

ATP - B2B programmer guide

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Chapter 1. History

| Version | Date | Changes |
|----------------|-------------|---|
| ATP Doc V1 | 01/04/2020 | Initial version |
| ATP Doc V3 | 23/05/2022 | Change BidId to BidGroupId for AFRR tests |
| ATP Doc V4 | 25/08/2023 | Remove Unit field from ATP activation |
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Chapter 2. Introduction

This document is a developer guide for the use of the ATP B2B API for communicating with Business Service Provider (BSP). This documents provides the information for the communication of availability signal of FCR and Availability and prequalification signal of aFRR product towards BSP.

This document is organized into three sections.

- [ATP protocol](#)

The first part describes ATP protocol.

- [Messages specifications](#)

The second part is a detailed message specification.

- [Using the ATP B2B portal](#)

The last part explains how the communication with the B2B portal actually works. C# code samples are supplied.

Chapter 3. ATP protocol

3.1. Introduction

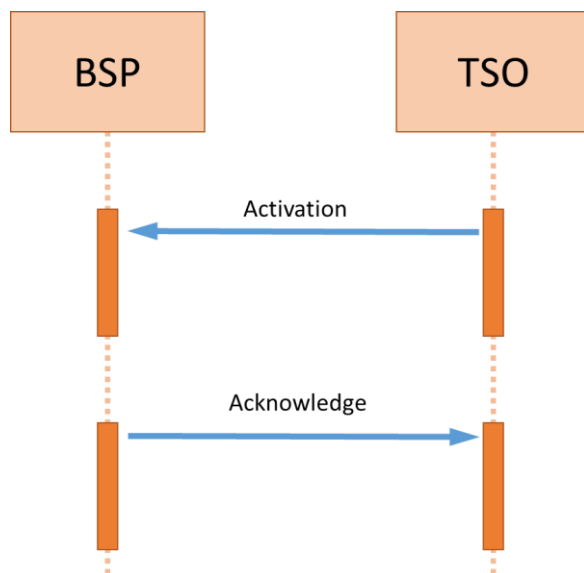
This section describes the protocol defined for FCR and aFRR product.

Throughout this section, references are made to the detailed specification of XML messages. This specification is provided in the following section (Message specification).

3.2. ATP protocol

This part concerns messages related to ATP protocol.

The following diagram illustrates the ATP protocol which is used to launch FCR and aFRR activation.



3.2.1. The TSO initiates an FCR/aFRR activation

When Elia will need to launch an availability or prequalification test, Elia will send an activation message to the BSP.

The message contains information related to the activation (contract reference, Energy bid ID, activated periods and power).

Message : [ATP Activation : TSO initiates ATP activation](#)

3.2.2. The BSP answers the ATP request

The BSP acknowledge the TSO request (only for aFRR, not for FCR).

URL: <https://atp.elia.be/atp.prod/v1/ack>

Method: POST

Note: the XMLs sent in the POST method will contain BOM (Byte order mark) characters. This has the goal to specify that the text stream's encoding is Unicode, to a high level of confidence and Unicode character encoding is used.

Chapter 4. Message : [ATPAcknowledge: BSP answers to the TSO FCR and aFRR activation](#) Messages specifications

4.1. ATPActivation protocol

4.1.1. Data structure ATP Activation : TSO initiates ATPactivation.

XML Namespace: <http://www.elia.be/namespaces/public/ATP/b2bmsg>

4.1.1.1. Synopsis

| Field | Cardinality | Data type | Description |
|------------------------------|-------------|------------------------------------|---|
| activation | mandatory | List of Activation | The list of activated bids |
| bsp | mandatory | Partner | BSP identification. |
| tso | mandatory | Partner | TSO identification. |
| tsoReference | mandatory | string | Unique reference for the activation request given by the TSO. |

4.1.1.2. Detailed fields information

4.1.1.2.1. Field activation

List of activations

| | |
|-------------|------------------------------------|
| Cardinality | mandatory |
| Data type | List of Activation |

This information describes the FCR and aFRR activation request.

4.1.1.2.2. Field bsp

BSP reference.

| | |
|-------------|-------------------------|
| Cardinality | mandatory |
| Data type | Partner |

This information is used to identify the Business Service Provider identification.

4.1.1.2.3. Field tso

TSO reference.

| | |
|-------------|-------------------------|
| Cardinality | mandatory |
| Data type | Partner |

This information is used to identify the Tso identification.

4.1.1.2.4. Field tsoReference

Tso reference for the activation request.

| | |
|-------------|------------------------|
| Cardinality | mandatory |
| Data type | string |
| Min len. | 1 |
| Max len. | 30 |

This information represents a unique identifier for each activation request given by the TSO.

4.1.2. Data structure ATPAcknowledge using root element ATPActivation: BSP answers to the TSO ATP activation

Note: this acknowledge is using the same data structure of an ATP activation sent by Elia as described in [ATPActivation protocol](#)

4.1.2.1. Synopsis

| Field | Cardinality | Data type | Description |
|------------------------------|-------------|------------------------------------|--------------------------------|
| activation | mandatory | List of Activation | The list of activated bids |
| bsp | mandatory | Partner | BSP identification |
| tsoReference | mandatory | string | Tso reference for the message. |
| | | | |

4.1.2.2. Detailed fields information

4.1.2.2.1. Field beginDateTime

Begin Date and Time

| | |
|-------------|--------------------------|
| Cardinality | mandatory |
| Data type | datetime |

This is the date and time (in UTC format) at which the acknowledgement message is sent.

4.1.2.2.2. Field Activation

List of activations

| | |
|-------------|------------------------------------|
| Cardinality | mandatory |
| Data type | List of Activation |

This information describes the FCR and aFRR activation request.

4.1.2.2.3. Field bsp

BSP reference

| | |
|-------------|-----------|
| Cardinality | mandatory |
|-------------|-----------|

| | |
|-----------|-------------------------|
| Data type | Partner |
|-----------|-------------------------|

This information represents the Business Service Provider identification. BSP is identified via the Energy Coordinator Identifier or EIC-code.

4.1.2.2.4. Field tsoReference

Tso reference for the message.

| | |
|-------------|------------------------|
| Cardinality | mandatory |
| Data type | string |
| Min len. | 1 |
| Max len. | 30 |

This information represents a unique identifier for each activation request given by the TSO in the activation request message.

4.1.2.2.5. Field bspReference

BSP reference

| | |
|-------------|------------------------|
| Cardinality | optional |
| Data type | string |
| Min len. | 1 |
| Max len. | 30 |

This information represents a unique identifier given by the BSP.

4.2. Generic message parts

4.2.1. Data structure Partner: Partner identifier

This data structure is used to identify a partner in a transaction. It forms part of several message structures.

The fact that the code type must be specified in addition to the code itself, allows users to use their preferred code type, provided it is recognised by the system.

In addition, the identity of a partner can be indicated in words to make messages easier to read for humans.

4.2.1.1. Synopsis

| Field | Cardinality | Data type | Description |
|------------------------------|-------------|------------------------|---------------|
| code | mandatory | string | Code |
| codeType | mandatory | string | Code type |
| friendlyName | optional | string | Friendly name |

4.2.1.2. Detailed fields information

4.2.1.2.1. Field code

Code

| | |
|-------------|------------------------|
| Cardinality | mandatory |
| Data type | string |
| Min len. | 1 |

For the FCR or aFRR Supplier this is always his EIC-code. For more information please contact your contractual contact.

For Elia this is always "ELIA"

4.2.1.2.2. Field codeType

Code type

| | |
|-------------|------------------------|
| Cardinality | mandatory |
| Data type | string |
| Min len. | 1 |

The following table indicates the valid values:

| Value | Description |
|-------|--------------------------------|
| C03 | EIC code |
| C11 | ELIA proprietary coding scheme |

4.2.1.2.3. Field friendlyName

Friendly name

| | |
|-------------|------------------------|
| Cardinality | optional |
| Data type | string |
| Min len. | 1 |

This field is optional and not used by the system which is processing the messages. It is only there to facilitate human reading of the message.

4.2.2. Data structure Activation: Base information for a ATP Activation

XML Namespace: <http://www.elia.be/namespaces/public/Atp/b2bmsg>

4.2.2.1. Synopsis

| Field | Cardinality | Data type | Description |
|-----------------------------------|-------------|------------------------|--------------------|
| contractReference | mandatory | string | Contract Reference |
| activationType | mandatory | string | Type of activation |

| Field | Cardinality | Data type | Description |
|----------------------------------|-------------|--|--|
| bidId | Optional | string | Bid identification as received from BMAP (only applicable for FCR tests) |
| bidGroupId | Optional | string | BidGroupId as sent to Biple (only applicable for aFRR tests) |
| activationDetail | mandatory | List of activationDetail | Details of bid activation |

4.2.2.2. Detailed fields information

4.2.2.2.1. Field contractReference

Contract reference

| | |
|-------------|------------------------|
| Cardinality | mandatory |
| Data type | string |

The reference of the activated contract. The contract reference is communicated by ELIA to the Supplier at time of contract signing.

4.2.2.2.2. Field activationType

ActivationType of the activation request

| | |
|-------------|------------------------|
| Cardinality | mandatory |
| Data type | string |

ActivationType are the different possible activations that Elia may sent. For the moment, the list is limited to availability and prequalification tests.

The following table indicates the valid values:

| Value | Description |
|--------------------------|---|
| FCR_AvTest_Capacity | Request for an activation of Capacity Availability test for FCR |
| FCR_AvTest_EnergyUp | Request for an activation of Energy Availability test for FCR in UP direction |
| FCR_AvTest_EnergyDown | Request for an activation of Capacity Availability test for FCR in DOWN direction |
| aFRR_SingleUnit_AvTest | Request for an activation of Availability test for aFRR product for DP_SU. |
| aFRR_SingleUnit_PreqTest | Request for an activation of Prequalification test for aFRR product for DP_SU |

| Value | Description |
|------------------------------|--|
| aFRR_ProvidingGroup_AvTest | Request for an activation of Availability test for aFRR product for DP_PG. |
| aFRR_ProvidingGroup_PreqTest | Request for an activation of Prequalification test for aFRR product for DP_PG. |

4.2.2.2.3. Field bidId

The identification corresponding to the activated bid for FCR tests

| | |
|-------------|------------------------|
| Cardinality | Optional |
| Data type | string |

BID ID is a mandatory value for FCR. This BID ID is the Elia Bid Reference as used in BMAP when bids are created.

4.2.2.2.4. Field bidGroupId

The unique identification used to identify associated bids with each other as defined in BIPLE. It is used to associate bids that are to be technically linked together.

This is only application for aFRR tests

| | |
|-------------|------------------------|
| Cardinality | Optional |
| Data type | string |

For aFRR, the bidGroupId is the reference defined by the BSP when sending aFRR bids to BIPLE.

For FCR, this bidGroupId is the Elia Bid Reference as used in BMAP when bids are created .

For an Activation of DP_SU (for product type aFRR), Elia will activate the Power plant (see field unit).

4.2.2.2.5. Field activationDetail

List of activated bids

| | |
|-------------|--|
| Cardinality | mandatory |
| Data type | List of activationDetail |

4.2.3. Data structure activationDetail: Base information for a ATP Bid Activation

4.2.3.1. Synopsis

| Field | Cardinality | Data type | Description |
|-------------------------------|-------------|--------------------------|--------------------------------|
| beginDateTime | mandatory | datetime | Start of the activation period |
| endDateTime | mandatory | datetime | End of the activation period |

| Field | Cardinality | Data type | Description |
|--------------------------------------|-------------|--|---|
| power | optional | decimal | Requested power to activate (MW). Negative value will be sent for an activation of aFRR Down. |
| activatedAccessPoint | optional | List of activatedAccessPoint | List of activated access points with their volume |

4.2.3.2. Detailed fields information

4.2.3.2.1. Field beginDateTime

End date and time.

| | |
|-------------|--------------------------|
| Cardinality | mandatory |
| Data type | datetime |

The start of the activation period, in UTC time.

4.2.3.2.2. Field endDateTime

End date and time.

| | |
|-------------|--------------------------|
| Cardinality | mandatory |
| Data type | datetime |

The end of the activation period, in UTC time.

4.2.3.2.3. Field power

End date and time.

| | |
|-------------|-------------------------|
| Cardinality | $-n \geq 0 \leq 1$ |
| Data type | decimal |

The activated power.

4.2.3.2.1. Field activatedAccesspoint

List of activated Delivery Points

| | |
|-------------|--|
| Cardinality | $0 \leq n$ |
| Data type | List of activatedAccessPoint |

This information describes the list of the activated volumes.

4.2.4. Data structure activatedAccessPoint: Base information for the activated access point

4.2.4.1. Synopsis

| Field | Cardinality | Data type | Description |
|---------------------|-------------|------------------------|-------------------------|
| ean | mandatory | string | Ean of the access point |

4.2.4.2. Detailed fields information

4.2.4.2.1. Field ean

Ean of the access point

| | |
|-------------|------------------------|
| Cardinality | mandatory |
| Data type | string |

This is the EAN of the activated access point.

All valid delivery points and their EAN-codes are communicated in the Specific Conditions for automatic Frequency Restoration Reserve (aFRR) Service

This can be a positive or a negative value and it is expressed in MW.

4.3. Data types

The following table describes all the datatypes allowed in XML data structure specifications.

| Data type | Typical XML representation | Lexical pattern | Comments |
|--------------|---|------------------------|---|
| string | | .* | The following constraints can be expressed: minimum length, maximum length, pattern, choice of valid values |
| int | -1, 0, 126789675, +100000 | [-+]?[0-9]+ | The following constraints can be expressed: minimum value, maximum value. Values must be between 2147483647 and -2147483648 inclusive. |
| decimal | -1.23, 12678967.543233, +100000.00, 210 | [-+]?[0-9]+(\.[0-9]+)? | The following constraints can be expressed: minimum value, maximum value. Values must have at most 28 digits, with. |
| boolean | 1, 0, true, false | 1 0 true false | |
| code | | .* | This is similar to string, but allowed values must be part of a documented "code table". The actual signification of the code table constraint is application-dependent |
| datetim e | To indicate 1:20 pm on May the | [0-9]{4}-[0-9]{2}-[0- | Represents a time instant. If the time zone offset is not indicated, UTC is assumed. See |

| Data type | Typical XML representation | Lexical pattern | Comments |
|-----------|--|---|---|
| | 31st, 1999 in Brussels which is 2 hours ahead of UTC, one would write: 1999-05-31T13:20:00+02:00 | $9\{2\}T[0-9\{2\}(:[0-9\{2\}(:[0-9\{2\})?)?([+-][0-9\{2\}(:[0-9\{2\})?)?)?$ | also the example below for daylight saving time handling. |
| time | 13:20:00+02:00 | $[0-9\{2\}(:[0-9\{2\}(:[0-9\{2\})?)?([+-][0-9\{2\}(:[0-9\{2\})?)?)?$ | Represents a time instant in the day. If the time zone offset is not indicated, UTC is assumed. See also the example below for daylight saving time handling. |
| date | To indicate May the 31st, 1999, one would write: 1999-05-31 | $[0-9\{4\}-[0-9\{2\}-[0-9\{2\}$ | Represents a calendar date. |
| binary | | Encoded binary data (the default encoding is base64) | Used to transfer data that is not unicode text. |

The daylight saving times (25th hour) issue is solved by the use of UTC time or by indicating the time-zone delta.

Example: summer time to winter time in Belgium in 2000.

| ISO | Local time | UTC |
|---------------------|----------------|------------------|
| 2000-10-29 00:00+02 | 0h | 2000-10-28 22:00 |
| 2000-10-29 01:00+02 | 1h | 2000-10-28 23:00 |
| 2000-10-29 02:00+02 | 2h | 2000-10-29 00:00 |
| 2000-10-29 02:00+01 | at 3h it is 2h | 2000-10-29 01:00 |
| 2000-10-29 03:00+01 | 3h | 2000-10-29 02:00 |

Example: winter time to summer time in Belgium in 2000.

| ISO | Local time | UTC |
|---------------------|----------------|------------------|
| 2000-03-26 00:00+01 | 0h | 2000-03-25 23:00 |
| 2000-03-26 01:00+01 | 1h | 2000-03-26 00:00 |
| 2000-03-26 03:00+02 | at 2h it is 3h | 2000-03-26 01:00 |
| 2000-03-26 04:00+02 | 4h | 2000-03-26 02:00 |

4.4. ATPBaseURL

Demo Environnement

URL : <https://atpacc.elia.be/atp.acc/v1/ack>

Endpoint PROD environment :

URL : <https://atp.elia.be/atp.prod/v1/ack>

(Access credentials for this environment will only be given once all testing is validated by ELIA)

Before all testing please notify your ELIA contractual contact well in advance.