

"Short Term Auction for Reserves ("STAR") Procedures and User Manual "

Summary	This manual explain the procedures and how to use the application STAR for the execution of the aFRR and mFRR Capacity Auctions.
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Disclaimer: This document has no legal value and is established with the purpose to explain the STAR platform and procedure to BSPs. This document should always be aligned with the General Framework Agreement aFRR and/or BSP Contract mFRR and Balancing Rules. In case of mismatches, the contractual documents and Balancing Rules prevail and are to be considered as valid reference.

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1 Introduction

1.1.1 Document scope

The scope of this document is to describe the auction process and related topics of the Belgian auction via the local platform STAR. This document is organized as follows :

- Section 2 describes the auction process for the automatic Frequency Restoration Reserves (aFRR).
- Section 3 describes the auction process for the manual Frequency Restoration Reserves (mFRR).

Note that the Frequency Containment Reserve (FCR) is auctioned on the regional procurement platform as of 1 July 2020 on a daily basis. For more information about the regional procurement platform, please refer to Regelleistung.net.

1.1.2 About Short-Term Auctioning

The methodology for determining the volumes of balancing capacity to be procured is specified in the document named 'Elia's methodology to determine the required Balancing Capacity' or 'LFC Means' approved by CREG on 6 December 2019.

The platform STAR is the local platform that enables the execution of the aFRR and mFRR capacity auctions . The objective of this user manual is to describe the procedures applicable for this platform. It's critical that all resources that are technically able to provide reserves, offer their available capacity on the short term market via STAR.

More information about :

- Volume needs of different capacity product can be consulted on the following link : Capacity - Volumes needs (elia.be)
- Product development and evolutions, please consult our website on: <https://www.elia.be/en/users-group/wg-balancing> .

In the remainder of this document the following related topics to STAR can be found: bidding obligations, auction process & rules and a specific user manual. Based on the experience gained from the different auctions, the content of this document might be subject to change after discussion between the different stakeholders.

1.1.3 Requirements for participation to the short term auction

A potential BSP willing to participate for the short-term procurement one of the following reserve products FCR, aFRR and/or mFRRreserve, should:

- become a qualified BSP;
- have signed the necessary BSP contract or general framework agreement for the respective service and;
- must have adequate knowledge of the bidding obligations and tools (STAR) through a training given by Elia.

Elia will respect a reasonable time for implementation and signature of these documents in order to allow effective participation in a realistic and feasible time frame. The latter documents requiring signature prior to allowed participation can be obtained through a request via e – mail to contracting_AS@elia.be.

2 Procedure and User Manual for aFRR

2.1 STAR Procedure aFRR

2.1.1 Standard Auction Process & Rules

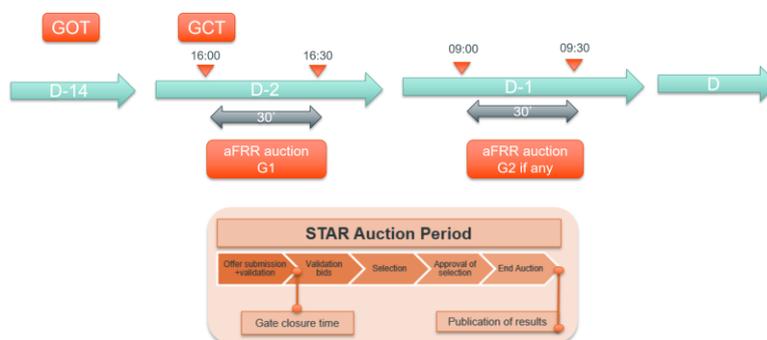
Auction process via local procurement platform (STAR)

The short term capacity reserve tendering for aFRR is a daily procurement. As of 4 May 2022, Elia has to procure the LFC means for each aFRR capacity products (Up and Down) for the six CCTUs of Day D by running one capacity auction in D-2.

The capacity auction is performed in Day D-2 for delivery on day D taking into account the following timeline :

- aFRR GOT for the capacity auction of Day D is scheduled on Day D-14 at 00:00 CET;
- aFRR GCT for the capacity auction of Day D is scheduled on Day D-2 at 16:00 CET;
- Publication of the award for the capacity auction of Day D-2 is performed at the latest Day D-2 at 16:30 CET.

The picture below shows a default timeline for the aFRR tendering via the local procurement platform (STAR Auction platform) for Standard Auction. Possible changes of dates can occur, please see the official calendar published on Elia Website (<https://www.elia.be/en/grid-data/balancing/capacity-auction-calendar>).



The standard STAR auction process consists out of the following steps:

- Bidding phase:
 - Bidders introduce and validate his capacity bids;
- Awarding phase:
 - Elia validates the capacity bids;
 - Elia performs and approves offer selection;
 - Elia ends the auction.

aFRR Capacity bid Submission

For aFRR, the Bidder can start to submit "All-CCTU" and/or "Single-CCTU" aFRR Capacity Bids for the delivery date D in D-14. The Capacity Bids for each Delivery Period have to be introduced before each respective GCT (Gate Closure Time).

When the auction is open, new capacity bids can be introduced and already created capacity bids can be modified or cancelled, regardless of their status. When a new offer is created and saved, it automatically has the status 'Received'.

Once Capacity bids are fine, BSP can submit the bids by clicking on Validate bids.

- If the offer set respects the bidding obligations, the status changes to 'Checked';

- If the offer set does not respect the bidding obligations, the status changes to 'Rejected' for all concerned Capacity bids.

Each time the offer set is submitted, an email is sent with a report of the latest offer set. In addition to this process, a report is sent each time the STAR user checks the respect of the bidding obligations.

Elia checks feasibility and consistency of the Received offers; following this process, the status of an offer is changed to 'Accepted' or 'Rejected'. Rejection of an offer or a set of offers is limited to cases when:

- Such offer or group of offers shows manifest errors or inconsistencies,;
- The bidding obligations are not respected.

Short-term auction BSPs remain fully responsible for their offers. Bids are firm at GCT.

Offer validation

After GCT, no new offers can be introduced, nor existing offers can be modified or cancelled. Elia will automatically validate the offers introduced in STAR once the Bidders clicked on Validate Bids.

Award of aFRR Capacity bids

When Elia ends the auction, the status of the selected aFRR Capacity bids changes to "Awarded". The status of the other aFRR Capacity Bids remains unchanged (Accepted or Rejected). The rules to award capacity bids can be found in section 2.1.4: "Awarding Procedure & Award Criteria".

All bidders receive an email to inform that the auction ended and can consult if and which of his aFRR Capacity bids have been awarded in the Auction overview. From that point in time, the individual awarded bids will be visible for each bidder separately.

At each moment, bidders are able to see the results from previous auctions in a similar way by selecting the appropriate delivery period for which bids were made in the past. A functionality is included as well as to generate such specific reports. More information can be found in this User Manual further below.

Publications on Elia's Website

On a daily basis the following information regarding the aFRR capacity auction is published on Elia's website before and after the aFRR capacity auction:

Volume need:

For aFRR, Elia will publish the need of aFRR UP and the need for aFRR DOWN for a specific day D on Elia's website via: <https://www.elia.be/en/grid-data/balancing/capacity-auction-calendar>.

Total awarded volumes

For each Capacity product, the final total contracted volume for each CCTU will be published as well on Elia's website via:

<https://www.elia.be/en/grid-data/balancing/capacity-auction-results>

Average prices

For each Capacity product, the average price for each CCTU will be published in an anonymous way on Elia's website via:

<https://www.elia.be/en/grid-data/balancing/capacity-auction-results>

Marginal prices

For each Capacity product, the marginal price for each CCTU will be published in an anonymous way on Elia's website via:

<https://www.elia.be/en/grid-data/balancing/capacity-auction-results>

Offered volume

For each Capacity product, the offered volume for each CCTU will be published in an anonymous way on Elia's website via:

<https://www.elia.be/en/grid-data/balancing/capacity-auction-results>

Reference Cost

For each Capacity Product, the reference cost will be published on the following link :

<https://www.elia.be/en/grid-data/balancing/capacity-auction-results>

RC Factor

The RC Factor is published on the following link : <https://www.elia.be/en/grid-data/balancing/capacity-auction-calendar>.

Individual Capacity bids

For each Capacity product, the individual anonymized capacity bids for each CCTU of all bidders after each auction will be published as well on Elia's website via Open Data.

Open Data is available via the following link : <https://opendata.elia.be/pages/home/>

2.1.2 Fallback procedures aFRR for local procurement platform

In case of shortfall of volumes, a fallback procedure is applicable: The auction will be ended and all selected volumes will be awarded. Subsequently, after auction ending, a new gate will be opened for the remaining volume. The same auction process is applicable for this additional auction round.

This second gate has the following timeline :

- aFRR GOT is scheduled on Day D-2 at 16:30 CET (just after the first gate);
- aFRR GCT is scheduled on Day D-1 at 09:00 CET;
- Publication of the award is performed at the latest Day D-1 at 09:30 CET.

The procedure during the Fallback procedure will be the same as during the Standard Procedure.

2.1.3 Back-up procedures for local procurement platform (STAR)

The back-up procedure is applicable if the auction platform would be unable to hold the short-term auction under standard conditions. In this case, Elia will request by e-mail to each bidder to communicate its aFRR Capacity bids by mail to Elia. The volume need will also be indicated in the e-mail. If Elia can return to standard conditions for the second gate, Elia will communicate this information directly to the BSPs via mail.

aFRR Capacity bid Submission

The bidder can start to make aFRR Capacity bids as of the BSP received the notification by ELIA that the back-up procedure will be used.

Each BSP should provide Elia its aFRR Capacity bids in one of the following ways :

- Sending its final XML towards: "contracting_AS@elia.be".
- Sending the Excel template provided by Elia towards: "contracting_AS@elia.be".

The following structure for the title must be used :

"YYYYMMDD_BSPNAME_STARTCCTU_ENDCCTU_VERSIONNUMBER". For example, the title of the document containing the aFRR Capacity bids for the delivery date 21/06/2022 and for the delivery period "0 -4" must be "20220621_BSPNAME_0_4_v1".

The BSP has also the possibility to send all his offers in the same document if the BSP sends the Capacity bids via the Excel template provided by Elia. In this case, the title must be : "20200621_ELIA_0_24_v1".

aFRR Capacity bid Update

A BSP can update its aFRR Capacity bids between the GOT and the GCT. To update its bids, the BSP has to send a new version of the document. Only the last version, received before GCT, is taken into account by ELIA at the GCT. For example, A BSP already sent the following aFRR Capacity bids :

- 20220621_BSPNAME_0_4_v1
- 20220621_BSPNAME_4_8_v1
- 20220621_BSPNAME_8_12_v1
- 20220621_BSPNAME_12_16_v1
- 20220621_BSPNAME_16_20_v1
- 20220621_BSPNAME_20_24_v1

If the BSP wants to update the bids for the delivery period 20 – 24 (“20220621_BSPNAME_20_24_v1”), he has to send a new version with a higher version number (“20200621_BSPNAME_20_24_v3”). The versioning doesn’t have to be growing sequel as long as the latest version has the highest version number.

Offer validation & selection

Elia will take into account the aFRR Capacity bids which are received for the aFRR Capacity Auction between:

- The notification by Elia via mail to inform that the Back-up procedure will be used (=GOT). The BSP is informed that a back-up procedure will be used no later than 18:00 CET on D-2;
- The aFRR Capacity Gate Closure time is scheduled at 09:00 CET (= GCT)

Award of aFRR Capacity bids

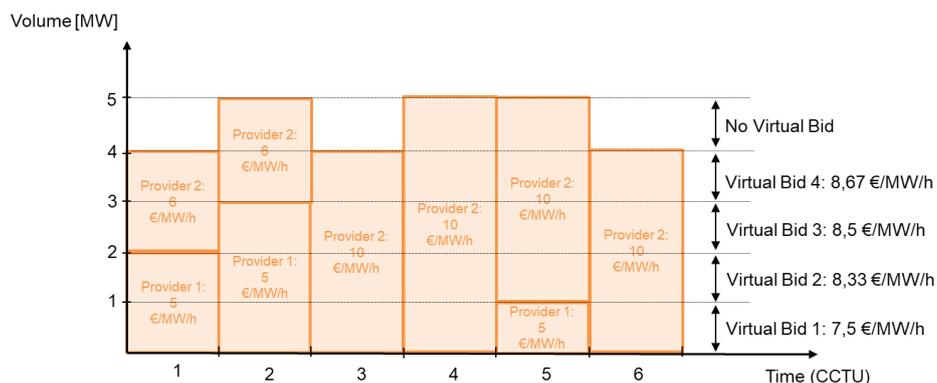
Elia will communicate by mail towards the bidder not later than 30 minutes after the GCT the aFRR awarded.

2.1.4 Method of optimal bid selection & Award Criteria

Each Supplier will introduce “All-CCTU” and/or “Single-CCTU” aFRR capacity bids in the application STAR. Each bid contains a volume up, price up and/or a volume down, price down. The awarding process is based on 3 successive optimizations. In order to perform these three optimizations, ELIA has first to create the virtual bids based on the validated “Single-CCTU” aFRR Capacity Bids.

Creation of Virtual Bids

At the GCT and if enough “Single-CCTU” aFRR Capacity Bids have been submitted, ELIA will build a Virtual aFRR Capacity Bid out of six “Single-CCTU” aFRR Capacity Bids. In order to build a Virtual Bid, Elia ranks “Single-CCTU” aFRR Capacity Bids by increasing price for each CCTU. Based on this ranking, ELIA selects the first available volume of 1 MW from each CCTU. A virtual aFRR Capacity Bid can only be created if there is at least 1 MW validated in each CCTU. The price of the created Virtual Bid is the average price of the six “Single-CCTU” Capacity Bids from which the volume of 1 MW is selected.



Optimization 1 – First total cost optimization

ELIA perform a first total cost optimization considering the "All-CCTU" and the virtual aFRR Capacity Bids. From this first optimization, the reference cost per aFRR Capacity Product is determined as the average price of the selected bids. The virtual Capacity Bids selected in the first optimization are considered selected and the remaining volume to procure is the total volume to procure from which we deduce the sum of the volume of the virtual Capacity Bids selected.

In the unlikely case an alternative optimum exists, the following criteria will successively be applied to determine the solution: 1) maximize overall retained volume 2) maximizing the number of retained Bidders 3) maximizing the equal distribution of the overall volume demand amongst all retained Bidders or 4) the first solution from the optimization process.

Optimization 2 – Merit Order Selection

Elia performs a merit order selection per Capacity Product on the remaining virtual Capacity Bids. Elia selects at maximum the remaining volume to procure and only the virtual Capacity bids for which the price is lower or equal than the reference cost multiplied by the RC factor. The remaining volume to procure is updated based on the virtual Capacity Bids selected in the first optimization and the merit order selection.

Optimization 3– Second total cost optimization

For this optimization, ELIA perform a total cost optimization considering the "All-CCTU" and the remaining virtual aFRR Capacity Bids. The output of this optimization is a selection of "All-CCTU" and virtual Capacity Bids.

In the unlikely case an alternative optimum exists, the same criteria than for the first total cost optimization are used.

Optimization 4– Cap on degradation of the first total cost optimization

This final step is only executed when the total cost of step 3 is higher than the total cost from step 1 * TCO Degradation Cap Factor. The aFRR Capacity Bids selected in Optimization 3 are unselected and the volume of virtual aFRR Capacity Bids selected in Optimization 2 (merit order selection) is reduced according to an iterative process. During this process, the volume of virtual aFRR Capacity Bids selected in Optimization 2 (merit order selection) is progressively reduced, and the second total cost optimization is repeated until the total cost is less than or equal to the total cost from step 1 * TCO Degradation Cap Factor.

Award Process

The "All-CCTU" aFRR Capacity bids selected in the "final optimal selection" are awarded. ELIA awards "Single-CCTU" bids based on the virtual aFRR Capacity Bids selected in Optimization 1, 2, 3 and 4 (if applicable).

2.2 Bidding sheet assistance & obligations

Elia is procuring the necessary aFRR volumes one aFRR Capacity Auction. An aFRR Capacity Bid can be offered either for all-CCTUs together or for a single CCTU. The Bidding obligations for both types of aFRR Capacity bids are described below.

2.2.1 Bidding obligations for aFRR Capacity Bids

The following obligations are the minimum obligations to be respected. Elia invites every BSP to submit more Capacity Bids in order to increase the possibility to be retained in the optimal selection.

Specific Bidding Obligations for "All-CCTU" aFRR Capacity Bids :

The "All-CCTU" bids have to be indivisible and not combinable. For each aFRR Capacity Bids, the BSP has to precise the following characteristics :

- The offered volume per Capacity Product (Up/Down), in MW, taking into account that the volumes are defined as an integer superior or equal to 0.
- Price applicable per Capacity Product in €/MWh defined with two decimals.

All the "All-CCTU" aFRR Capacity Bids have to respect the following bidding obligations. Be aware, that the rejection of one aFRR Capacity Bid may lead to the rejection of other aFRR Capacity Bid(s) because compliance to Bidding Obligations is not ensure anymore.

1. **Smallest offered volume**

The smallest offered volume per aFRR Capacity Product should not exceed 5 MW.

2. **Volume increment**

The difference between two offered volumes of the same aFRR Capacity Product can be at maximum 5MW. In case of Capacity Bids combining a volume aFRR Up and a volume aFRR Down, the maximum increment for aFRR Up (resp. aFRR Down) for all Capacity Bids with the same amount of aFRR Down (resp. aFRR Up).

3. **Total Cost**

The total cost of a aFRR Capacity Bids (price in €/MWh x offered volume in MW) should never exceed the total cost of a aFRR Capacity bBid with a larger offered volume.

The check is performed while keeping the volume of one aFRR capacity Product constant and varying the volume of the other aFRR Capacity Product.

Specific Bidding Obligations for "Single CCTU" aFRR Capacity Bids :

All "Single-CCTU" aFRR Capacity Bids are divisible up to 1MW (i.e. ELIA can select a part or the total offered volume at the same unit price) and combinable. For each "Single-CCTU" aFRR Capacity Bid, the BSP defines the following characteristics:

- Concerned CCTU;
- aFRR Capacity Product;
- Offered volume in MW taking into account that the volumes are defined as an integer superior or equal to 1;
- Price applicable in €/MW/h defined with two decimals

Common Bidding Obligations for "All-CCTU" and "Single-CCTU" aFRR Capacity Bids :

1. **Maximum offered volume**

The maximum offered volume of aFRR Up (resp. aFRR Down) must be lower or equal to $aFRR_{max,up}$ (resp. $-aFRR_{max,down}$). In case BSP tries to offer more volume than its $aFRR_{max,up}$ (resp. $-aFRR_{max,down}$), Elia will reject all submitted aFRR Capacity Bids for the concerned aFRR Capacity Product.

Example :

We consider a BSP with $aFRR_{max,up} = 100$ MW. This BSP offers his first bids by introducing a maximum volume of 95 MW of "All-CCTU" bids Up. We consider that no bids are rejected as the offered bids are compliant with the bidding obligation described before and the volume offered is lower than $aFRR_{max,up}$.

	0 - 4	4-8	8 - 12	12 - 16	16 - 20	20 - 24
Volume Offered All-CCTU Bids UP [MW]	95					

Volume Offered Single-CCTU Bids UP [MW]						
Total Offered UP [MW]	95	95	95	95	95	95

The BSP decides to offer 5 MW UP of Single-CCTU aFRR Capacity bids for the CCTU "0 - 4", "4 - 8", "8 - 12". These Single-CCTU aFRR Capacity Bids are accepted as the total offered volume up is equal to $aFRR_{max,up}$. For the CCTU "12 - 16", he offers 10 MW UP of Single-CCTU aFRR Capacity Bids. This last offer leads to the rejection of **all ("All-CCTU" and Single-CCTU) aFRR capacity bids already submitted**, because the total offered volume UP is greater than $aFRR_{max,up}$.

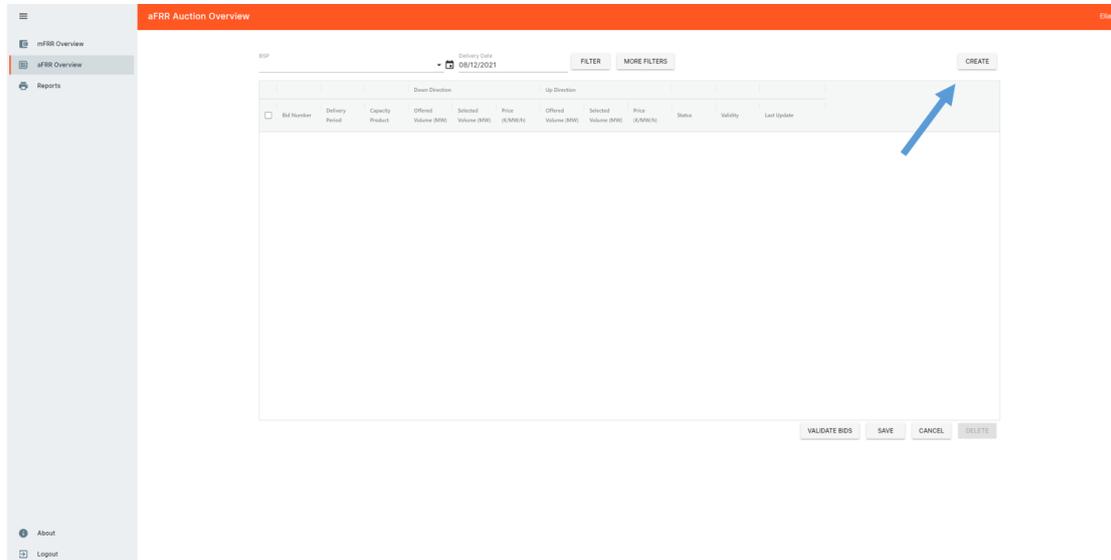
	0 - 4	4-8	8 - 12	12 - 16	16 - 20	20 - 24
Volume Offered All-CCTU Bids UP [MW]	95					
Volume Offered Single-CCTU Bids UP [MW]	5	5	5	10		
Total Offered UP [MW]	100	100	100	105	95	95

2.3 STAR User Manual aFRR

2.3.1 Create, modify or delete an offer

Create a new aFRR offer

To create a new aFRR offer, navigate to Overview. This screen gives an overview of all aFRR offers that have been submitted for the delivery date selected in the calendar picker. By default the day after tomorrow will be displayed.



To introduce a new offer, select the correct delivery date, click **Create**, a pop-up will appear where you will have to fill in the specifications of the offer:

Create Bids

BSP ▼

Delivery Date 📅

09/12/2021

CCTU

0 - 4, 4 - 8, 8 - 12, 12 - 16, 16 - 20, 20 - 24 ▼

Contract Reference ▼

Capacity Product

Upward ▼

Offered Volume Up (MW)

0

Price Up (€/MW/h)

0

Offered Volume Down (MW)

0

Price Down (€/MW/h)

0

CANCEL
SAVE

- Check if you are submitting offers for the correct **delivery date**.
- Specify the **delivery periods (CCTU)** for which you would like to submit your offer. You can submit "Single-CCTU" aFRR Capacity Bids (delivery periods 0-4, 4-8, ..) or "All-CCTU" aFRR Capacity Bids (delivery period 0-24). Only the delivery periods (CCTU's) for which the gate has been opened can be selected. Once the gate for a delivery period has been closed, it is not possible to submit any more offers. You can select multiple delivery periods (CCTU's) at the same time by (de)selecting the checkboxes in the dropdown. You can select

Create Bids

BSP

Delivery Date
09/12/2021

CCTU

<input type="checkbox"/>	0 - 24
<input checked="" type="checkbox"/>	0 - 4
<input type="checkbox"/>	4 - 8
<input checked="" type="checkbox"/>	8 - 12
<input checked="" type="checkbox"/>	12 - 16
<input checked="" type="checkbox"/>	16 - 20

0 0

CANCEL SAVE

- The **contract reference** for which you are submitting bids is specified as well
- The **Capacity Product** has to be completed if you offer to the per-CCTU auction. You must indicate the direction of your offer (upward or downward)
- Specify the **offered volume and price** per offer, for the product type and the direction you have selected.
 - The volume must have a granularity of 1 MW. Figures with decimals will not be accepted.
 - The price (€/MW/h) can have two decimals maximum.

Click on **Save** for your offer(s) to be saved.

Bid Number	Delivery Period	Capacity Product	Down Direction			Up Direction			Status	Valid
			Offered Volume (MW)	Selected Volume (MW)	Price (€/MWh)	Offered Volume (MW)	Selected Volume (MW)	Price (€/MWh)		
<input type="checkbox"/>	1	0 - 4	Down	5		5.67			Received	<input checked="" type="radio"/>
<input type="checkbox"/>	1	12 - 16	Down	5		5.67			Received	<input checked="" type="radio"/>
<input type="checkbox"/>	1	16 - 20	Down	5		5.67			Received	<input checked="" type="radio"/>
<input type="checkbox"/>	1	20 - 24	Down	5		5.67			Received	<input checked="" type="radio"/>
<input type="checkbox"/>	1	4 - 8	Down	5		5.67			Received	<input checked="" type="radio"/>
<input type="checkbox"/>	1	8 - 12	Down	5		5.67			Received	<input checked="" type="radio"/>

Your created offer(s) will appear in the overview table and the following characteristics are filled in automatically:

- When a new offer is created, the **offer number** is assigned automatically. This offer number cannot be edited.

Note

When an offer is cancelled or deleted, the offer number is not re-cycled. e.g. Bidder_x:

- creates an offer with offer number 1
- creates offer with offer number 2 does not save the offer (=cancelled)
- the next offer that will be created will have offer number 3

- When a new offer is created the **status** is 'Received' by default.
- When a new offer is saved, automatically a **reception time** is registered.

The offer has to be **saved** before the gate closing time in order to be retained.

Note

If the offer has been retained when the auction has ended, the columns '**Selected Volume**' will be completed with the selected volume – depending on the capacity product that was awarded.

Modify an introduced offer

Perform the modifications directly in the auction overview by clicking on and editing the cells you would like to modify. Click on **Save** when you are done.

If the state of the gates allows a modification, the following fields can be edited: Offered Volume and Prices.

In case the bidding rules were already validated (status *Checked* or *Rejected*), a modification might alter the outcome of this validation. The status of all offers will return to status *Received* and the validation flag will become grey.

Delete an introduced offer

If you would like to **Delete** an introduced offer, you need to select the offer(s) by checking the checkbox in the left column of the auction overview table. After you

have selected the necessary offers, click on the delete button in the the lower right corner of the screen. Then click **OK** in response to the question 'Are you sure that (those) bid(s)?'. After this click on **Save**.

The screenshot displays the 'aFRR Auction Overview' screen. It features a table with the following columns: Bid Number, Delivery Period, Capacity Product, Offered Volume (MWh), Selected Volume (MWh), Price (€/MWh), Status, Validity, and Last Update. The table lists six bids, all with a status of 'Checked'. At the bottom right of the table, there are buttons for 'VALIDATE BIDS', 'SAVE', 'CANCEL', and 'DELETE'. A blue arrow points to the 'DELETE' button.

2.3.2 Validate Bidding Obligation

When you submit an aFRR offer, you must make sure that the total volume you offered for one delivery period (CCTU) and one product type does not exceed your contracted prequalified volume for that product type (this may be a different value per capacity product). If you do exceed the prequalified volume with the total volume that you offer, all the submitted bids are deleted. The other rules (smallest volume, total cost and volume increment) are explained in the section 2.2.1.

To check if your offers comply with these validation rules, click **Validate Bids** in the auction overview screen. The result of this validation process is reflected in the status of the offers (*Checked* or *Rejected*) and a validation flag.

The offers which successfully passed the validation will receive the **status Checked**.

The offers which don't comply with the Bidding Obligation will receive the **status Rejected**.

2.3.3 Offer Status

Every offer follows a validation cycle. There are 5 possible validation statuses:

- **Received:** The offer is successfully received. As long as the gate is open, you can modify/cancel any offer with status *Received*.
- **Checked:** The bidding obligations were successfully validated. As long as the Gate is open, you can modify/delete any offer with status *Checked*.
- **Accepted:** Elia has accepted the offer. This also means that the gate has been closed and you no longer can modify/delete any offers.
- **Rejected:** Elia has rejected the offer. As long as the gate is open, you can modify/delete any offer with status *Rejected*.
- **Awarded:** The auctioning process is finished and Elia retained the offer (the offer is part of the optimal offer selection). The offer may not be modified.

Note

When an offer with status *Checked* or *Rejected* is modified, the status automatically changes to *Received*.

3 Procedure and User Manual mFRR/R3

3.1 STAR Procedure mFRR/R3

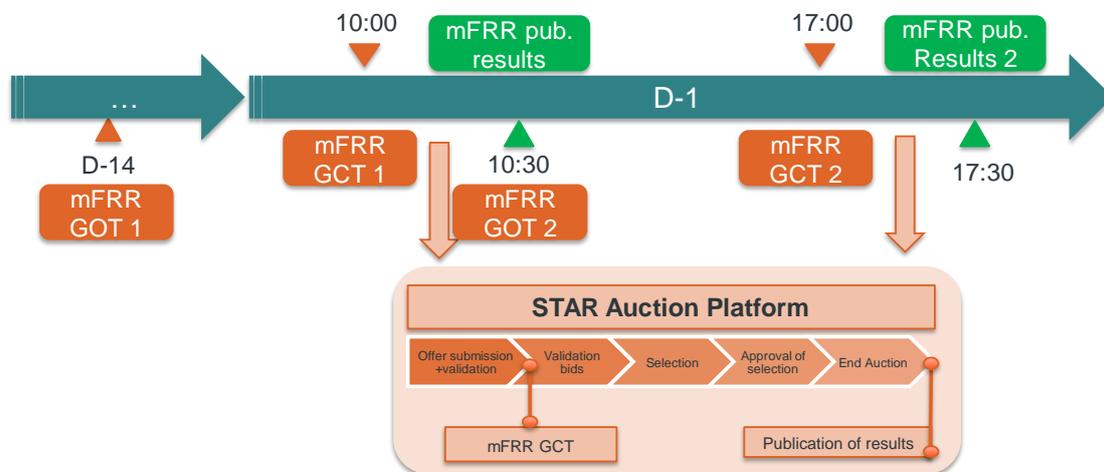
3.1.1 Standard Auction Process & Rules

Auction process via local procurement platform (STAR)

The short term market reserve tendering for mFRR is a daily process as of 3 February 2020. ELIA procures all mFRR Capacity Products for Day D by running one capacity auction for each CCTU, i.e. in total 6 capacity auctions for Day D. The 6 capacity auctions are performed at the same time in Day D-1 for delivery on Day D taking into account the following timeline:

- mFRR Capacity GOT for the 6 capacity auctions of Day D-1 is scheduled on Day D-14 at 00:00 CET;
- mFRR Capacity GCT for the 6 capacity auctions of Day D-1 is scheduled on Day D-1 at 10:00 CET;
- Publication of the award for the 6 capacity auctions of Day D-1 is performed at the latest Day D-1 at 10:30 CET.

The figure below shows a default timeline for Standard and Fallback auction.



The standard STAR auction process consists out of the following steps:

- mFRR Capacity bid submission:
 - Bidders introduce and validate his mFRR Capacity bids;
- Allocations phase:
 - Elia performs and approves offer selection;
 - Elia ends the auction.
 - Elia publishes auction results towards BSP

mFRR Capacity bid Submission

For mFRR/R3, the Bidder can start to make Capacity Bids as of Gate Opening Time (D-14), The mFRR Capacity Bids for each Delivery Period have to be introduced before each respective GCT (Gate Closure Time).

When the auction is open, new capacity bids can be introduced and already created capacity bids can be modified or cancelled, regardless of their status. When a new offer is created and saved, it automatically has the status 'Received'.

Once Capacity bids are fine, BSP can submit the bids by clicking on Validate bids.

- If the offer set respects the bidding obligations, the status changes to 'Checked';

- If the offer set does not respect the bidding obligations, the status changes to 'Rejected' for all concerned Capacity bids.

Rejection of an offer or a set of offers is limited to cases when:

- Such offer or group of offers shows manifest errors or inconsistencies,;
- The bidding obligations are not respected.

During short-term auction, BSPs remain fully responsible for their mFRR capacity bids.

Offer validation & selection

After GCT, no new offers can be introduced, nor existing offers can be modified or cancelled. Elia will automatically validate the offers introduced in STAR once the Bidders clicks on Validate Bids.

Award of mFRR Capacity bids

When Elia ends the auction, the status of the selected mFRR Capacity bids changes to "Awarded". The status of the other mFRR Capacity Bids remains unchanged (Accepted or Rejected).

The rules to award capacity bids can be found in section 3.4: "Awarding Procedure & Award Criteria".

All bidders receive an email to inform that the auction ended and can consult if and which of his mFRR Capacity bids have been awarded in the Auction overview. From that point in time, the individual awarded bids will be visible for each bidder separately.

At each moment, bidders are able to see the results from previous auctions in a similar way by selecting the appropriate delivery period for which bids were made in the past. A functionality is included as well as to generate such specific reports.

More information can be found in the User Manual further below.

At that point in time, each bidder is able to log-in via STAR to see their individual awarded capacity bids (if any). Based on the merit order selection, average prices and the total awarded volume will be calculated and published for transparency reasons via <https://www.elia.be/en/grid-data/balancing/capacity-auction-results>

Publications on Elia's Website

On a daily basis the following information regarding the mFRR capacity auction is published on Elia's website before and after the mFRR capacity auction:

Volume need:

For mFRR, Elia will publish the need of mFRR Standard and its total need of mFRR for each CCTU on Elia's website via: <https://www.elia.be/en/grid-data/balancing/capacity-volumes-needs>

The volume need will be calculated also on a daily basis for each CCTU and will be published on Elia's website the day of the auction latest 7h00.

Total awarded volumes

For each procured product, the final total contracted volume for each CCTU will be published as well on Elia's website via:

<https://www.elia.be/en/grid-data/balancing/capacity-auction-results>

Average prices

For each procured product, the average price for each CCTU will be published in an anonymous way on Elia's website via:

<https://www.elia.be/en/grid-data/balancing/capacity-auction-results>

Marginal prices

For each procured product, the marginal price for each CCTU will be published in an anonymous way on Elia's website via:

<https://www.elia.be/en/grid-data/balancing/capacity-auction-results>

Offered volume

For each procured product, the offered volume for each CCTU will be published in an anonymous way on Elia's website via:

<https://www.elia.be/en/grid-data/balancing/capacity-auction-results>

Individual Capacity bids

For each procured product, the individual anonymized capacity bids for each CCTU of all bidders after each auction will be published as well on Elia's website via:

<https://www.elia.be/en/grid-data/balancing/capacity-auction-results>

The defined standard auction timings can be consulted on the website [Elia.be](https://www.elia.be)¹.

It is possible that some dates differ from the general rule of having the auction because of either planning constraints or national holidays in order to guarantee a smooth auction process.

3.1.2 Fallback procedures mFRR/R3 for local procurement platform

A fallback procedure is launched if, for one CCTU of Day D, ELIA receive insufficient offered volume for at least one of the following:

- the required volume for mFRR Standard;
- the total required volume (being either mFRR Standard or mFRR Flex).

ELIA opens a second capacity auction for the concerned CCTU, with the following characteristics:

- mFRR Capacity GOT is opened on Day D-1, no later than 30 minutes after publication of the award of the first capacity auction;
- mFRR Capacity GCT is scheduled on Day D-1 at 17:00 CET;
- Publication of the award is performed at the latest Day D-1 at 17:30 CET.

A new gate will be created in STAR platform where the Bidders can create bids by selecting the correct CCTU ending by G2 : Example " 0 - 4 - G2 "

The procedure during the Fallback procedure will be the same as during the Standard Procedure.

3.1.3 Back-up procedures mFRR/R3 for local procurement platform

The back-up procedure is applicable if the auction platform would be unable to hold the short-term auction under standard conditions.

Elia will request by e-mail to each bidder to communicate its mFRR Capacity bids to Elia.

The volume need will be indicated in the e-mail.

mFRR Capacity bid Submission

The bidder can start to make mFRR Capacity bids as of the BSP received the notification by ELIA that the back-up procedure will be used.

Each BSP should provide Elia its mFRR Capacity bids in one of the following ways :

- Sending its final XML towards: " contracting_AS@elia.be "
- Sending the Excel template provided by Elia towards: " contracting_AS@elia.be "

¹ <https://www.elia.be/en/grid-data/balancing/capacity-auction-calendar>

The following structure for the title must be used :
"YYYYMMDD_BSPNAME_STARTCCTU_ENDCCTU_VERSIONNUMBER". For example, the title of the document containing the mFRR Capacity bids for the delivery date 21/06/2020 and for the delivery period "0 -4" must be "20200621_BSPNAME_0_4_v1".

The BSP has also the possibility to send all his offers in the same document. In this case, the title must be : "20200621_ELIA_0_24_v1".

mFRR Capacity bid Update

A BSP can update its mFRR Capacity bids between the GOT and the GCT. To update its bids, the BSP has to send a new version of the document. Only the last version, received before GCT, is taken into account by ELIA at the GCT. For example, A BSP already sent the following mFRR Capacity bids :

- 20200621_BSPNAME_0_4_v1
- 20200621_BSPNAME_4_8_v1
- 20200621_BSPNAME_8_12_v1
- 20200621_BSPNAME_12_16_v1
- 20200621_BSPNAME_16_20_v1
- 20200621_BSPNAME_20_24_v1

If the BSP wants to update the bids for the delivery period 20 – 24 ("20200621_BSPNAME_20_24_v1"), he has to send a new version with a higher version number ("20200621_BSPNAME_20_24_v3"). The versioning doesn't have to be growing sequel as long as the latest version has the highest version number.

Offer validation & selection

Elia will take into account the mFRR Capacity bids which are received between:

- The notification by Elia via mail to inform that the Back-up procedure will be used (=GOT). The BSP is informed that a back-up procedure will be used no later than 14:30 CET.
- The mFRR Capacity Gate Closure time for the 6 Capacity Auctions of Day D-1 scheduled at 17:00 CET (= GCT)

Award of mFRR Capacity bids

At 17:00, Elia will gather all the validated offers from the bidders and create the merit order to award the correct mFRR Energy bids (for awarding criteria, see section 3.4)

Elia will communicate by mail towards the bidder not later than 30 minutes after the GCT the mFRR awarded.

Submission of mFRR Energy Bid

If the BSP will not be able to introduce its obligation correctly in BMAP, BSP should do the following:

- For the DP_SU: the BSP Should have on its Delivery points in Free margin at least the volume of its obligation.
- For DP_PG: The BSP should create non-Contracted mFRR Energy bids in BMAP .

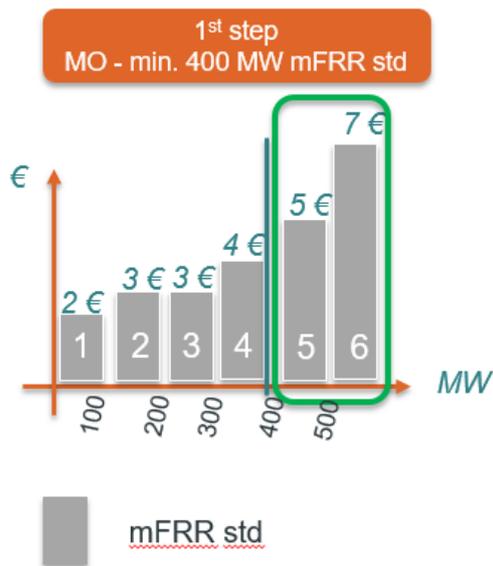
Elia will use this information for the different activations to cover its needs.

3.1.4 Awarding Procedure & Award Criteria

The awarding procedure is based on the principle of merit order. ELIA applies the merit order by sorting mFRR Capacity Bids following increasing price. The set of cheapest mFRR Capacity Bids fulfilling the required volumes of each mFRR Capacity Product is awarded in accordance with the awarding procedure described in BSP Contract mFRR.

Below an example is given to explain how the awarding procedure will be done. The example represents an awarding procedure of 1 CCTU where Elia has the need of 850MW (minimal 400MW Standard)

In 1st step, Elia will use a merit order selection on the mFRR Capacity bids containing a Pstd (Price Standard) to obtain the minimal volume of mFRR Standard:



In this case, BID 1,2,3,4 will be awarded.

Non selected mFRR standard volume is transferred to second merit order optimization.

If Bid has a Pflex (Price Flex), Elia will consider the bid being mFRR Flex product in the second merit order

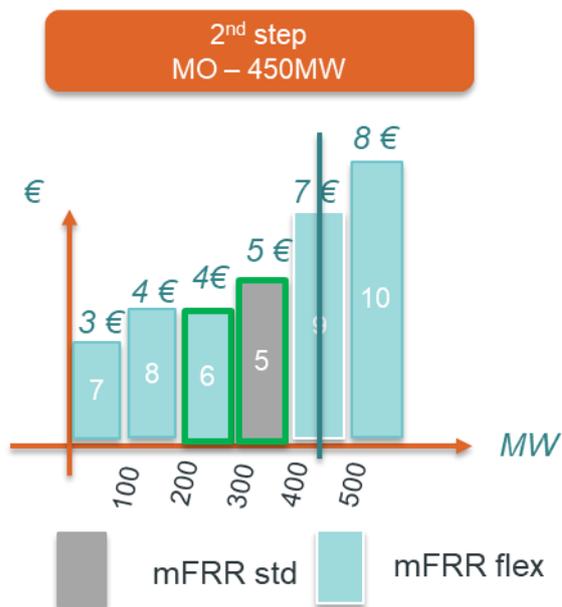
Consider:

- Bid 5: Volume = 100MW: Pstd = 5,00€/MW/h Pflex = NA
- Bid 6: Volume = 100MW: Pstd = 7,00€/MW/h Pflex = 4,00€/MW/h

Elia will consider in the second merit order

- BID 5 as a mFRR Standard product @5,00€/MW/h
- BID 6 as a mFRR Flex product @4,00€/MW/h

The 2nd merit order optimization will be done to award remaining required volume (450MW in example see figure below).



In the 2nd merit order, Bid 5 will be awarded as mFRR Standard and BID 6,7,8 (partially) will be awarded as mFRR Flex .

The total awarded volume will be 500MW mFRR Standard for the CCTU and 350MW mFRR Flex.

Important remarks

- Specific conditions about awarding procedure described in BSP Contract mFRR.
- Elia may award 1 mFRR capacity bid in the 1st merit order for a part as being mFRR Standard and on the second merit order mFRR Flex.
- If there are several bids with the same price, they are ordered in the Merit Order based on the reception time.

3.2 Bidding obligations

Elia is procuring the necessary mFRR volumes by applying two consecutive merit order as explained in section 3.1..

Concrete bidding obligations for mFRR/R3

The following obligations are the minimum obligations to be respected for each Service Type. ELIA invites every BSP to submit more Capacity Bids in order to increase the possibility to be retained in the optimal selection.

The obligations are applicable for BASE offers only. For the avoidance of doubt, it is clearly stated that these bidding obligations do not concern procurement through the Regional Procurement Platform.

1. **Bidding Obligation 1: Divisibility**

All mFRR Capacity Bids are divisible up to 1 MW (i.e. ELIA can select part or totality of the offered volume at the same unit price) and all mFRR Capacity Bids are combinable.

Example: BSP offers 20MW @Pstd = 5,00€/MW/h

Elia can decide to award only 14MW @Pstd = 5,00€/MW/h

2. Bidding Obligation 2: Offered Volume

The offered volume for the mFRR Capacity Bid, expressed in MW, is an integer. In other words, no decimal is permitted. BSP cannot offer 3,5MW

3. Bidding Obligation 3: Price constraint

The price of the mFRR Capacity Bid, expressed €/MW/h, is always defined with two decimals.

4. Bidding Obligation 4: Maximal volume offered

The total offered volume for mFRR Standard (respectively mFRR Flex) must be inferior or equal to the mFRRmax,std (respectively mFRRmax,flex).

In case BSP tries to offer more volume than its mFRRmax,std (respectively mFRRmax,flex), Elia will reject the most expensive mFRR Capacity bids to fulfill Obligation 4.

For mFRRmax,std

Elia will order all the mFRR Capacity bids following the increasing price Pstd. Once the sum of the volumes depass mFRRmax,std, Elia will reject the next mFRR Capacity bids.

For mFRRmax,flex

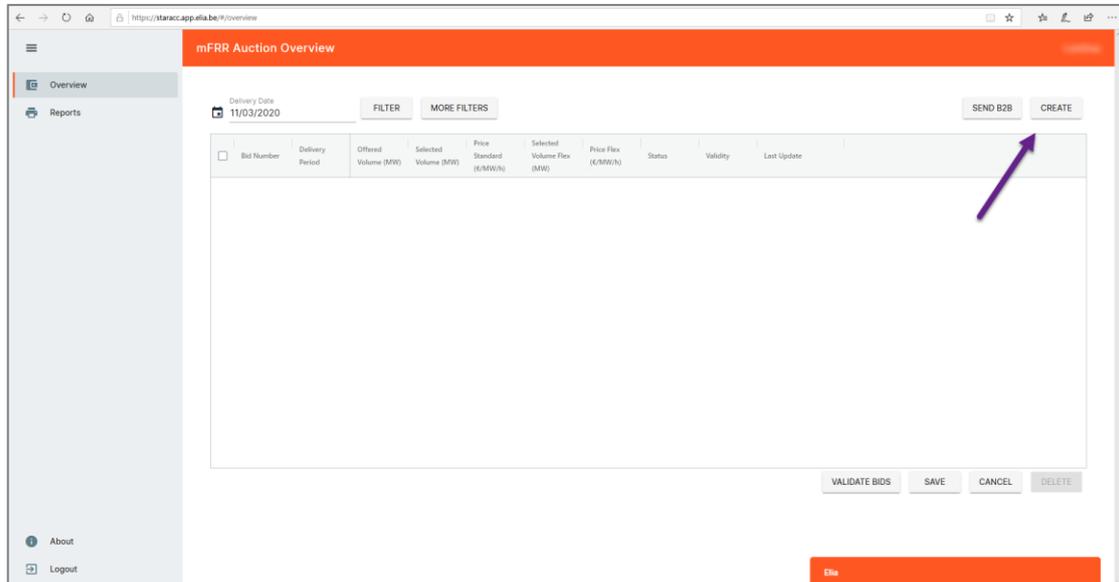
Once the obligation for mFRRmax,std is fulfilled, Elia will verify Bidding Obligation 4 for mFRRmax,flex. Same rule will be applied here to reject the next mFRR Capacity bids which are superior to its mFRRmax,flex

3.3 STAR User Manual mFRR/R3

3.3.1 Create, modify or delete an offer

Create a new mFRR/R3 offer

To create a new mFRR offer, navigate to Overview. This screen gives an overview of all mFRR offers that have been submitted for the delivery date selected in the calendar picker. By default the day after tomorrow (= next delivery date) will be displayed.



To introduce a new offer, select the correct delivery date, click **Create**, a pop-up will appear where you will have to fill in the specifications of the offer:

Create Bids

BSP

Product Type
 Standard

Delivery Date

Delivery Period
 0 - 4, 4 - 8, 8 - 12, 12 - 16, 16 - 20, 20 - 24

Contract Reference

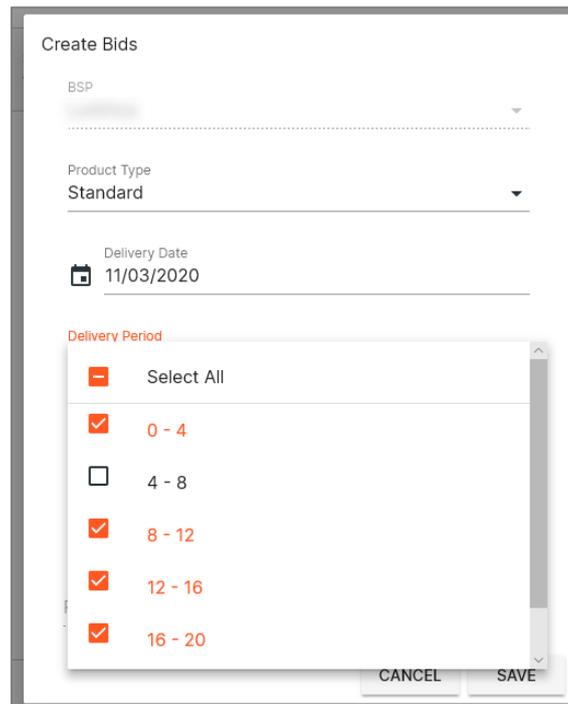
Offered Volume (MW) Price Standard (€/MW/h)
 0 0

Price Flex (€/MW/h) Add Price

- Specify the **product type** (Standard/Flex). Only one product type can be selected per offer. However, if you select product type 'Standard', you will be able to add a "Price Flex" (€/MW/h) if you would like your offer to be considered as a flex product if it does not get selected for the required mFRR

standard volume. If you do not enter a "Price Flex" for your standard offers, they will remain to be considered as a standard product after the required mFRR standard volume has been procured for the concerned delivery period. Only the product types for which the framework agreement and short-term contract was signed, will be available for reception.

- Check if you are submitting offers for the correct **delivery date**.
- Specify the **delivery periods** (CCTU) for which you would like to submit your offer. Only the delivery periods (CCTU's) for which the gate has been opened can be selected. Once the gate for a delivery period has been closed, it is not possible to submit any more offers. You can select multiple delivery periods (CCTU's) at the same time by (de)selecting the checkboxes in the dropdown.



The screenshot shows a web form titled "Create Bids". It contains several fields: "BSP" (a dropdown menu), "Product Type" (a dropdown menu set to "Standard"), and "Delivery Date" (a date picker set to "11/03/2020"). Below these is a "Delivery Period" dropdown menu that is open, showing a list of time intervals with checkboxes: "Select All", "0 - 4" (checked), "4 - 8" (unchecked), "8 - 12" (checked), "12 - 16" (checked), and "16 - 20" (checked). At the bottom of the form are "CANCEL" and "SAVE" buttons.

- The **contract reference** for which you are submitting bids is specified as well
- Specify the **offered volume and price** per offer, for the product type you have selected.
 - The volume must have a granularity of 1 MW. Figures with decimals will not be accepted.
 - The price (€/MW/h) can have two decimals maximum.
- As mentioned above, if you select product type 'Standard', you will be able to add a "Price Flex" (€/MW/h) if you would like your offer to be considered as a flex product if it does not get selected for the required mFRR standard volume. You can do this by checking the box "Add price" and entering a price for flex.

Click on **Save** for your offer(s) to be saved.

Bid Number	Delivery Period	Offered Volume (MW)	Selected Volume (MW)	Price Standard (€/MWh)	Selected Volume Flex (MW)	Price Flex (€/MWh)	Status	Validity	Last Update
1	0 - 4	1		2.30		2.60	Received	●	06/02/2020 16:39
1	12 - 16	1		2.30		2.60	Received	●	06/02/2020 16:39
1	16 - 20	1		2.30		2.60	Received	●	06/02/2020 16:39
1	20 - 24	1		2.30		2.60	Received	●	06/02/2020 16:39
1	8 - 12	1		2.30		2.60	Received	●	06/02/2020 16:39

Your created offer(s) will appear in the overview table and the following characteristics are filled in automatically:

- When a new offer is created, the **offer number** is assigned automatically. This offer number cannot be edited.

Note

When an offer is cancelled or deleted, the offer number is not re-cycled. e.g. Bidder_x:

- creates an offer with offer number 1
 - creates offer with offer number 2 does not save the offer (=cancelled)
 - the next offer that will be created will have offer number 3
- When a new offer is created the **status** is 'Received' by default.
 - When a new offer is saved, automatically a **reception time** is registered.

The offer has to be **saved** before the gate closing time in order to be retained.

Note

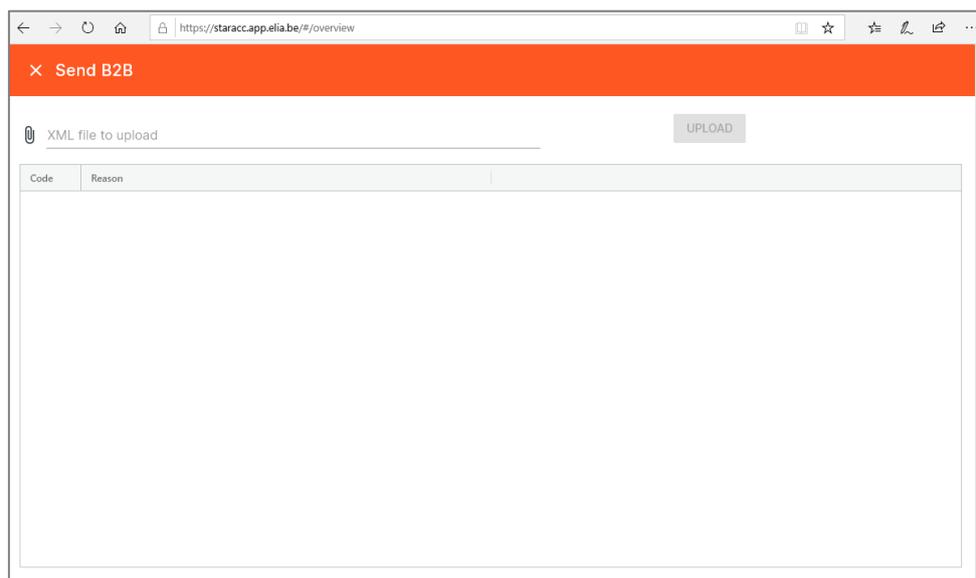
If the offer has been retained when the auction has ended, the columns '**Selected Volume Standard**' and/or '**Selected Volume Flex**' will be completed with the selected volume – depending on the product type that was awarded.

B2B Offer import

STAR application provides the possibility to import the offers using a webservice-base B2B interface. By implementing this webservice, an external authorized IT system can directly inject the offers into STAR application using XML-based messages.

In case of technical problem, STAR GUI enables the user to import manually a B2B XML message. To **manually import a B2B XML message**, execute the following instructions:

- Click on the **"Send B2B" button** of the Overview screen. The B2B import screen will be displayed (see the following screenshot)



- Click on **'XML file to upload' field** in order for the pop-up to appear that will allow you to select the XML file you want to transmit.
- Click on **Upload button** to transmit the XML file.
- The output panel displays the **result of the import operation**. In case of errors the details of the errors are listed.



- In case of successful import, the **Bidding Obligation validation** is automatically executed (see Bidding Obligation Validation). Go back to the auction overview to visualize the offer you have imported and the result of the Bidding Obligation validation (see 3.3.2)
- For mFRR, a separate file has to be uploaded for each Delivery Period (CCTU). It is not possible to submit multiple Delivery Periods in one file.

For more info contact ENMAN contracting via contracting_AS@elia.be

Modify an introduced offer

Perform the modifications directly in the auction overview by clicking on and editing the cells you would like to modify. Click on **Save** when you are done.

If the state of the gates allows a modification, the following fields can be edited: Offered Volume and Prices. Only prices that were initially submitted can be modified. Example: If you entered a standard offer with a price for standard, but no additional price for flex; you cannot add the flex price after your initial save.

In case the bidding rules were already validated (status *Checked* or *Rejected*), a modification might alter the outcome of this validation. The status of all offers will return to status *Received* and the validation flag will become grey.

Delete an introduced offer

If you would like to **Delete** an introduced offer, you need to select the offer(s) by checking the checkbox in the left column of the auction overview table. After you have selected the necessary offers, click on the delete button in the the lower right corner of the screen. Then click **OK** in response to the question 'Are you sure that (those) bid(s)?'. After this click on **Save**.

mFRR Auction Overview

Delivery Date: 14/03/2020

FILTER MORE FILTERS

SEND B2B CREATE

<input type="checkbox"/>	Bid Number	Delivery Period	Offered Volume (MW)	Selected Volume (MW)	Price Standard (€/MWh)	Selected Volume Flex (MW)	Price Flex (€/MWh)	Status	Validity	Last Update
<input checked="" type="checkbox"/>	1	0 - 4	10		3.00			Checked	●	07/02/2020 15:33
<input type="checkbox"/>	2	0 - 4	10		5.00			Checked	●	07/02/2020 15:33
<input type="checkbox"/>	3	0 - 4	10		7.00			Checked	●	07/02/2020 15:33
<input type="checkbox"/>	4	0 - 4	10		9.00			Checked	●	07/02/2020 15:33
<input checked="" type="checkbox"/>	5	0 - 4	10		11.00			Checked	●	07/02/2020 15:33
<input type="checkbox"/>	6	0 - 4	10		13.00			Checked	●	07/02/2020 15:33
<input type="checkbox"/>	7	0 - 4	10		15.00			Checked	●	07/02/2020 15:33
<input checked="" type="checkbox"/>	8	0 - 4	10		17.00			Checked	●	07/02/2020 15:33
<input type="checkbox"/>	9	0 - 4	10		19.00			Checked	●	07/02/2020 15:33
<input checked="" type="checkbox"/>	10	0 - 4	10		21.00			Checked	●	07/02/2020 15:33
<input type="checkbox"/>	11	0 - 4	10		23.00			Checked	●	07/02/2020 15:33

VALIDATE BIDS SAVE CANCEL DELETE



Throughout the auctioning process, you can communicate with Elia by using the chat box on the auction overview screen (lower right corner).

To send a message, **star typing your message** in the text box and click on **Enter (on your keyboard)** to send your message.

Note that chat messages are related to a specific delivery period, make sure you are in the correct delivery period to receive all messages.

3.3.2 Validate Bidding Obligation

When you submit an mFRR offer, you must make sure that the total volume you offered for one delivery period (CCTU) and one product type does not exceed your contracted prequalified volume for that product type (this may be a different value for standard and flex). If you do exceed the prequalified volume with the total volume that you offer, the most expensive bids will be rejected until you do not longer exceed the prequalified volume. First the check is done for the standard offered volume and after that for the flex offered volume. Offers that were submitted with two prices (standard & flex), will first be considered as standard volume and in a second check as flex volume. If the concerned offer was rejected in the first check, it will no longer be considered in the second check.

To check if your offers comply with these validation rules, click **Validate Bids** in the auction overview screen. The result of this validation process is reflected in the status of the offers (*Checked* or *Rejected*) and a validation flag.

The offers which successfully passed the validation will receive the **status Checked**.

The offers which don't comply with the Bidding Obligation will receive the **status Rejected**.

3.3.3 Offer Status

Every offer follows a validation cycle. There are 5 possible validation statuses:

- **Received:** The offer is successfully received. As long as the gate is open, you can modify/cancel any offer with status *Received*.

- **Checked:** The bidding obligations were successfully validated. As long as the Gate is open, you can modify/delete any offer with status *Checked*.
- **Accepted:** Elia has accepted the offer. This also means that the gate has been closed and you no longer can modify/delete any offers.
- **Rejected:** Elia has rejected the offer. As long as the gate is open, you can modify/delete any offer with status *Rejected*.
- **Awarded:** The auctioning process is finished and Elia retained the offer (the offer is part of the optimal offer selection). The offer may not be modified.

Note

When an offer with status *Checked* or *Rejected* is modified, the status automatically changes to *Received*.

3.3.4 Create an Offer Report

In the menu navigate to **Reports** .

Select a **start** and **end date** and the format in which you would like to view all offers for the selected delivery periods (CCTU's). The report is identical to the Auction Overview screen.

