



MARI Stakeholder Workshop

Q&A document

13/07/2020

Webinar

PARTICIPANTS

For GDPR reasons, a list of participants is not shared. The meeting was only online and no physical location was made available due to COVID-19 restrictions.
In total, 507 (peak around 400) participants joined the workshop

1. Legend

In bold letters: Sections to which the question referred to

Black: question from Webinar participant

Italic: clarification provided when discussing the question in the plenary

Marigold: response from MARI TSOs

2. Questions and answers

General

Where can I find information on the national TSO decisions?

It will be included in the T&C of each country. ENTSO-E keeps a list of those.

Will the presentation in its final form be shared?

The presentation in its final form will be shared with registered participants, and will be published on the MARI & PICASSO websites.

Where can I find information on the national TSO decisions?

It will be included in the T&C of each country. ENTSO-E keeps a list of those.

mFRR design

You said, if one is offering a direct activation bid for QH0, one may also be activated during QH1?

The activation of a bid in Direct Activation in QH0 means that the activation request from start in QH0 is extended in QH1. An activation request in QH1 is not foreseen.

But would the remaining 30 MW not be free to be activated?

What example was this about? Participant is invited to clarify but does not respond.



Should the reserved bids by the TSO's occur, they might be published before as limitations, for previous knowledge. Can this be possible? *How can BSPs anticipate these reserved bids, how can BSPs bid if they have no knowledge of this? Should this not be published previously in stead of making BSPs make their bids, and then reserve the bids? BSPs should know upfront if the bids are going to be reserved or not?*

It depends strongly on the issue in the country and is solved according to local TSO rules. On EU level there is no framework set how to deal with this.

mFRR process

Is there any difference of data in step 1 ('Offers') and step 2 ('Bids')?

Bids are anonymized offers and in the form of local merit order list bids send to the platform.

Will the availability of cross-border capacity be known by BSPs before the BSP gate closure time?

No, currently is not foreseen to publish the CBCL prior to Gate Closure Time.

When will steps 3-5 in slide 6 happen in relation to the time of SIDC GCT for the given MTUs (delivery periods)?

The provision of mFRR CBCL may take place at all time but the mFRR IF art 4.2(a) frames clearly that the initial cross-zonal capacity shall be the remaining of SDIC until a capacity calculation methodology is put in place. Therefore, process-wise the provision of CBCL by all TSOs to MARI shall take place after the SDIC GTC.

The cross-border capacity constraint is the same for PICASSO, MARI and TERRE platforms (remaining cross-border capacity after intraday markets). How will it be allocated between the three platforms?

Due to process time foreseen in the RR IF, mFRR IF and aFRR IF, the first use of CBCL takes place in TERRE, MARI and PICASSO, in that chronological order. The use of CBCL is always in serie and not in parallel.

How will the group of bids be visible in the merit order list? *How the complex bids show up in the CMOL, are they transparent? If you see the MOL with all these complexities it might be challenging to follow the price formation.*

On complex bids, the following information will be published: <...>. The mFRR AOF calculates the solution taking into account all constraints and rules. Recalculation of the price formation outside the mFRR platform is not possible due to the fact that not all parameters used in the AOF are published.

Please clarify terms "accepted, activated and cleared".

The terminology "accepted", "cleared" or "selected" are equivalent and determine the results of the AOF in the bids. The terminology "activated" designated the actual activation of the bids which is communicated from the TSO to the BSP. In MARI, the selected bid by AOF and the activated bid should theoretically be the same according to mFRR IF art. 3. (16 d) . If the bids differ, the TSO shall publish the information pursuant to EBGL art 29(5).

Accession Timeline

Are there already defined requirements for data exchange/communication - this is important for modification of system.

TSOs must show the communication will look like. When will TSOs share this?

The TSOs are working on an Implementation Guide (IG) which defines the communication between the TSOs and the mFRR platform. The IG will serve as a basis for TSOs to determine the communication between TSO and BSPs. The timing of such documents are determined individually by each TSO.

When will the platforms be available for testing by the BSPs?

The mFRR platform, like other balancing platforms, are based on a TSO-TSO model. There is no direct connection between the BSPs and the platforms. The testing between BSP and TSO depends on the timing determined individually by each TSO. The testing is also influenced by the time by which the TSO intends to connect to the mFRR platform. For further information please contact your TSO.

MARI Algorithm (AOF)

Why there is no "direct" deactivation option? *Why is this not allowed, if direct activation is allowed? You may be activated in the middle of the Market Unit, why not also deactivate the unit?*

The feature of direct deactivation is not included in the initial design of the platform. It was assessed that direct deactivation may be technically infeasible for some technologies due to technical constraints

Why is minimization of cross border exchanges an objective?

Why is there the objective to minimize cross-border exchanges?



The principal objective (first) is maximization of social welfare, this will set approx. 95%. For the last 5% additional rules apply and they do not affect the welfare. It serves to define the optimum of where the flow will go, how the cross border flow will run. When there are several solution available in this case (all are considered equal and with no additional impact to social welfare), this criterium is applied. This approach is similar to what is applies in DA market coupling, de-incentivising of small adverse flows on the cross-border exchange that will be consumed by the grid not to generate losses.

I'm afraid the answer to this was not clear enough. I would assume that losses would be already considered in welfare maximization algorithm.

For the Go-Live of the mFRR Platform, the TSOs have decided that losses are not taken into account given the potential impact on the performance of the algorithm. The TSOs will further analyse and consider the inclusion of losses in further releases of the algorithm.

Deactivation is the same request as activation in the sens of reduce power- is the request of mFRR in down direction. The BSP receives the information and than has to activate accordingly its units.

Direct Activation are "run-on_demand", does this mean AOF execute each time a TSO submit a demand request? Or are requests accumulated for some time? No the AOF runs every two minutes. Can the requests not be accumulated (in DA)?

The AOF indeed runs everytime that a TSO request a demand. Once the AOF is running, the demand are queued and aggregated per direction in Direct Activation to be processed once the AOF is free again. Parallel running of AOF is avoided as the same CMOLs and ATC are used.

What happens if the AOF fails to clear the market? But the timeframes are very short, is this manageable?

In normal situation, the AOF is always able to provide a solution to ensure a clearing. The solution may not be optimal but is used as a fallback if no better solution can be found in the allocated time.

If for technical reasons the AOF is unable to deliver a result to the TSOs, the TSOs have foreseen fallbacks which ensure the continuity of operations without the mFRR platform.

MARI Bidding Design

Can you put an indivisible bid up to 9999 MW? or does it have to divisible?

What is de maximum indivisibility limit?

As described in Art 7(5) of mFRR IF, "The maximum size of indivisible bids shall be defined in the national terms and conditions for balancing and shall not be higher than the largest technical minimum production or consumption of the pre-qualified generation or load unit of the BSP".

Are grandchildren also allowed, or is it limited to 2 layers?

Yes, because of the multi-part modelling of bids, such is possible

I have question regarding minimum delivery period for DATCR. Do we have minimum delivery period, is it 15 min?

The question was related to a TSO having direct activation, min delivery period will be 15 or 12,5 minutes?

The minimum duration of the delivery period is 5 minutes as mentioned in Art 7 of the mFRR IF. The delivery period for a Scheduled Activation is effectively 5 min and varies between 5 and 20 min for Direct Activation, depending on when the request of the TSO is submitted to the platform.

In central dispatch systems where bids from the integreted scheduling process will be converted in standard bids, will the choice whether to make SA or DA bids be left to the TSO? *If the decision to offer SA or DA is left to the TSO or if the indication is given by the market operator.*

Central dispatch TSO converts the bids offered by the operators in standard bids. In this stage bids aren't classified between scheduling and direct. MARI Platform runs the Scheduled Auction, defines the bids to active as result of scheduled process and leaves to the Direct Auction all the other bids.

Will there be restrictions on these smart bids (e.g. max number per BSP, max volumes, ...) similar to what has been imposed on the day-ahead market?

Complex bids will indeed have some restrictions in terms of allowed numbers as it may significantly impact the performance of the AOF. Performance analysis are currently being performed and TSOs have to further discuss the restrictions.

slide 17, what is SA and DA

SA means Scheduled Activation and DA stands for Direct Activation

How could a 9999 MW order by acceptable since that as such suggests, for more then half of all EU countries, that it would be much higher then the total consumption, e.g. suggesting a party would be solely delivering the recovery from



a blackout? *How can there be a demand in line with that? Is there a drive to submit larger bid in order to be accepted, activated? Will size have a direct impact whether the welfare algorithm will select an order?*

The maximum bid size is purely a technical limitation that was chosen high aiming not to limit the BSPs in any way. After the Balancing Energy Gate Closure Time, all bids submitted by a BSP is firm. Thus, if such as bid is cleared the BSP has the obligation to delivery the requested energy.

The AOF has as objective function the maximization of the welfare and does not have a specific rule which favours bids of large size. However, market rules may impact the selection of some bids due for example on their divisibility characteristics.

mFRR Balancing Energy Product

Is it correct that the FAT, which is traditionally 15 min, will be reduced to 12.5 min?

The Full Activation Activation Time of the mFRR Standard Balancing Energy Product is 12.5 min, as described in Art 7 of the mFRR IF

Direct Activation - it was said that every BSP should be capable for Direct Activation but on slide it reads that BSPs 'may choose'?

Did not understood the point on TSO force some DA bids. Is it a %? If BSP can choose if Bids are available or not how does this work?

As mentioned in the Art 3 (2) of SPBC (Standard Product for Balancing Capacity), " For each contracted standard mFRR balancing capacity product, each BSP shall provide corresponding capacity in the form of integrated scheduling process bids or standard mFRR balancing energy product bid(s), defined in the all TSOs' proposal for the implementation framework for a European platform for the exchange of balancing energy from mFRR pursuant to Article 20 of the EB Regulation. Such bids shall be direct activatable bids, provided that the delivery period does not exceed the end of the last validity period for which the BSP is contracted." Other conditions regarding the possibility for a BSP to choose is subject to the Terms and Conditions for BSPs

Is it correct that it is possible that mFRR activations last only 5 minutes?

The delivery period (i.e. delivery of the requested power in full) is minimum 5 minutes as described in the Art 7 of mFRR IF. The activation time of the bid (considering also ramping up and ramping down) depends on the conditions prescribed by Terms and Conditions for BSP

All shapes are admitted?

If the shape is exactly by T as ramp it is acceptable

The permitted ramp up and ramp down of a BSP for the delivery of mFRR energy is prescribed by the Terms and Conditions BSPs but shall in any case respect the Standard mFRR Balancing Energy Product, described in Art. 7 of the mFRR IF.

Is there an overview of all the possible activation shapes of the participating TSO areas?

The permitted ramp up and ramp down of a BSP for the delivery of mFRR energy is prescribed by the Terms and Conditions BSPs. All TSOs are expected to change their local design in order to comply with the Standard mFRR Balancing Energy Product, described in Art. 7 of the mFRR IF. There is currently no overview of the rules for ramp up and ramp down.

What if in QH 0 we have order for giving more energy into grid (ramp up) and in QH+1 order for reducing energy from the grid (ramp down)? How will the generators which provides both services charged if they start to break their power or just release them to stop by the inertia without putting a break onto them?

Art 8 of EBGL defines a Balancing Energy Gate Closure Time by which the BSP are to submit their bids. The bids are considered firm after the BE GCT and the BSP has the responsibility to ensure the feasible delivery of the energy bids in all conditions. The TSOs have foreseen Technical Linking and Conditional Linking to provide tools to BSP to model their portfolio.

Why was it "impossible to harmonise more"? Mechanical and physical laws should be the same across Europe. So what prevented hamonisation? Local politics or unwillingness of TSOs?

At the moment it is not possible to have harmonization, but can we expect a date when this will happen?

The current level of harmonization is the outcome of discussions of all TSOs, taking into account constraints and legacies from local market developments prior the EBGL and approved by ACER. The art. 16 of the mFRR IF foresees a process of harmonization where stakeholders are consulted via a survey.

The EBGL and the mFRR IF already introduce a change in paradigm for many if not all TSOs. A further harmonization than the current level puts additional pressure not only on the TSOs but also on the BSPs to be ready within the 30 months foreseen by the mFRR IF. Additionally, these changes apply not only for mFRR but also for aFRR.

Would be possible to provide aFRR, mFRR by TSO itself?

Only market participants can provide reserves.

When BSP know the remaining reserve to offer: if the offer a mFRR and aFRR in same time? and it is the only reserve till maximum power?

The mFRR IF foresees under Art. 9 (4)(b) that combined aFRR and mFRR bids (or any other combinations) can be offered outside of the mFRR platform. If a bid is activated outside of the mFRR platform and becomes unavailable for mFRR activation, it should be marked as such. It is however not foreseen by the Balancing platform to handle such



combinations. This type of bidding is a local decision of the TSOs and should be incorporated into the Terms and Conditions for BSPs.

Pricing

Why do you put energy from triangles QH-1 and QH+1 into QH0? It will be not correct when we shall calculate imbalance of BSP.

In terms of volume of energy, it is the same. The imbalance settlement is between TSO-BSP and this is locally defined

Why is the function in the box given as "MAXorMIN" whereas the text allways states "maximum from..."?

In the text it is meant for scheduled activation and in the box it is for direct activation is depends on the direction (upward = max, downward - min)

Other

Which are the main differences between MARI and PICASSO platforms and kind of services?

There is no direct link between both platforms, only a common capacity management module is foreseen. Both markets are independent and they will also be operated independently from one another.

Should TSOs book the reserve mFRR for advance? If you want to use a abalancing mechanism, should we reserve some capacity in advance or not? What capacity? In case Ukraine wants to buy mFRR reserve, does it need to reserve?

In other words, how bins mFRR product on BM and on AnSs Market? What is the relation?

The mFRR IF, like the other Implementation Framework cover solely the Balancing Energy. The procurement of mFRR Balancing Capacity is the responsibility of the local TSOs. TSOs may also enter in Balancing Capacity Cooperation to jointly procure based on methodologies foreseen by EBGL art 40, 41 and 42. Those methodologies foresee reservation of cross-zonal capacities.

All things, which are explained here, apply to the balancing ENERGY market. The balancing CAPACITY market of local TSOs is not affected by this, right?

The mFRR IF, like the other Implementation Framework cover solely the Balancing Energy. TSOs may take the opportunity of revision of the Terms and Conditions for BSPs to also perform amendments on Balancing Capacity in order to be compliant with the EBGL and other regulations or simply as evolution of the design.

Will the granularity of the bids always be up to the QH level, or will bids pass through larger 'blocks' (re. current Belgian mFRR bid selection)? *When in Belgium BSPs are bidding on 4H blocks. And if the volume is selected it is for 4H of time. Will MARI select also for quarter hours?*

The mFRR IF Art 7(3)(e) foresees that mFRR bids are submitted for a mFRR MTU, which is fixed to 15 min in its definition.

Could Ukraine join to MARI or PICASSO if Ukraine is not a member and even an observer? Is there some other mechanism to obtain balancing energy from Europe to Burshtyn island?

The stakeholder is invited to contact ENTSO-E and Ukrenergo (Electricity TSO of Ukraine) to further clarify the possibility of membership or the observership to the Balancing Platform projects.