/11/2023 14:00 – 18:00

