MARI mFRR activation

Implementation Guide

25/05/2023 | Training BSP

Disclaimer: In case of inconsistencies between this presentation and the Technical Guide or the T&C BSP, the Technical Guide and the T&C BSP always prevails

Agenda for today

Scheduled Activation

- Overview
- Structure of the activation request message
- Exchange Flow
- Activation of multiple bid groups

Direct Activation

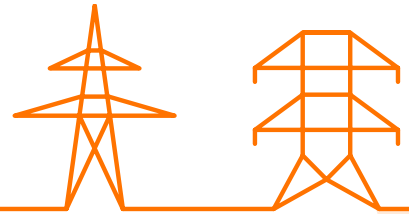
- Overview
- Structure of the activation request message
- Exchange Flow

Specific cases

- mFRR for Redispatching
- Availability Test
- Prequalification Test

Related topics

- Communication requirements



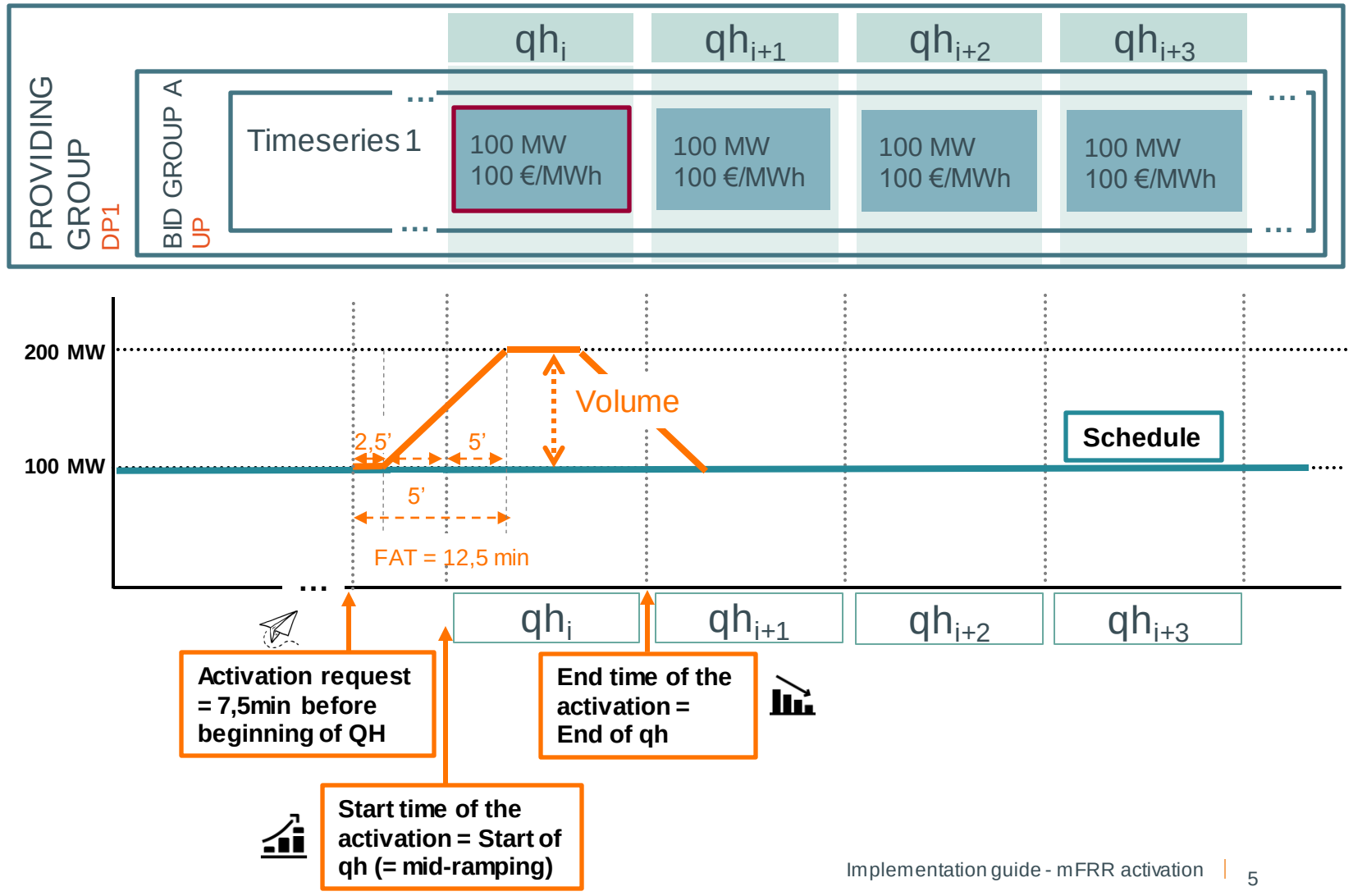
Scheduled activation

MFRR SCHEDULED ACTIVATION
General

7,5 minutes before the beginning of the QH, Elia can send an activation request on mFRR Energy bids submitted by the BSP for the next QH taking into account the properties of the bids: volume, linking,…

mFRR Scheduled Activation	
Direction	UP or DOWN
Duration	1 QH
Start time	Start of the QH of the activation
Volume	A part of / full volume of the mFRR Energy bid*

*A bid partially activated will be considered as unavailable for any further activation within same QH



Legend:

Bid selected / activated

Bid submitted

MFRR SCHEDULED ACTIVATION

Structure of an Activation message

Market Document

- mRID of the activation
- Type: mFRR Activation Document
- Process type: **Scheduled Activation (A60)**
- Sender: Elia
- Receiver: BSP
- Creation date: time of the activation request
- Activation time period: start time & end time of the activation

Timeserie(s)

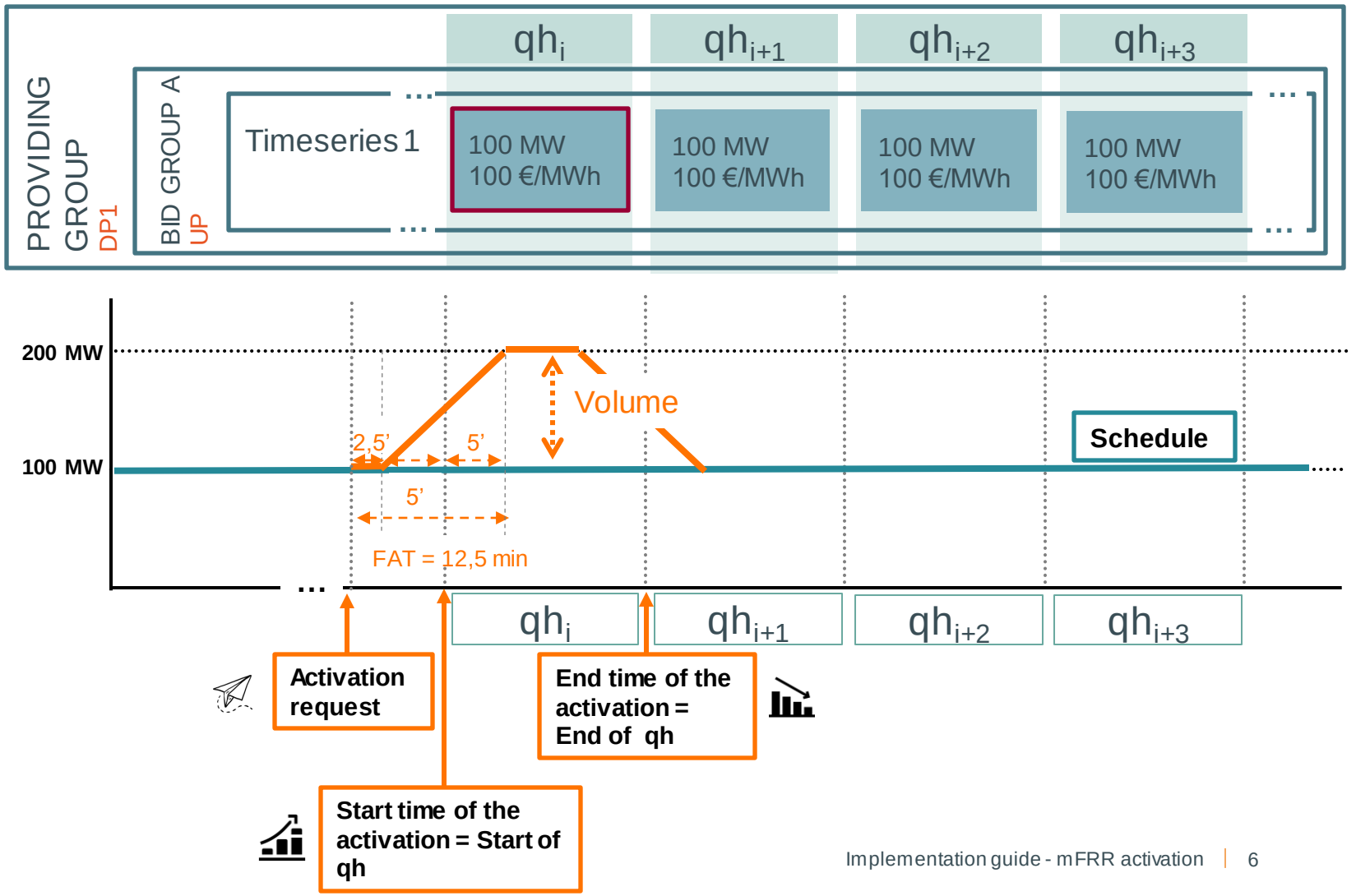
- Bid group ID: A
- Business Type: **Balancing mFRR (A97)**
- Measurement Unit: MW
- Direction: UP

Period

- Resolution: 15’
- TimeInterval: start time & end time of the activation

Point

- Position: 1
- Quantity: 100MW



MFRR SCHEDULED ACTIVATION
Communication flow

After receiving a mFRR activation request, BSP must send per activation request:

- One technical acknowledgement message (automatic) immediately after reception

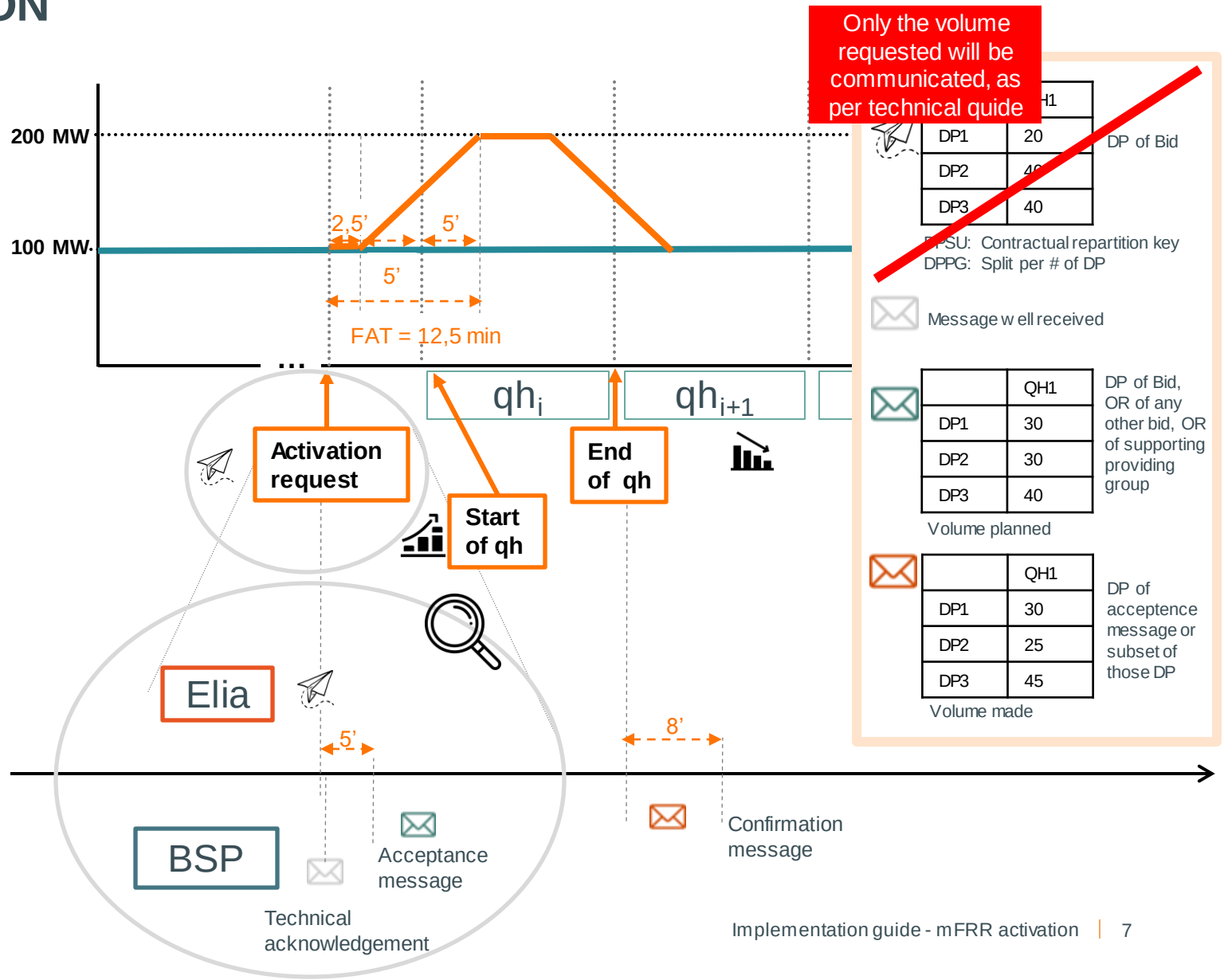
Activations cannot be rejected anymore. The technical ACK can only indicate technical rejection in case of wrong activation request message format.

- Acceptance message: at the latest 5 minutes after reception

For each DP, the BSP should confirm the volume he plans to deliver, on best effort/best guess.

- Confirmation message: at the latest 8 minutes after the end of the QH of the activation

For each DP, the BSP should confirm the volume he delivered.



MFRR SCHEDULED ACTIVATION

Activation with multiple bid groups

Market Document

- mRID of the activation
- …
- Activation time period: start & end time of activation

Timeserie(s)
- Bid group ID: A
- …

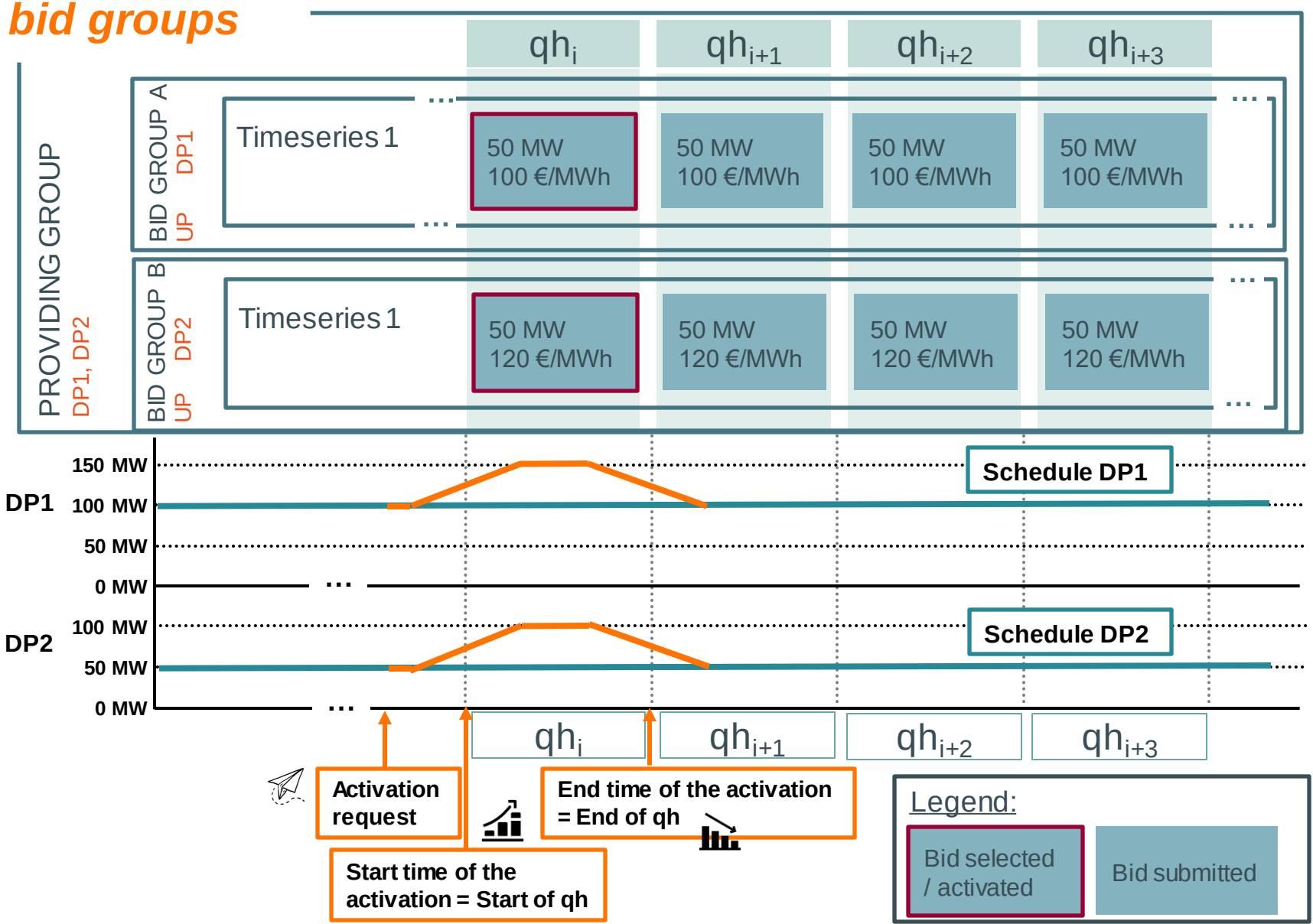
Period
- Resolution: 15'
- TimeInterval: start time & end time of the activation

Point
- Position: 1
- Quantity: 50MW

Timeserie(s)
- Bid group ID: B
- …

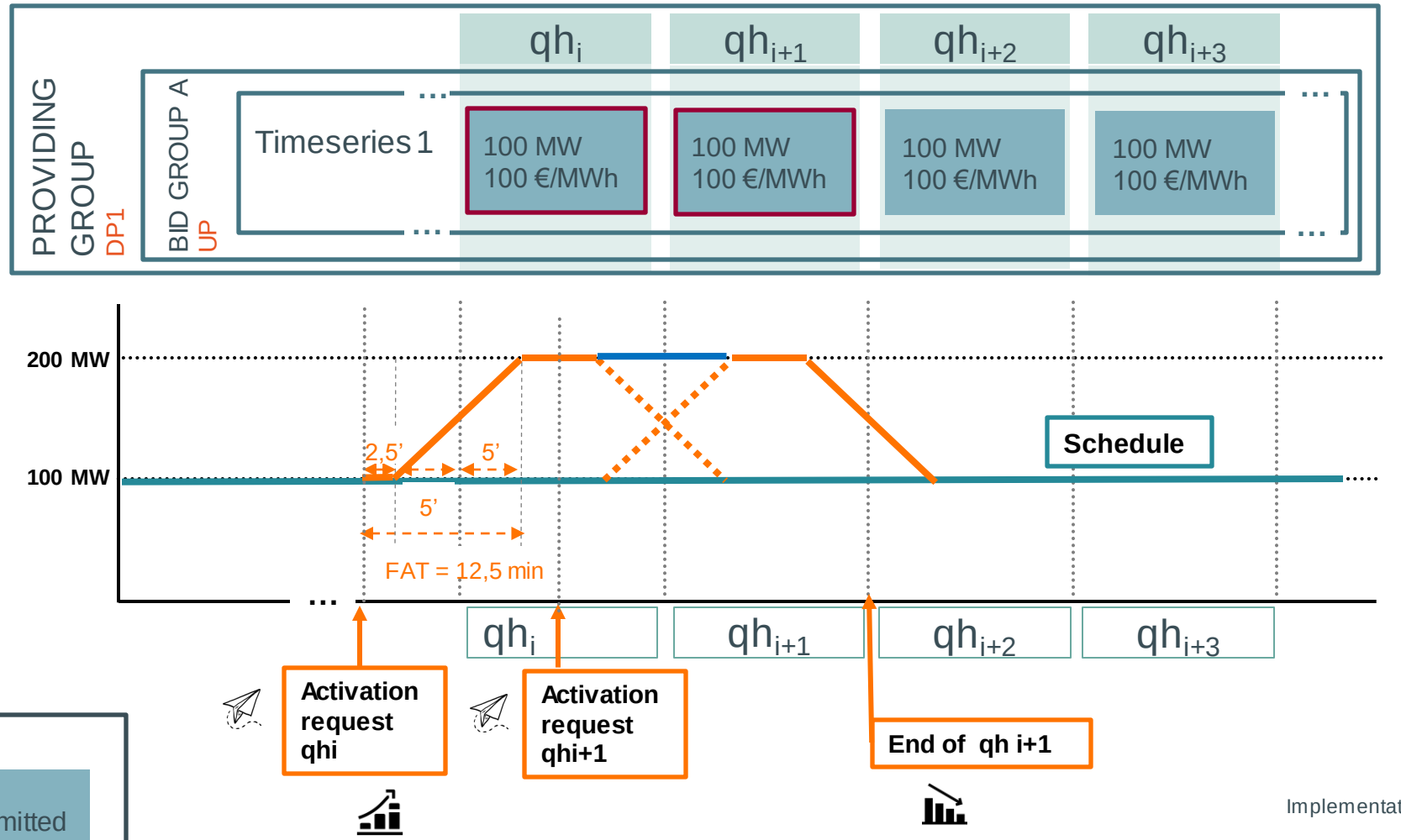
Period
- Resolution: 15'
- TimeInterval: start time & end time of the activation

Point
- Position: 1
- Quantity: 50MW



MFRR SCHEDULED ACTIVATION

Consecutive Scheduled Activations in same direction



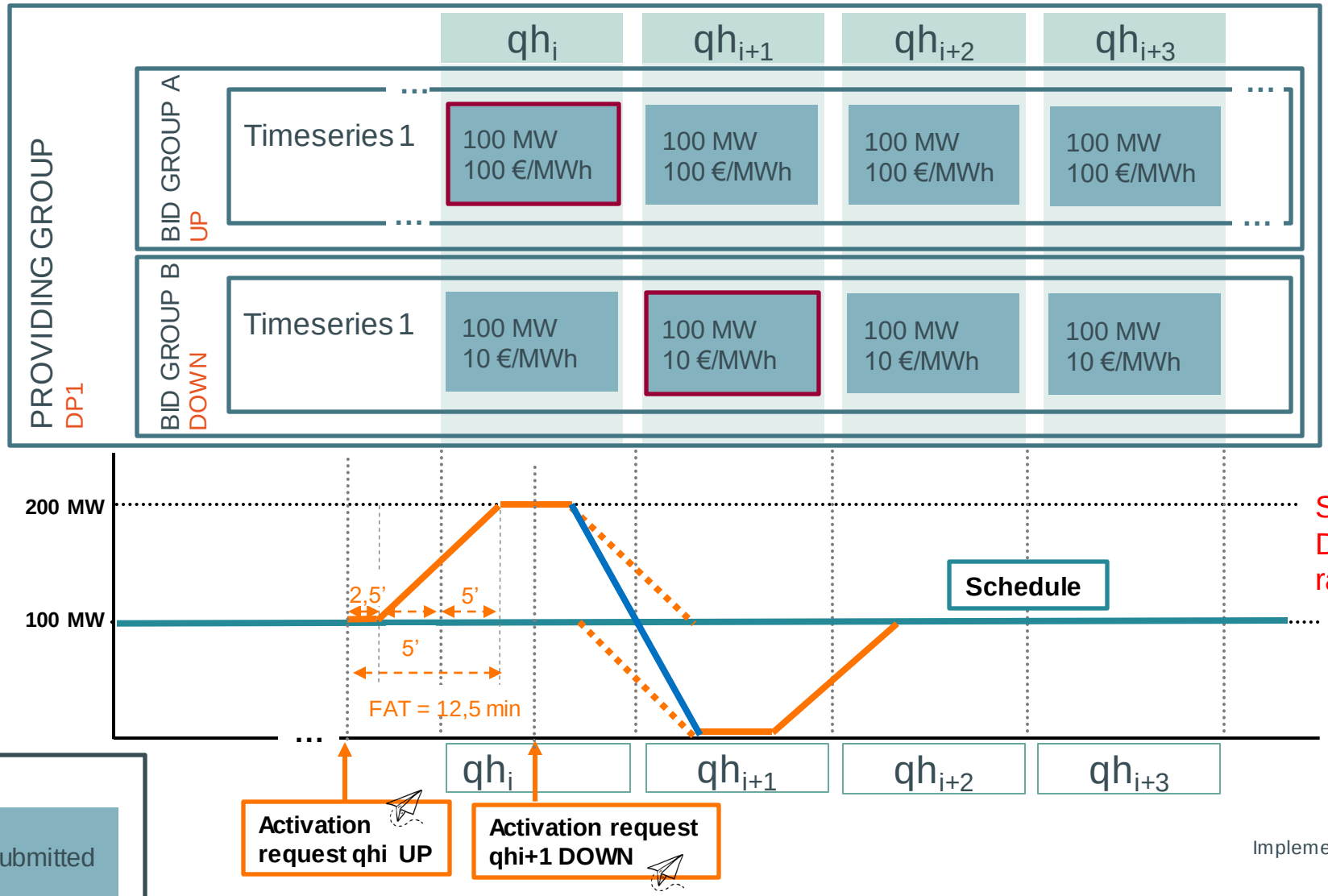
Legend:

Bid selected / activated

Bid submitted

MFRR SCHEDULED ACTIVATION

Consecutive Scheduled Activations in opposite direction



SA UP followed by SA DOWN requires faster ramping

Legend:

Bid selected / activated

Bid submitted

Direct activation

MFRR DIRECT ACTIVATION

Structure of the message

Market Document

- mRID of the activation
- Type: mFRR Activation Document
- Process type: **Direct Activation (A61)**
- Sender: Elia
- Receiver: BSP
- Creation date: time of the activation request
- Activation time period: start time (**= mid-ramping ≠ start of a QH**) & end time of the activation (= end of second QH)

Timeserie(s)

- Bid group ID: A
- Business Type: Balancing mFRR (A97)
- Measurement Unit: MW
- Direction: UP

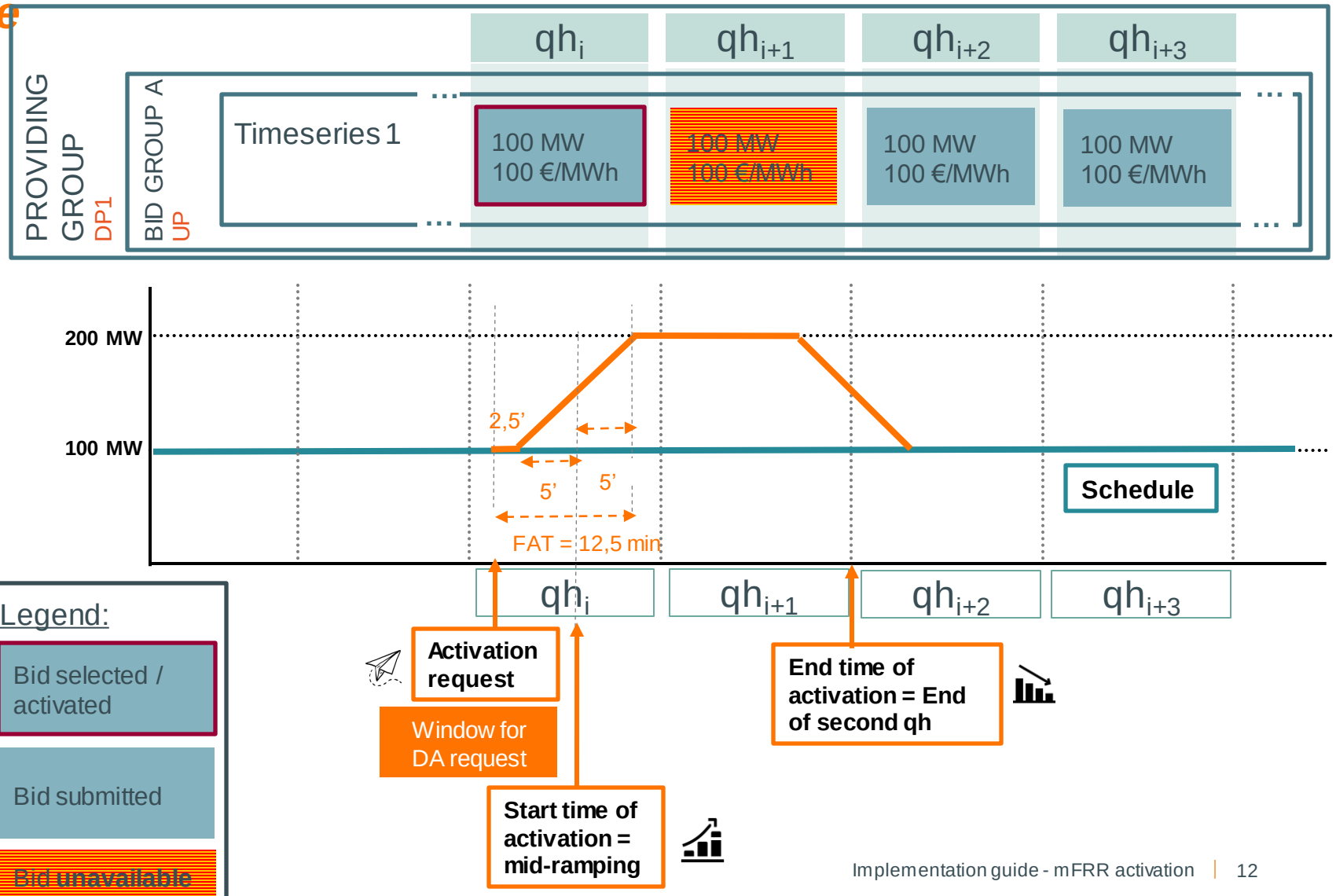
Period

- Resolution: 15'
- TimeInterval: start time (**≠ start of a QH**) & end time of the activation

Point

- Position: 1
- Quantity: 100MW

- Position: 2
- Quantity: 100MW



MFRR DIRECT ACTIVATION
Communication flow

After receiving a mFRR activation request, BSP must send per activation request:

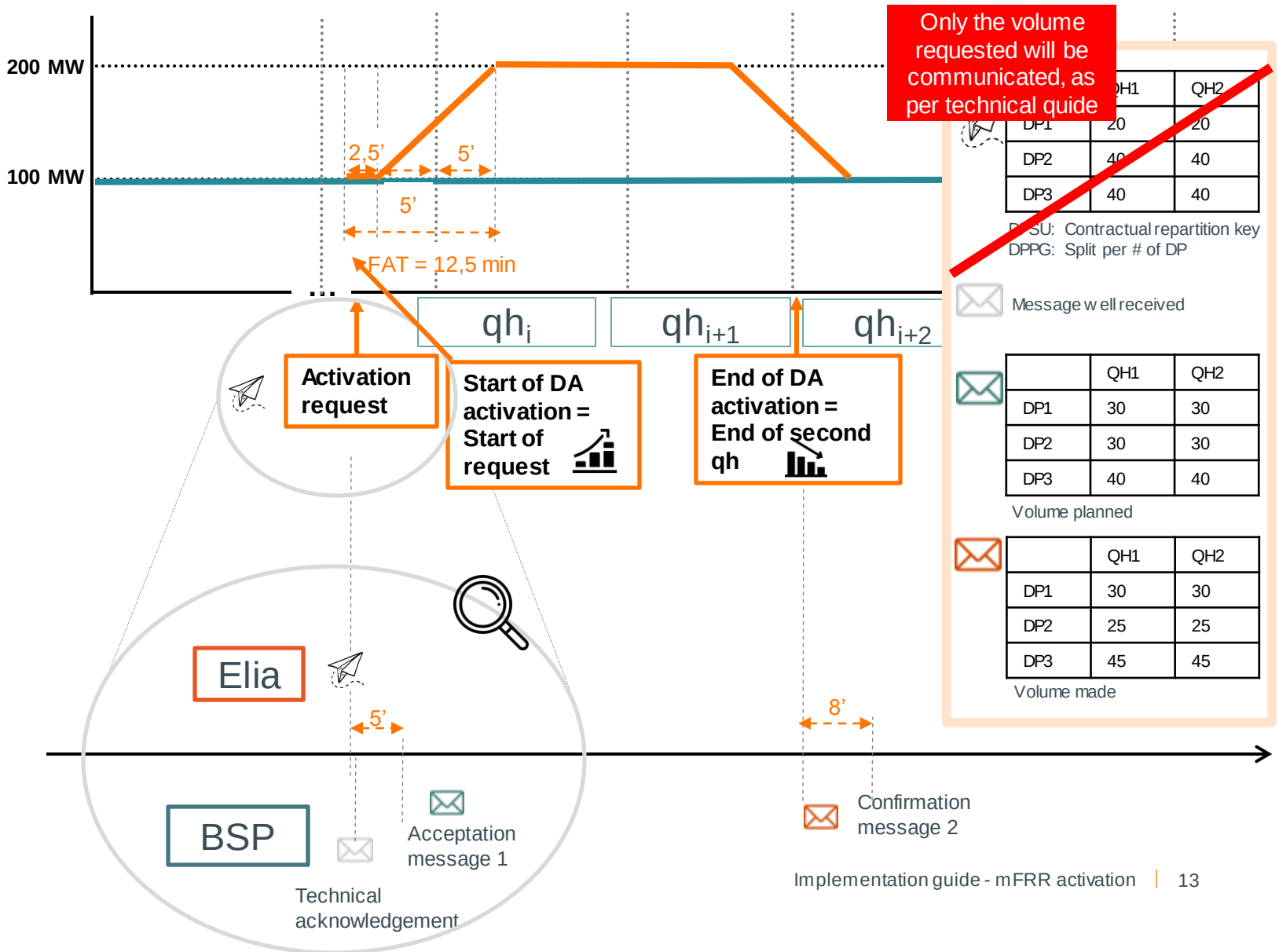
One technical acknowledgement message (automatic) immediately after reception

1st acceptation message: at the latest 5 minutes after reception

Per quarter hour and **for each DP**, the BSP should confirm the volume he plans to deliver, on best effort/best guess.

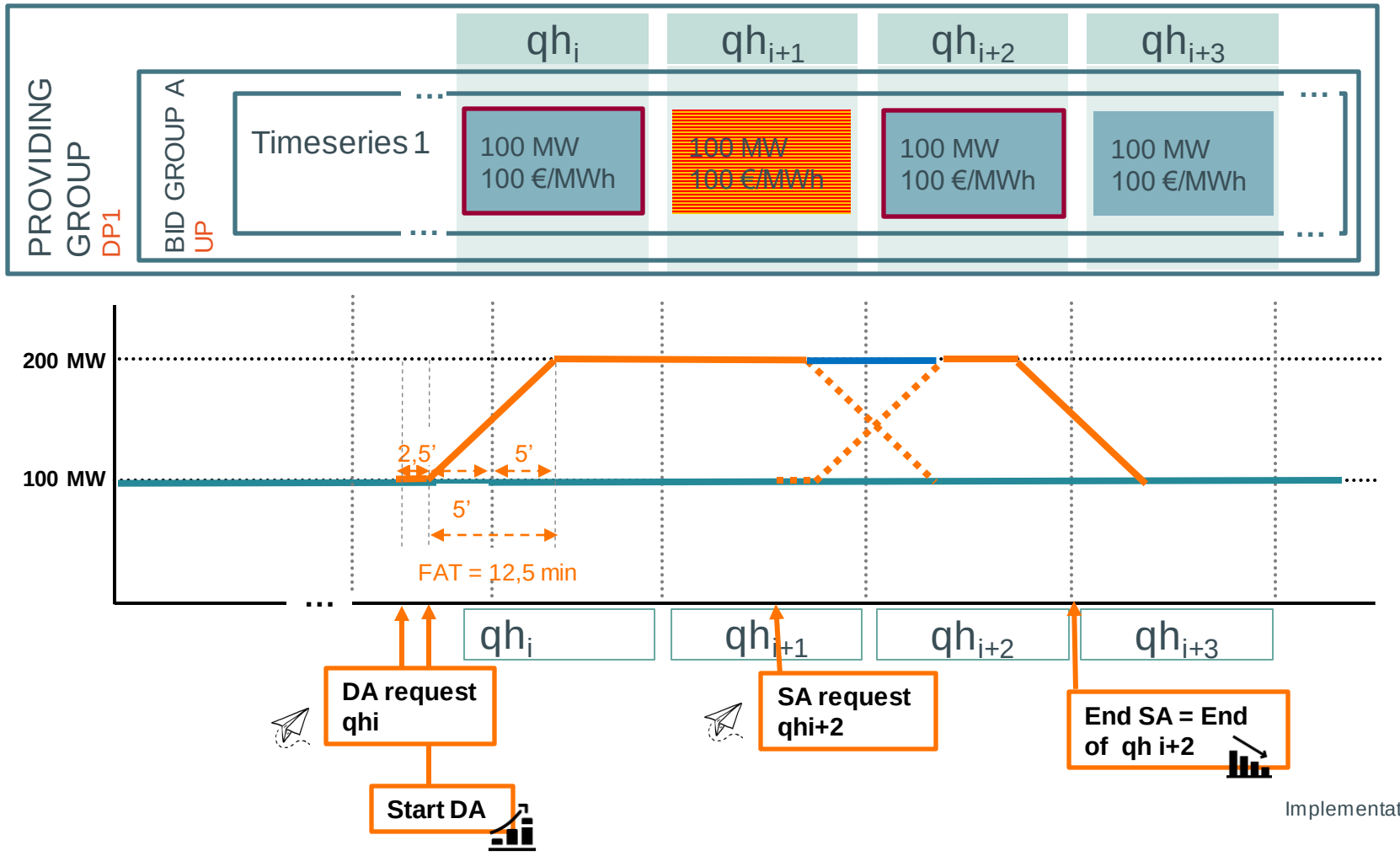
2nd confirmation message: at the latest 8 minutes after the last QH of the activation

Per quarter hour and **for each DP**, the BSP should confirm the volume he delivered.



CONSECUTIVE ACTIVATION

Direct activation followed by Scheduled Activations in same direction

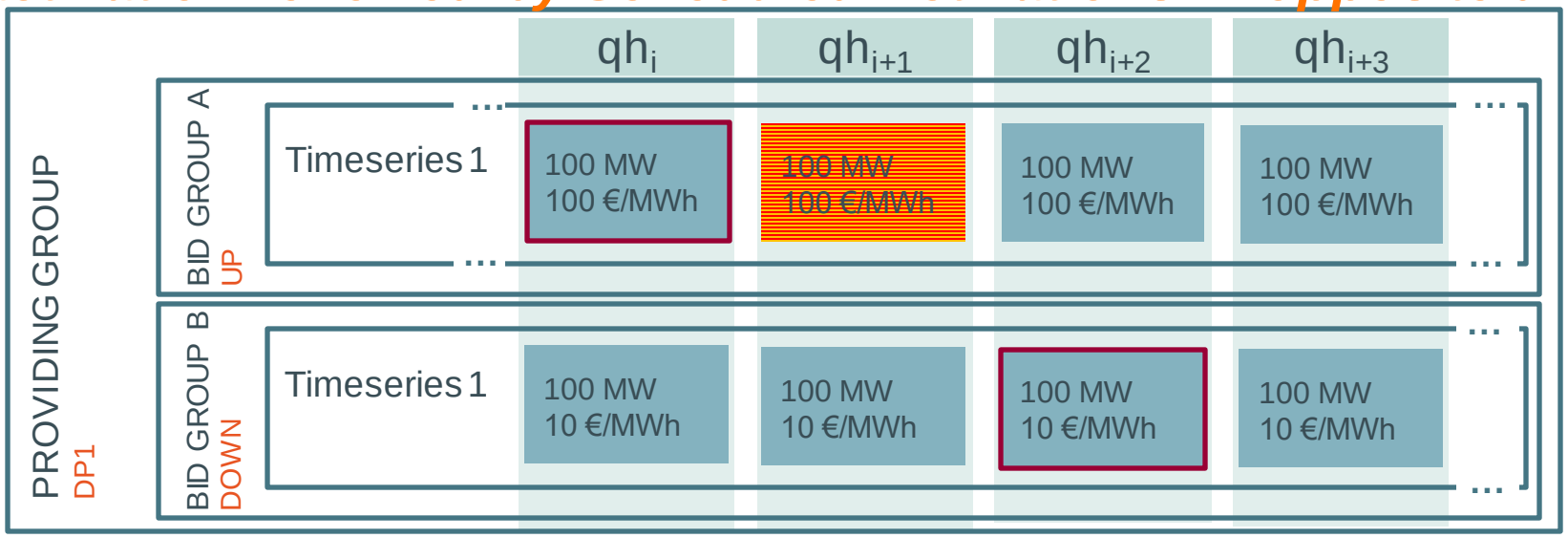


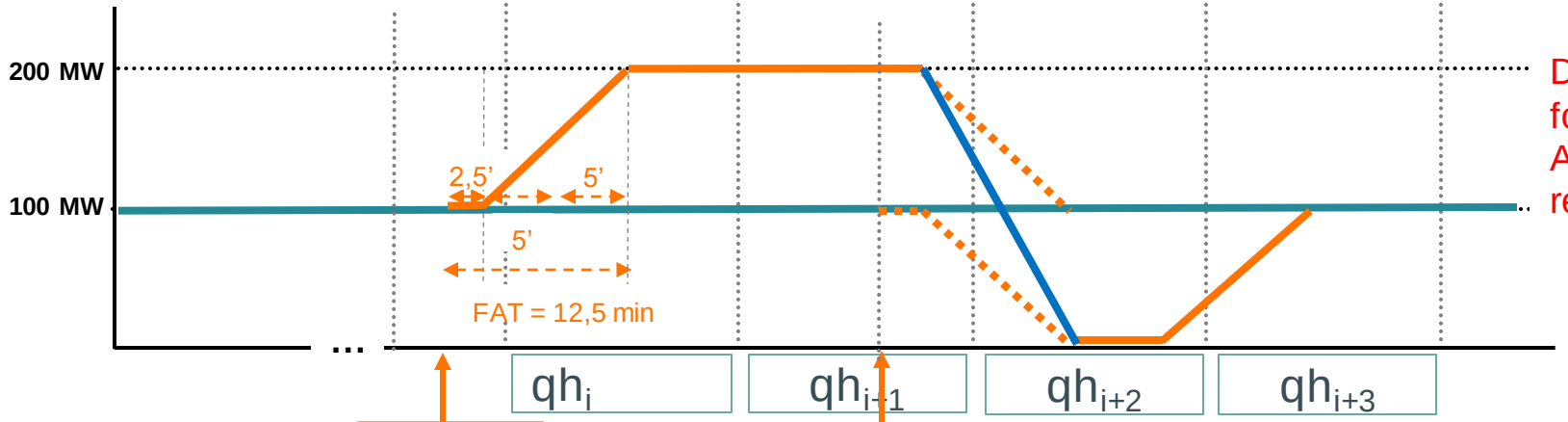
Legend:

- Bid selected / activated
- Bid submitted
- Bid unavailable for activation

CONSECUTIVE ACTIVATION

Direct activation followed by Scheduled Activations in opposite direction





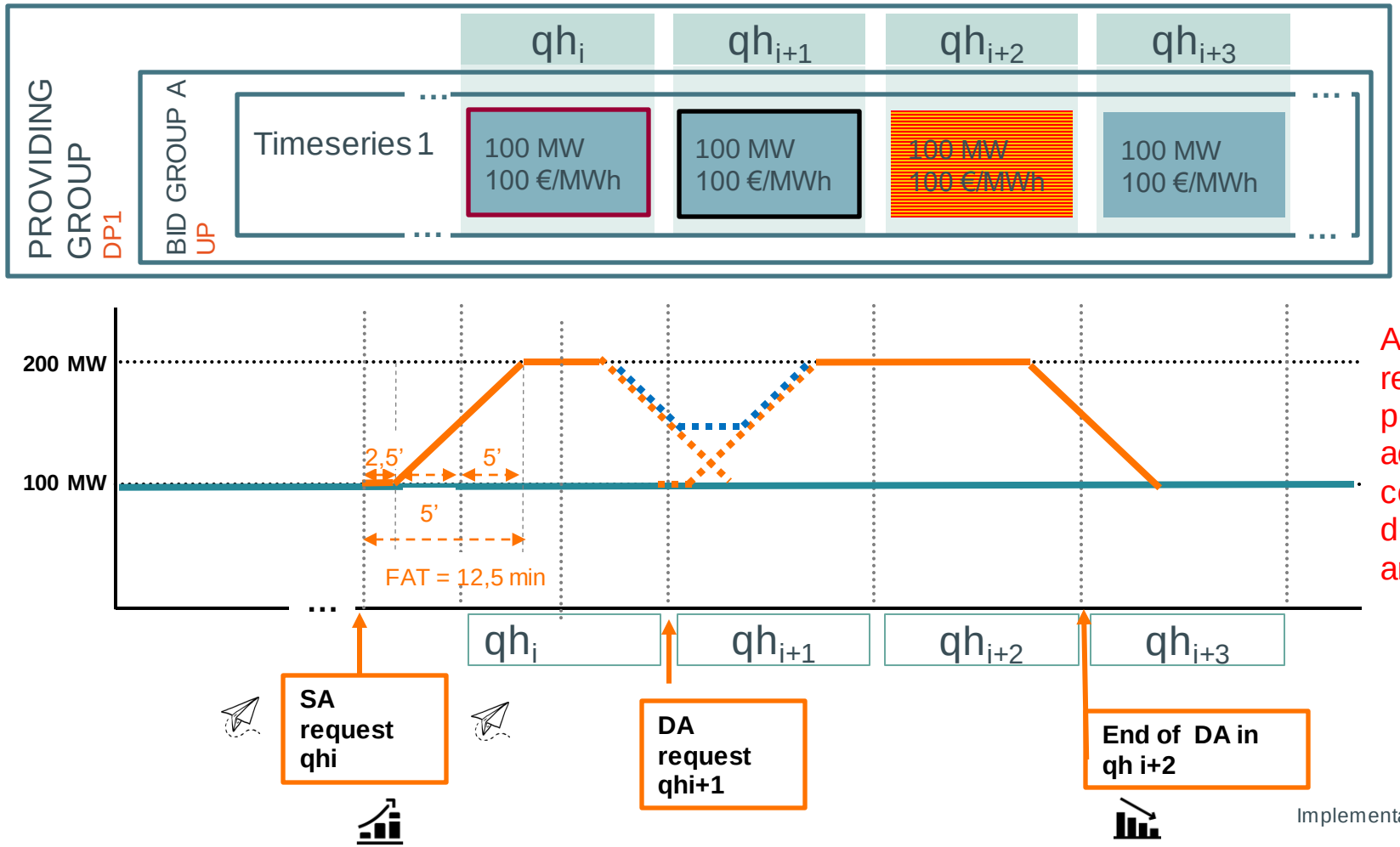
Direct Activation UP followed by Scheduled Activation DOWN requires faster ramping

Legend:

- Bid selected / activated
- Bid submitted
- Bid unavailable for activation

CONSECUTIVE ACTIVATION

Scheduled followed by Direct Activations in same direction



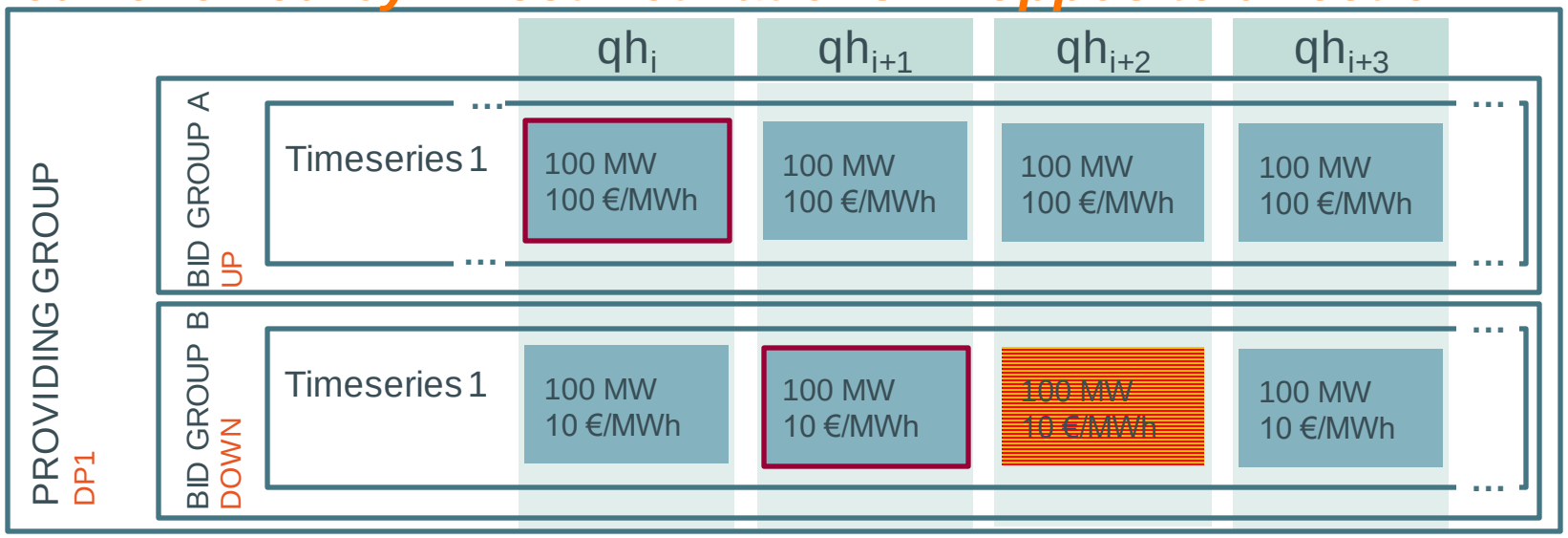
As the timing of DA request is uncertain it is possible that the activation cannot continue without a deactivation between SA and DA request

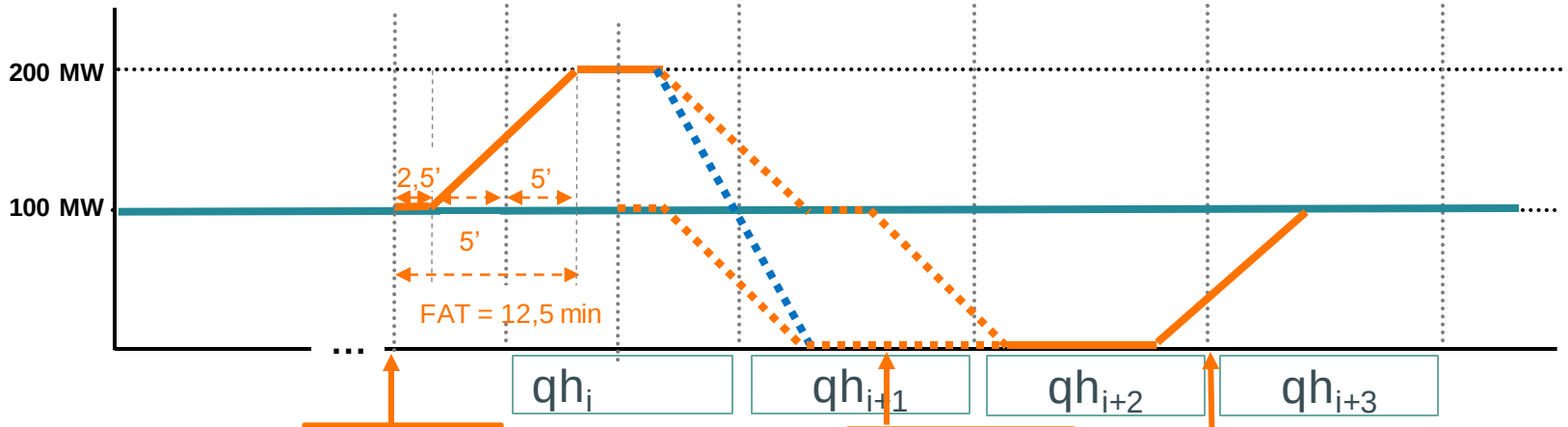
Legend:

- Bid selected / activated
- Bid submitted
- Bid unavailable for activation

MFRR SCHEDULED ACTIVATION

Scheduled followed by Direct Activations in opposite direction





Legend:

- Bid selected / activated
- Bid submitted
- Bid unavailable for activation

As the timing of DA request is uncertain it is possible that a faster ramping woud be needed between the 2 activations (.....)

Specific cases

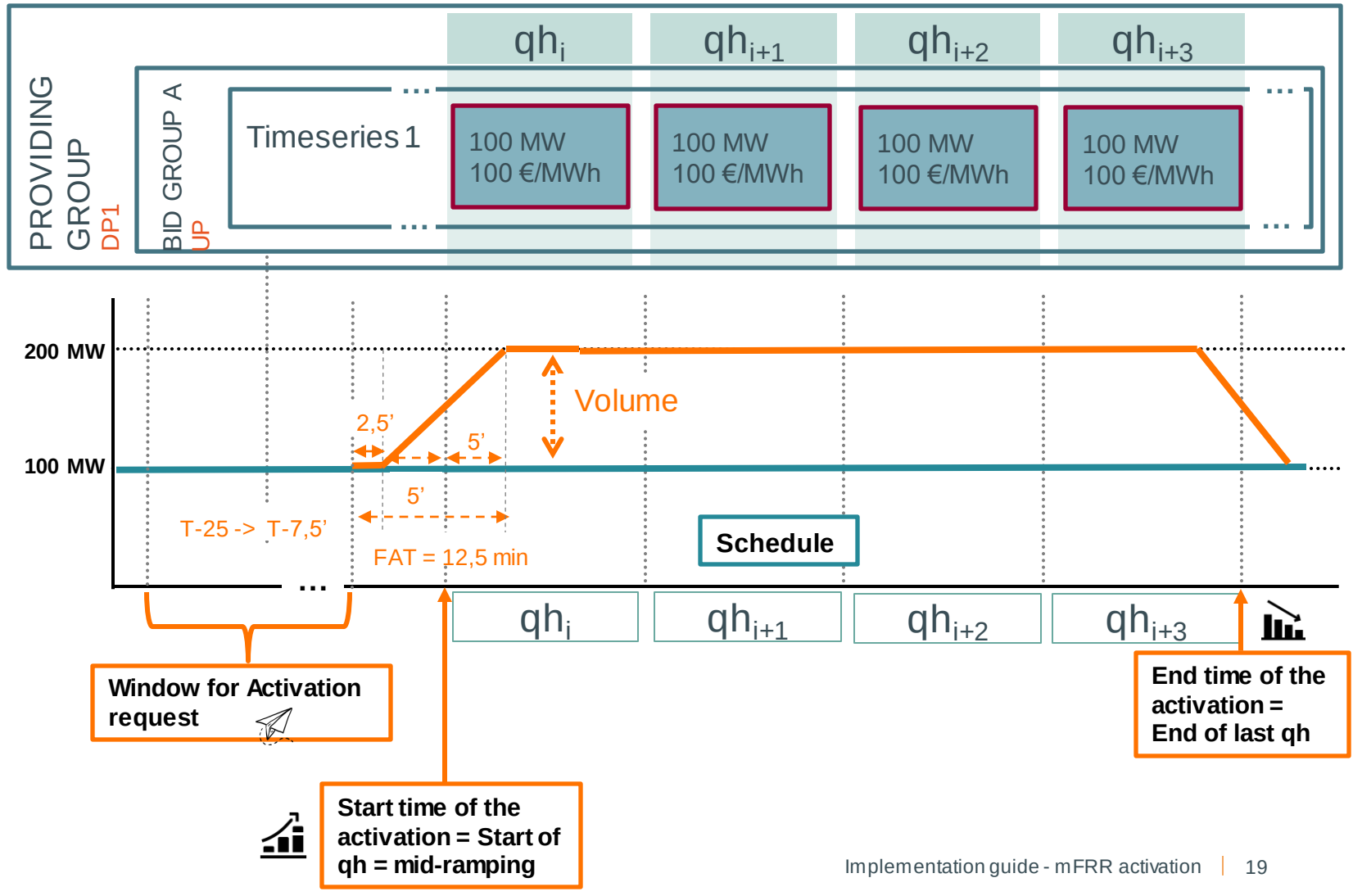
MFRR FOR REDISPATCHING SCHEDULED ACTIVATION

Overview

Between 25mins and 7,5mins before the beginning of the first QH of activation, Elia can send an activation request on mFRR Energy bids submitted by the BSP taking into account the properties of the bids.

Scheduled mFRR activation for redispatching	
Direction	UP or DOWN
Duration	(**2** or) multiple QH
Start time	**Start of first QH**
Volume	A part of / full volume of the mFRR Energy bid*

*A bid partially activated will be considered as unavailable for any further activation within same QH



Legend:

Bid selected / activated

Bid submitted

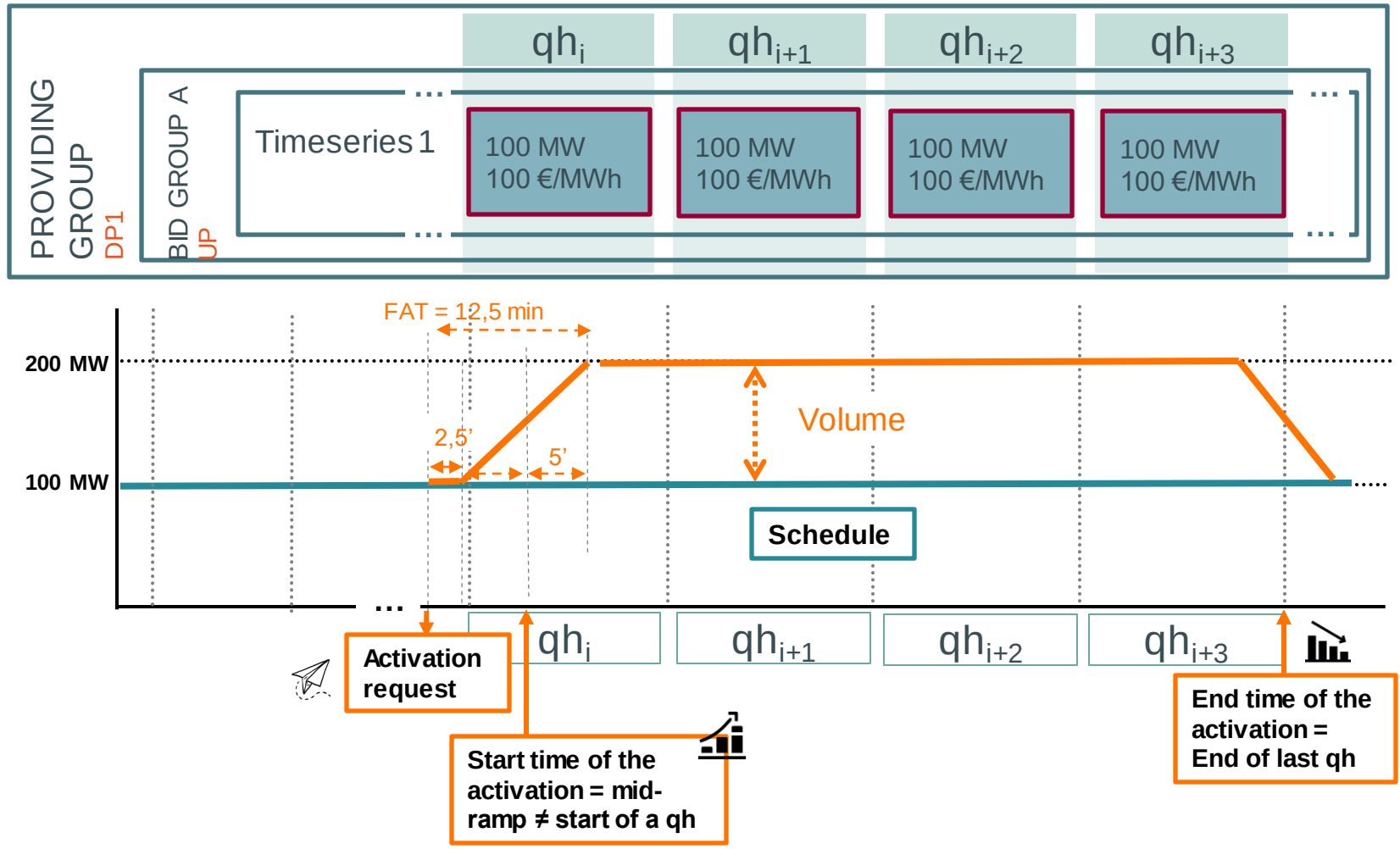
MFRR FOR REDISPATCHING DIRECT ACTIVATION

Overview

At any time, Elia can send an activation request for direct activation on mFRR Energy bids submitted by the BSP taking into account the properties of the bids.

Direct mFRR activation for redispatching	
Direction	UP or DOWN
Duration	(**2** or) multiple QH
Start time	**Mid-ramping**
Volume	A part of / full volume of the RD Energy bid*

*A bid partially activated will be considered as unavailable for any further activation within same QH



Legend:

Bid selected / activated

Bid submitted

MFRR FOR REDISPATCHING

Structure of the message

Market Document

- mRID of the activation
- Type: mFRR Activation Document
- Process type: **SA (A60)** or **DA (A61)**
- Sender: Elia
- Receiver: BSP
- Creation date: time of the activation request
- Activation time period: start time & end time of the activation

Timeserie(s)

- Bid group ID: A
- Business Type: **Network Element Constraint (B40)**
- Measurement Unit: MW
- Direction: UP

Period

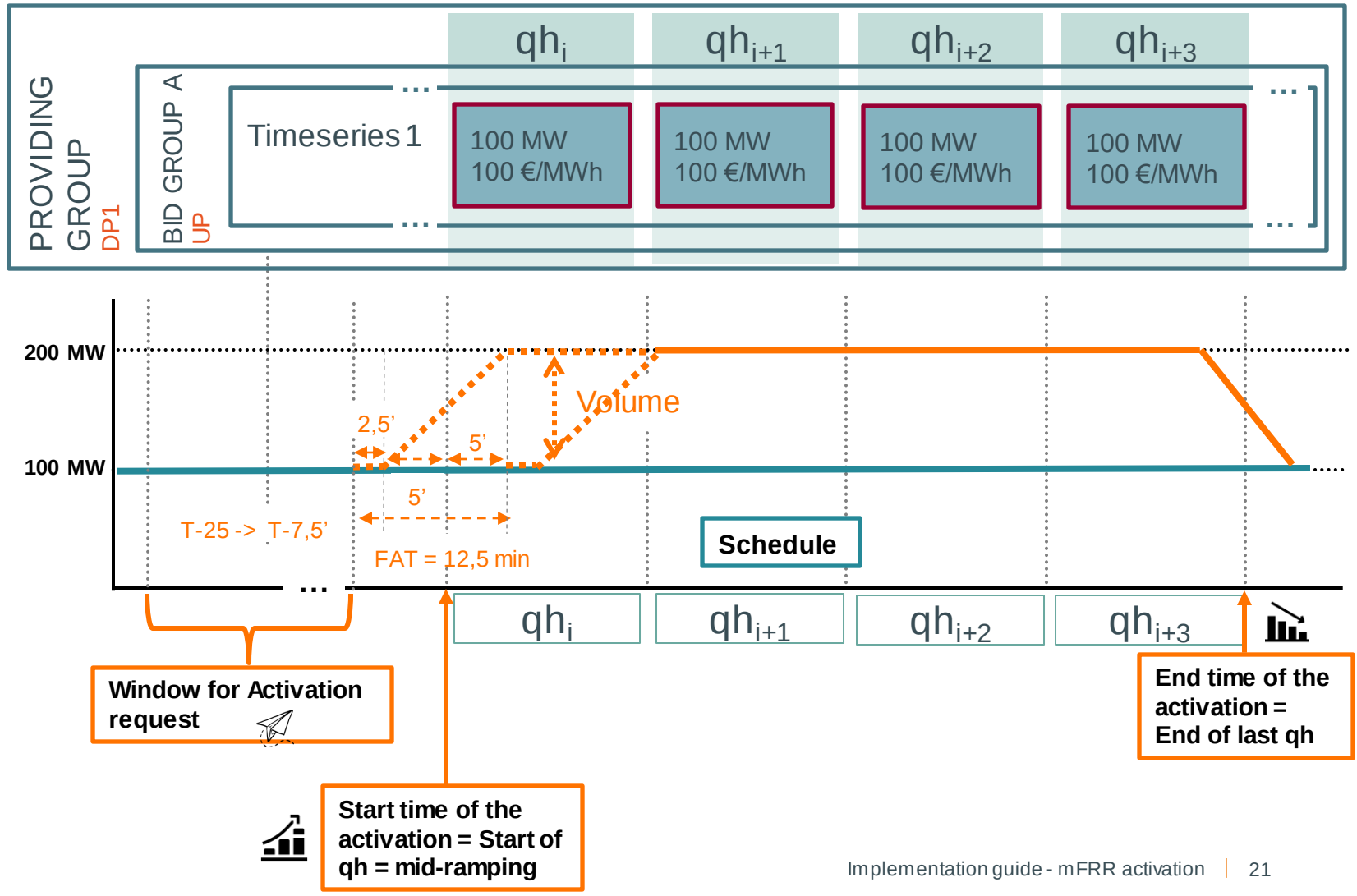
- Resolution: 15'
- TimeInterval: start time & end time of the activation

Point

- Position: 1
- Quantity: 100MW

⋮

- Position: x
- Quantity: 100MW



Availability test

Structure of the message

Market Document

- mRID of the activation
- Type: mFRR Activation Document
- Process type: *I*
- Sender: Elia
- Receiver: BSP
- Creation date: time of the activation request
- Activation time period: start time & end time of the activation

Timeserie(s)

- Bid group ID: A
- Business Type: **Testing (B83)**
- Measurement Unit: MW
- Direction: UP

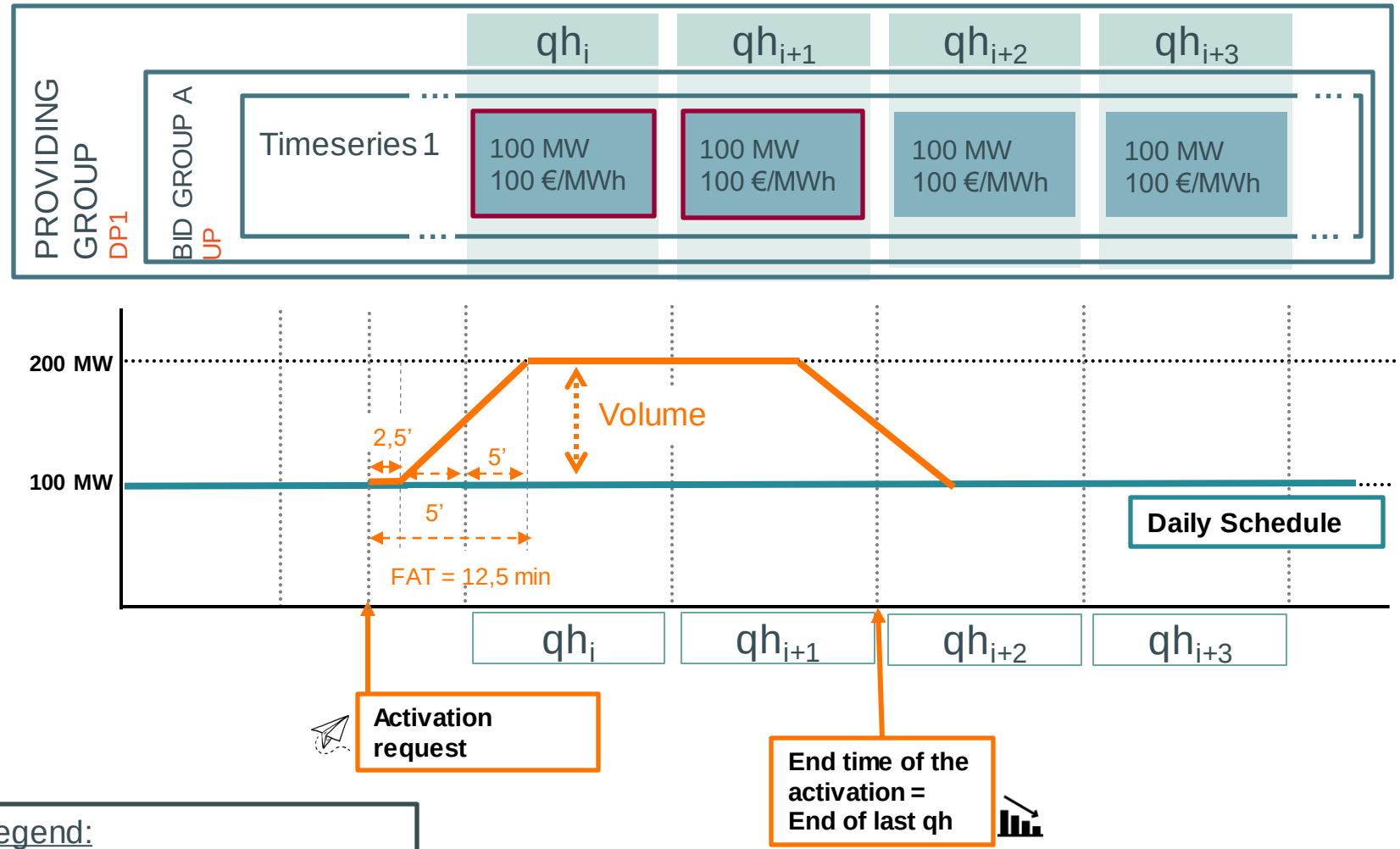
Period

- Resolution: 15'
- TimeInterval: start time (**≠ start of a QH**) & end time of the activation

Point

- Position: 1
- Quantity: 100MW

- Position: 2
- Quantity: 100MW



Legend:

- Bid selected / activated
- Bid submitted

PREQUALIFICATION TEST

Structure of the message

Market Document

- mRID of the activation
- Type: mFRR Activation Document
- Process type: /
- Sender: Elia
- Receiver: BSP
- Creation date: time of the activation request
- Activation time period: start time & end time of the activation

Timeserie(s)

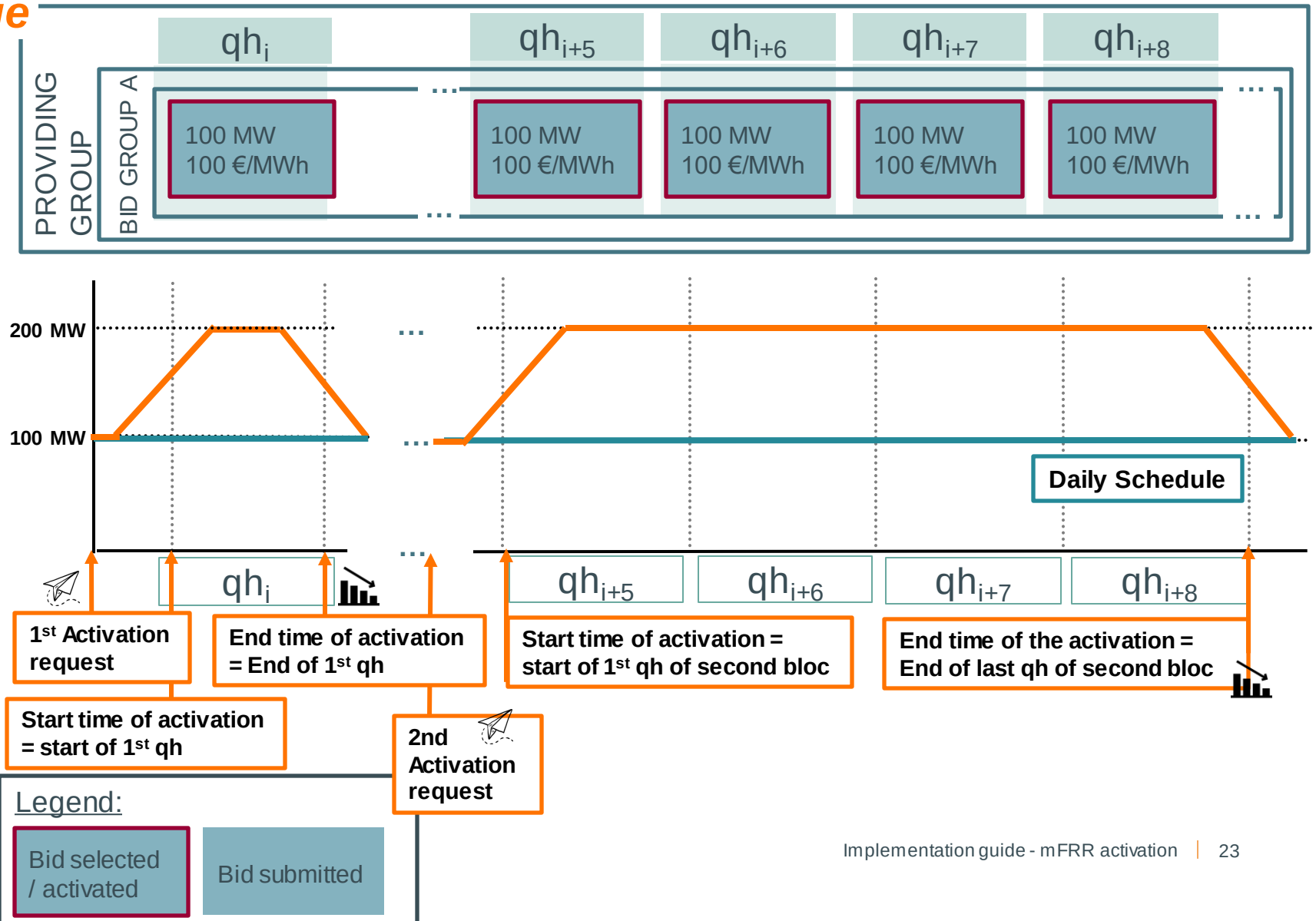
- Bid group ID: A
- Business Type: **Prequalification (Z11)**
- Measurement Unit: MW
- Direction: UP

Period

- Resolution: 15'
- TimeInterval: start time (**≠ start of a QH**) & end time of the activation

Point

1st activation request	2nd activation request
- Position: 1 - Quantity: 100MW	- Position: 1 - Quantity: 100MW
	- Position: 4 - Quantity: 100MW



Related Topics

RELATED TOPICS

Communication requirements - Options as Communication Channels

Main Communication

"Main communication channel(s)" that have to be used by market parties.

If several channels are available, the BSP/SA/OPA can chose to use only one or all of them.

Back Up Communication

"Back-up communication channel(s)" that have to be used by market parties.

If several channels are available, the BSP/SA/OPA can chose to use only one or all of them.

The BSP **must have** a back-up communication channel.

Working in back-up mode do not imply working in a degraded mode and should ensure **the same level of service** from Elia and the Market Party.

Fall Back Communication

"Fallback communication channel(s)" that have to be used by market parties.

If several channels are available, the BSP/SA/OPA can chose to use only one or all of them.

The BSP/SA/OPA must master the Fallback communication channel.

Working in fallback mode will always imply working in **degraded mode and not ensuring the full level of service** from Elia or from the market party.

Both parties will react on **best effort** in fallback mode.

On best effort basis, in case of a persistent issue, Elia will publish an UMM to inform the Market

RELATED TOPICS
Communication requirements – Balancing Service Provider

BSP

mFRR Activation Request

Main: ECL
Back Up: Email
Fall Back: Phone

In case no technical acknowledgement is received by Elia after sending an activation request to a BSP, Elia will send the activation request via e-mail to this BSP.

The e-mail will be sent with a standardized title, the JSON file will be joined as attachment and the body of the text will contain summarized information interpretable rapidly by a human user (concerned DP, volume, start and end time).

The same level of service will be expected from Elia and the Market Party.

Thank you.