WG Balancing of 17th March 2021

Teleconference

17/03/2021

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 Skype 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

09:00 – 09:10 – Introduction and Validation of minutes
09:10 – 09:30 – Incentives: high level presentation of the scope, aim and ambition (part 2)
09:30 – 10:00 – Balancing service - overview 2020
10:00 – 10:15 – Imbalance Price design
10:15 – 10:40 – mFRR design – feedback on informal consultation

AOB

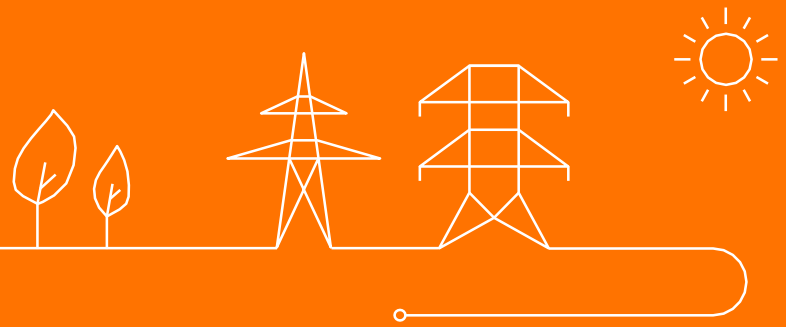
- Progressive integration of ALEGrO in IGCC
- EU Balancing : workshops - update
- High level planning of iCAROS phase 1

Minutes of Meeting for approval

- Minutes of Meeting of 29th January 2021 :
  - Due to late delivery of the MoM, the approval of these MoM is suggested to take place during the next WG Balancing

Incentives: high level presentation of the scope, aim and ambition (part 2)

Presented by Kris Poncelet/Yannick Vandenberghe



Incentive: SIMPLIFY

WG balancing 17/03/2021

Contact: Yannick Vandenberghe (Yannick.Vandenberghe@elia.be)

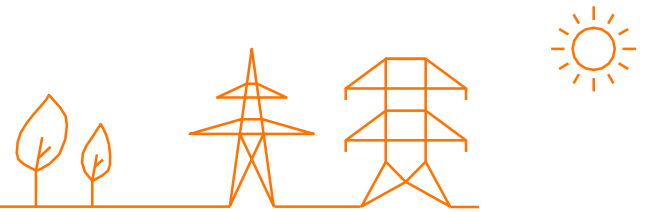
Agenda

1. Context: CREG decision B658E-68

2. Deliverables

3. Models comparison

4. Next steps



1. Context: CREG decision B658E-68 (July 2020)

4.2.1. Description

Le projet consiste à sélectionner un modèle statistique de type *data mining* (ex : ARIMA, *neural network, Support Vector Machine*,…), à l'entrainer et à l'implémenter dans l'objectif de prédire le « *system imbalance* » et, ensuite, à le tester en « *parallel run* » dans des conditions de système différentes. Le projet contiendra également une analyse de la pertinence de la mise à disposition des acteurs de marché de cette prévision du « *System Imbalance* » (ci-après : SI).

4.2.1. Beschrijving

Het project bestaat erin een databeheermodel van het type *data mining* (zoals ARIMA, *neural network, Support Vector Machine*…) te selecteren, te trainen en te implementeren om de *'system imbalance'* te voorspellen en het vervolgens te testen in *'parallel run'* in verschillende systeemomstandigheden. Het project zal ook een analyse bevatten van de relevantie van de terbeschikkingstelling van deze voorstelling van *'system imbalance'* (hierna: SI) aan de marktspelers.

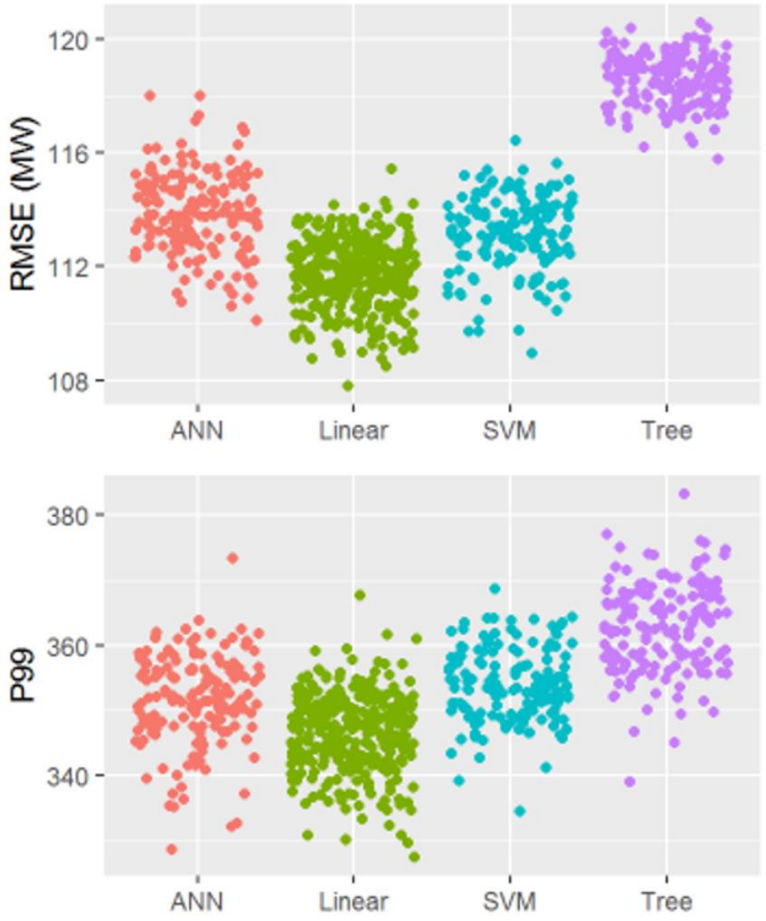
2. Three deliverables are foreseen in the framework of the incentive

- 31 Jan. 2021: Selection of the data set and models comparison

- 31 Aug. 2021: Public consultation
  - Description of models, comparison, (dis)advantages;
  - Assess the relevance to provide SI forecast to market parties (time horizon / format);
  - If applicable/positive: Implementation plan proposal (tool and publication).

- 23 Dec. 2021: Final report
  - Tests results (after a Proof of Concept of min. 1 month);
  - If applicable: Implementation plan.

3. The linear regression model gives the best results



4 Models have been compared:

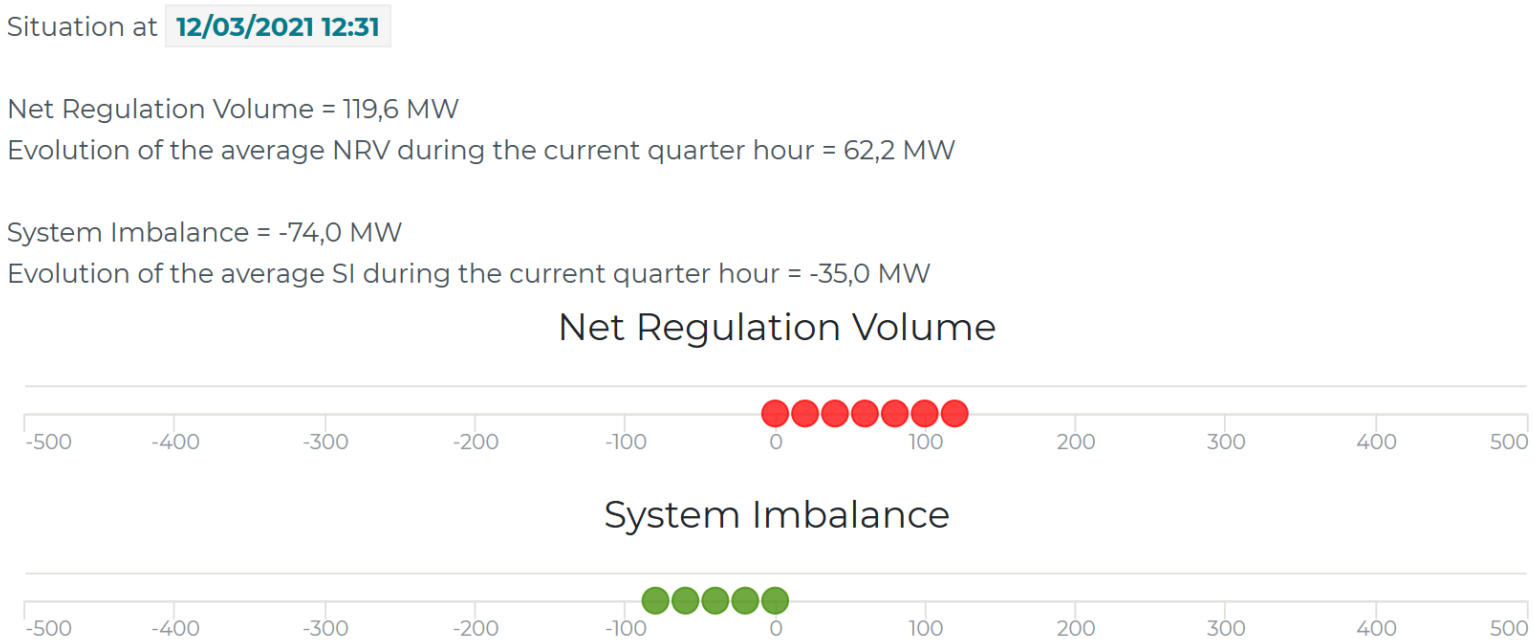
- Linear regression;
- **A**rtificial **N**eural **N**etwork;
- **S**upport **V**ector **M**achine;
- Tree.

The Linear regression model has been selected as it:

- Gives more accurate and stable results (here for qh+1 forecast);
  - RMSE: root-mean-square error
  - P99: 99th percentile
- Offers a higher interpretability.

4. Next steps: Market consultation will take place end of summer 2021

- Assess the relevance to make the SI forecast available for the market parties;
- In which time horizons?
- Format / impact on publications?



Incentive: Technology- neutral framework for the use of Units with technical limitations for balancing

WG Balancing 17/03/2021

Contact: Kris Poncelet (Kris.Poncelet@elia.be)

Context

- Volumes offered to mFRR are from reserve providing groups/units w/o technical limitations

- In exceptional circumstances:
  - Elia can activate via a separate measure technical units that cannot be activated via the mFRR process
  - Currently, Elia relies on units with an obligation to provide a MW schedule (i.e., slow-starting units)

- In the winter of 2018-2019, due to the adequacy concerns following the unavailability of nuclear units:
  - Elia temporarily introduced a product “slow R3 non-reserved” (also known as “Winter product”) for non-CIPU technical units
  - Market parties requested to analyze whether this product can be converted in a permanent product for balancing

Objectives

1. Describe the **existing possibilities** for Units with Technical Limitations* to **contribute to balancing**
2. Make a **judgement on the necessity for a technology-neutral framework** for the use of Units with Technical Limitations for balancing
3. Analyze the **options for a technology-neutral framework** to enable the use of Units with Technical Limitations for balancing
    - Technically, operationally as well as contractually
    - Indicate the preferred option in case of multiple options
4. Describe the necessary conditions for an eventual implementation
    - Provide a recommendation on whether or not to implement the preferred technology-neutral framework
    - Describe the necessary conditions for an eventual implementation and propose an implementation plan

* Under consideration are Technical Units that face technical limitations restricting them in a given moment in time from being activated via the FRR process, including but not limited to Technical Units that, in accordance with art. 226§1 of the FGC, are obliged to offer to the TSO their available upward or downward active power in the form of balancing energy bids. Examples are Technical Units that are not in operation and require a start-up time longer than the full activation time of mFRR, Technical Units that are technically not capable of reacting within the full activation time of mFRR, or Technical Units that, due to limited coordinability or other technical constraints cannot be activated following the FRR process.

Planned approach

1. Overview of Units with Technical Limitations (UwTL)
   - Types of UwTL& constraints faced
     - slow-starting generation units (CCGTs)
     - Generation units with limited coordinability (CHPs, …)
     - Demand-side with technical limitations
   - Assessment of potential volumes of the different types of UwTL
     - Limited volumes were realized in the winter product
     - Elia will engage with stakeholders to obtain a better view on potential volumes of UwTL that do not have an obligation to provide a MW schedule

2. Describe the current or past possibilities for the use of Units with Technical Limitations to contribute to balancing (O1)
   - mFRR (tech-neutral)
   - DA/ID markets (tech-neutral, opened to DP_{PG} valorized via independent FSPs as of go-live ToE DA/ID)
   - Exceptional measures (currently restricted to the use of technical units with an obligation to provide a MW schedule)
   - Past: Winter product (for adequacy purposes)

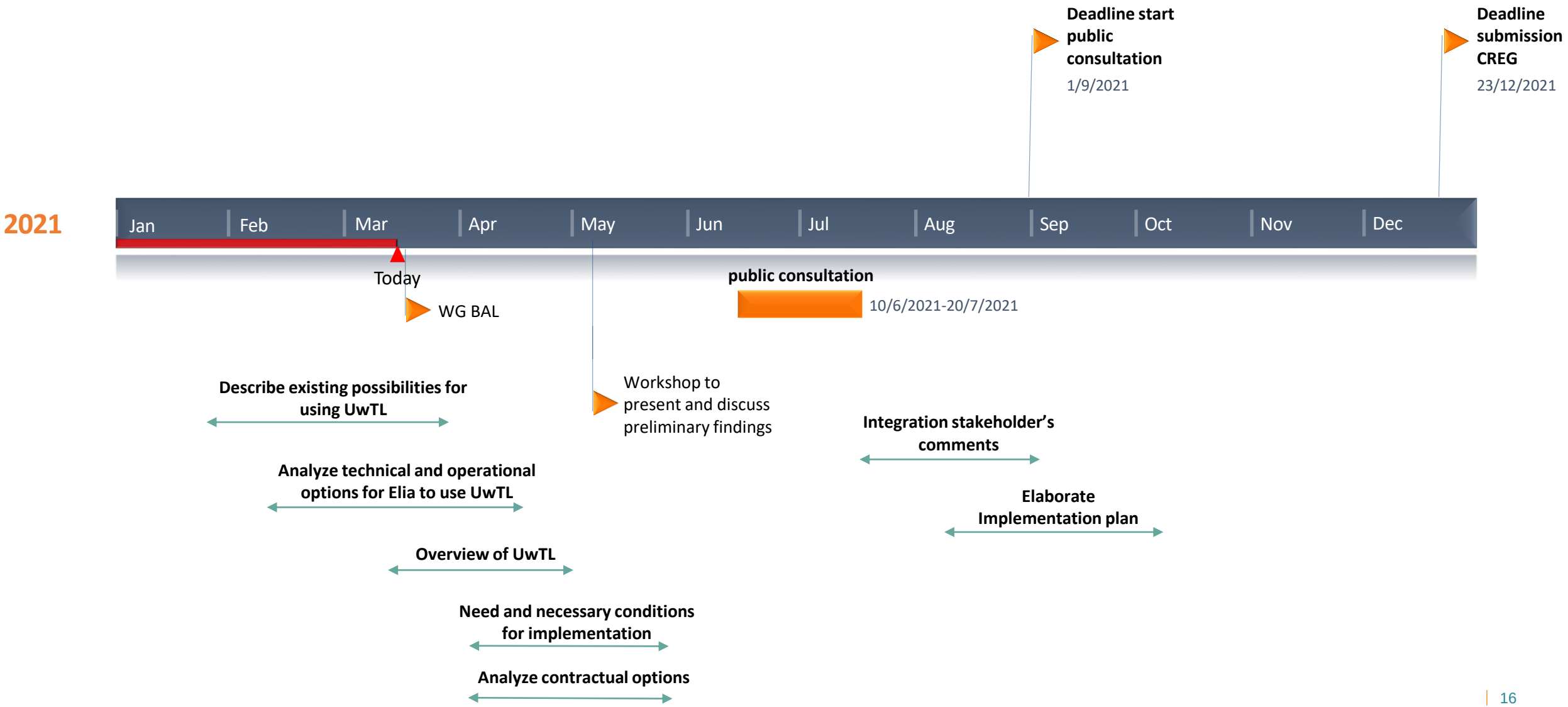
3. Analyze the technical and operational options for Elia to use UwTL for balancing purposes (O3)
   - Exceptional measures:
     - Ex-ante actions in order increase FRR reserve capacity
     - RT actions

4. Assess the need for a technology-neutral framework of the use of Units with Technical Limitations (O2)

5. Analyze the contractual options for using UwTL and recommend a preferred option (O3)

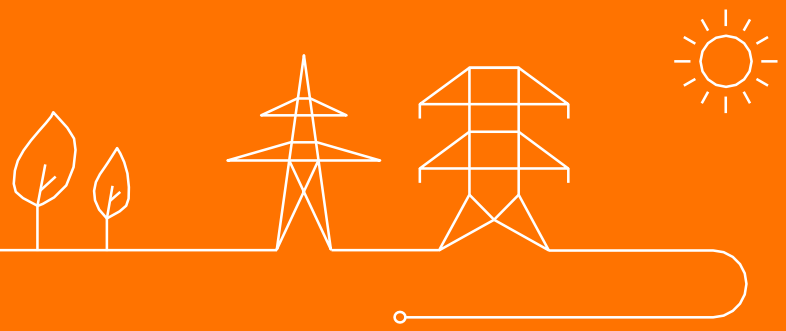
6. Provide a recommendation on whether or not to implement and describe the necessary conditions for implementation and an implementation plan

Indicative planning



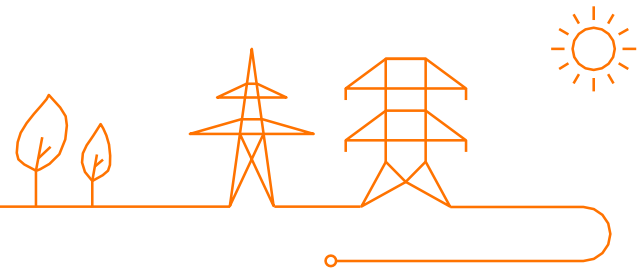
Balancing service - overview 2020

Presented by Amandine Leroux



Agenda

1. Newities
2. Reservation
3. Activation
4. Quality



Newities 2020

General overview

- ✓ New regulated & technology neutral contracts for all balancing services
- ✓ All balancing capacity procured by daily auctions
- ✓ Alignment of delivery controls of all balancing services
- ✓ New tools to enable technology neutral products

mFRR (as of 04/02)

- ✓ Remuneration of merit order activation in “pay as clear”
- ✓ Availability tests to monitor availability of contracted energy bids

Newities 2020

FCR (as of 01/07)

- ✓ Daily capacity procurement fully in Regelleistung and “pay as clear”
- ✓ New process for submission of energy bids to facilitate pooling of delivery points

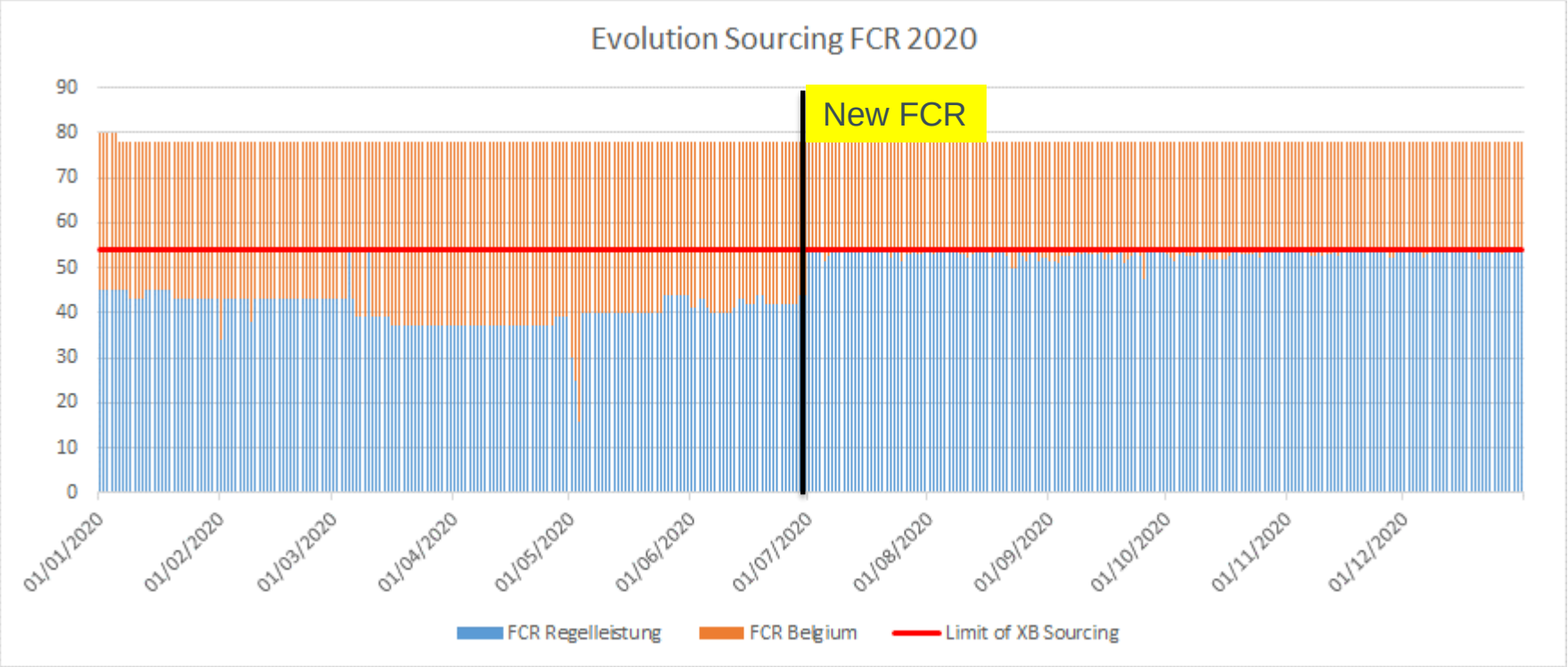
aFRR (as of 30/09)

- ✓ Daily capacity procurement in two steps
- ✓ New prequalification system
- ✓ New process for submission of energy bids
- ✓ Merit order activation of energy bids

Balancing Capacity & Energy

Statistics 2020

FCR Capacity Auctions

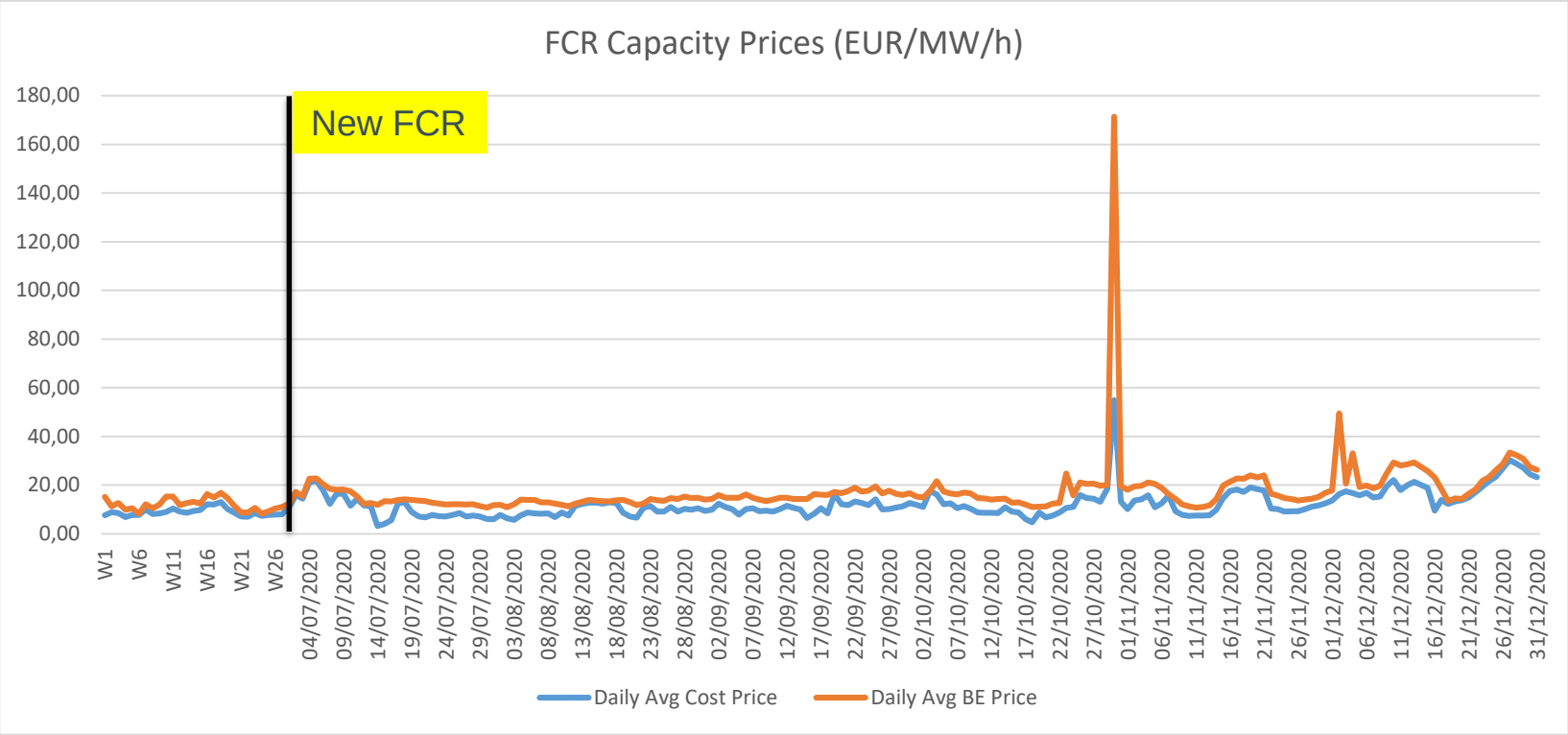


FCR Capacity 2020 mainly procured :

1- Cross-border (since 01/07, limit is reached much more often)

2- From DP_{PG} (non-CIPU) for the core share

Evolution FCR Capacity Prices

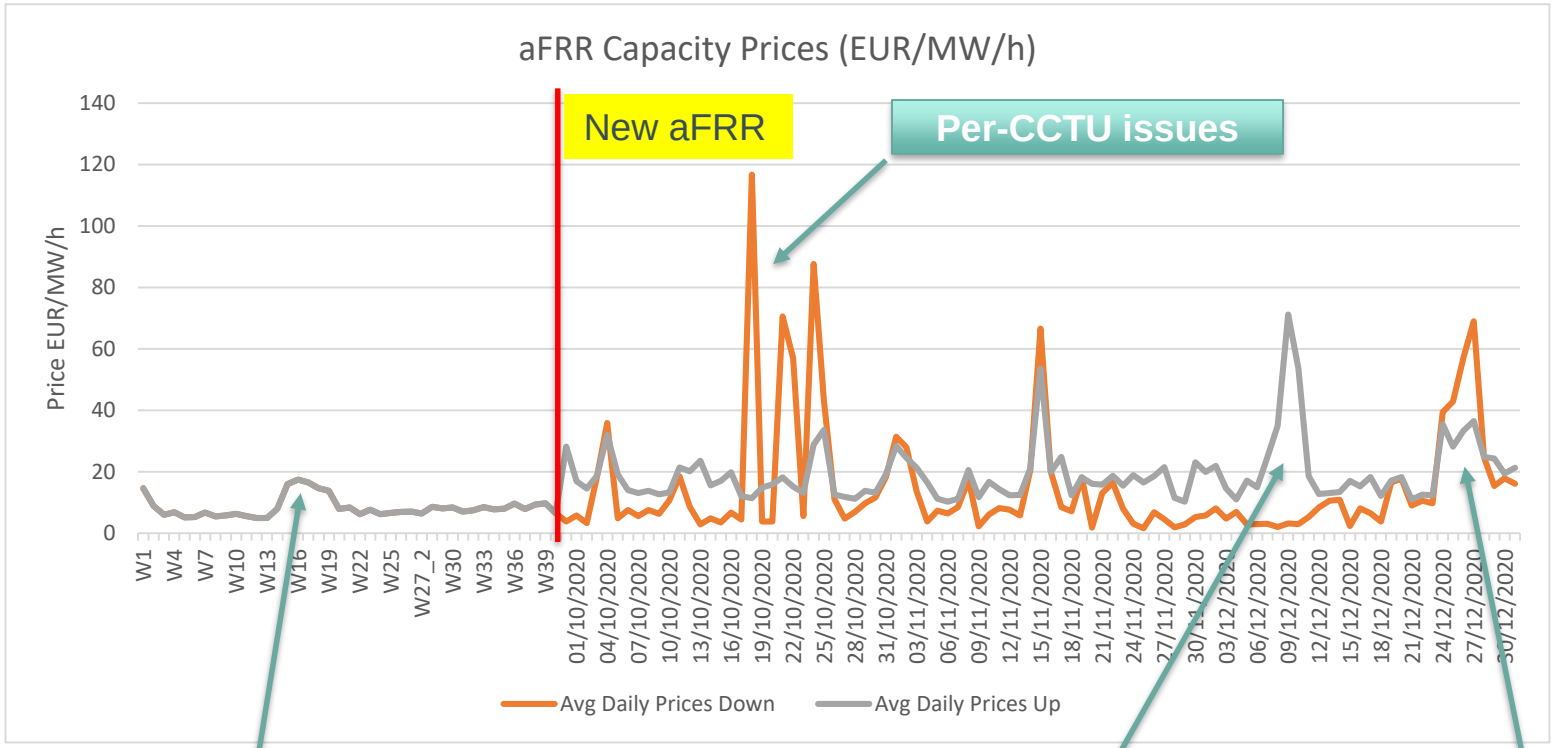


- Average daily FCR prices rather constant ➔ **10-20 €/MW/h**
- **30/10 and 02/12**: peak of price for the Belgian core share

  ➔ reason: unavailability of one important BSP

FCR prices rather constant, but very sensitive to the unavailability of one important BSP

Evolution aFRR Capacity Prices



- **18/10 and 24/10:** High spikes of aFRR prices in the per CCTU auctions

  ➔ protective measure implemented as of 25/10

- **December 2020:** Peaks of price

  ➔ Reasons:

  1. High EPEX DAM prices for peak hours the week of 07/12

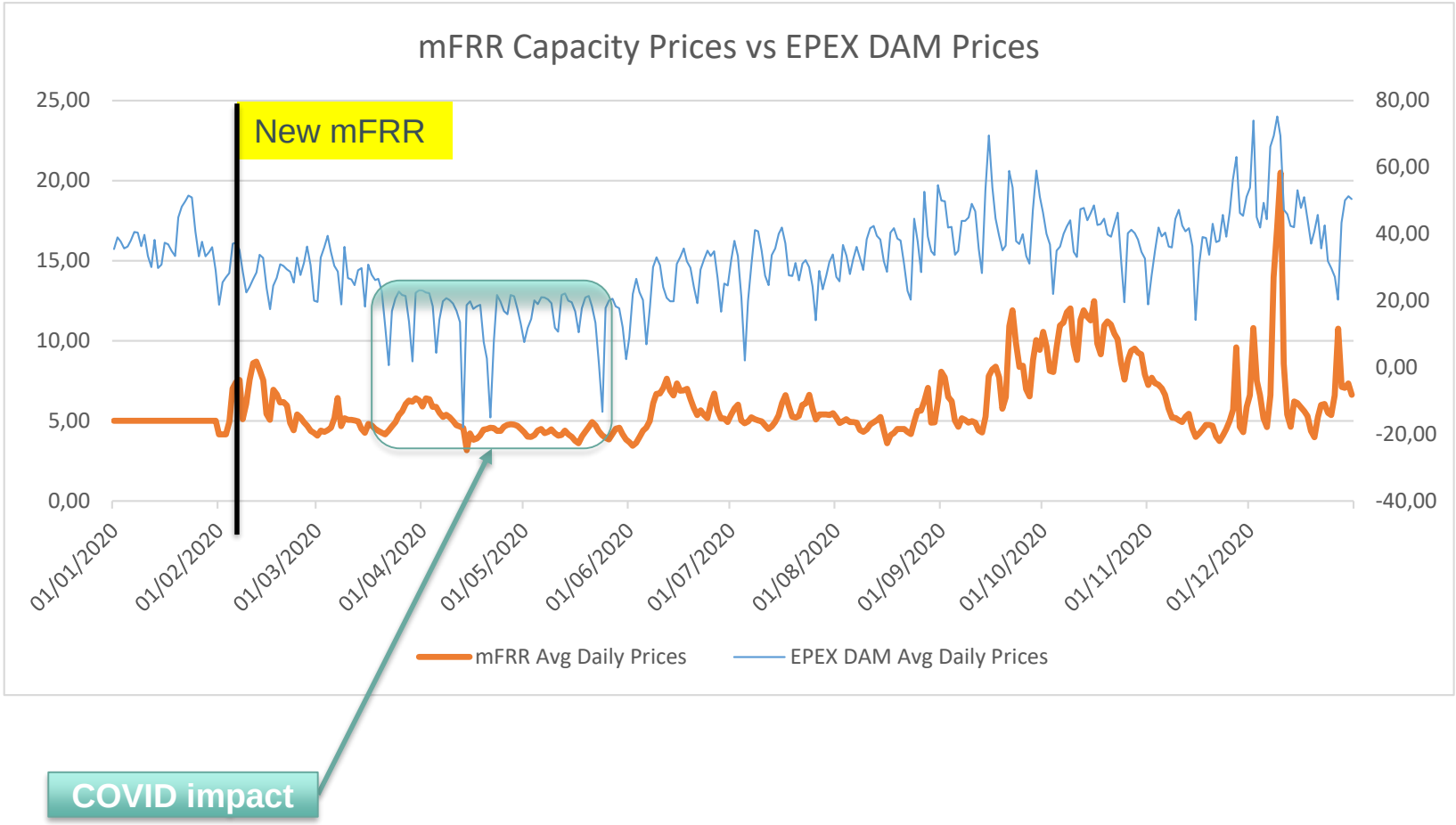
  2. Very negative CSS during Christmas week

- **23/12 (delivery date):** Re-opening of aFRR capacity procured in per-CCTU auction, i.e first DP_{PG} prequalified

After a week with high peaks in October, aFRR prices stabilized following protective measure on 25/10

Peak of aFRR prices in December due to either high electricity prices or very negative CSS

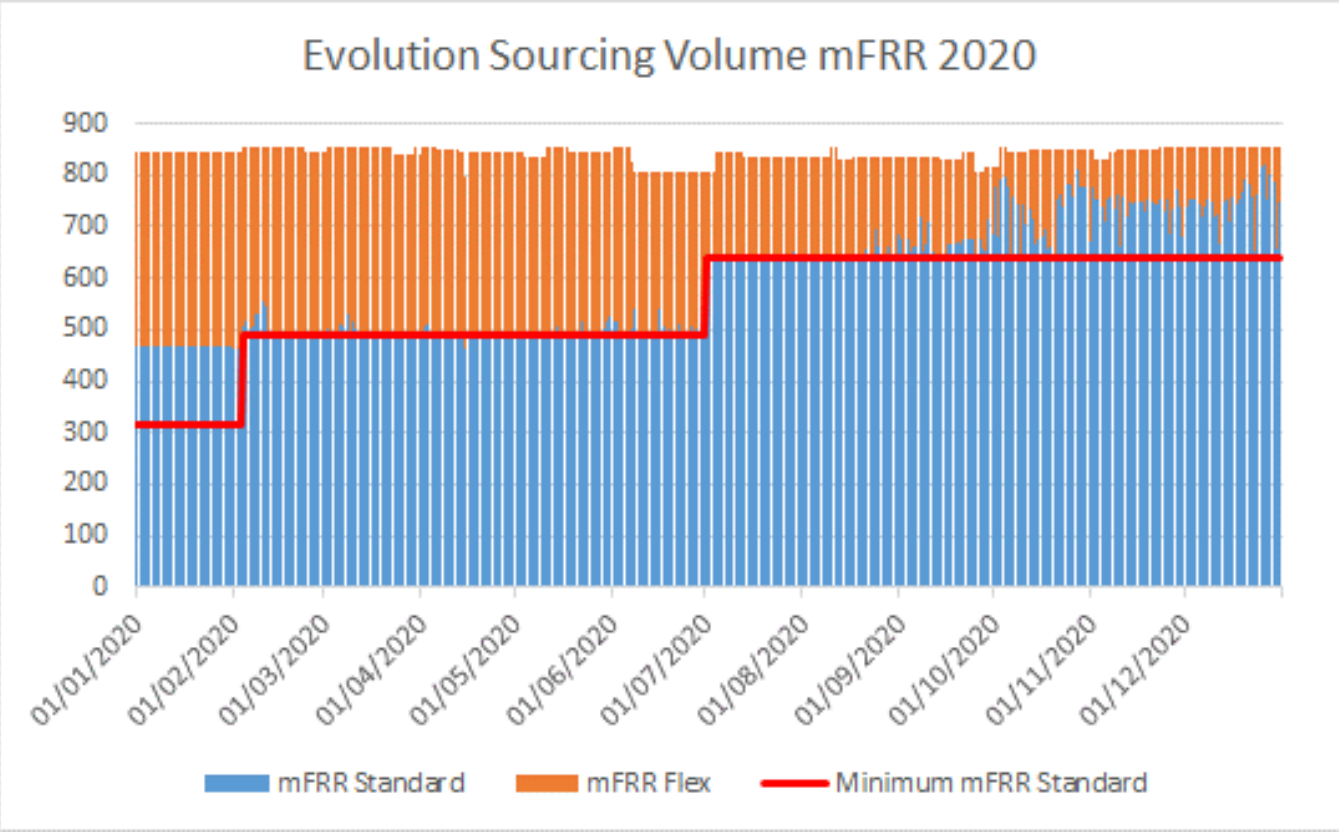
Evolution mFRR Capacity Prices



- mFRR prices in December are the highest of this year
- Similar trend to EPEX DAM prices observed in mFRR prices

mFRR prices follow trend of electricity prices, highest prices in December for this year

Evolution mFRR Capacity Volumes



- mFRR Standard minimum volume to be procured increased to 490MW (as of 04/02) and then to 640MW (as of 01/07)
- Volumes offered for mFRR Flex are switching to mFRR Standard during the year 2020

mFRR Flex volumes are switching to mFRR Standard

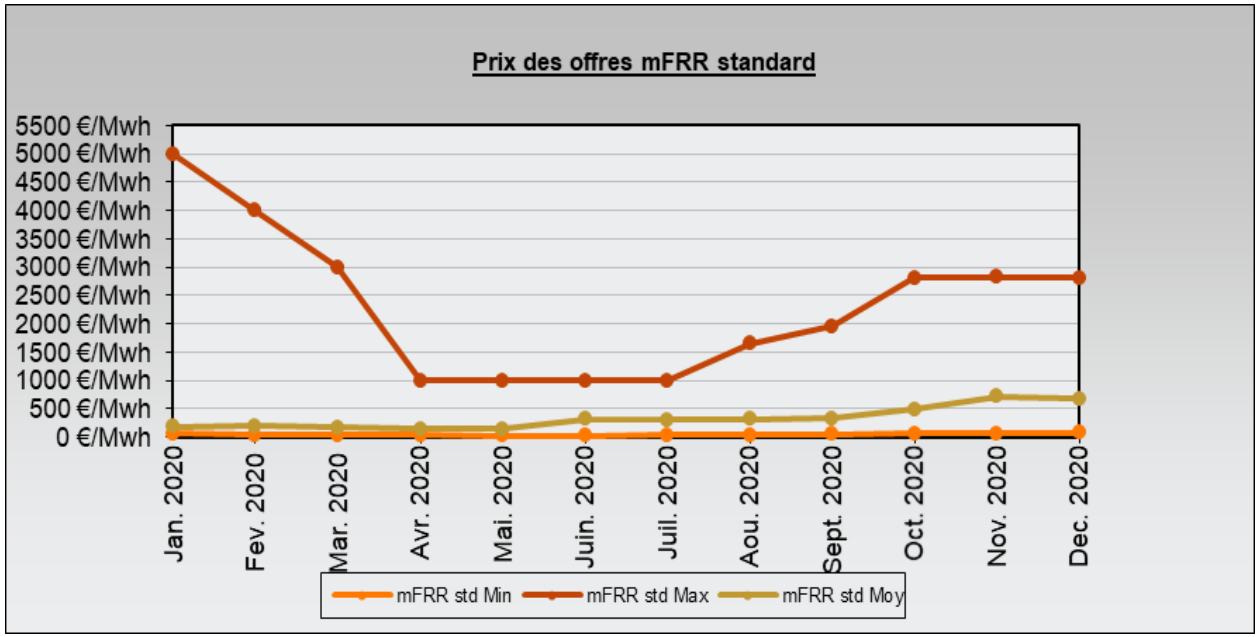
mFRR DP_{PG} – ToE statistics

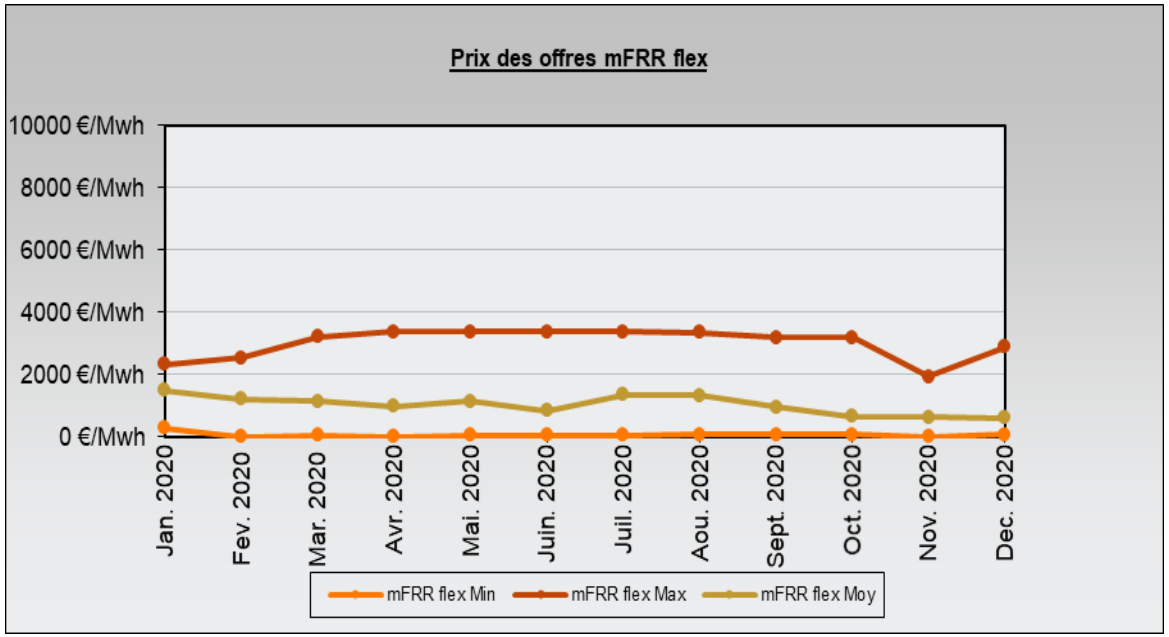
Situation December 2020:

- Number of BSPs: **10**
- Number of Suppliers: **24**
- Sum of $mFRR_{max}$ (corresponding to DP_{PG}):
  - **476 MW** Standard & Flex
  - **71 MW** only offered as Flex

	ToE	Opt-Out	Pass Through	Total
# Delivery Points	87	169	8	264
Sum $DP_{mFRR,Max,Up}$ (MW)	442,2	773,0	247,6	1 462,8
% Sum $DP_{mFRR,Max,Up}$	30%	53%	17%	100 %

mFRR Standard / mFRR Flex Energy Bids





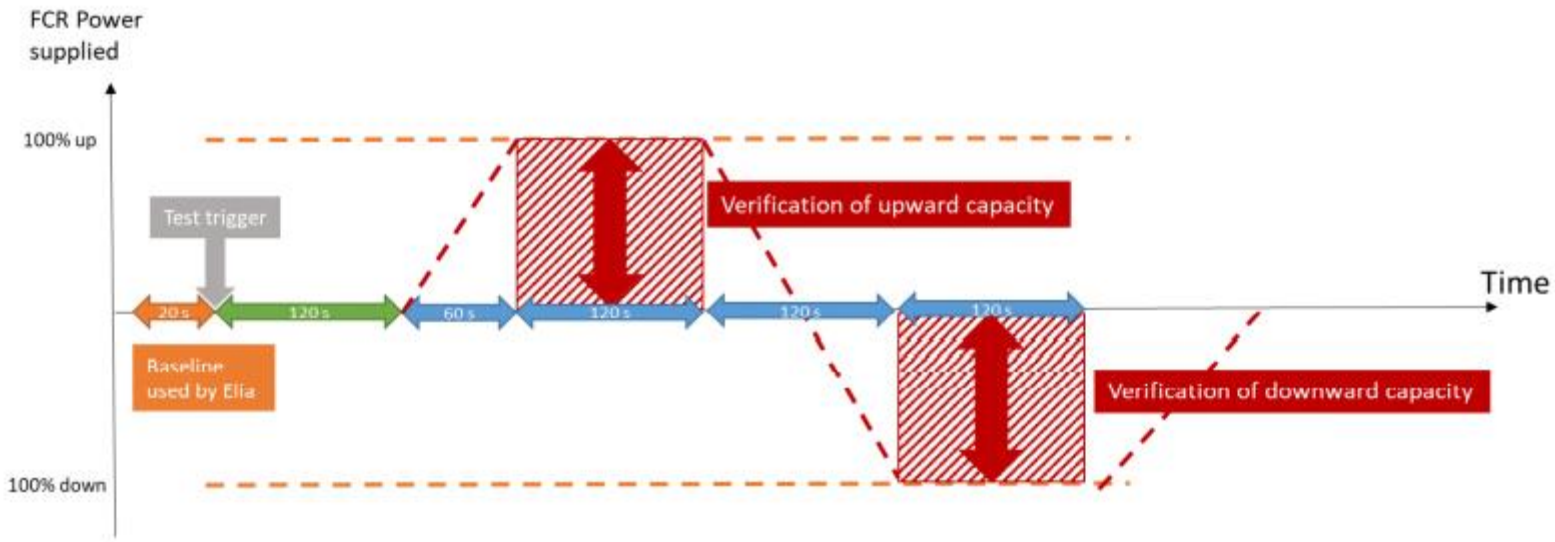
Non-Contracted mFRR Energy Bids DP_{PG} (non-CIPU)

No offers in 2020

No energy bids mFRR NC submitted in 2020 from delivery points DP_{PG} (non-CIPU)

FCR Availability Control – Capacity Tests

- Requested FCR has to be supplied during 2 minutes in both directions
- Missing MW is penalized in proportion of monthly remuneration, depending on % of failure and quality of historical tests delivery



Situation Dec/20:

17 tests / 3 suppliers

- 10 successful
- 4 lightly failed
- 3 failed

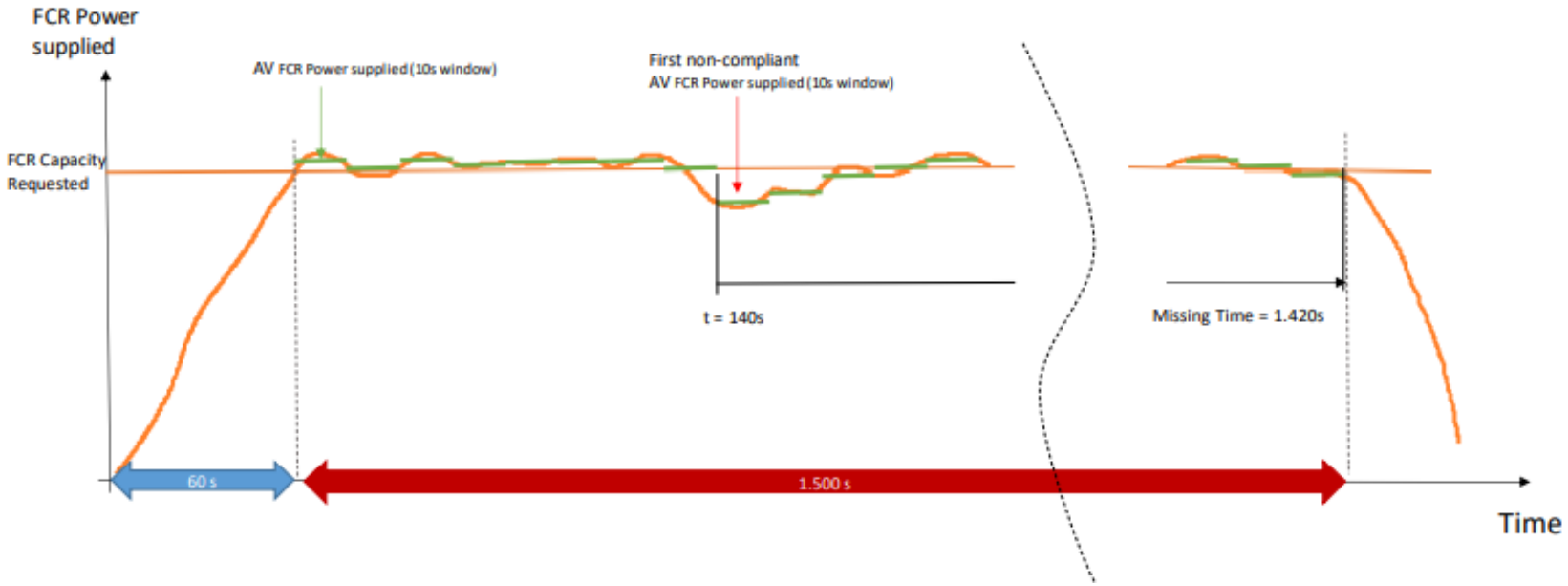
FCR Availability Control – Energy Tests

- Requested FCR has to be supplied during 25 minutes
- Missing Time is penalized in proportion of monthly remuneration, depending on % of failure and quality of historical tests delivery

Situation Dec/20:

2 parks of batteries tested

- 1 test successful
- 1 test failed



mFRR Availability Control – Capacity Tests

- Min 1 and max 12 tests per year (max can decrease to 6 if success)
- Test duration of two quarter hour and requested volume to be supplied during the second quarter hour
- Missing MW is penalized in proportion of monthly remuneration, depending on % of failure and quality of historical tests delivery

Situation Dec/20

16 tests / 8 suppliers

- 8 successful
- 5 lightly failed
- 3 failed

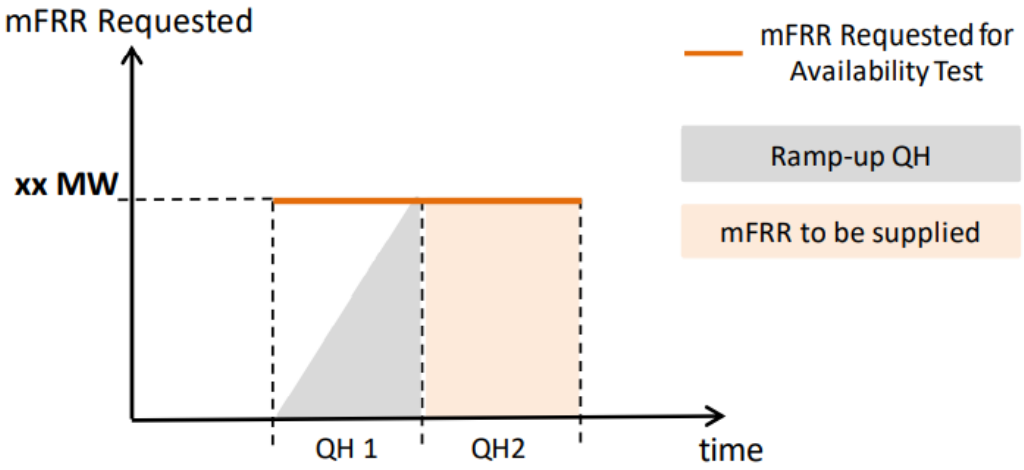


Figure 1 – Availability test pattern

Activation

Statistics 2020

Activation Volumes

		2020				2019				
		MWh hausse	MWh baisse	TOTAL	% Activation	MWh hausse	MWh baisse	TOTAL	% Activation	Delta TOTAL
Activation automatiques	aFRR	185.714	225.683	411.397	36%	242.393	266.573	508.965	46%	-19%
	IGCC	257.352	232.401	489.752	43%	194.977	216.614	411.591	38%	19%
Activation manuelles	mFRR Standard	35.621	N/A	35.621	3%	20.664	N/A	20.664	2%	72%
	mFRR Flex	0	N/A	0	0%	524	N/A	524	0%	-100%
	mFRR NC non-CIPU incrémentaux/ decrementaux	0	0	0	0%	0	0	0	0%	0%
	Bids incrémentaux/ decrementaux	84.688	106.864	191.551	17%	76.376	75.651	152.026	14%	26%
	Réserve Inter-TSO	0	0	0	0%	300	850	1.150	0%	-100%
	TOTAL	563.374	564.947	1.128.321	100%	535.232	559.687	1.094.920	100%	3%

Total balancing activation volume at a similar level than previous year

FCR Activation Control

- Maximum 6 controls and 2 controls per CCTU per month
- failure factor = (FCR Requested – FCR Supplied) / FCR Requested
- Criteria of classification in table below:
  - If failure factor <= 0% Sufficient
  - If 0% < failure factor <= 30% ; Lightly insufficient
  - If failure factor > 30% Strongly insufficient

Situation Dec/2020:

- Most of the controls are performed on BSP providing with pool of DP_{PG}
- Level of performance similar to last year

	Réaction suffisante		Réaction légèrement insuffisante		Réaction fortement insuffisante		Total	
Year	2020	2019	2020	2019	2020	2019	2020	2019
FCR controls	**192**	**216**	**10**	**7**	**7**	**15**	**209**	**238**
%	**92%**	**91%**	**5%**	**3%**	**3%**	**6%**	**100%**	**100%**

aFRR Activation Control

- Continous control based on telemeasures
- Penalized energy equals the difference between the aFRR Supplied and aFRR Requested taking into account a tolerance of 15% of energy bid volume

Energie pénalisante MWh		Total
2020 (until 29/09)	Energie pénalisante MWh	7.835
	Energie R2 activée MWh	411.397
	% Energie pénalisante / énergie activée	1,9%
2019	Energie pénalisante MWh	6.544
	Energie R2 activée MWh	508.965
	% Energie pénalisante / énergie activée	1,3%

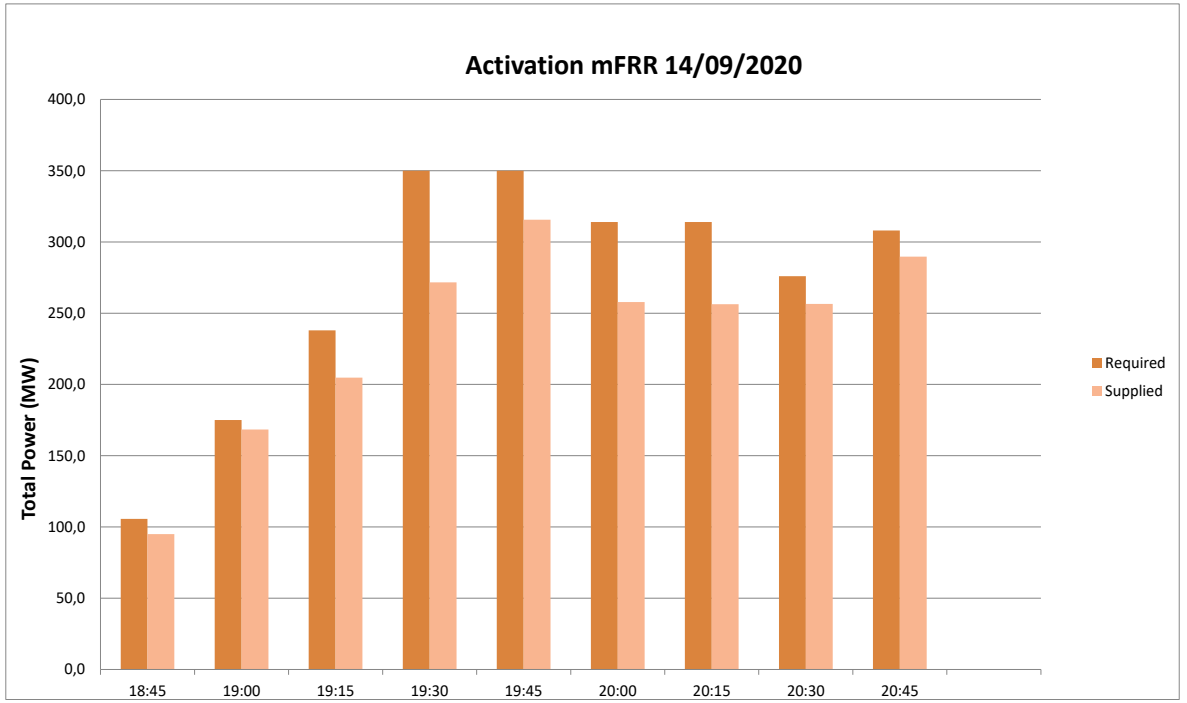
Situation till 29/09 (*):

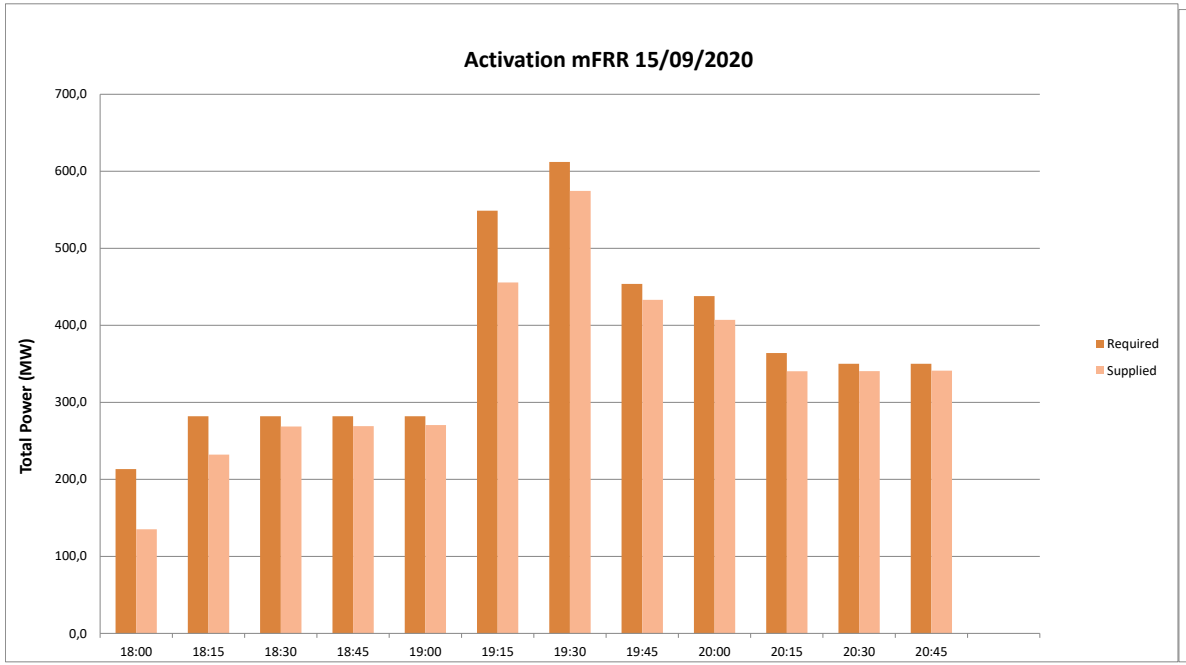
- Increase of penalized energy to 1,9% compared to last year (1,3%)
- (*) Starting from 30/09/2020 activation control aFRR based on the new contract are still under discussion with concerned BSPs

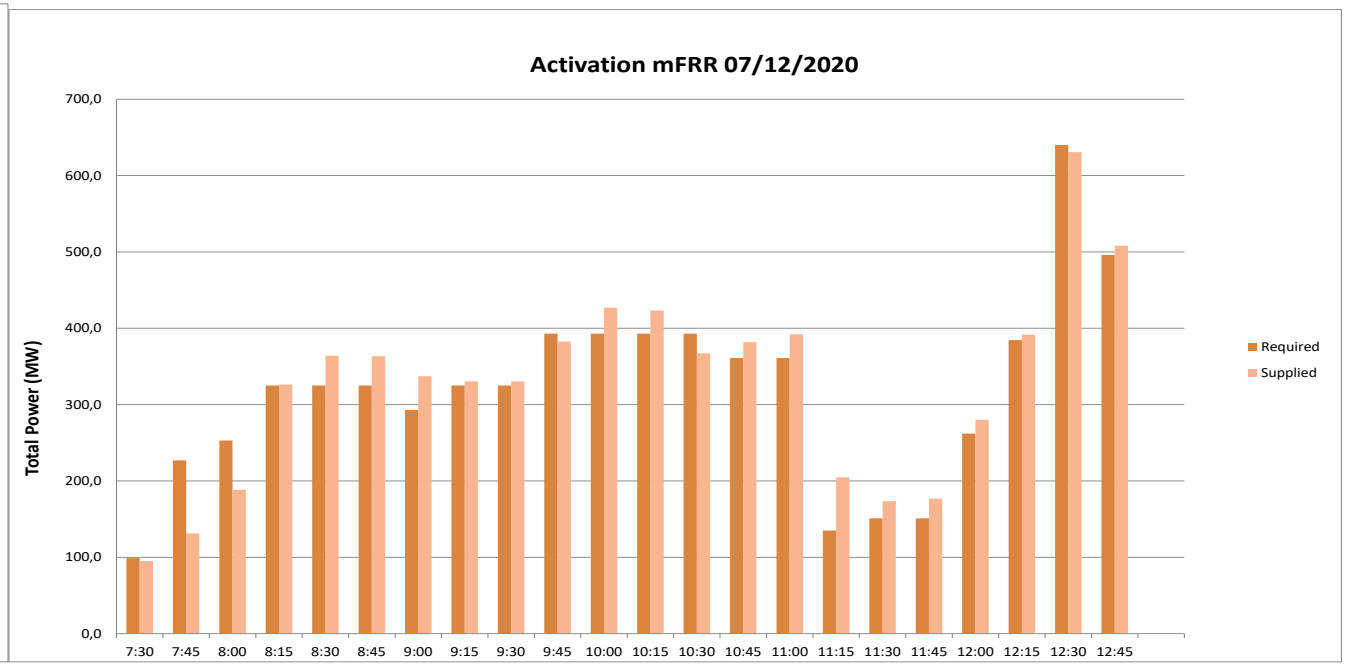
mFRR Activation Control

Examples of days for which more than 300 MW of mFRR energy have been activated by Elia

- In general a good delivery or a light underdelivery of mFRR energy is observed



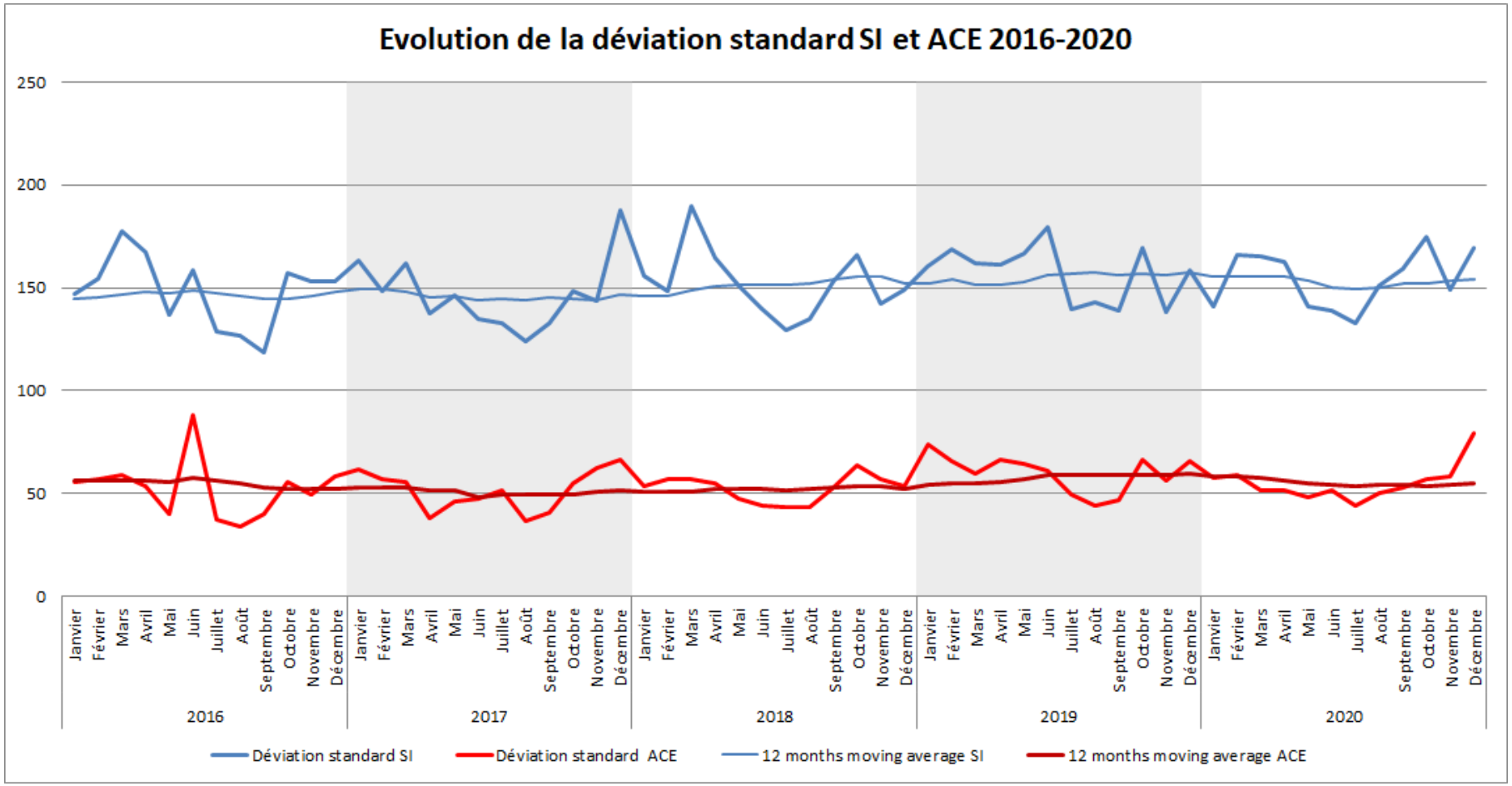




Quality

Statistics 2020

Evolution System Imbalance (last 5 years)



System Imbalance and ACE rather stable in the last years

Quality Results

Monitoring FRCE		Level 1 FRCE Range (MW)			93	Level 2 FRCE Range			175
Levels L1 and L2		Limit %QH above Level 1 FRCE Range			30%	Limit %QH above Level 1 FRCE Range			5%
Period	#QH	#QH above Level 1 FRCE Range				#QH above Level 2 FRCE Range			
	Period	FRCE Positive	FRCE Negative	FRCE Total	% QH	FRCE Positive	FRCE Negative	FRCE Total	
Jan-20	2976	104	107	211	7,09%	21	27	48	1,61%
Feb-20	2784	87	92	179	6,43%	24	22	46	1,65%
Mar-20	2972	111	50	161	5,42%	32	8	40	1,35%
Apr-20	2880	68	65	133	4,62%	18	20	38	1,32%
May-20	2976	63	29	92	3,09%	14	6	20	0,67%
Jun-20	2880	37	49	86	2,99%	9	15	24	0,83%
Jul-20	2976	59	57	116	3,90%	13	9	22	0,74%
Aug-20	2976	48	92	140	4,70%	6	27	33	1,11%
Sep-20	2880	78	65	143	4,97%	24	19	43	1,49%
Oct-20	2980	76	103	179	6,01%	17	43	60	2,01%
Nov-20	2880	87	107	194	6,74%	12	30	42	1,46%
Dec-20	2976	69	85	154	5,17%	18	18	36	1,21%
Total	**35136**	**887**	**901**	**1788**	**5,09%**	**208**	**244**	**452**	**1,29%**

- Limits established in SOGL for FRCE (or ACE)
- Level 1 is similar to prior ACE Std Deviation indicator
- Level 2 is used for the extreme values (prior sigma 90, 99)
- For 2020, we are below the 30% and 5% required for Level 1 and Level 2 respectively

Respect in 2020 of limits of SOGL requirement for FRCE levels 1 and 2

Imbalance price design

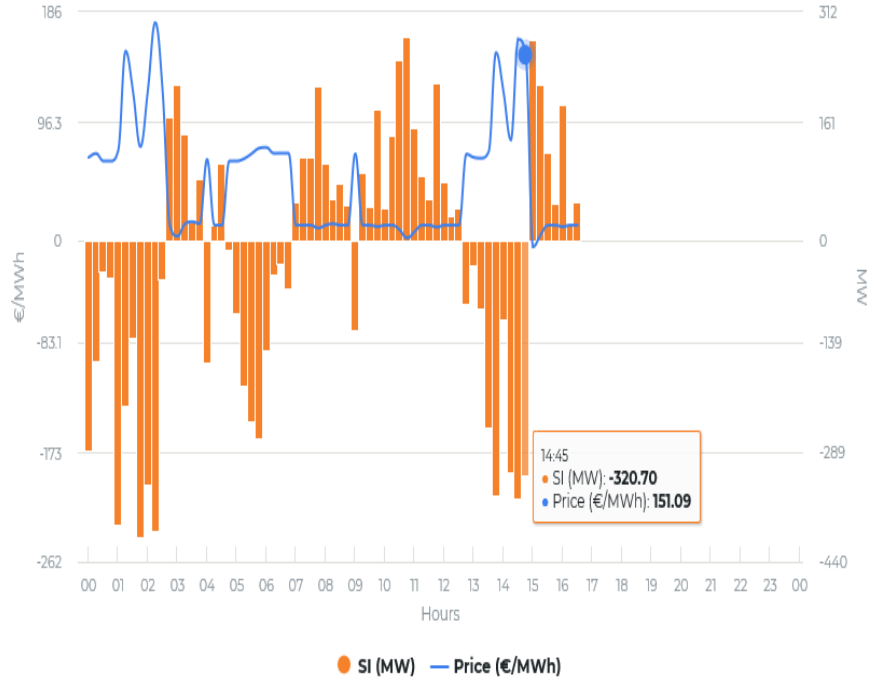
Presented by Nicolas Pierreux

Introduction

- Imbalance Settlement Harmonisation (ISH) methodology was adopted by ACER on 15/7/2020 in accordance with EBGL and will enter into force on 15/1/2022
- Its purpose is to harmonise the main features of imbalance settlement in EU, in particular regarding the use of reference prices provided by the EU balancing platforms
- Besides the use of prices provided by MARI (mFRR) and PICASSO (aFRR), the ISH methodology has a limited impact in Belgium on the current imbalance price calculation as it allows for:
  - ✓ Single pricing
  - ✓ Marginal pricing between mFRR and aFRR
  - ✓ Additional components such as the “alpha”
- Note that the ISH methodology assumes that the activation of energy in the context of reserve sharing agreements will be executed through MARI (for mFRR). The contractual prices of RSA will therefore be replaced by the price of MARI as soon as the concerned border in included in MARI

Imbalance price: situation today

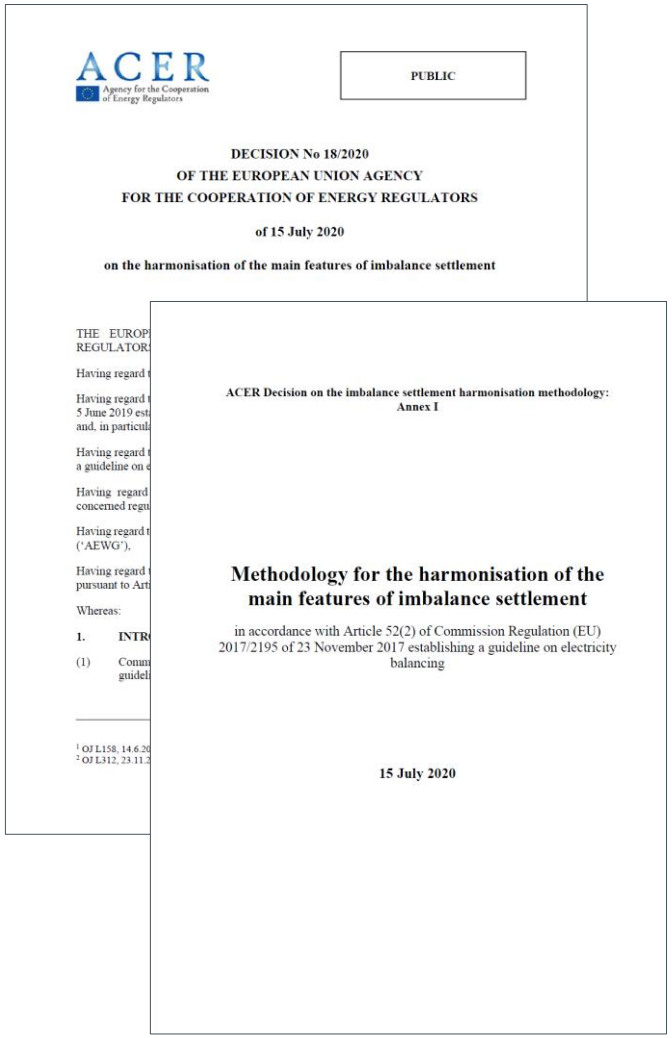
- Imbalance price should reflect the real-time value of energy while providing incentives for BRPs to balance their own position or help the system. It is the same for all BRPs irrespective of their long or short position (“single price”)
- The imbalance tariff is calculated per imbalance settlement period (ISP) of 15 minutes and corresponds to the **maximum of aFRR and mFRR price components** in the average direction of the system imbalance over the ISP*
- An adder (the “alpha”) is applied in case the SI exceeds 150 MW. This adder tends to 200 €/MWh when the average SI over QH(t) and QH(t-1) amounts to 700MW



* The specific case where a unit with Technical limitations is activated is ignored in this presentation

Imbalance price: impact of ISH methodology

- **As of joining PICASSO or MARI**, the local aFRR or mFRR price component (resp.) will be replaced by the cross-border marginal price (CBMP) of the uncongested area as communicated by the EU platforms…
  - ⇨ **Belgian imbalance price will be influenced by foreign balancing markets and TSOs' demands**
- … provided the CBMP results from the activation of bids in the direction requested by the local TSO
  - ⇨ **By only considering the CBMP when the bid selection by the platform corresponds to the direction of the local TSO demand, correct incentives are maintained for reactive balancing** (i.e. high imbalance price if the system is short, low price of the system is long)
- If there is no activation in the EU platforms (i.e. neither in MARI, nor in PICASSO) in the direction requested by Elia, the **Value of Avoided Activation will set the imbalance price** (without prejudice to the alpha)


ACER
Agency for the Cooperation of Energy Regulators

PUBLIC

DECISION No 18/2020
OF THE EUROPEAN UNION AGENCY
FOR THE COOPERATION OF ENERGY REGULATORS

of 15 July 2020

on the harmonisation of the main features of imbalance settlement

ACER Decision on the imbalance settlement harmonisation methodology: Annex I

Methodology for the harmonisation of the main features of imbalance settlement

in accordance with Article 52(2) of Commission Regulation (EU) 2017/2195 of 23 November 2017 establishing a guideline on electricity balancing

15 July 2020

Imbalance price: calculation of aFRR and mFRR price components*

aFRR

TODAY: Volume weighted average price of activated energy bids (paid-as-bid)

$$\frac{\sum_{k=activated\ bids} (aFRR\ Requested_k * Time_k * aFRR\ Price_k)}{\sum_k (aFRR\ Requested_k * Time_k)}$$

WITH PICASSO: Volume weighted average price <u>of aFRR CBMP per optimization cycle</u> where PICASSO activates a bid in the direction requested by Elia

$$\frac{\sum_{OC=optimisation\ cycles\ of\ the\ ISP} (aFRR\ Requested_{OC} * CBMP_{OC} * direction\ factor_{OC})}{\sum_{OC} (aFRR\ Requested_{OC} * direction\ factor_{OC})}$$

where *direction factor $_{OC}$ = 1 if PICASSO activates a bid in the direction requested by Elia and 0 otherwise*

mFRR

TODAY: Marginal price of the activated energy bids (paid-as-cleared)

WITH MARI: mFRR CBMP where MARI activates a bid in the direction requested by Elia
If Elia's requests result in the activation of bids in the requested direction in both schedule <u>and</u> direct activation processes, the mFRR price is the maximum of $CBMP_{SA}$ and $CBMP_{DA}$ for this quarter-hour

VoAA

TODAY: In case all Elia's needs for aFRR are netted and there is no mFRR activation, the imbalance price is based on the first aFRR bid in the <u>local</u> MOL

WITH PICASSO: In case no bid is activated in the direction requested by Elia (full netting of FRR requests in MARI and PICASSO)**, the imbalance price is based on the first aFRR bid in the <u>common</u> MOL**

* Price per quarter-hour and per direction

Imbalance price: basic example with 1 FRR product, 1 direction

- Elia_demand = +100 MW
- Other TSOs_demand* = -500 MW
- Orderbook:

FRR up (TSO pays)	FRR down (TSO receives)
100MW **@80€/MWh**	100MW @20€/MWh (BE)
100MW @90€/MWh (BE)	100MW @17€/MWh
200MW@120€/MWh	**300MW @10€/MWh**

- FRR platform result: **400 MW FRR down** will be activated **@10€/MWh**
- **TSO-TSO and TSO-BSP Settlements @10€/MWh**
- **Belgian imbalance price:** Based on **FRR up activations** ➔ N.A. ➔ **VoAA** = **80€/MWh****

BRP keeps the right incentive to balance its position or help the system

* We actually consider the demand of the other TSOs in the uncongested area
**Alpha not considered in this example

Imbalance price: more complex example with 2 products, 2 directions

- Elia_demand over an ISP = +100 MW mFRR (SA); +50 MW aFRR; -10 MW aFRR

  ⇨ Net demand = +140 MW ➔ **only consider prices for FRR up**

  ✓ Price for mFRR = 70€/MWh (CBMP for mFRR up in SA)
  ✓ Price for aFRR = 80€/MWh (VWAP of CBMP for aFRR up)

↳ **Imbalance price = max (Price for mFRR, Price for aFRR)***

- Note that:

  ✓ If Price for mFRR and Price for aFRR were not defined (due to no activation of FRR up to satisfy Elia demand), Imbalance price would be based on VoAA

  ✓ If Elia had had a demand for mFRR in both SA and DA, the price for mFRR would have been the highest of CBMP for SA and DA provided mFRR was activated in the direction requested by Elia for both types of activation

* Alpha not considered in this example

mFRR design – feedback on informal consultation

Presented by Sofie Van den Wayenberg

Belgian mFRR design review: stakeholder consultation

Dedicated workshops	
Monday 7/12/2020 (10:00-12:30)	1st workshop High-level session – Introduction – Recap of European context & design
Wednesday 16/12/2020 (14:00-17:00)	2nd workshop First detailed design session
Friday 15/1/2021 (10:00-12:30)	3rd workshop Second detailed design session
Thursday 28/1/2021 (14:00-17:00)	4th workshop Open session for Q&A, presentations of other parties than Elia, …
Wednesday 31/03/2021 (14:00-17:00)	**5th workshop** Detailed design session (finetuning & response to informal consultation) Manual on energy bidding

Design note

16 December 2020

mFRR design note
- **Informal consultation**

5 February 2021

mFRR design note: Informal consultation responses

- Organized between 16/12/2020 – 5/02/2021 in parallel with dedicated workshops on the new mFRR design for the members of the Working Group Balancing
- **6 responses received:**
  - CENTRICA BUSINESS SOLUTIONS
  - FEBEG
  - FEBELIEC
  - FLEXCITY
  - LAMPIRIS
  - NEXT KRAFTWERKE
- **General overview:**

▪ Feedback on European design ▪ Feedback on local regulation	Not in Elia's control: change requests are part of a separate, long-term track. Current EU design and regulation is basis for new local design.
▪ Feedback on local design	Main topic 31/3 workshop
▪ Requests for clarification of the impact of the European or local design	Clarification will be given via: workshop, design note, or bilaterally

mFRR design note: Informal consultation – summary of stakeholder feedback (1)

- **General:**
  - Feedback in support of the advantages of the European balancing market and connecting to the mFRR Platform
  - Concerns due to complexity of the new design and remaining open questions
  - Concerns due to speed of implementation
  - Concerns on the impact on available balancing volumes, prices and costs
  - Questions to clarify the rules of the activation optimization function (AOF)
  - Requests for European harmonization of ‘other’ design topics (such as activation control, penalties, imbalance price)

mFRR design note: Informal consultation – summary of stakeholder feedback (2)

- **mFRR energy obligation on DPsu:**
  - Opposition against article 226 of the Federal Grid Code
  - Elia's efforts to take into account the impact on BRP balancing are appreciated but are considered insufficient.

- **mFRR products:**
  - Restatement of a disagreement with the planned phase-out of the mFRR Flex (working assumption for the local implementation of MARI).

- **Prequalification and baselines:**
  - Concrete questions on the non-activation period in the prequalification test.
  - Concerns with impact of expected deactivation profile on the last qh baseline.

mFRR design note: Informal consultation – summary of stakeholder feedback (3)

- **Bidding:**
  - Concrete cases
  - DP: requests to eliminate pooling constraints and to allow combo of mFRR and aFRR for DPpg
  - Different stakeholder views on the proposed possibility to reduce mFRR bid volume after GCT (from confirmation of the need to concerns about market manipulation)
  - Request to maintain current rules on minimum volume for DPpg
  - Requests for additional bid characteristics (to allow for an easier implementation of neutralization time between activations, to protect DP against technically harming consecutive activations, to manage minimum activation periods)

- **Remuneration:**
  - Comments on the complexity of the clearing prices as defined in the European Pricing methodology
  - Requests for remuneration of opportunity costs in case of declaration of bid unavailability due to CRI or Guaranteed Volume

mFRR design note: Informal consultation – summary of stakeholder feedback (4)

- **Activation:**
  - Comments on the reduction of the Full Activation Time (FAT) from 15’ to 12,5’
  - Comments on the activation profiles for scheduled and direct activation (linearity assumption, longer delivery in case of DA)
  - Concerns due to risk of incompliance with activation profiles, which would increase balancing needs
  - Use of other DP in response to an activation and its consideration in settlement

- **Activation control & penalty:**
  - Comprehension of the need for a BSP penalty when connected to the mFRR-Platform due to potentially opposing incentives for BSPs and BRPs.
  - However, major concerns on ‘double penalty’ (penalty for BSP & imbalance price for BRP)
  - Concerns on increased risks of mFRR underdelivery due to new activation profile

mFRR design note: Informal consultation – summary of stakeholder feedback (5)

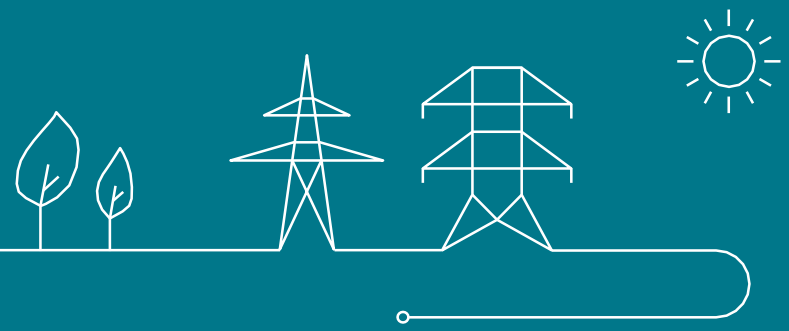
- **Planning:**
  - Large impact of the transition from implicit to explicit bidding for DPsu, both in terms of complexity (BSP portfolio management and bidding approach) and IT systems (at BSP and Elia side)
  - Technical guides needed to estimate IT costs and to plan developments
  - “climate of constant change” / “change fatigue”: balancing roadmaps lead to high implementation workload for all stakeholders, changes become difficult to follow and implement
  - Connection to the MARI platform conditional upon the connection of at least 1 neighboring country or the use of XB capacities of other countries that are not yet ‘connected’ (no TSO demand and no submission of energy bids)

⇒ Increased risks (lower volumes or less reliable mFRR) if market players are not ready on time or implement quick short-cuts

AOB

Progressive integration of ALEGrO in IGCC

Presented by Philippe Magnant



EU Balancing : workshops - update

Presented by Cécile Pellegrin

Local implementation MARI (BSP-ELIA)

- *Workshops and informal consultation of the design note took place*
- *A 1st joint mFRR- iCAROS Workshop focusing on the IT implementation took place on the 11/03*
- *Next planned meetings:*
  - *31/03 – Feedback of informal consultation & energy bidding manual (manual will be shared upfront)*
  - *03/06 - Joint mFRR- iCAROS Workshop focusing on the IT implementation (focus on Technical guides)*

Local implementation PICASSO (BSP-ELIA) and aFRR capacity auctions

- *PICASSO (energy part): Workshops and informal consultation of the design note took place*
- *Capacity auctions:*
  - *PfA of the T&C for the protective measure has been submitted to the CREG. Consultation report is available on Elia's website*
  - *A workshop took place to present and discuss a proposal for a next evolution of the aFRR capacity design. Feedback from stakeholders on this proposal is requested by the 26th of March*
- *A workshop is planned on the 2nd of April on both energy and capacity design, based on the feedback we will have received from stakeholders*

High level planning of iCAROS phase 1

Presented by Viviane Illegems

iCAROS : Phase 1 of the implementation

	From …	Phase 1 – Q2 2022
Relevant Assets	Only mandatory for large classic power generators [≥25MW]	Only mandatory for large SYNCHRONOUS POWER GENERATING MODULE (SPGM); POWER PARK MODULES per primary energy source (PPM) or ENERGY STORAGE DEVICE (ESD) [≥25MW]
Data Exchange	Non-standardized and obsolete data exchange	• NEW Outage Planning DA & ID • NEW : DA & ID Scheduling • NEW : Redispatch (RD) energy bidding – explicit & aligned with bid properties MARI
Tools & Technologies	Partially supported by obsolete tools & technologies [~15 years]	• New tool for DA & ID Outage Planning • New DA & ID scheduling tool • New RD bidding module – explicit
Roles & Contracts	ROLES : • BRP = OPA = SA CONTRACT : • regulated T&C OPA & T&C SA & Coordination Rules	ROLES : BRP = OPA = SA CONTRACT : • regulated T&C OPA & T&C SA & Coordination Rules

High level milestone overview implementation for iCAROS and explicit mFRR (MARI)

MAR 2021	MAY 2021	JUN 2021	AUG/SEP/OCT 2021	OCT 2021	DEC 2021/JAN 2022	FEB/MAR 2022	MAR 2022	APR 2022
•Technical workshop focus on data exchanges (11/3) •Manual for Energy bids •iCAROS Taskforce workshop : design phase 1 and manual for RD Energy Bids (25/3) •mFRR design workshop (31/03)	•Technical guides for external stakeholders	•Technical workshop focus on technical guides (3/6)	•Public consultation of T&C and coordination/ balancing rules	•Launch of demo platform for market parties to test their developments •External testing with OPA/SA/BSP of individual functionalities	•External testing with OPA/SA/BSP of functional integrating testing	•External testing with OPA/SA/BSP of operational run of data exchange	•Regulatory approval of T&C and coordination / balancing rules •Completion of End-to-End testing with external stakeholders	•Contract management T&C •**Go-Live explicit bidding mFRR & iCAROS**