



mFRR Activation & Deactivation (ECP)

Implementation Guide

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1. Introduction

This guide contains information about the electronic activation and deactivation process of mFRR bids through ECP. The document describes the business rules as well as provides detailed information about the messages exchanged between Fingrid and Balance Service Provider or their service provider (both referred later as BSP).

1.1 Abbreviations

BSP	Balance Service Provider
mFRR	Manual Frequency Restoration Reserve

1.2 Change log

- 25.2 – version 1.0 created

1.3 References

- [1] urn-entsoe-eu-wgedi-errp-activatondocument-5-0.xsd
- [2] urn-entsoe-eu-wgedi-acknowledgement-acknowledgementdocument-6-0.xsd

2. General Rules

2.1 Activation process

Fingrid activates mFRR bids submitted to the trading system in price order according to the real time demand. Fingrid orders the activation of a resource by sending an activation document to the BSP. The BSP must respond to the activation order with an activation response document within 2 minutes of the request (including all latencies in the communication). Full activation should be realized within 15 minutes from Fingrid's order message. The exact time is visible in the activation order document. Both the activation order and the activation response documents are acknowledged with an acknowledgement document.

An activation has been agreed between Fingrid and the BSP at the time when Fingrid has acknowledged the activation response with a positive acknowledgement document.

2.2 Deactivation process

Every activation order has a time interval for the activation [start time, end time]. If no other information is provided, the resource should be deactivated according to [end time] of the activation order.

Fingrid can also ask specifically for a deactivation of an active resource during an hour. In such a case, a new activation document is sent with new time stamps. The BSP must respond to the new activation order with a response document within 2 minutes of the request (including all latencies in the communication). Full deactivation should be realized within 15 minutes from the order message by Fingrid

Both the deactivation order and the response document are acknowledged with an acknowledgement document.

2.3 Technical Aspects (Activation)

Activation documents, Activation Response documents and Acknowledgement documents will be exchanged between the parties using ECP/MADES network

2.4 Updating an activation/deactivation

By default, Fingrid requires the full activation of the resource within 15 minutes from the activation order. BSP can activate the resource also sooner by changing the [start time] time stamp in the activation response message. It is not allowed to start the activation later than 15 minutes from the activation order. If an activation is scheduled to start at the beginning of an hour (hh:00), the BSP is not allowed to activate the resource sooner (during the previous hour).

By default, Fingrid requires a deactivation within 15 minutes from the deactivation order. It is not allowed for the BSP to deactivate the resource sooner than the deactivation order states.

2.5 Communication overview

In the figure below, the overall communication regarding the activation & deactivation process is clarified



3. Message Implementation Guide

This part of the document provides detailed information about the content of the Activation order message and describes, how the BSP should fill out the Activation response message. The activation process can be summarized in the following steps:

1. Activation order is sent by Fingrid using the ENTSO-E ERRP ActivationDocument [1]
2. BSP acknowledges receiving the ActivationDocument using ENTSO-E AcknowledgementDocument [2]
3. BSP responds to the activation request within 2 minutes using ENTSO-E ActivationDocument [1]
4. Fingrid acknowledges receiving the ActivationDocument using ENTSO-E AcknowledgementDocument [2]

3.1 Activation Document

3.1.1 Business rules

- Document identification can be maximum 35 character long.
- National code shall be used as sender identification.
- Messages are sent using UTC time zone, this is denoted by Z in the date times format.
- mFRR-activations are ordered for up to one hour at a time.
- The activation document contains information about one specific bid solely.
- The Activation Response document must include the same Order Identification (ID & version), Allocation Identification and Resource provider information as the Activation Document.
- The Activation Time Series of the response message must be equal to the activation order except for Status (ResourceProvider, BusinessType, AcquiringArea, ConnectingArea, MeasureUnit and Direction must be the same as requested)

3.1.2 Mapping table

Activation Document	
Document Identification	<i>Unique identification of the document (spaces and special characters not accepted)</i>
Document Version	Fixed 1
Document Type	<i>Fingrid sends:</i> A40 DATCR Activation (normal activation based on MOL) A36 Deactivation document Z15 DATCR Activation, move (change) of planned production <i>BSP responds:</i> A41 Activation response
Process Type	A29 Secondary reserve process (e.g., aFRR) A30 Tertiary reserve process (e.g., mFRR)
Sender Identification	<i>National identification code of the party who is sending the document</i> codingScheme = NFI (kansallinen koodi)
Sender Role	A04 System Operator (used by Fingrid) A27 Resource Provider (used by BSP)
Receiver Identification	<i>National identification code of the party who is receiving the document</i> codingScheme = NFI (kansallinen koodi)
Receiver Role	A04 System Operator (used by BSP) A27 Resource Provider (used by Fingrid)
Creation Date Time	<i>Date and time for creation of the document</i> YYYY-MM-DDTHH:MM:SSZ (including seconds) (ISO 8601 UTC format)
Activation Time Interval	<i>The beginning and ending date and time of the period covered by the document</i> YYYY-MM-DDTHH:MMZ/YYYY-MM-DDTHH:MMZ (without seconds) (ISO 8601 UTC format)
Domain	10YFI-1-----U codingScheme = A01 (EIC)

Order identification	<i>Unique identification of the activation order “Activation ID”. The same activation ID is used in the request and the response</i>
Order identification Version	<i>The version of the activation order. Incremented with one for each transmission of the document from the System Operator. The same version is used in the request and response.</i>
Activation Time Series	
Allocation Identification	<p><i>Reference to relevant bid OR an “Move of planned production ID”</i></p> <p><i>The “Move of planned production ID” is only used for document type Z15 (DATCR activation, move (change) of planned production)</i></p> <p><i>The same Allocation Identification is used in the request and response.</i></p>
Resource Provider	<i>Reserve object, e.g., name of a power plant, which can be checked from the Vaksi web-interface “Laitosnimi”</i>
Business Type	A97 Manual Frequency Restoration Reserve
Acquiring Area	<p><i>EIC code for the national area</i> 10YFI-1-----U <i>“The area where the resource is contracted for use”</i> codingScheme = A01 (EIC)</p>
Connecting Area	<p><i>EIC code for the national area</i> 10YFI-1-----U <i>“The area where the resource is located”</i> codingScheme = A01 (EIC)</p>
Measure Unit	MAW Megawatt
Direction	A01 Up A02 Down
Status	<p><i>Fingrid sends:</i> A10 Ordered</p> <p><i>BSP responds:</i> A07 Activated A09 Cancelled</p>
Period	
Time Interval	<p><i>The start and end date and time of the time interval of the period in question</i> YYYY-MM-DDTHH:MMZ/YYYY-MM-DDTHH:MMZ (without seconds) (ISO 8601 UTC format)</p>
Resolution	<p><i>This shall be included in the Time Interval Covered by the document</i> PT60M or PT1H</p> <p><i>The time resolution corresponds to the difference between the start time and the stop time</i></p>
Interval	
Pos	1 Always one
Qty	<i>The quantity for the interval in question</i>

3.1.3 Validation of activation response document

An acknowledgement document is generated either accepting the received document or rejecting it completely. Partly accept is never used.

Following error codes are applied:

- A01 successfully received document.
- A02 discarded document.

The table below contains the list of error messages that will be included in the Acknowledgement document in case validation of the response document fails:

Description	Error message
Activation Document:	
Document Identification is mandatory	<i>Message reference missing.</i>
Document Identification must be unique	<i>Message reference must be unique.</i>
Message must be received within a given time	<i>Message was received after deadline.</i>
Message can only include bids for next 30 days	<i>Message contains data for more than next 30 days.</i>
Sender Identification must be connected to the Subject Party	<i>Sender is not connected to the Subject Party.</i>
Activation Time Series:	
Message can only contain mFRR bids	<i>Message can only contain mFRR bids.</i>
Measure Unit Quantity required	<i>Quantity unit required.</i>
Quantity unit must be MAW	<i>Quantity unit must be MAW.</i>
Measure Unit Price required	<i>Currency required.</i>
Currency must be EUR	<i>Currency must be EUR.</i>
Reserve object code required	<i>Reserve object code required.</i>
Period:	
Activation response is sent multiple times	<i>Aktivointi oli jo hyväksyty (Activation has already been accepted)</i>
Deactivation response has different time stamps than deactivation request	<i>Deaktivointi sanomassa ollut loppuaika on muuttunut (The end time of the deactivation has changed)</i>

4. Appendices

APPEDIX 1: Examples of the xml-messages:

- ActivationDocument
- ActivationDocument Acknowledgement
- Activation Response
- Activation response Acknowledgement

