

Elia B2B E-nomination system using CIM - Implementation Guide

This document describes all aspects of Elia B2B E-Nomination system implementation using International CIM message format.

This manual should be read by:

- *BRP operational staff
who need to understand how the concepts and processes related to the current system are treated in the Elia implementation of CIM standard*
- *BRP IT staff
who need to develop or adapt business applications to generate and receive CIM XML Scheduling messages with Elia B2B E-Nomination system*

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Changes with the previous version

| <i>Section</i> | <i>Description</i> |
|----------------------|--|
| <i>8.6.3.4</i> | <i>It is possible to get the aggregated global position of the BRP taking into account the international nominations calculated at the 'MidPoint' between Belgium and UK and this value returned at the Belgium Boundary Point (or Belgium SetPoint)</i> |
| <i>6.4.4</i> | <i>Description of the different fields for the international nominations with UK</i> |
| <i>Many sections</i> | <i>Add the reference to the UK as other border in the text</i> |

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Chapter 1. Introduction

The Elia B2B E-nomination system can be used by BRPs to submit new nominations to Elia and to retrieve information about existing nominations within Elia systems.

This implementation guide provides all the information you need to understand and adapt your systems in order to communicate with the Elia B2B E-nomination system using the CIM Scheduling standard.

The principal aim of the CIM Scheduling standard is to provide a standard form of information exchange between BRPs and TSOs across Europe. The development of a standard messaging system enable the implementation of business applications that can communicate balancing requirements between all involved parties in all European countries.

Before to read this document, Elia suggests to read the document [E-Nomination Guide](#) (freely available on the Elia web page [nominations](#)) that explains all the business concepts about the nominations at Elia.

Note! No Application Programming Interface (API) are provided and thus it is up to the BRP to implement both XML handling and the connection with the Elia B2B E-nomination system. (See "3.6 HTTP communication through VB Script " p 12 for example of how implement XML handling and connection) using the 'Message generation tool' if he desires to (see "7.4 Using the Message Generation Tool " p 43).

1.1. CIM – Electronic Scheduling System (ESS)

This implementation guide explains the use of the CIM Scheduling system in order to submit nominations to the Elia B2B E-nomination system.

Additional information is available from IEC Standard Implementation Guides: These documents define the adopted standard for the different Message structures. They provide reference for all parts of the document.

They can be bought on the IEC Web Store: <https://www.iec.ch/>

| IEC reference | CIM XML message defined | Title | Short description |
|---------------|-------------------------|--|--|
| 62325-301 | None | Framework for energy market communications - Part 301: Common information model (CIM) extensions for markets | This Standard specifies the common information model (CIM) for energy market communications |
| 62325-351 | None | Framework for energy market communications - Part 351: CIM European market model exchange profile (ESMP) | This Standard specifies a package which provides a logical view of the functional aspects of European style market management within an electricity market. |
| 62325-451-1 | Acknowledge | Framework for energy market communications - Part 451-1: Acknowledgement business process and contextual model for CIM European market | This Standard specifies a package for the acknowledgment business process and its associated message contextual model, assembly model and XML Schema for use within the European style electricity markets |

| | | | |
|-------------|---------------------------------|--|--|
| 62325-451-2 | Schedule, Anomaly, Confirmation | Framework for energy market communications - Part 451-2: Scheduling business process and contextual model for CIM European market | This Standard specifies a package for the scheduling business process and its associated message contextual models, assembly models and XML Schemas for use within the European style electricity markets |
| 62325-451-5 | Status Request | Framework for energy market communications - Part 451-5: Problem statement and status request business processes, contextual and assembly models for European market | This Standard specifies a package for the problem statement and status request business processes and the associated message contextual models, assembly models and XML Schema for use within European style markets |

Additional information: ENTSO-E is responsible for the CIM standard for European part:
<https://www.entsoe.eu/digital/common-information-model/>

1.2. Related documents

| Document | Short description |
|-------------------------|---|
| E-nominations guide | <p>The existing "B2C" application (Elia e-nomination web site) used for submitting, reviewing and modifying nominations in a web browser. Elia recommends strongly to have this document while using the present implementation guide to have a better understanding of the different business concepts used by Elia.</p> <p>It is freely available on https://www.elia.be/-/media/project/elia/elia-site/customers/customer-tools/nominations/e-nominationsguide.pdf</p> |
| Message Generation Tool | <p>The File 'MessageGenerationTool.xlsm' can assist you in understanding the structure of the CIM XML format message in comparison to the Elia e-nomination web site (also called "B2C").</p> <p>It also serves to generate sample CIM XML scheduling messages that can be used as a basis in order to adapt your own application.</p> <p>This tool is explained on section 7.4 "Using the Message Generation Tool" on page 43.</p> <p>This tool is available from : https://nominations.elia.be/NominationsPrivate/doc_b2b.htm?_ga=2.23854394.1019237877.1540470016-486086368.1509010226 which can be accessed using your BRP user id and password.</p> |

Chapter 2. Glossary

| Term | Description |
|--------------------------|---|
| Amprion | One of the 4 German TSO having a common electrical border with Elia Grid. (from end 2020) |
| B2B | In this document "Business to business". This is the Electronic interface used by BRP that allows to access the Elia B2B E-nomination system directly from the BRP's technical system. A BRP can submit a nomination through xml-messages that are sent directly to Elia via the so-called B2B E-nomination system. |
| BRP | The BRP is responsible for the energy balance of the injections and off takes he manages. A BRP is the only party who can exchange, import and export energy. To do so, he has to submit nominations. The BRP is therefore the company who uses Elia B2B E-nomination system. |
| CAI | Capacity Agreement Identification. Identifies agreement for capacity allocation. The related element is defined in section "8.3.3 Schedule TimeSeries elements " p 52 |
| CDS | Closed Distribution System |
| CIM | Common Information Model |
| Common Information Model | The Common Information Model (CIM) is an international standard used for modelling the information exchanges required in electric utilities. CIM is independent of any individual application, middleware, or message protocols used for data exchange. More information on "1.1 CIM – Electronic Scheduling System (ESS)" p 5 |
| Contract | The Contract between the BRP and Elia. |
| Cross-Border | Nomination between 2 Areas or 2 borders. For example between Belgium and the Netherlands or Belgium and France or Belgium and Amprion Area |
| DA | Day-ahead. |
| DST | Daylight Saving Time |
| DTD | Document Type Definition. These documents are not provided nor supported by Elia. Only the XML Schema (XSD) are available. See https://nedi1.elia.be/namespaces/public/scheduling/ELIA-iec62325-451-2-schedule_v5_1.xsd for example |
| E-Nomination website | Elia website where BRPs can submit nominations manually via a web browser, consult the states and history of the nominations and check if their BRP obligations are fulfilled The document E-Nomination Guide (freely available) explains all the business concepts about the nominations at Elia and how to use the E-Nomination website. |
| EIC | Energy Identification Code |
| Element | This term is also used to describe a message "field", but in a more technical sense in relation to the structure of the CIM XML message. |
| Elia | Belgian TSO. For details, see www.elia.be |

| | |
|------------------------------|---|
| Elia B2B E-nomination system | The subject of this implementation guide: The system of Elia that receives the automated HTTP/XML nomination requests from the BRP |
| ESS | Electronic Scheduling System |
| Execution date | The delivery day when the nomination is executed by Elia |
| Export | In this document, this is a flow of energy from Elia's grid to a neighbour Area (FR, NL, DE) |
| IEC | International Electrotechnical Commission https://www.iec.ch/ |
| Gate | The gate determines the timeframe when a nomination can be entered and what is the scope of the entered nomination. |
| HUB | See 'Internal' in this Glossary |
| ID | Intra-day |
| Import | In this document, this is a flow of energy from any neighbour Area (FR, NL, DE) to Elia's grid |
| Injection | An Injection nomination is the schedule of the addition of energy on the Elia grid from a Access Point, a Distribution grid or a CDS access point. |
| Internal | A transfer of energy between 2 BRPs into the Elia's grid. |
| Intra-day | A Nomination whose scope is the current day. |
| Load | See 'Offtake' in this glossary. |
| Message field | This refers to the element in the CIM XML message that describes a particular parameter associated with the message. See also "Element" in this glossary |
| MW | Unit of active power: megawatt (1 000 000 W). |
| Nomination | <p>A nomination is the access schedule of a planned energy exchange between two BRPs, injection or offtake of an BRP in the Elia grid. As energy cannot be stored, any energy injection done by a given BRP requires a matching energy exchange with another BRP or off take done by the same BRP at the same point in time.</p> <p>There are 4 types of nomination:</p> <ol style="list-style-type: none"> 1. <u>Internal</u> (hub) nomination, with 2 subtypes: HUB DA & ID 2. <u>International</u> (Cross border) nomination, with 2 subtypes: XB DA & ID 3. Load (<u>offtake</u>) nomination 4. Production nomination, with 2 subtypes: <ol style="list-style-type: none"> 4.1 Generation nomination, treated in accordance with the CIPU Contract (out of scope of this implementation guide) 4.2 <u>Injection</u> nomination in distribution grids |
| National Grid | British TSO having a common electrical border with Elia network. |
| Offtake | An Offtake (Load) nomination refers to the physical energy off take from the Elia grid to an Access Point, a Distribution grid, an Offshore or a CDS access point. |
| RTE | 'Réseau de Transport d'Electricité'. French TSO having a common electrical border with Elia network. |
| Schedule message | This refers to the conceptual equivalent of a nomination which uses the message format set "Schedule_MarketDocument" from the IEC 62325-451-2 standard |

| | |
|--------|--|
| | defined in section "1.1 CIM – Electronic Scheduling System (ESS)" p 5 The word "message" is used to indicate the 'content' of the communication between a BRP and Elia |
| TenneT | Dutch TSO having a common electrical border with Elia network. |
| TSO | Transmission System Operator. TSOs are responsible for the bulk transmission of electric power on the main high voltage electric networks. TSOs provide grid access to the electricity market players (i.e. generating companies, traders, suppliers, distributors and directly connected customers) according to non-discriminatory and transparent rules. In order to ensure the security of supply, they also guarantee the safe operation and maintenance of the system. In many countries, TSOs are in charge of the development of the grid infrastructure too. TSOs in the European Union internal electricity market are entities operating independently from the other electricity market players. |
| UTC | Coordinated Universal Time, which is the international standard for civil time and the Internet. |
| VB | Visual Basic |
| VBA | Visual Basic for Applications |
| XB | Cross Border, i.e. international. |
| XML | eXtensible Markup Language They are also called "CIM XML" in this document. A very short description of XML is given in 4.2 "XML messages" p 19 |
| XSD | XML Schema |

Chapter 3. HTTP Communication with Elia B2B E-nomination system

This section describes how to use the Elia B2B E-nomination system by sending and receiving CIM XML messages directly over HTTPS.

3.1. Connecting to the B2B E-nomination system

There are two Elia B2B E-nomination systems:

- *The demonstration or test purpose system: This web site may be used by any BRP who wants to test his new B2B application without impact on the operational data, using the user id and password provided by Elia.*
- *the production system.*

Note! The same address is used when connecting to the “B2B testing web page” (see 3.7 B2B E-nomination system – Web testing page " p 13) and to be used in HTTPs POST calls (see "3.6 HTTP communication through VB Script " p 12)

3.2. Elia B2B E-nomination Address

Elia B2B E-nomination system API address to use by BRP application are:

| Address | Remark |
|--|---|
| https://nominationsdemo.elia.be/B2B/cimrequest.asp | EndPoint Address to the Elia B2B E-nomination system (test/demo system) |
| https://nominations.elia.be/B2B/cimrequest.asp | EndPoint Address to the Elia B2B E-nomination system (production version) |

Note! These addresses may only be used by a BRP application using HTTPs POST calls (see "3.6 HTTP communication through VB Script " p 12)

It is therefore not possible to use them within a Web Browser

3.3. Creating CIM XML document per datatype

The CIM XML Messages that are sent to the Elia B2B E-nomination system must observe the specifications documented in the Chapter 8 "Messages sent from the BRP to Elia" p 48 . The fields must be mapped to XML tags in the following way:

- A field with a simple datatype (simple datatypes are listed in the section "4.2.3 Data types " p 20) is mapped to an xml tag with the same name and the field content becomes the content of the tag. For example, the version field in a 'revisionNumber' is mapped to:

```
<Schedule_MarketDocument ...>
[... ]
<revisionNumber>609</revisionNumber>
[... ]
</Schedule_MarketDocument >
```

- A field where the datatype is another structure is mapped to an xml tag with the same name, taking over the child tags of that other structure. For example, the schedule_Time_Period.timeInterval field in a Schedule_MarketDocument is mapped to:

```
<Schedule_MarketDocument ...>
[... ]
<schedule_Time_Period.timeInterval>
  <start>2020-07-21T22:00Z</start>
  <end>2050-07-22T22:00Z</end>
```

```
</schedule_Time_Period.timeInterval>
[...]
```

- A field where the datatype is a list is mapped to an xml tag repeated:

```
<CrossBorderNom>
[...]
```

```
<TimeSeries>
  <Point>
    <position>1</position>
    <quantity>142.9</quantity>
  </Point>
  <Point>
    <position>2</position>
    <quantity>307.1</quantity>
  </Point>
</TimeSeries>
</CrossBorderNom>
```

3.4. Error handling

In case of an error (invalid request, internal error or any issue that arrives to the Elia B2B E-nomination system), each page returns

- an Error message and
- a standard HTTP status of 510, 400, 401, etc

instead of their normal output.

3.5. Handling the connection to the Elia B2B E-nomination system

To establish an Internet connection with the Elia B2B E-nomination system, the following rules must be observed:

- For data security reasons, HTTPS must be used with the userid and password given by Elia.
- All messages must be sent by HTTP(s) POST method
- The content type should be "text/xml"
- The HTTPS body should only consist of the XML string, beginning directly with the root tag.

3.6. HTTP communication through VB Script

Here is an example of how to communicate with the Elia B2B E-nomination system with a VB Script code.

This method is compatible with Microsoft Windows 10.

Note! The current version Microsoft XML Parser (indicated as “msxml” in the example here below) needs to be installed on the computers that executes the script and correctly referenced in the script.

Complete script:

```
'This script calls the Elia B2B E-nomination system CIMRequest.asp page to get information
about existing international nominations
baseUrl = "https://nominationsdemo.elia.be/B2B/cimrequest.asp"
user = "Your user id given by Elia"
password = "Your password"
EIC = "Your EIC"
postData = "<Schedule_MarketDocument xmlns='urn:iec62325.351:tc57wg16:451-
2:scheduledocument:5:1' xmlns:xsi='http://www.w3.org/2001/XMLSchema-instance'>" & _
    "<mRID>" & EIC & "</mRID>" & _
    "<revisionNumber>1</revisionNumber>" & _
    "<type>A01</type>" & _
    "<process.processType>A01</process.processType>" & _
    "<process.classificationType>A01</process.classificationType>" & _
    "<sender_MarketParticipant.mRID codingScheme='A01'>" & EIC &
"</sender_MarketParticipant.mRID>" & _
    "<sender_MarketParticipant.marketRole.type>A08</sender_MarketParticipant.marketRole.type>"
    & _
    "<receiver_MarketParticipant.mRID
codingScheme='A01'>10X1001A1001A094</receiver_MarketParticipant.mRID>" & _
    "<receiver_MarketParticipant.marketRole.type>A04</receiver_MarketParticipant.marketRole.ty
pe>" & _
    "<createdDateTime>2020-07-22T22:00:00Z</createdDateTime>" & _
    "<schedule_Time_Period.timeInterval>" & _
        "<start>2050-07-22T22:00Z</start>" & _
        "<end>2050-07-23T22:00Z</end>" & _
    "</schedule_Time_Period.timeInterval>" & _
    "<domain.mRID codingScheme='A01'>10YBE-----2</domain.mRID>" & _
"</Schedule_MarketDocument>"

Set o = CreateObject("msxml2.ServerXMLHTTP")
o.open "POST", baseUrl, 0, user, password
o.setRequestHeader "Content-type", "text/xml"
o.setRequestHeader "Content-length", len(postData)
o.send postData
Msgbox "Status: " & o.status
Msgbox "Answer: " & o.responseText
```

Each main command of this VB script is described here below:

```
Set o = CreateObject("msxml2.ServerXMLHTTP")
```

We create an instance of the "ServerXMLHTTP" object that serves to establish HTTPS connection to the Elia B2B E-nomination system. "msxml2" must be replaced by the version of the XML version available on your computer if this version 2 is not available.

```
o.open "POST", baseUrl, 0, user, password
```

We initialize an XMLHTTP request and specify the method, URL and authentication of the information for the request.

In this case we call the HTTPS "POST" method of the CIMRequest.asp page in asynchronous mode and specify the user account and the corresponding password.

```
o.setRequestHeader "Content-type", "text/xml"
```

```
o.setRequestHeader "Content-length", len(postData)
```

We specify that the content type of the request is XML and the length of the data we transmit to the called page.

```
o.send postData
```

We send the HTTPS request to the Elia B2B E-nomination system (defined by the variable `baseUrl`) and receive the response.

```
Msgbox "Status: " & o.status
```

We display the HTTP status of this call to the Elia B2B E-nomination system. If no issue, the value should be 200

```
Msgbox "Answer: " & o.responseText
```

We display the message answer of this call from the Elia B2B E-nomination system.

Note! This code can also be run within Microsoft Excel VBA

3.7. B2B E-nomination system – Web testing page

The goal of the "B2B" protocol is to allow to send automatically the CIM XML documents using a BRP System that uses the HTTPS "POST" command as described in the section here above.

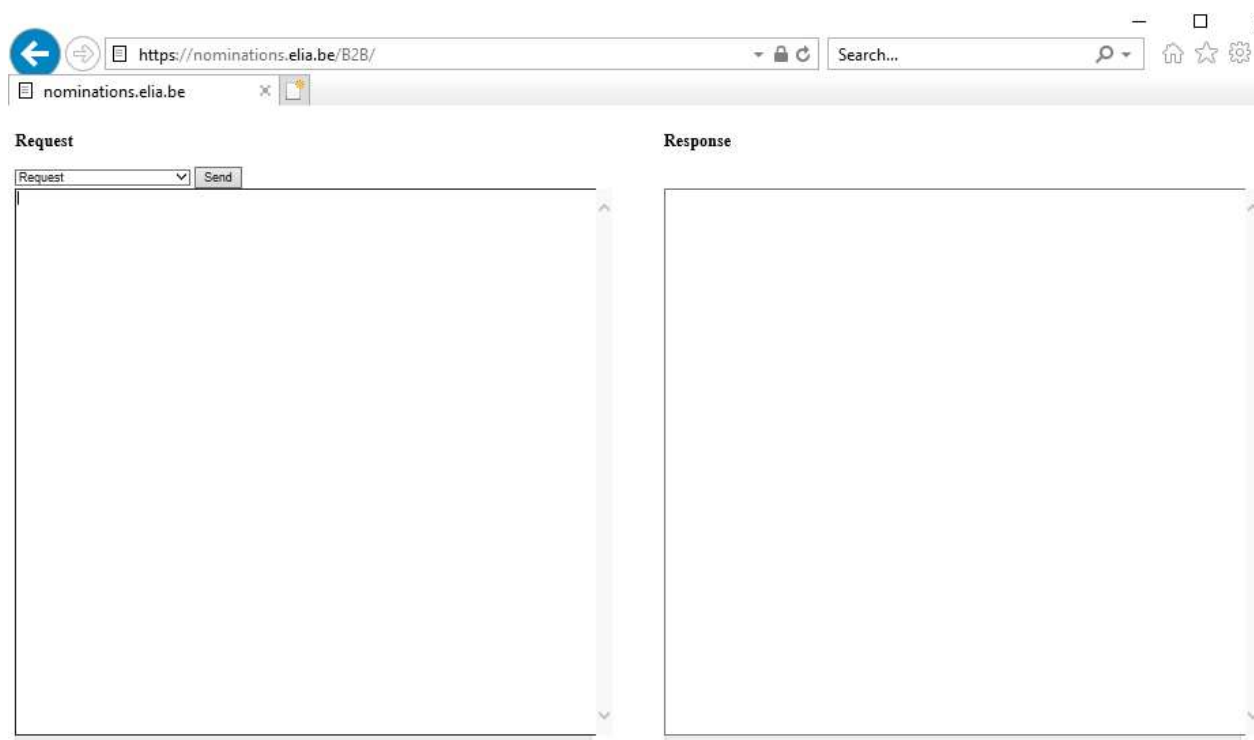
However, it is possible also to send a CIM XML document by using your web browser and going on a specific web page on the E-Nomination website, accessible using the user id and password that are provided by Elia

Elia web page where the B2B messages can be reached on your web browser:

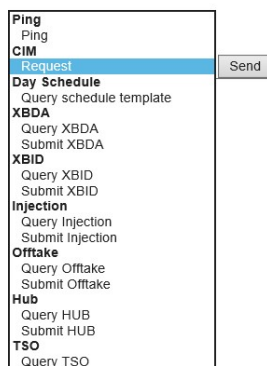
| Address | Remark |
|---|---|
| https://nominationsdemo.elia.be/B2B/ | Web page allowing to test or send messages to Elia test B2B E-nomination system |
| https://nominations.elia.be/B2B/ | Web page allowing to test or send messages to Elia B2B E-nomination system |

Note! A special user id only available for the demonstration B2B web site testing page can be furnished on request to the Elia 'Energy Scheduling Office' (adress available at the beginning of this implementation guide)

This web page allows the user to enter the CIM XML message:



Please note that the Request text box must be 'CIM > Request'



Note! A first useful test is to use the 'Message generation tool' (see "7.4 Using the Message Generation Tool " p 43) to create a CIM XML message. Then copy and paste this created CIM XML message on this web page and see the response of the Elia B2B E-nomination system.

This web page can be useful in following cases:

- Test a new CIM XML document and directly see the answer within your Web Browser from the (demo) Elia B2B E-nomination system
- Use as "fall back" solution if your system has a problem to connect to the Elia B2B E-nomination system but the CIM XML document is available

Chapter 4. Submitting nominations

This chapter is of interest to BRP *operational staff* who want to understand how familiar concepts are treated in the CIM standard for Elia Nominations.

This chapter describes the terms and concepts associated with submitting nominations in the terminology of the IEC CIM adopted standards.

The Elia terminology used in the management of nominations is set out in the E-nominations guide available freely on Elia Web at the address [e-nominationsguide.pdf](#)

A description of the general principles in terms of the CIM standard are set out in the IEC Standard Implementation Guides (see section 1.1 "CIM – Electronic Scheduling System (ESS)").

Nominations submitted to the Elia B2B E-nomination system must be written in XML (eXtensible Markup Language), so this chapter also contains an introduction to XML.

4.1. Schedule message

The nature of a nomination (being a request to transfer a series of quantities of energy between two parties or Areas/Domains over a specified period of time) have to be submitted by a certain time, be processed and eventually accepted. An overall description of the process is given in Chapter 5.

This section contains a review of the general principles involved in submitting nominations and relates the terms and parameters used by Elia in the e-nominations web site to the terms that are expressed in the IEC 62325-451-2 (see section 1.1 "CIM – Electronic Scheduling System (ESS)")

When submitting a nomination using the e-nominations web site the first step you would take would be to choose the type of nomination (International, Internal, Offtake or Injection).

- There is one type of "*Schedule_MarketDocument*" that can be used for **all** types of nominations

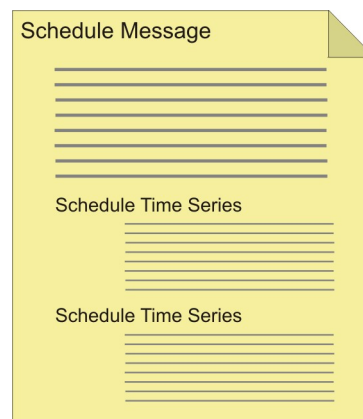
The characteristics that define the different types of nomination are determined by a collective group of fields and attributes within a single message type.

The actual nomination i.e. the series of energy quantities forms just a part of the Schedule message. This is referred to as the "Time Series". A single Schedule message can contain several Time Series.

The Schedule message itself contains a set of 'header' lines. All of these header lines define attributes that are common to all the time series.

Similarly each time series has a set of headers in addition to the actual energy values. These headers distinguish between the different time series in the same message.

Details on the parameters that can be specified for each time series are given in Chapter 8.



- Each Schedule message is identified by a **mRID** field.

This message **mRID** must be unique for any particular day. This means that you must use different identification for messages that are submitted on different days.

Similarly each time series within the message must have a unique identification.

- Each Schedule Time Series is identified by a **mRID** field

This is only required to be unique within this message.

4.1.1. The Parties involved

A Schedule (or Status Request) message must of course be submitted by a BRP.

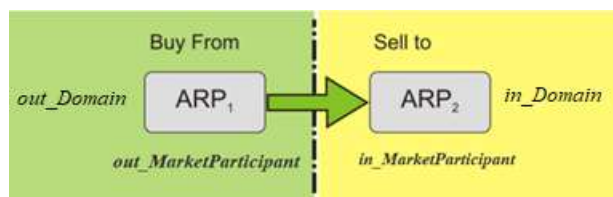
- The **BRP** submitting a nomination is identified by the **sender_MarketParticipant.mRID** field.
- Only the EIC is allowed to identify the sender_MarketParticipant.mRID and receiver_MarketParticipant.mRID

The BRP who is submitting a message is defined in the header of the message, but the corresponding BRP (counterparty) who is involved in the transfer is defined in the Schedule Time Series. Thus a single Schedule message can contain time schedules with different counterparty BRPs.

On the E-nomination web site, the pair of BRPs involved in the internal transfer are referred to as the "Buy from" party (who is selling the energy: the "Seller") and the "Sell to" party (who is buying the energy: the "Buyer").

In the IEC 62325-451-2, energy is transferred from the out_MarketParticipant.mRID, who is selling the energy (*sending it out*) to the in_MarketParticipant.mRID, who is buying the energy (*taking it in*).

- The **Sell to** party is referred to as the **in_MarketParticipant.mRID**: this is the **buyer**
- The **Buy from** party is referred to as the **out_MarketParticipant.mRID**: this is the **seller**
- Only the EIC is allowed to identify the out_MarketParticipant.mRID and in_MarketParticipant.mRID



A BRP is also associated with a business area (or domain). This is discussed in more detail in section 4.1.2 below.

The out_MarketParticipant is associated with an out_Domain and the in MarketParticipant is associated with an in_Domain.

A business area with which Electricity can be Exchanged can be regarded as:

- One European country; thus Belgium, France , United Kingdom or the Netherlands
- One part of a European Country managed by one TSO: Amprion is managing one Area from Germany

This business area can be either an in_Domain or an out_Domain.

The concerned BRPs in the other Domains are currently referred to as the Counterparty. When submitting a nomination, it is a mandatory requirement when submitting a Schedule message.

- When submitting an International nomination, the **Counterparty** BRPs in the Netherlands, France, UK, Area *must* be specified as an **in_MarketParticipant.mRID** or **out_MarketParticipant.mRID** and must be the same EIC as the BRP in Belgium

4.1.2. The Domains - business areas

All BRPs are associated with a business area in which they operate.

- The **domain** (*domain.mRID*) defines the business area associated with the message

The domain or Area is a concept that does apply in the Elia B2B E-nomination system. It defines the nature of the Schedule message as well as the business areas involved.

- 1) The "generic" domain is set in the Schedule message header and thus applies to all time series contained within the message. Because all the messages concern Belgium: the CIM element "domain.mRID" is always "10YBE-----2".

2) The definition of the business area being an in_Domain or an out_Domain is specified in the Time Series.

- For the equivalent of an Internal, Offtake or Injection nomination Belgium is the in_Domain or an out_Domain and is optional.
- For the equivalent of an International nomination then Belgium must be either the in_Domain or an out_Domain. In this case both elements are mandatory.

Note! On Elia e-nomination web site, international nominations are associated with a 'contract'. A contract is selected according to the border over which the energy is being transferred (with France (RTE), the Netherlands (TenneT), UK (National Grid) or Amprion in Germany) and the direction in which the transfer takes place.

In the CIM XML messages, all the information related to a 'contract' is defined by a combination of fields described in Chapter 6.

4.1.3. Dates and times

4.1.3.1. Created Date and Time

Each message must indicate when it was created on the sending System.

■ The **Message creation date and time** is referred to as a **createdDateTime**

The element 'createdDateTime' must be expressed in UTC with the format: "YYYY-MM-DDThh:mm:ssZ"

Where

- YYYY refers to the year,
- MM refers to the month
- DD refers to the day
- T is a fixed entry and indicates the start of the time definition
- hh refers to the hour
- mm refers to the minutes
- ss refers to the seconds
- Z is a fixed entry indicating that the Time Coordinate is UTC.

Example 1: 2020-05-10T13:00:00Z means then 10th of May 2020 at 15h in Belgian Summer local time

4.1.3.2. Daylight Saving Time

The daylight saving times (DST) issue is solved by the use of UTC time

Example 1: summer time to winter time in Belgium in 2020.

| ISO | Local time | UTC |
|---------------------|----------------|-------------------|
| 2020-10-25 00:00+02 | 0h | 2020-10-24T22:00Z |
| 2020-10-25 01:00+02 | 1h | 2020-10-24T23:00Z |
| 2020-10-25 02:00+02 | 2h | 2020-10-25T00:00Z |
| 2020-10-25 02:00+01 | at 3h it is 2h | 2020-10-25T01:00Z |
| 2020-10-25 03:00+01 | 3h | 2020-10-25T02:00Z |

Example 3: winter time to summer time in Belgium in 2020.

| ISO | Local time | UTC |
|---------------------|----------------|-------------------|
| 2020-03-29 00:00+01 | 0h | 2020-03-28T23:00Z |
| 2020-03-29 01:00+01 | 1h | 2020-03-29T00:00Z |
| 2020-03-29 03:00+02 | at 2h it is 3h | 2020-03-29T01:00Z |
| 2020-03-29 04:00+02 | 4h | 2020-03-29T02:00Z |

4.1.3.3. Execution date

A nomination always refers to a particular period: exactly one complete day (The 'Execution date' or 'Delivery date' or 'Delivery period' or 'operational period' or 'schedule_Time_Period') on which the energy will be transferred. It appears in different places in the CIM XML file.

- The **Execution date** is referred to as a **schedule_Time_Period.timeInterval**
-

All dates are referred to not by a single calendar date but by a Start time and an End time that are defined in UTC.

Every Schedule Time Series must refer to the same 'schedule_Time_Period.timeInterval' or 'execution date' within one Schedule message.

The time interval for the schedule must be defined as a

{start-date-time} and {end-date-time}

with both date-times being expressed in UTC.

The date to which the Schedule refers is the complete day in local time. i.e. starting at 0.00h local time and ending at 24:00 h (excluded).

The corresponding start and end time expressed in UTC depend therefore on whether it is summer time or winter time as explained in the above section:

- In summer time UTC time is Local time – 2 hours, therefore 0.00h local time in Belgium is 22.00h UTC on the previous day.
- In winter time UTC time is Local time – 1 hour, therefore 0.00 h local time in Belgium is 23.00h UTC on the previous day.

So to submit a Schedule for 15th June 2019 the following value would be required:

```
<schedule_Time_Period.timeInterval>
  <start>2019-06-14T22:00Z</start>
  <end>2019-06-15T22:00Z</end>
</schedule_Time_Period.timeInterval>
```

To submit a schedule for 15th November 2020 the following value would be required:

```
<schedule_Time_Period.timeInterval>
  <start>2020-11-14T23:00Z</start>
  <end>2020-11-15T23:00Z</end>
</schedule_Time_Period.timeInterval>
```

To submit a schedule for 25th October 2020 (The daylight saving times (DST) from summer to winter) the following value would be required:

```
<schedule_Time_Period.timeInterval>
  <start>2020-10-24T22:00Z</start>
  <end>2020-10-25T23:00Z </end>
</schedule_Time_Period.timeInterval>
```

To submit a schedule for 28th March 2021 (The daylight saving times (DST) from winter to summer) the following value would be required:

```
<schedule_Time_Period.timeInterval>
  <start>2021-03-27T23:00Z</start>
  <end>2021-03-28T22:00Z</end>
</schedule_Time_Period.timeInterval>
```

The same date / time period must be used for each of the Time series that are contained in the Schedule message

4.1.3.4. Time interval for a value

The time interval for which the energy transfer values are defined is hourly for international schedules and 15 minutes for others schedules.

- The **Time interval** for a value is referred to as a **resolution**
-

See also sections "8.3.4 Period elements" p 54 and "8.3.5 Number of "Point" " p 54

4.1.4. Access points: Injection point or Offtake point

The Access Points can be:

- *DSO Access Points*
- *CDS Access Points*
- *Access Points directly connected on the Elia grid*
- *Offshore Interconnection Point*

An injection or an offtake point, used in Injection or Offtake nomination is defined within the Schedule Time series.

- The **Injection point** and **Offtake point** are referred to by the CIM Element **marketEvaluationPoint.mRID**.
 - This element contains only the EAN of the Injection or Offtake Point.
-

The `marketEvaluationPoint` should thus be different for each time series contained within the message for the same type of nomination.

Note! To know the possible Access points you may use, do not hesitate to consult the Elia e-nomination web site.

4.2. XML messages

Messages as created by a business application must be written in eXtensible Markup Language (XML). This section contains a basic introduction to XML documents and their structure. This is not an extensive description of XML, but aims to provide operational staff with enough information to understand the important aspects of using XML in relation to CIM XML messages.

Note! Some important information about XML messages used by Elia B2B2 nomination system are also available in "8.3.1 Schedule message XML Namespace " p 50 .

Note! Each element must respect the indicated lower case or upper case letters.

4.2.1. XML overview

"XML" stands for eXtensible Markup Language and represents a simple but effective means of transferring data in an easily understandable and usable fashion. An XML message consists of a number of "elements" (set between tags) that define the nature of the data to be communicated. So for example a Schedule Time Series ("TimeSeries") contains elements called `<Point>` (within Period), which define each time interval contained in the time series.

4.2.2. A well-formed message

Each `<Point>` contains two other elements that define the position of the time interval in the entire time series as well as the quantity of power to be transferred during this interval.

```
<Point>
  <position/>1</position>
  <quantity>11</quantity>
</Point>
```

The start of the information is indicated by the opening tag `<Point>` and the end by the closing tag `</Point>` with the "/" in front

All the tags must be correctly opened and closed: Then the message is said to be “well-formed”. The use of properly nested start and end tags is essential if the XML message is to be read and interpreted correctly.

4.2.3. Data types

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

| Data type | Typical XML representation | Lexical pattern | Comments |
|---------------|---|---------------------------------------|--|
| int | -1, 0, 126789675, +100000 | <code>[-+]?[0-9]+</code> | The following constraints can be expressed: minimum value, maximum value. Values must be between -2147483648 and 2147483647. |
| decimal | -1.23, 12678967.543233, +100000.00, 210 | <code>[-+]?[0-9]+(\.[0-9]+)?</code> | The following constraints can be expressed: minimum value, maximum value. Values must have at most 28 digits |
| boolean | 1, 0, true, false | <code>true false</code> | |
| Date and time | See "4.1.3 Dates and times " p 17 | | |

4.2.4. A valid message

In order to be universally understood, an XML file must follow a predefined structure. The structure of the message is set out in a “Schema”. A Schema is also a type of XML message with the file extension “.XSD”. The Schema for a Schedule message dictates that an `<Point>` element must contain a `<position>` element followed by a `<quantity>` element. If one of these elements is missing or they are not presented in the correct order then the message is termed “invalid”: it does not comply with the Schema. An invalid message will always be rejected using an Acknowledgement message by the Elia B2B nomination system

The Schema that is used to control the content and structure of a XML message may be indicated in the header of the message

```
<Schedule_MarketDocument xmlns="urn:iec62325.351:tc57wg16:451-2:scheduledocument:5:1"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
```

Details on the Schemas and the namespace are given in Chapter 11.

Note! The Elia B2B E-nomination system does not return the difference: a message which is ‘invalid’ or ‘not well formed’ will receive an Acknowledge message indicating that it is “not well formed”

XML files are basically very simple and can be created in a text editor, but since the resulting message must be both valid (complying with the Schema) and well-formed (has matching start and end tags), it is recommended that a dedicated XML editor is used, that makes reference to the Schema and guides the user in creating valid messages

Note! The “Message Generation Tool” provides an easy and intuitive way of creating valid XML Schedule message. Refer to 6.4.4 for more information.

Note! The B2B web page allow to see easily the response of the Elia B2B nomination system without to have to build any System. Refer to “3.7 B2B E-nomination system – Web testing page ” p 13 for more information.

4.2.5. A correct XML message

The fact that your XML Schedule message is “valid” i.e. complies to all the rules of the Schema, does not necessarily mean that it is “correct” in terms of specifying your intended nomination. Not all the requirements of the XML message can be defined simply in terms of the elements it contains.

This is illustrated by considering the example below:

```
<Period>
  <timeInterval>
    <start>2012-09-18T22:00Z</start>
    <end>2012-09-19T22:00Z</end>
  </timeInterval>
  <resolution>PT15M</resolution>
  <Point>
    <position>1</position>
    <quantity>11</quantity>
  </Point>
</Period>
```

This sample of the file is well-formed (all the opening tags are matched with closing tags) and valid since it obeys all the rules of the Schema. But it is not correct from an operational point of view since only one interval of 15 minutes and one corresponding energy quantity is defined when the time series is defined for 24 hours (between 22:00h UTC time on 18th of September and the same time on the 19th of September 2012).

There are a number of “business” rules that must be applied to the Schedule message that are not controlled by the Schema. The Schema is an international standard and is being implemented in many European countries, it allows for a range of options that will satisfy all the TSOs in the world. In some cases Elia applies specific constraints on the messages that it will accept. For example Elia only accepts energy quantities specified in the units “MAW”, whereas the Schema allows for MWH, KWH and others.

As mentioned above there is only one Schedule message used for all types of nominations. The distinction between different types is managed by a combination of related and dependent fields.

Information on how the various elements are related is given in Chapter 6. To aid you in setting up messages that are well-formed, valid and correct, you can use the Message Generation Tool described to 6.4.4.

Chapter 5. The balancing process

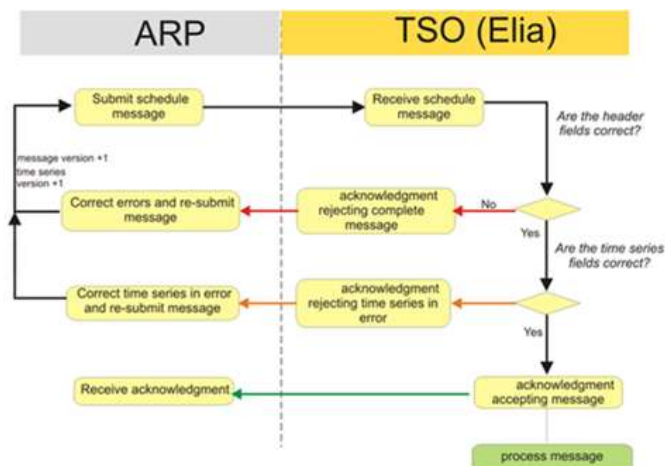
Schedule messages detailing energy transfer requirements (see Chapter 4) must be submitted to the TSO (Elia) just as nominations must be submitted via the Elia e-nomination web site. When the Elia B2B E-nomination system receives the CIM XML Schedule message, an Acknowledgement message is returned. The Acknowledgement indicates whether the message has been accepted (completely or partially) or rejected. This can only be regarded as a message delivery receipt, it does not mean that the proposed energy schedule has been confirmed by Elia. This constitutes phase 1 as described in section 5.1.

Once the Schedule message has been accepted, the accepted time series are stored as "nominations" in the Elia B2B nomination system, the assessment of the balance requirements can begin. If there is a problem in satisfying the requested transfers, a BRP can make a specific request for information on the status of their nominations. The BRP can then take corrective action before the cut-off time is reached. This constitutes phase 2 as described in section 5.2).

The BRP can request a Confirmation Report for a Specific execution date: See "Messages sent from the BRP to Elia " p 48

5.1. Phase 1 - Acceptance of the Schedule

This phase constitutes an initial assessment of the structure, syntax, validity and correctness of the Schedule message: It checks that the message is well-formed, valid and that all the rules relating to the message type have been correctly applied. It does not assess the energy quantities and does not imply a confirmation of the requested energy transfers.



When a BRP submits a Schedule message to the TSO (Elia) the message is checked to see that it is well-formed, valid (conforms to the Schema) and correct (satisfies the business rules laid down by Elia) (See section 4.2.) and can be accepted.

If an error is detected in the header fields of the Schedule message then the whole message is rejected, nothing is saved in the Elia B2B nomination system and an Acknowledgement message is returned indicating the problem. The BRP must correct the error and re-submit the message, with a higher message version number of the message and the time series.

If the header fields are correct but an error is detected in one of the time series, the message is 'partially' rejected, the correct nominations are saved and an Acknowledgement message is returned indicating the reference (mRID) of the time series within the message where the problems exist. Once again the BRP must correct the error and re-submit the message. The version number of the time series in error and the version number of the message must be increased.

Remark: If the message contains many time series, the time series that are valid and satisfy the business rules are accepted and saved in the Elia B2B nomination system. They have therefore not to be resent.

Note! When re-submitting the message, it is not necessary to re-submit the nominations that were already accepted.

When no errors are detected and the message is both well-formed, valid and correct, the message will be accepted. An Acknowledgement message is sent to indicate this. At this point the second phase can begin and an assessment of the balance situation can begin.

Details on the structure and content of Acknowledgment messages are given in section 9.2.

5.2. Phase 2 - Balance assessment

Once a Schedule CIM XML message has been (at least partially) accepted, the information necessary to balance a BRP's time series can be assessed.

A BRP can make a specific request using the CIM XML "Status Request" message to obtain:

- *An Anomaly CIM XML report (described in section "9.3 Anomaly report " p 72)*

which will list only time series contained in the Elia e-nomination web site that present balancing problems detected for the criteria's defined in the Status Request message.

- *A Confirmation CIM XML report (described in section "9.4 Confirmation report " p 78)*

which contains all the time series known in the Elia e-nomination web site for the criteria's defined in the Status Request message

There is just one Status Request message format that is used for requesting each type of report.

Details on all the fields contained in the Status Request message are listed in section "8.6

StatusRequest_MarketDocument " p 59

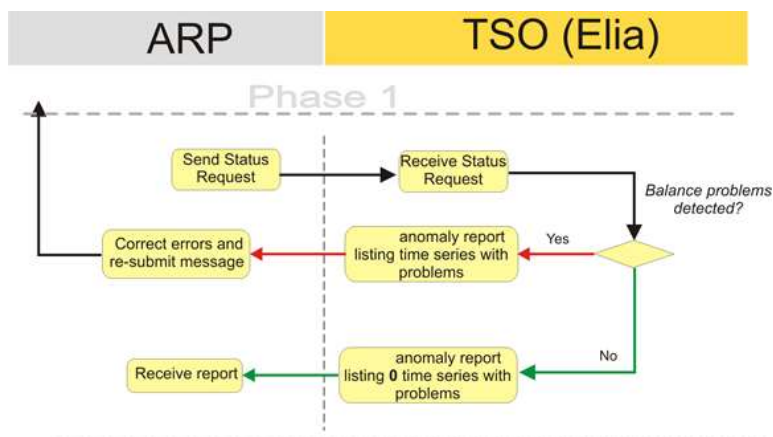
The Schema relating to the Status Request is referenced in chapter "Schemas and namespaces " p 86

Note! You can generate a Status Request example using the Elia "Message Generation Tool" as described in section "7.4 Using the Message Generation Tool " p 43, and test it using the "B2B web testing page" as described in "3.7 B2B E-nomination system – Web testing page " p 13 .

5.2.1. Anomaly report request

Figure below shows the process involved when the BRP requests an Anomaly report. If a balance problem has been detected for the criteria's defined in the Status Request message, an Anomaly report listing only the time series presenting errors will be issued. If there are no anomalies the Anomaly report will contain a header and no time series.

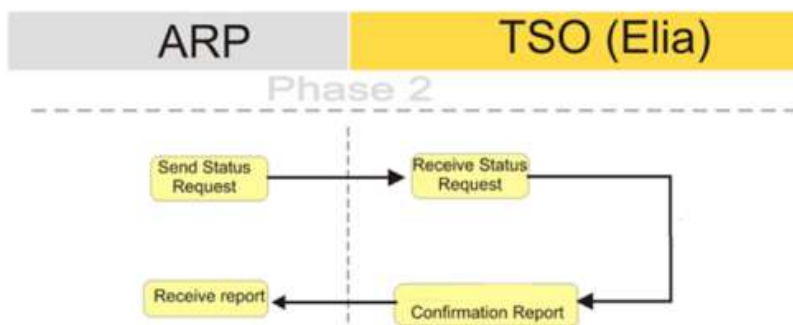
If the Status Request message contains issues, an Acknowledgement message is sent back



Note! Elia B2B E-nomination system never sends on its own initiative CIM XML messages. It only answers to the Schedule or Status Request messages sent by the BRP

5.2.2. Confirmation report request

Figure below represents the process involved when the BRP requests a Confirmation report.



Chapter 6. Schedule message: Nomination types

This chapter explains in an object approach the context of the messages to send to the Elia B2B E-nomination system.

Note! All power values must be positive. The direction being indicated, when necessary, by the elements 'in_MarketParticipant.mRID', 'out_MarketParticipant.mRID', 'in_Domain.mRID' or 'out_Domain.mRID' in the element 'TimeSeries'

This chapter shows in more detail how the elements are represented in the Schedule CIM XML message. It also highlights specific business conditions required for the messages to be correct.

This chapter is divided into four sections dealing with:

- Injection nominations (section 6.1)
- Offtake nominations (section 6.2)
- Internal nominations (section 6.3)
- International (external) nominations (section 6.4)

Note! Generation nominations are not treated by the Elia B2B nomination system.

Note! Once a nomination has been submitted and when a change to this nominated schedule has to be made, the BRP must submit a new version, i.e. a time series with the same elements but with a higher version number.

This nomination may be in the same schedule message (mRID) and sent with other time series or sent within a new Schedule message: The Elia B2B nomination system will validate that the given time series version is higher than the currently accepted nomination highest version number

6.1. Injection nomination Schedule

Details on how to create this specific type of message is given in section 7.5.

The complete list of all the elements required for a Schedule message are listed in Chapter 8.

For an Injection Schedule message: the marketEvaluationPoint.mRID time series field is mandatory.

This type of nomination requires the following values to be attributed to the fields shown below.

| Element | Value |
|---|-----------------------------------|
| Header series process.processType | A01 |
| Header sender_MarketParticipant.marketRole.type | A08 |
| Header Domain.mRID | 10YBE-----2 codingScheme="A01" |
| TimeSeries businessType | A01 |

Note! An Injection nomination can be created using the "Message Generation Tool" described in 6.4.4.

6.2. Offtake nomination

Details on how to create this specific type of message is given in section 7.6.

The complete list of all the fields required for a Schedule message are listed in Chapter 8.

For an Offtake Schedule message: the time series element marketEvaluationPoint.mRID is mandatory

This type of nomination requires the following values to be attributed to the fields shown below.

| Element | Value |
|---|-----------------------------------|
| Header process.processType | A01 |
| Header sender_MarketParticipant.marketRole.type | A08 |
| Header Domain.mRID | 10YBE-----2 codingScheme="A01" |
| TimeSeries businessType | A04 |

Note! An Offtake nomination can be created using the "Message Generation Tool" described in 6.4.4.

6.3. Internal nomination Schedule

Details on how to create this specific type of message is given in section 7.7.

The complete list of all the fields required for a Schedule message are listed in Chapter 8.

*For an Internal Schedule message:
the time series elements in 'MarketParticipant.mRID' and the
'out_MarketParticipant.mRID' time series fields are mandatory*

Note! An Internal nomination can be created using the "Message Generation Tool" described in 6.4.4.

6.3.1. Internal nomination Flex and Regular Parts

From 2021, Elia B2B E-nomination system and e-nomination web site will support that BRP sends "Flex" and/or "Regular" parts within their Internal Nominations. More information about these new concepts will be found within e-nomination guide or with your Key Account Manager.

Time series BusinessType could therefore have one of the following values:

| Internal Time series BusinessType code | Description |
|--|---|
| A02 | This is the standard Internal trade Type. The Internal nomination is a "classical" exchange of energy between 2 BRP's |
| Z02 | This is the "Regular" part of an Internal nomination within one exchange between 2 BRP. This part may be omitted or present. If it is present, then all values must be present |
| Z03 | This is the "Flexible" part of an Internal nomination. This part may be omitted or present. If it is present, then all values must be present |

Note! Only the total of Regular and Flex parts is compared against the CounterParty nomination.

Note! If you never use the new "flex" possibility, then continue to use the A02 businessType code. If there is only "regular" power exchange, then code Z02 and A02 are equivalent but Elia advises to use the code A02.

6.3.2. Day Ahead internal nomination Schedule

This type of nomination requires the following values to be attributed to the elements shown below.

| Element | Value |
|---|--|
| Header process.processType | A01 |
| Header sender_MarketParticipant.marketRole.type | A08 |
| Header Domain.mRID | 10YBE-----2 codingScheme="A01" |
| TimeSeries businessType | A02 or Z02 or Z03 See "6.3.1 Internal nomination Flex and Regular Parts " p 27 |

6.3.3. Intraday internal nomination Schedule

This type of nomination requires the following values to be attributed to the fields shown below.

| Element | Value |
|---|--|
| Header process.processType | A02 or A18 |
| Header sender_MarketParticipant.marketRole.type | A08 |
| Header domain.mRID | 10YBE-----2 codingScheme="A01" |
| TimeSeries businessType | A02 or Z02 or Z03 See "6.3.1 Internal nomination Flex and Regular Parts " p 27 |

6.4. International nomination Schedule

Details on how to create this specific type of message is given in section 7.8.

The complete list of all the elements required for a Schedule message are listed in Chapter 8 where it is indicated whether elements are mandatory or optional.

This section describes possible International nominations for FR, NL and DE nominations and all time frames.

Note! Currently, some International nominations and/or time frames are implicit and may not be introduced by the BRP. However on very specific case, they could be sent as a "fall-back protocol" and must be coordinated with Elia. This is why the following sections proposes all the possible cases, even if they are not currently allowed.

Please refer to your Elia Key Account manager or Elia Energy Scheduling Office (address on the cover of this implementation guide) to know what are the possible internal nominations that are currently allowed.

In addition to the elements listed in Chapter 8 and in the sub-sections below the following condition applies to all international Schedule messages:

*For an international Schedule message:
the 'TimeSeries' elements 'in_MarketParticipant.mRID' and the
'out_MarketParticipant.mRID' are mandatory and must use the same EIC*

When submitting an International nomination on the E-nomination web site, each type of International nomination is associated with a "Contract".

| | |
|-------------------------------|--|
| Contract | B-000-00-00001 Day Ahead Yearly from ELIA to TenneT |
| Counterparty: Accepted | B-000-00-00001 Day Ahead Yearly from ELIA to TenneT |
| Transaction ID: | B-000-00-00002 Day Ahead Monthly from ELIA to TenneT |
| | B-000-00-00003 Day Ahead Daily from ELIA to TenneT |

There is no direct equivalent to the contract in the CIM XML message. Instead the information linked with a contract is defined by a combination of fields. In each of the following sub-sections the item, as it would be selected from the Contract drop-down list in the E-nominations web site, is shown along with the corresponding fields and their values that need to be defined in the Schedule message.

Note! The energy flows from (going out) the business area identified by the element 'TimeSeries' out Domain to the business area identified by the element 'TimeSeries' in Domain (coming in)

Note! An International nomination can be created using the "Message Generation Tool" described in 6.4.4.

6.4.1. International transfer between BE and NL

This section describes all the specific elements values required for a Schedule message transferring energy between BE (Elia) and NL (TenneT). The two sub-sections refer to the two directions: From Elia to TenneT and from TenneT to Elia.

6.4.1.1. From Elia to TenneT

Contract : B-XXX-YY-00001 | Day Ahead Yearly | From Elia to TenneT

This type of nomination requires the following values to be attributed to the fields shown below.

| Element | Value |
|---|-----------------------------------|
| Header process.processType | A01 |
| Header sender_MarketParticipant.marketRole.type | A08 |
| Header domain.mRID | 10YBE-----2 codingScheme="A01" |
| TimeSeries businessType | A03 |
| TimeSeries in_Domain.mRID | 10YNL-----L codingScheme="A01" |
| TimeSeries out_Domain.mRID | 10YBE-----2 codingScheme="A01" |
| TimeSeries marketAgreement.type | A04 |

Contract : B-XXX-YY-00002 | Day Ahead Monthly | From Elia to TenneT

This type of nomination requires the following values to be attributed to the fields shown below.

| Element | Value |
|---|-----------------------------------|
| Header process.processType | A01 |
| Header sender_MarketParticipant.marketRole.type | A08 |
| Header domain.mRID | 10YBE-----2 codingScheme="A01" |
| TimeSeries businessType | A03 |
| TimeSeries in_Domain.mRID | 10YNL-----L codingScheme="A01" |

| | |
|---------------------------------|-----------------------------------|
| TimeSeries out_Domain.mRID | 10YBE-----2 codingScheme="A01" |
| TimeSeries marketAgreement.type | A03 |

Contract : B-XXX-YY-00003 | Day Ahead Daily | From Elia to TenneT

This type of nomination requires the following values to be attributed to the fields shown below.

| Element | Value |
|---|-----------------------------------|
| Header process.processType | A01 |
| Header sender_MarketParticipant.marketRole.type | A08 |
| Header domain.mRID | 10YBE-----2 codingScheme="A01" |
| TimeSeries businessType | A03 |
| TimeSeries in_Domain.mRID | 10YNL-----L codingScheme="A01" |
| TimeSeries out_Domain.mRID | 10YBE-----2 codingScheme="A01" |
| TimeSeries marketAgreement.type | A01 |

Contract : B-XXX-YY-00007 | Intraday | From Elia to TenneT

This type of nomination requires the following values to be attributed to the fields shown below.

| Element | Value |
|---|-----------------------------------|
| Header process.processType | A02 or A18 |
| Header sender_MarketParticipant.marketRole.type | A08 |
| Header domain.mRID | 10YBE-----2 codingScheme="A01" |
| TimeSeries businessType | A03 |
| TimeSeries in_Domain.mRID | 10YNL-----L codingScheme="A01" |
| TimeSeries out_Domain.mRID | 10YBE-----2 codingScheme="A01" |
| TimeSeries marketAgreement.type | A07 |

6.4.1.2. From TenneT to Elia

Contract : B-XXX-YY-00004 | Day Ahead Yearly | From TenneT to Elia

This type of nomination requires the following values to be attributed to the fields shown below.

| Element | Value |
|---|-------|
| Header process.processType | A01 |
| Header sender_MarketParticipant.marketRole.type | A08 |

| | |
|---------------------------------|-----------------------------------|
| Header domain.mRID | 10YBE-----2 codingScheme="A01" |
| TimeSeries businessType | A03 |
| TimeSeries in_Domain.mRID | 10YBE-----2 codingScheme="A01" |
| TimeSeries out_Domain.mRID | 10YNL-----L codingScheme="A01" |
| TimeSeries marketAgreement.type | A04 |

Contract : B-XXX-YY-00005 | Day Ahead Monthly | From TenneT to Elia

This type of nomination requires the following values to be attributed to the fields shown below.

| Element | Value |
|---|-----------------------------------|
| Header process.processType | A01 |
| Header sender_MarketParticipant.marketRole.type | A08 |
| Header domain.mRID | 10YBE-----2 codingScheme="A01" |
| TimeSeries businessType | A03 |
| TimeSeries in_Domain.mRID | 10YBE-----2 codingScheme="A01" |
| TimeSeries out_Domain.mRID | 10YNL-----L codingScheme="A01" |
| TimeSeries marketAgreement.type | A03 |

Contract : B-XXX-YY-00006 | Day Ahead Daily | From TenneT to Elia

This type of nomination requires the following values to be attributed to the fields shown below.

| Element | Value |
|---|-----------------------------------|
| Header process.processType | A01 |
| Header sender_MarketParticipant.marketRole.type | A08 |
| Header domain.mRID | 10YBE-----2 codingScheme="A01" |
| TimeSeries businessType | A03 |
| TimeSeries in_Domain.mRID | 10YBE-----2 codingScheme="A01" |
| TimeSeries out_Domain.mRID | 10YNL-----L codingScheme="A01" |
| TimeSeries marketAgreement.type | A01 |

Contract : B-XXX-YY-00008 | Intraday | From TenneT to Elia

This type of nomination requires the following values to be attributed to the fields shown below.

| Element | Value |
|---|-----------------------------------|
| Header process.processType | A02 or A18 |
| Header sender_MarketParticipant.marketRole.type | A08 |
| Header domain.mRID | 10YBE-----2 codingScheme="A01" |
| TimeSeries businessType | A03 |
| TimeSeries in_Domain.mRID | 10YBE-----2 codingScheme="A01" |
| TimeSeries out_Domain.mRID | 10YNL-----L codingScheme="A01" |
| TimeSeries marketAgreement.type | A07 |

6.4.2. International transfer between BE and FR

This section describes all the specific field values required for Schedule message transferring energy between Elia and RTE in terms of the contract types. The two sub-sections distinguishes between the two directions: From Elia to RTE and from RTE to Elia

6.4.2.1. From Elia to RTE

Contract : B-XXX-YY-00101 | Day Ahead Yearly | From Elia to RTE

This type of nomination requires that the following values be attributed to the fields shown below.

| Element | Value |
|---|---------------------------------------|
| Header process.processType | A01 |
| Header sender_MarketParticipant.marketRole.type | A08 |
| Header domain.mRID | 10YBE-----2 codingScheme="A01" |
| TimeSeries businessType | A03 |
| TimeSeries in_Domain.mRID | 10YFR-RTE-----C codingScheme="A01" |
| TimeSeries out_Domain.mRID | 10YBE-----2 codingScheme="A01" |
| TimeSeries marketAgreement.type | A04 |

Contract : B-XXX-YY-00102 | Day Ahead Monthly | From Elia to RTE

This type of nomination requires the following values to be attributed to the fields shown below.

| Element | Value |
|---|-----------------------------------|
| Header process.processType | A01 |
| Header sender_MarketParticipant.marketRole.type | A08 |
| Header domain.mRID | 10YBE-----2 codingScheme="A01" |
| TimeSeries businessType | A03 |

| | |
|---------------------------------|---------------------------------------|
| TimeSeries in_Domain.mRID | 10YFR-RTE-----C codingScheme="A01" |
| TimeSeries out_Domain.mRID | 10YBE-----2 codingScheme="A01" |
| TimeSeries marketAgreement.type | A03 |

Contract : B-XXX-YY-00103 | Day Ahead Daily | From Elia to RTE

This type of nomination requires the following values to be attributed to the fields shown below.

| Element | Value |
|---|---------------------------------------|
| Header process.processType | A01 |
| Header sender_MarketParticipant.marketRole.type | A08 |
| Header domain.mRID | 10YBE-----2 codingScheme="A01" |
| TimeSeries businessType | A03 |
| TimeSeries in_Domain.mRID | 10YFR-RTE-----C codingScheme="A01" |
| TimeSeries out_Domain.mRID | 10YBE-----2 codingScheme="A01" |
| TimeSeries marketAgreement.type | A01 |

Contract : B-XXX-YY-00107 | Intraday | From Elia to RTE

This type of nomination requires the following values to be attributed to the fields shown below.

| Element | Value |
|---|---------------------------------------|
| Header process.processType | A02 or A18 |
| Header sender_MarketParticipant.marketRole.type | A08 |
| Header domain.mRID | 10YBE-----2 codingScheme="A01" |
| TimeSeries businessType | A03 |
| TimeSeries in_Domain.mRID | 10YFR-RTE-----C codingScheme="A01" |
| TimeSeries out_Domain.mRID | 10YBE-----2 codingScheme="A01" |
| TimeSeries marketAgreement.type | A07 |

6.4.2.2. From RTE to Elia

Contract : B-XXX-YY-00104 | Day Ahead Yearly | From RTE to Elia

This type of nomination requires the following values to be attributed to the fields shown below.

| Element | Value |
|---------|-------|
|---------|-------|

| | |
|---|---------------------------------------|
| Header process.processType | A01 |
| Header sender_MarketParticipant.marketRole.type | A08 |
| Header domain.mRID | 10YBE-----2 codingScheme="A01" |
| TimeSeries businessType | A03 |
| TimeSeries in_Domain.mRID | 10YBE-----2 codingScheme="A01" |
| TimeSeries out_Domain.mRID | 10YFR-RTE-----C codingScheme="A01" |
| TimeSeries marketAgreement.type | A04 |

Contract : B-XXX-YY-00105 | Day Ahead Monthly | From RTE to Elia

This type of nomination requires that the following values be attributed to the fields shown below.

| Element | Value |
|---|---------------------------------------|
| Header process.processType | A01 |
| Header sender_MarketParticipant.marketRole.type | A08 |
| Header domain.mRID | 10YBE-----2 codingScheme="A01" |
| TimeSeries businessType | A03 |
| TimeSeries in_Domain.mRID | 10YBE-----2 codingScheme="A01" |
| TimeSeries out_Domain.mRID | 10YFR-RTE-----C codingScheme="A01" |
| TimeSeries marketAgreement.type | A03 |

Contract : B-XXX-YY-00106 | Day Ahead Daily | From RTE to Elia

This type of nomination requires the following values to be attributed to the fields shown below.

| Element | Value |
|---|---------------------------------------|
| Header process.processType | A01 |
| Header sender_MarketParticipant.marketRole.type | A08 |
| Header domain.mRID | 10YBE-----2 codingScheme="A01" |
| TimeSeries businessType | A03 |
| TimeSeries in_Domain.mRID | 10YBE-----2 codingScheme="A01" |
| TimeSeries out_Domain.mRID | 10YFR-RTE-----C codingScheme="A01" |
| TimeSeries marketAgreement.type | A01 |

Contract : B-XXX-YY-00108 | Intraday | From RTE to Elia

This type of nomination requires the following values to be attributed to the fields shown below.

| Element | Value |
|---|---------------------------------------|
| Header process.processType | A02 or A18 |
| Header sender_MarketParticipant.marketRole.type | A08 |
| Header domain.mRID | 10YBE-----2 codingScheme="A01" |
| TimeSeries businessType | A03 |
| TimeSeries in_Domain.mRID | 10YBE-----2 codingScheme="A01" |
| TimeSeries out_Domain.mRID | 10YFR-RTE-----C codingScheme="A01" |
| TimeSeries marketAgreement.type | A07 |

6.4.3. International transfer between BE and Germany (Area managed by Amprion TSO)

This section describes all the specific field values required for Schedule message transferring energy between Elia and Amprion in terms of the contract types. The two sub-sections distinguishes between the two directions: From Elia to Amprion and from Amprion to Elia

6.4.3.1. From Elia to Amprion

Contract : B-XXX-YY-00401 | Day Ahead Yearly | From Elia to Amprion

This type of nomination requires that the following values be attributed to the fields shown below.

| Element | Value |
|---|--|
| Header process.processType | A01 |
| Header sender_MarketParticipant.marketRole.type | A08 |
| Header domain.mRID | 10YBE-----2 codingScheme="A01" |
| TimeSeries businessType | A03 |
| TimeSeries in_Domain.mRID | 10YDE-RWENET---I codingScheme="A01" |
| TimeSeries out_Domain.mRID | 10YBE-----2 codingScheme="A01" |
| TimeSeries marketAgreement.type | A04 |

Contract : B-XXX-YY-00402 | Day Ahead Monthly | From Elia to Amprion

This type of nomination requires the following values to be attributed to the fields shown below.

| Element | Value |
|---|-------|
| Header process.processType | A01 |
| Header sender_MarketParticipant.marketRole.type | A08 |

| | |
|---------------------------------|--|
| Header domain.mRID | 10YBE-----2 codingScheme="A01" |
| TimeSeries businessType | A03 |
| TimeSeries in_Domain.mRID | 10YDE-RWENET---I codingScheme="A01" |
| TimeSeries out_Domain.mRID | 10YBE-----2 codingScheme="A01" |
| TimeSeries marketAgreement.type | A03 |

Contract : B-XXX-YY-00403 | Day Ahead Daily | From Elia to Amprion

This type of nomination requires the following values to be attributed to the fields shown below.

| Element | Value |
|---|--|
| Header process.processType | A01 |
| Header sender_MarketParticipant.marketRole.type | A08 |
| Header domain.mRID | 10YBE-----2 codingScheme="A01" |
| TimeSeries businessType | A03 |
| TimeSeries in_Domain.mRID | 10YDE-RWENET---I codingScheme="A01" |
| TimeSeries out_Domain.mRID | 10YBE-----2 codingScheme="A01" |
| TimeSeries marketAgreement.type | A01 |

Contract : B-XXX-YY-00407 | Intraday | From Elia to Amprion

This type of nomination requires the following values to be attributed to the fields shown below.

| Element | Value |
|---|--|
| Header process.processType | A02 or A18 |
| Header sender_MarketParticipant.marketRole.type | A08 |
| Header domain.mRID | 10YBE-----2 codingScheme="A01" |
| TimeSeries businessType | A03 |
| TimeSeries in_Domain.mRID | 10YDE-RWENET---I codingScheme="A01" |
| TimeSeries out_Domain.mRID | 10YBE-----2 codingScheme="A01" |
| TimeSeries marketAgreement.type | A07 |

6.4.3.2. From Amprion to Elia

Contract : B-XXX-YY-00404 | Day Ahead Yearly | From Amprion to Elia

This type of nomination requires the following values to be attributed to the fields shown below.

| Element | Value |
|---|--|
| Header process.processType | A01 |
| Header sender_MarketParticipant.marketRole.type | A08 |
| Header domain.mRID | 10YBE-----2 codingScheme="A01" |
| TimeSeries businessType | A03 |
| TimeSeries in_Domain.mRID | 10YBE-----2 codingScheme="A01" |
| TimeSeries out_Domain.mRID | 10YDE-RWENET---I codingScheme="A01" |
| TimeSeries marketAgreement.type | A04 |

Contract : B-XXX-YY-00405 | Day Ahead Monthly | From Amprion to Elia

This type of nomination requires that the following values be attributed to the fields shown below.

| Element | Value |
|---|--|
| Header process.processType | A01 |
| Header sender_MarketParticipant.marketRole.type | A08 |
| Header domain.mRID | 10YBE-----2 codingScheme="A01" |
| TimeSeries businessType | A03 |
| TimeSeries in_Domain.mRID | 10YBE-----2 codingScheme="A01" |
| TimeSeries out_Domain.mRID | 10YDE-RWENET---I codingScheme="A01" |
| TimeSeries marketAgreement.type | A03 |

Contract : B-XXX-YY-00406 | Day Ahead Daily | From Amprion to Elia

This type of nomination requires the following values to be attributed to the fields shown below.

| Element | Value |
|---|-----------------------------------|
| Header process.processType | A01 |
| Header sender_MarketParticipant.marketRole.type | A08 |
| Header domain.mRID | 10YBE-----2 codingScheme="A01" |
| TimeSeries businessType | A03 |
| TimeSeries in_Domain.mRID | 10YBE-----2 codingScheme="A01" |

| | |
|---------------------------------|--|
| TimeSeries out_Domain.mRID | 10YDE-RWENET---I codingScheme="A01" |
| TimeSeries marketAgreement.type | A01 |

Contract : B-XXX-YY-00408 | Intraday | From Amprion to Elia

This type of nomination requires the following values to be attributed to the fields shown below.

| Element | Value |
|---|--|
| Header process.processType | A02 or A18 |
| Header sender_MarketParticipant.marketRole.type | A08 |
| Header domain.mRID | 10YBE-----2 codingScheme="A01" |
| TimeSeries businessType | A03 |
| TimeSeries in_Domain.mRID | 10YBE-----2 codingScheme="A01" |
| TimeSeries out_Domain.mRID | 10YDE-RWENET---I codingScheme="A01" |
| TimeSeries marketAgreement.type | A07 |

6.4.4. International transfer between BE and United Kingdom

This section describes all the specific field values required for Schedule message transferring energy between Elia and Amprion in terms of the contract types. The two sub-sections distinguishes between the two directions: From Elia to Amprion and from Amprion to Elia

6.4.4.1. From Elia to National Grid

Contract : B-XXX-YY-00301 | Day Ahead Yearly | From Elia to National Grid

This type of nomination requires that the following values be attributed to the fields shown below.

| Element | Value |
|---|-----------------------------------|
| Header process.processType | A01 |
| Header sender_MarketParticipant.marketRole.type | A08 |
| Header domain.mRID | 10YBE-----2 codingScheme="A01" |
| TimeSeries businessType | A03 |
| TimeSeries in_Domain.mRID | 10YGB-----A codingScheme="A01" |
| TimeSeries out_Domain.mRID | 10YBE-----2 codingScheme="A01" |
| TimeSeries marketAgreement.type | A04 |

Contract : B-XXX-YY-00302 | Day Ahead Monthly | From Elia to National Grid

This type of nomination requires the following values to be attributed to the fields shown below.

| Element | Value |
|---------|-------|
|---------|-------|

| | |
|---|-----------------------------------|
| Header process.processType | A01 |
| Header sender_MarketParticipant.marketRole.type | A08 |
| Header domain.mRID | 10YBE-----2 codingScheme="A01" |
| TimeSeries businessType | A03 |
| TimeSeries in_Domain.mRID | 10YGB-----A codingScheme="A01" |
| TimeSeries out_Domain.mRID | 10YBE-----2 codingScheme="A01" |
| TimeSeries marketAgreement.type | A03 |

Contract : B-XXX-YY-00303 | Day Ahead Daily | From Elia to National Grid

This type of nomination requires the following values to be attributed to the fields shown below.

| Element | Value |
|---|-----------------------------------|
| Header process.processType | A01 |
| Header sender_MarketParticipant.marketRole.type | A08 |
| Header domain.mRID | 10YBE-----2 codingScheme="A01" |
| TimeSeries businessType | A03 |
| TimeSeries in_Domain.mRID | 10YGB-----A codingScheme="A01" |
| TimeSeries out_Domain.mRID | 10YBE-----2 codingScheme="A01" |
| TimeSeries marketAgreement.type | A01 |

Contract : B-XXX-YY-00307 | Intraday | From Elia to National Grid

This type of nomination requires the following values to be attributed to the fields shown below.

| Element | Value |
|---|-----------------------------------|
| Header process.processType | A02 or A18 |
| Header sender_MarketParticipant.marketRole.type | A08 |
| Header domain.mRID | 10YBE-----2 codingScheme="A01" |
| TimeSeries businessType | A03 |
| TimeSeries in_Domain.mRID | 10YGB-----A codingScheme="A01" |
| TimeSeries out_Domain.mRID | 10YBE-----2 codingScheme="A01" |
| TimeSeries marketAgreement.type | A07 |

6.4.4.2. From National Grid to Elia

Contract : B-XXX-YY-00304 | Day Ahead Yearly | From National Grid to Elia

This type of nomination requires the following values to be attributed to the fields shown below.

| Element | Value |
|---|-----------------------------------|
| Header process.processType | A01 |
| Header sender_MarketParticipant.marketRole.type | A08 |
| Header domain.mRID | 10YBE-----2 codingScheme="A01" |
| TimeSeries businessType | A03 |
| TimeSeries in_Domain.mRID | 10YBE-----2 codingScheme="A01" |
| TimeSeries out_Domain.mRID | 10YGB-----A codingScheme="A01" |
| TimeSeries marketAgreement.type | A04 |

Contract : B-XXX-YY-00305 | Day Ahead Monthly | From National Grid to Elia

This type of nomination requires that the following values be attributed to the fields shown below.

| Element | Value |
|---|-----------------------------------|
| Header process.processType | A01 |
| Header sender_MarketParticipant.marketRole.type | A08 |
| Header domain.mRID | 10YBE-----2 codingScheme="A01" |
| TimeSeries businessType | A03 |
| TimeSeries in_Domain.mRID | 10YBE-----2 codingScheme="A01" |
| TimeSeries out_Domain.mRID | 10YGB-----A codingScheme="A01" |
| TimeSeries marketAgreement.type | A03 |

Contract : B-XXX-YY-00306 | Day Ahead Daily | From National Grid to Elia

This type of nomination requires the following values to be attributed to the fields shown below.

| Element | Value |
|---|-----------------------------------|
| Header process.processType | A01 |
| Header sender_MarketParticipant.marketRole.type | A08 |
| Header domain.mRID | 10YBE-----2 codingScheme="A01" |
| TimeSeries businessType | A03 |

| | |
|---------------------------------|-----------------------------------|
| TimeSeries in_Domain.mRID | 10YBE-----2 codingScheme="A01" |
| TimeSeries out_Domain.mRID | 10YGB-----A codingScheme="A01" |
| TimeSeries marketAgreement.type | A01 |

Contract : B-XXX-YY-00308 | Intraday | From National Grid to Elia

This type of nomination requires the following values to be attributed to the fields shown below.

| Element | Value |
|---|-----------------------------------|
| Header process.processType | A02 or A18 |
| Header sender_MarketParticipant.marketRole.type | A08 |
| Header domain.mRID | 10YBE-----2 codingScheme="A01" |
| TimeSeries businessType | A03 |
| TimeSeries in_Domain.mRID | 10YBE-----2 codingScheme="A01" |
| TimeSeries out_Domain.mRID | 10YGB-----A codingScheme="A01" |
| TimeSeries marketAgreement.type | A07 |

Chapter 7. Creating sample schedules

This chapter describes how to use the Elia “Message Generation Tool” to generate sample Schedule and Status Request messages.

7.1. Purpose

The “Message Generation Tool” enables you to input the data required for all types of nomination and to see the corresponding CIM XML code generated.

The objective of this tool is to aid operational in understanding the structure and format of a Schedule or a Status Request message based on the same data accepted by the Elia e-nomination web site.

The resulting CIM XML messages will be of assistance to IT departments who need to develop a business application to generate these messages.

The resulting CIM XML can be copied and pasted on the Elia B2B testing page . See "3.7 B2B E-nomination system – Web testing page " p 13

***Note!** The primary purpose of this tool is educational. It is not designed to be used as an operational tool to generate real nominations.*

***Note!** Some simplification has been applied in view of its educational purpose: all possible cases could be not available*

7.2. Disclaimers

Elia provides this tool as an educational device. Please note therefore that Elia is not responsible for the correct functioning of this tool.

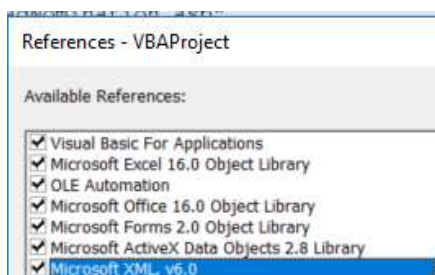
If the macros (VBA) are not authorized on your computer or by your company, please do not use this tool.

The code (Excel VBA) is freely available within Excel file (file MessageGenerationTool.xlsm). Therefore no help is provided to support this tool on your site

7.3. Pre-requisites

The following conditions apply:

- The tool can only be used on Microsoft Windows 10 operating systems.
- The “Message Generation Tool” is in the Excel file “MessageGenerationTool.xlsm”
- This tool is available from :
https://nominations.elia.be/NominationsPrivate/doc_b2b/MessageGenerationTool.xlsm
which can be accessed using your BRP user id and password.
- The Excel file “MessageGenerationTool.xlsm” uses VBA macros. You must therefore follow any instructions given by your company or the Excel application to enable the macros to be run. If the macros (VBA) are not authorized on your Windows computer, please do not use this tool.
- The regional setting for your computer must be set to UK English. This is so that the correct interpretation of number values and dates is made.
- Numbers must be entered using the point (.) as the decimal separator and without commas (,)
E.g. 12345.6 NOT 12,345.6
- There are a set of libraries that are required:



- If your computer does not have some of these libraries, please do not use this tool

7.4. Using the Message Generation Tool

7.4.1. Starting up

1. Download the file *MessageGenerationTool.xlsm* from the location given above and open the file.
2. Follow any instruction given by Excel or your company in order to run the macros in the Excel file.
3. Click on the "Read-me" tab and enter the information required (see section 7.4.2).

Note! If any of the conditions defined in the section "7.3 Pre-requisites" p 42 are not met, then you will have to write yourself the CIM XML messages. You should therefore bypass this chapter;

7.4.2. Read-me sheet

The "Message Generation Tool" contains an initial worksheet entitled "Read-me". This sheet provides basic instructions and the opportunity to enter data that is common to all types of messages.

All fields that are "yellow" must be filled in.

The data required on this sheet are :

- Your BRP EIC code.
- Execution date (also called the delivery date)
This is automatically filled in to be the current date + 1 day.
You can enter another date however by specifying the required DD /MM /YYYY
This will appear in the CIM XML message in various fields in UTC (see below).
- Creation time
This is automatically generated to be the time when the Excel file is opened or refreshed.
This will appear in the CIM XML file as the "createdDateTime" in UTC (see below).
- The directory where the generated CIM XML message will be created
The CIM XML files generated by this tool can be viewed and saved in the location specified here. The directory entered in this field must exist and must be reachable. The User must have a read/write/modify access on this directory.

Once these fields have been completed, you can click on one of the tabs that corresponds to the type of nomination that you wish to generate. More detailed information on each of these is given in the corresponding sections 7.5 to 7.8

7.4.3. Viewing messages

When all the required fields have been completed for the type of nomination a number of operations are available:

[Create an additional time series]

When you click on this button a second time series will be created within the same message. It is a copy of the first. The parameters defined in the message header fields must apply to ALL time series, however the parameters contained within the time series fields can be modified. Exactly which fields can be modified is explained for each of the message types.

[Remove last additional time series]

This will remove the last time additional series that was added using the button above (if there are more than 1 time series)

[View XML File]

When you click on this button, the complete CIM XML file (as shown in the Excel sheet) is created and

saved in the directory specified on the "Read-me" sheet defined in section 7.4.2 and will be displayed in a separate window. The name of the file will be based on the fields in the file.

Note! You can copy this message and paste it on the B2B testing page. Refer to "3.7 B2B E-nomination system – Web testing page " p 13

7.4.4. Dates and times – UTC

The Execution date is defined on the "Read me" sheet. It is set automatically by Excel to be the current date + 1 day. You can however enter, on the "Read me" sheet, any future date required by specifying the day, month and year. The Creation date is also set automatically to be the current time.

For any explanation about the UTC date and time, see section "4.1.3 Dates and times" p 17

7.4.5. Daylight saving

The Execution date and the corresponding Time Schedule Interval normally refers to a 24-hour day except for twice a year.

Based on the information available in 2020:

- On the last Sunday in March there are only 23 hours. This day begins at 23:00h on the Saturday and ends at 22:00h on the Sunday.
- On the last Sunday in October, there are 25 hours. This day begins at 22:00h on the Saturday and ends at 23:00h on the Sunday.

Example of schedule_Time_Period.timeInterval for a Day of 25 hours can be found in section "8.4 Schedule_MarketDocument example" p 54.

7.5. Injection nomination

To create a schedule message that corresponds to an Injection nomination you need to enter the following information:

- 1) *All the entry fields on the "Read-me" sheet (see section 7.4.2 above).*
- 2) *The version number – this must be 1 initially.
This same number will be used for the time series version number too.*
- 3) *The EAN code that identifies the Injection point (CIM XML element marketEvaluationPoint.mRID). Each time series is associated with one and only one injection point. You can create additional time series each with a different injection point: See section "4.1.4 Access points: Injection point or Offtake point " p 19*
- 4) *The schedule values. One value must be entered for each '15 minute' interval.*

Once all the values for a single time series have been entered you can click any of the buttons provided as described in section 7.4.3.

Note! To know the EAN code of injection points you can use, consult the related web page on Elia e-nomination web site.

7.6. Offtake nomination

To create a schedule message that corresponds to an Offtake nomination you need to enter the following information:

- 1) *All the entry fields on the "Read-me" sheet (see section 7.4.2 above).*
- 2) *The version number – this must be 1 initially.
This same number will be used for the time series version number too.*
- 3) *The EAN code that identifies the "Offtake point" (CIM XML element marketEvaluationPoint.mRID). Each time series is associated with one and only one offtake point. You can create additional time series each with a different offtake point: See section "4.1.4 Access points: Injection point or Offtake point " p 19*
- 4) *The schedule values. One value must be entered for each '15 minute' interval.*

Once all the values for a single time series have been entered you can click any of the buttons provided as described in section 7.4.3.

Note! To know the EAN code of offtake points you can use, consult the related web page on Elia e-nomination web site.

7.7. Internal nomination

To create a schedule message that corresponds to an Internal nomination you need to enter the following information:

- 1) All the entry fields on the "Read-me" sheet (see section 7.4.2 above).
- 2) The version number – this must be 1 initially.
This same number will be used for the time series version number too.
- 3) Select whether you are creating a Day Ahead or an Intraday schedule.
- 4) In the "Buy from" field, enter the EIC code of the BRP who is selling the energy.
- 5) In the "Sell to" field, enter the EIC code of the BRP who is buying the energy.
Of course, one and only one of these fields must contain your own BRP EIC code.
- 6) The schedule values. One value must be entered for each 15 minute interval.

Once all the values for a single time series have been entered you can click any of the buttons provided as described in section 7.4.3.

7.8. External (International) nomination

Note! International nominations are only used on specific cases.

To create a schedule message that corresponds to an International nomination you need to enter the following information:

- 1) All the entry fields on the "Read-me" sheet (see section 7.4.2 above).
- 2) The version number – this must be 1 initially.
This same number will be used for the time series version number too.
- 3) Select whether you are creating a Day Ahead or an Intraday schedule
- 4) Select the type of contract required.
Be very careful to select the correct type of contract that matches the domain you have chosen.
If the contract type does not match the requirements for the domain and time period (Intraday or Day Ahead) your message will be incorrect and rejected by Elia.

The CIM XML Schedule_MarketDocument requires that you specify whether a capacity contract to transfer energy across the selected border exists. If such a contract exists, then you could specify the contract identification (see step 6) below).

Note! The Elia e-nomination web site does not require this information.

More details and examples of the parties involved in International transfers are given in Chapter 4.

- 5) Enter the EIC code of the Counterparty BRP in the other country.
(The Elia e-nomination system did not require this information, but it is a mandatory condition in the new system.) Currently: this BRP EIC must be the same as the BRP EIC in Belgium.
- 6) Enter the capacity contract identification. This information is provided by the Capacity Allocator.
If not available it can stay be empty.
- 7) The schedule values. One value must be entered for each 60-minute interval.

Once all the values for a single time series have been entered you can click any of the buttons provided as described above in section 7.4.3.

7.9. Status Request

A Status Request message can be submitted in order to obtain:

- An Anomaly report
- A Confirmation report.
- Each of these reports is discussed in detail in Chapter 9.

The overall balancing process, indicating when Anomaly and Confirmation reports are requested is outlined in Chapter 5. The information referenced in the report matches the time period of the original Status Request Message.

It refers to the content of the Elia B2B nomination system at the request time and not to a particular Schedule message.

To create a Status Request message you need to enter the following information:

- 1) All the entry fields on the "Read-me" sheet (see section 7.4.2 above).
- 2) Select the type of Message you are requesting.
- 3) You must restrict the information contained in the requested report by specifying a specific process type.

| Process type | Nomination type |
|--------------|--|
| A01 | Day Ahead |
| A02 or A18 | Intraday International 2 codes A02 and A18 are equivalent and may be used in the same way) |

- 4) You must restrict the information contained to a specific Execution date (exactly one day).
- 5) You can restrict the information contained in the requested report by specifying a specific Business type as listed below.

| Business type | Attribute value |
|--------------------------|--------------------------------------|
| Injection | A01 |
| Offtake | A04 |
| Internal | A02 |
| Internal (Regular part) | Z02 |
| Internal (Flexible part) | Z03 |
| International | A03 |
| All | Not necessary to indicate this field |

Note! New codes 'Z02' and 'Z03' will be only available in 2021

- 6) You can restrict the information contained in the requested report by specifying a specific Domain as listed below.

| Domain | Attribute value |
|------------------------|------------------|
| France | 10YFR-RTE-----C |
| Germany (Amprion area) | 10YDE-RWENET---I |
| United Kingdom | 10YGB-----A |
| Netherlands | 10YNL-----L |

Note! *If you requested international nominations and did not specify an Domain, then all Domain are taken into account.*

Once all the values have been entered you can click any of the buttons provided as described in section 7.4.3

Note! *An error could be returned indicating that the size of the returned report is too large. Elia advises to have Schedule message is maximum 50 TimeSeries elements*

Chapter 8. Messages sent from the BRP to Elia

This chapter describes the CIM XML elements that are contained within the `Schedule_MarketDocument` and `StatusRequest_MarketDocument`. It lists each of the elements and indicates particular conditions that relate to each of them specifically in the Elia context.

More information can be found in the CIM Implementation guides from IEC: See "1.1 CIM – Electronic Scheduling System (ESS)" p5

This chapter is aimed primarily at developers of BRP's business applications to generate messages:

- *Schedule_MarketDocument (nominations) described in section 8.3*
- *StatusRequest_MarketDocument described in section 8.6.*

Note! *Elia B2B E-nomination system never sends on its own initiative CIM XML messages. It always and only answers to the Schedule or Status Request messages sent by the BRP*

8.1. The Schemas

Details about the CIM XML Schemas (XSD) used to create this message are listed in Chapter 11.

Note! *It is important that a copy of the Schemas referenced in Chapter 11 are used, since these contain essential specific codes required by Elia.*

8.2. General rules

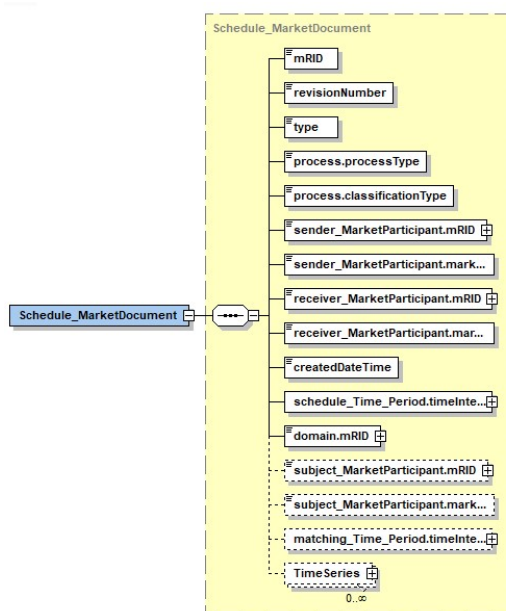
Here below some general rules that apply to all exchanged messages:

- *All messages must have a "UTF-8" encoding.*
- *Only following characters are allowed:*
 - *26 letters (uppercase or lowercase)*
 - *10 digits*
 - *Special characters: <, >, -, _ , &, ;*
- *Only the EIC are accepted for the MarketParticipant.*
- *Only the EAN is accepted for the marketEvaluationPoint.mRID for the Injection or the Offtake point.*
- *The CIM XML standard does not define a limit to the number of TimeSeries allowed in one message (sharing the same header elements). However, in order to keep performances and response time acceptable, Elia reserves the right to set a limit to this number and will refuse any message having more than 50 TimeSeries.*
The number 50 is based on the experience, Elia could set a higher or lower number of TimeSeries based on new experiences.
- *Any element indicated as optional in the section below can be:*
 - *Omitted completely*
 - *Only the element and no value*
 - *Defined completely with any data*

In any case, it is not treated by the Elia B2B nomination system

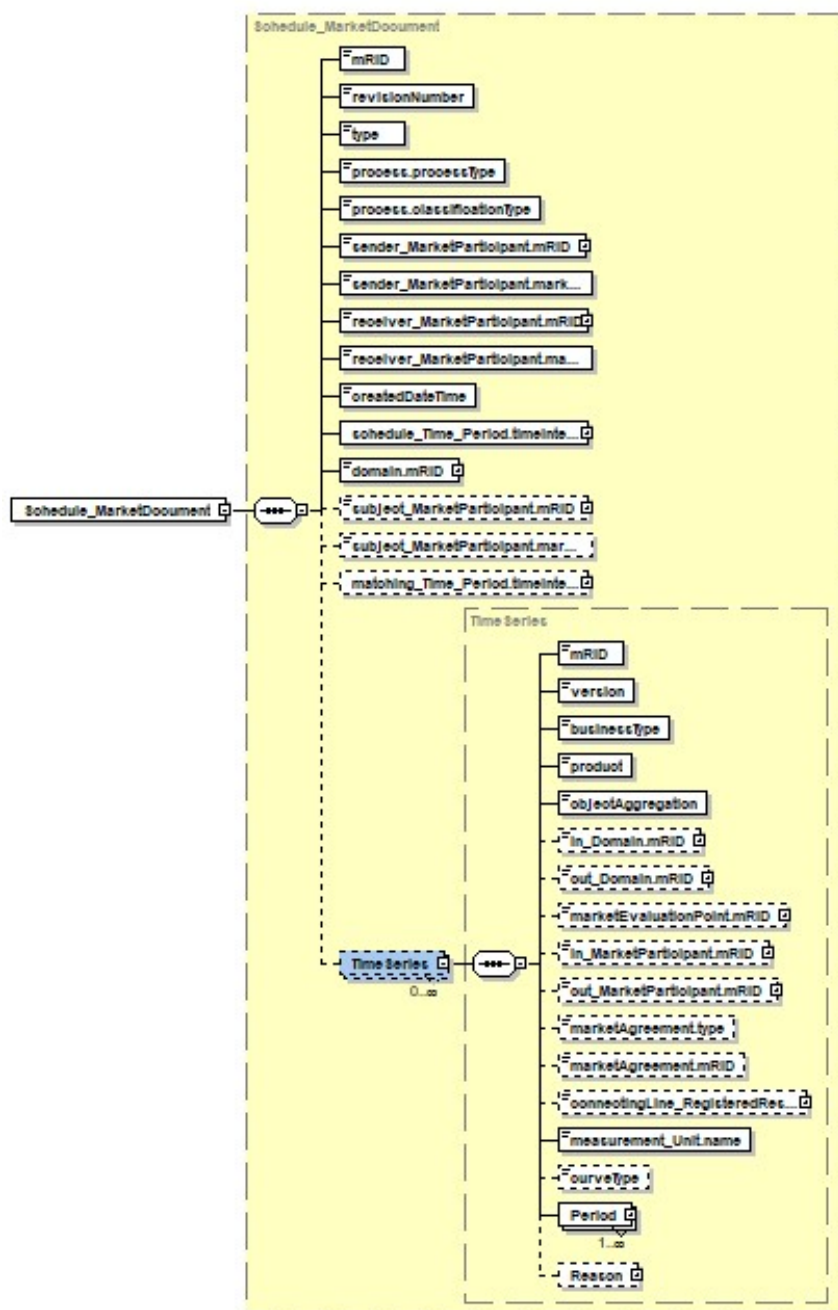
8.3. Schedule_MarketDocument

A `Schedule_MarketDocument` is the CIM XML message that must be used in order to submit the nominations. The structure of this message is described in detail in the IEC 62325-451-2 (see section 1.1 "CIM – Electronic Scheduling System (ESS)"); A schematic representation is shown below. It consists of a number of message header elements and a list of 'TimeSeries' elements



The message header elements apply to all the 'TimeSeries' that are contained within the message. Many of these header elements are mandatory and need to be expressed using pre-defined attribute values. The header elements are listed and described in section 8.3.2.

A Schedule message can contain a number of 'TimeSeries' (see related remark in 8.2 "General rules"). In addition to the actual series of energy values that comprise the nomination, the 'TimeSeries' also contains a series of general header elements. The information contained within the 'TimeSeries' header elements can be varied within each 'TimeSeries'. The overall structure is shown below.



The header elements for the schedule 'TimeSeries' are listed and described in section 8.3.3. The elements used for the Period element of the message are listed and described in section 8.3.4

8.3.1. Schedule message XML Namespace

The namespace for all XML elements is `urn:iec62325.351:tc57wg16:451-2:scheduledocument:5:1`

Please note that standards namespaces are also advised :

- `xmlns:xsd="http://www.w3.org/2001/XMLSchema"`
- `xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"`

8.3.2. Schedule message header elements

This section lists the elements that are used in the Schedule message header, shown in Figure above.

Note!

- All the values indicated here below are specific for a nomination submitted to Elia B2B nomination system by a BRP.
- Each of these elements are described in the IEC 62325-451-2 (see section 1.1 “CIM – Electronic Scheduling System (ESS)”).

| Element name | Meaning | Remarks |
|--|---|---|
| mRID | Unique identifier for the message. | This element is Mandatory. It must be unique for any day. This is a free string with maximum 60 characters Only following characters are accepted: lowercase ASCII letters, uppercase ASCII letters, digits and hyphen |
| revisionNumber | Version number for the message. | This element is Mandatory. It must be an increasing integer starting at 1. The version number of the message must match the highest version of a time series contained in the message This number can be maximum 999 |
| type | Code for the type of message. | This element is Mandatory. The value must be “A01”. |
| process.processType | Code for the process type. | This element is Mandatory. The values required for specific message types are listed in Chapter 6. |
| process.classificationType | Defines whether the schedule is an aggregation or a classification. | This element is Mandatory. The value must be “A01”. |
| sender_MarketParticipant.mRID | It consists of a unique identifier for the sender of the message (BRP) | This element is Mandatory. The value scheme must be “A01”. The value must be the BRP EIC code. |
| sender_MarketParticipant.marketRole.type | Identifies the role of the sender | This element is Mandatory. The value must be “A08”. |
| receiver_MarketParticipant.mRID | Identifies the receiver of the message. This element is Mandatory. It consists of a coding scheme entry and a unique identifier for the receiver (Elia). | The value must be “10X1001A1001A094” The value of the coding scheme must be “A01”. |
| receiver_MarketParticipant.marketRole.type | Identifies the role of the receiver | This element is Mandatory. The value must be “A04” |

| | | |
|-----------------------------------|---|--|
| createdDateTime | Date and time at which the message was submitted | This element is Mandatory. Time values must be expressed in UTC See section "4.1.3.1 Created Date and Time " p 17 |
| schedule_Time_Period.timeInterval | The Execution date: The start and end times to which the current schedule refers | This element is Mandatory. Both the start and end time must be expressed in UTC. See section "4.1.3.3 Execution date " p 18 |
| domain.mRID | The domain to which the current schedule refers | This element is Mandatory. The value must be "10YBE-----2" The value of the coding scheme must be "A01". |

8.3.3. Schedule TimeSeries elements

This section lists the elements that are used in the ScheduleTimeSeries header, shown in Figure above
Note!

- Each of these elements are described in the IEC 62325-451-2 (see section 1.1 "CIM – Electronic Scheduling System (ESS)")
- Lists of the enumerated attribute values that the elements are available. See appendix A.

| Element name | Meaning | Remarks |
|-------------------|--|---|
| mRID | Sender's identification of the time series. | This element is Mandatory. It must be unique for the day and all messages. This can be a free string with max of 60 characters. |
| version | The version number of the time series | This element is Mandatory. It must be an increasing integer starting at 1. It must be the same version as the header revisionNumber. This number can be maximum 999 |
| businessType | Identifies the trading nature of the time series | This element is Mandatory. The code values required for specific message types are listed in Chapter 6. |
| product | Identifies the type of energy | This element is Mandatory. The value must be "8716867000016" |
| objectAggregation | Identifies how the object is aggregated | This element is Mandatory. The value must be "A03" |
| in_Domain.mRID | The Domain / business area where the product is taken in (delivered) | This element is Mandatory when the schedule corresponds to an International nomination The values required for specific message types are given in Chapter 6. For other nominations types, it can be omitted. |

| | | |
|----------------------------|---|---|
| out_Domain.mRID | The Domain/business area from where the product is being taken out (supplied) | This element is Mandatory for International nominations The code values required for specific message types are given in Chapter 6. For other nominations types, it is optional and can be omitted. |
| marketEvaluationPoint.mRID | EAN code identifying the injection or offtake point. | This element is Mandatory when the schedule corresponds to an Injection or an Offtake nomination (see Chapter 6). This value must be the EAN code of the Injection or Offtake point. For other nominations types, it can be omitted. |
| in_MarketParticipant.mRID | Party taking in the product (buyer) | This element is Mandatory for Internal or International nominations (see Chapter 6). It corresponds to the party buying the energy. The value must be the EIC code of that party. For other nominations types, it can be omitted. |
| out_MarketParticipant.mRID | Party sending out the product (seller) | This element is Mandatory for Internal or International nominations. It corresponds to the party selling the energy. The value must be the EIC code of that party. For other nominations types, it can be omitted. |
| marketAgreement.type | Defines conditions for capacity | This element is Mandatory for International nominations. See Chapter 6 for more details. For other nominations types, it can be omitted. |
| marketAgreement.mRID | Identifies agreement for capacity allocation | This element is Mandatory for International nominations if a capacity contract exists This is the identification obtained from the Capacity Allocator. For other nominations types or if capacity contract is not available, it can be omitted. |
| measurement_Unit.name | Unit in which the quantities are expressed | This element is Mandatory. The value must be "MAW" |

Table 1 Schedule message time series elements

8.3.4. Period elements

This section lists the elements that are used in the Period element of the ScheduleTimeSeries.

Note! Each of these elements are described in the IEC 62325-451-2 (see section 1.1 “CIM – Electronic Scheduling System (ESS)”)

| Element name | Meaning | Remarks |
|--------------|---|---|
| timeInterval | The start and the end time for the series | This must be equal to the Schedule time interval (see section 8.3.2) |
| resolution | Amount of time for each interval in which a data value is defined | Elia requires that the resolution must be defined in minutes. For an International nomination, the resolution must be 60 minutes: The value must be “PT60M” or “PT1H” For other types the resolution must be 15 minutes: The values must be “PT15M” |
| Point | One Point is required for each {Time Interval / resolution}. | See "8.3.5 Number of “Point” " p 54 |
| position | Relative position of the interval in the schedule time interval | A series of integer values for each of the intervals. |
| quantity | The quantity of the product | The quantity must be expressed in MAW. |

Table 2 Schedule message period elements

8.3.5. Number of “Point”

For international nomination, the Interval must be 1 hour (60 minutes).

For all other types of nominations, the interval must be a quarter of an hour (15 minutes).

Daylight saving must be taken into account which means that the following cases are possible.

| Type of day | Number of quarter-hourly values | Number of hourly values |
|--|--|--|
| Normal day | 96 'Point' with 'position' values from 1 to 96 | 24 'Point' with 'position' values from 1 to 24 |
| Day light change from summer to winter | 100 'Point' with 'position' values from 1 to 100 | 25 'Point' with 'position' values from 1 to 25 |
| Day light change from winter to summer | 92 'Point' with 'position' values from 1 to 92 | 23 'Point' with 'position' values from 1 to 23 |

Table 3 Number of intervals in a day

8.4. Schedule_MarketDocument example

Following example describes a Schedule message with one Internal Day Ahead time series for Execution date 28/10/2018 (Daily Switching time from summer to winter time) concerning BRP 11X-BRP-EXAMPLEX who is buying energy from BRP 22XBRP-EXAMPLE26

```
<Schedule_MarketDocument xmlns="urn:iec62325.351:tc57wg16:451-2:scheduledocument:5:1"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
```

```

<mRID>12345678901234567890123</mRID>
<revisionNumber>2</revisionNumber>
<type>A01</type>
<process.processType>A01</process.processType>
<Process.classificationType>A01</Process.classificationType>
<Sender_MarketParticipant.mRID codingScheme="A01"> 11X-BRP-
EXAMPLEX</sender_MarketParticipant.mRID>
<sender_MarketParticipant.marketRole.type>A08</sender_MarketParticipant.marketRole.type>
<receiver_MarketParticipant.mRID
codingScheme="A01">10X1001A1001A094</receiver_MarketParticipant.mRID>
<receiver_MarketParticipant.marketRole.type>A04</receiver_MarketParticipant.marketRole.type>
e>

<createdDateTime>2018-10-26T17:31:00Z</createdDateTime>
<schedule_Time_Period.timeInterval>
    <start>2018-10-27T22:00Z</start>
    <end>2018-10-28T23:00Z</end>
</schedule_Time_Period.timeInterval>
<domain.mRID codingScheme="A01">10YBE-----2</domain.mRID>
<TimeSeries>
    <mRID>31</mRID>
    <version>2</version>
    <businessType>A02</businessType>
    <product>8716867000016</product>
    <objectAggregation>A03</objectAggregation>
    <in_MarketParticipant.mRID codingScheme="A01"> 11X-BRP-
EXAMPLEX</in_MarketParticipant.mRID>
    <out_MarketParticipant.mRID codingScheme="A01">22XBRP-
EXAMPLE26</out_MarketParticipant.mRID>
    <measurement_Unit.name>MAW</measurement_Unit.name>
    <Period>
        <timeInterval>
            <start>2018-10-27T22:00Z</start>
            <end>2018-10-28T23:00Z</end>
        </timeInterval>
        <resolution>PT15M</resolution>
        <Point>
            <position>1</position>
            <quantity>11</quantity>
        </Point>
        ... other <Point> elements ...
        <Point>
            <position>100</position>
            <quantity>22</quantity>
        </Point> <!-- due to DST, there are 100 and not 96 'Point' -->
    </Period>
</TimeSeries>
</Schedule_MarketDocument>

```

8.5. Schedule_MarketDocument with more than 1 type of nomination - example

It is possible to send for the same process (Day Ahead or Intraday) many types of nominations

- *Offtake, Injection, internal Day Ahead, External (Day Ahead) for the process Day Ahead*

- *Internal Intraday and Cross Border Intraday for the process Intraday*

In the example below, the BRP 11X-BRP-EXAMPLEX sends one Schedule_MarketDocument Day Ahead to Elia (10X1001A1001A094) . This document contains:

- *1 Injection on Access Point 541453104512600683*
- *1 International From Belgium to Germany*
- *1 offtake on Access Point 541453104512600713*
- *1 Internal from 11X-BRP-EXAMPLEX to 22XBRPC-----R*

```
<Schedule_MarketDocument xmlns="urn:iec62325.351:tc57wg16:451-2:scheduledocument:5:1"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="urn:iec62325.351:tc57wg16:451-2:scheduledocument:5:1
https://nedil.elia.be/namespaces/public/scheduling/ELIA-iec62325-451-2-schedule_v5_1.xsd">
  <mRID>1_20202420200203135745</mRID>
  <revisionNumber>1</revisionNumber>
  <type>A01</type>
  <process.processType>A01</process.processType>
  <process.classificationType>A01</process.classificationType>
  <sender_MarketParticipant.mRID codingScheme="A01"> 11X-BRP-
EXAMPLEX</sender_MarketParticipant.mRID>
  <sender_MarketParticipant.marketRole.type>A08</sender_MarketParticipant.marketRole.type>
  <receiver_MarketParticipant.mRID
codingScheme="A01">10X1001A1001A094</receiver_MarketParticipant.mRID>
  <receiver_MarketParticipant.marketRole.type>A04</receiver_MarketParticipant.marketRole.typ
e>
  <createdDateTime>2020-02-03T13:57:45Z</createdDateTime>
  <schedule_Time_Period.timeInterval>
    <start>2020-02-03T23:00Z</start>
    <end>2020-02-04T23:00Z</end>
  </schedule_Time_Period.timeInterval>
  <domain.mRID codingScheme="A01">10YBE-----2</domain.mRID>
  <TimeSeries>
    <mRID>14_InjectDA__20200203135745</mRID>
    <version>6</version>
    <businessType>A01</businessType>
    <product>8716867000016</product>
    <objectAggregation>A03</objectAggregation>
    <!-- No InArea in a InjectDA-->
    <!-- No OutArea in a InjectDA-->
    <marketEvaluationPoint.mRID
codingScheme="A10">541453104512600683</marketEvaluationPoint.mRID>
    <!-- in_MarketParticipant.mRID in a InjectDA-->
    <!-- out_MarketParticipant.mRID in a InjectDA-->
    <!-- No contract in a InjectDA-->
    <measurement_Unit.name>MAW</measurement_Unit.name>
    <Period>
      <timeInterval>
        <start>2020-02-03T23:00Z</start>
        <end>2020-02-04T23:00Z</end>
      </timeInterval>
      <resolution>PT15M</resolution>
      <Point>
        <position>1</position>
        <quantity>9.9</quantity>
      </Point>
```



```

        <Point>
            <position>96</position>
            <quantity>6.4</quantity>
        </Point>
    </Period>
</TimeSeries>
<TimeSeries>
    <mRID>14_XBDA__20200203135745</mRID>
    <version>6</version>
    <businessType>A03</businessType>
    <product>8716867000016</product>
    <objectAggregation>A03</objectAggregation>
    <in_Domain.mRID codingScheme="A01">10YDE-RWENET---I</in_Domain.mRID>
    <out_Domain.mRID codingScheme="A01">10YBE-----2</out_Domain.mRID>
    <!-- No marketEvaluationPoint.mRID in a XBDA-->
    <in_MarketParticipant.mRID codingScheme="A01"> 11X-BRP-
EXAMPLEX</in_MarketParticipant.mRID>
    <out_MarketParticipant.mRID codingScheme="A01"> 11X-BRP-
EXAMPLEX</out_MarketParticipant.mRID>
    <!-- Daily nom B-012-04-00403-->
    <marketAgreement.type>A01</marketAgreement.type>
    <marketAgreement.mRID/>
    <measurement_Unit.name>MAW</measurement_Unit.name>
    <Period>
        <timeInterval>
            <start>2020-02-03T23:00Z</start>
            <end>2020-02-04T23:00Z</end>
        </timeInterval>
        <resolution>PT15M</resolution>
        <Point>
            <position>1</position>
            <quantity>855.7</quantity>
        </Point>
        ... etc ...
        <Point>
            <position>96</position>
            <quantity>849.3</quantity>
        </Point>
    </Period>
</TimeSeries>
<TimeSeries>
    <mRID>14_LOADDA__20200203135745</mRID>
    <version>6</version>
    <businessType>A04</businessType>
    <product>8716867000016</product>
    <objectAggregation>A03</objectAggregation>
    <!-- No InArea in a LOADDA-->
    <!-- No OutArea in a LOADDA-->
    <marketEvaluationPoint.mRID
codingScheme="A10">541453104512600713</marketEvaluationPoint.mRID>
    <!-- in_MarketParticipant.mRID in a LOADDA-->
    <!-- out_MarketParticipant.mRID in a LOADDA-->

```

```

<!-- No contract in a LOADDA-->
<measurement_Unit.name>MAW</measurement_Unit.name>
<Period>
    <timeInterval>
        <start>2020-02-03T23:00Z</start>
        <end>2020-02-04T23:00Z</end>
    </timeInterval>
    <resolution>PT15M</resolution>
    <Point>
        <position>1</position>
        <quantity>7.3</quantity>
    </Point>
    ... etc ...
    <Point>
        <position>96</position>
        <quantity>8.2</quantity>
    </Point>
</Period>
</TimeSeries>
<TimeSeries>
    <mRID>12_HUB__20200203135746</mRID>
    <version>6</version>
    <businessType>A02</businessType>
    <product>8716867000016</product>
    <objectAggregation>A03</objectAggregation>
    <!-- No InArea in a HUB-->
    <!-- No OutArea in a HUB-->
    <!-- No marketEvaluationPoint.mRID in a HUB-->
    <in_MarketParticipant.mRID codingScheme="A01">22XBRPC-----
R</in_MarketParticipant.mRID>
    <out_MarketParticipant.mRID codingScheme="A01"> 11X-BRP-
EXAMPLEX</out_MarketParticipant.mRID>
    <measurement_Unit.name>MAW</measurement_Unit.name>
    <Period>
        <timeInterval>
            <start>2020-02-03T23:00Z</start>
            <end>2020-02-04T23:00Z</end>
        </timeInterval>
        <resolution>PT15M</resolution>
        <Point>
            <position>1</position>
            <quantity>0</quantity>
        </Point>
        ... etc ...
        <Point>
            <position>96</position>
            <quantity>0</quantity>
        </Point>
    </Period>
</TimeSeries>
</Schedule_MarketDocument>

```

The related response from the Elia B2B nomination system is given on section "9.2.3 Acknowledgement message example " p 71

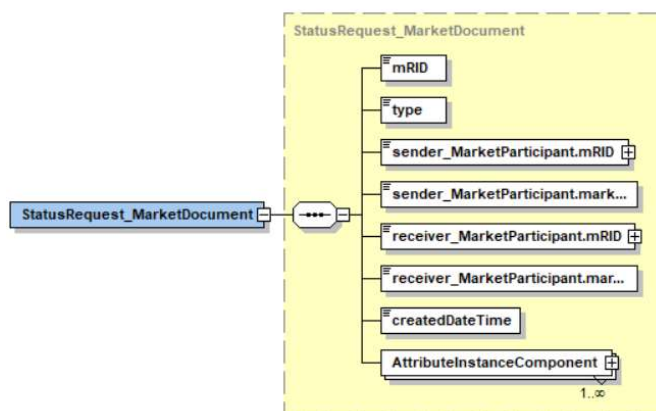
8.6. StatusRequest_MarketDocument

A StatusRequest_MarketDocument can be submitted in order to obtain:

- an Anomaly report.
- a Confirmation report

The overall process of sending and receiving messages is described in Chapter 5.

The Schema associated with the StatusRequest_MarketDocument is:



Note! Please note that to avoid Denial Of Service, the Elia B2B nomination system answers only to any request from the same BRP at a maximum frequency. This frequency can change without notice. Any request above this frequency is ignored. Currently, only one StatusRequest message each 5 minutes is allowed.

8.6.1. StatusRequest message XML Namespace

The namespace for all XML elements is `urn:iec62325.351:tc57wg16:451-5:statusrequestdocument:4:0`

Please note that standards namespaces are also advised :

- `xmlns:xsd="http://www.w3.org/2001/XMLSchema"`
- `xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"`

8.6.2. StatusRequest message header elements

The StatusRequest_MarketDocument contains the following elements.

Note! Each of these elements are described in the IEC 62325-451-5 (see section 1.1 “CIM – Electronic Scheduling System (ESS)”))

| Element name | Meaning | Remarks |
|-------------------------------|---|--|
| mRID | A unique identification for the Status Request message. | This element is Mandatory. It must be unique for any day. This is a free string with maximum of 60 characters Only following characters are accepted: lowercase ASCII letters, uppercase ASCII letters, digits and hyphen |
| type | A code identifying the message. | This element is Mandatory. The value must be A60 |
| sender_MarketParticipant.mRID | Element identifying the sender of the message | This element is Mandatory. It consists of a coding scheme entry |

| | | |
|--|--|---|
| | | and a unique identifier for the sender. The value must be the BRP EIC code. The value of the code scheme must be "A01". |
| sender_MarketParticipant.marketRole.type | Identifies the role of the sender. | This element is Mandatory. The value of the code must be "A08" |
| receiver_MarketParticipant.mRID | Identifies the receiver of the message. | This element is Mandatory. It consists of a coding scheme entry and a unique identifier for the receiver (Elia). The value must be "10X1001A1001A094" The value of the coding scheme must be "A01". |
| receiver_MarketParticipant.marketRole.type | Identifies the role of the receiver | This element is Mandatory. The value must be "A04" |
| createdDateTime | Date and time at which the Status Request was submitted | This element is Mandatory. Time values must be expressed in UTC See "4.1.3.1 Created Date and Time " p 17 |
| attributeInstanceComponent | Defines the type of report that is sent in response to the Status Request. | Multiple instances of this element are possible and some are Mandatory. Possible values are given in section 8.6.3 |

Table 4 Status Request message elements

8.6.3. AttributeInstanceComponent

The StatusRequest_MarketDocument may contain the following AttributeInstanceComponent
There is no order mandatory for the list of these AttributeInstanceComponent

8.6.3.1. The RequestedReturnDocumentType

The RequestedReturnDocumentType defines the type of report to receive (see "Messages response from Elia to the BRP" p 69 for information about these types of reports)

| Property | Description | | | | |
|---------------------|--|--------|------|---------------------|-----|
| Attribute name | RequestedReturnDocumentType | | | | |
| Cardinality | Optional. Default is 'Confirmation report' A07 | | | | |
| CodingScheme | Z02 | | | | |
| Attribute Value | <div>Possible values:</div> <table> <tr> <th>Report</th><th>Code</th></tr> <tr> <td>Confirmation report</td><td>A07</td></tr> </table> | Report | Code | Confirmation report | A07 |
| Report | Code | | | | |
| Confirmation report | A07 | | | | |

| | | |
|--|----------------|-----|
| | Anomaly report | A16 |
|--|----------------|-----|

Example: the request for the Confirmation report is:

```
<AttributeInstanceComponent>
  <attribute>RequestedReturnDocumentType</attribute>
  <attributeValue codingScheme="Z02">A07</attributeValue>
</AttributeInstanceComponent>
```

8.6.3.2. The ProcessType

Restricts the contents of the report to a specific process

| Attribute name | ProcessType | | | | | | | | |
|--------------------------------------|---|--------------|------|-----------|-----|-----------|------------|--------------------------------------|-----|
| Cardinality | Optional. Default is "A01" (day Ahead) | | | | | | | | |
| CodingScheme | Z03 | | | | | | | | |
| Attribute Value | Possible values: <table> <tr> <th>Process Type</th><th>Code</th></tr> <tr> <td>Day Ahead</td><td>A01</td></tr> <tr> <td>Intra Day</td><td>A02 or A18</td></tr> <tr> <td>Aggregated (Day Ahead and Intra Day)</td><td>A17</td></tr> </table> | Process Type | Code | Day Ahead | A01 | Intra Day | A02 or A18 | Aggregated (Day Ahead and Intra Day) | A17 |
| Process Type | Code | | | | | | | | |
| Day Ahead | A01 | | | | | | | | |
| Intra Day | A02 or A18 | | | | | | | | |
| Aggregated (Day Ahead and Intra Day) | A17 | | | | | | | | |

Example: the request for the Intra Day process type is:

```
<AttributeInstanceComponent>
  <attribute>ProcessType</attribute>
  <attributeValue codingScheme="Z03">A02</attributeValue>
</AttributeInstanceComponent>
```

8.6.3.3. The DateAndOrTime

Defines the Execution Date: the time interval to be contained in the report (exactly one day is accepted)

| Attribute name | DateAndOrTime |
|-----------------|---|
| Cardinality | Mandatory |
| CodingScheme | Z01 |
| Attribute Value | Possible values: exactly one date The date value is expressed with a simplified format "YYYY-MM-DD" (with added "0" if needed) |

Example: the request for the 5/1/2018 is:

```
<AttributeInstanceComponent>
  <attribute>DateAndOrTime</attribute>
  <attributeValue codingScheme="Z01">2018-01-05</attributeValue>
</AttributeInstanceComponent>
```

8.6.3.4. The BusinessType

The possible nomination type

| Property | Description |
|----------------|--------------|
| Attribute name | BusinessType |

| Cardinality | Optional. Default is "All" | | | | | | | | | | | | | | | | | | | | | | |
|---|---|-----------------|------|----------------------|-----|--------------------|-----|-----------------------------|-----|---|-----|---|-----|--------------------------|-----|-----|-----|--------------|-----|---|-----|----------|-----|
| CodingScheme | Z03 | | | | | | | | | | | | | | | | | | | | | | |
| Attribute Value | <div>Possible values:</div> <table> <tr> <th>Nomination type</th><th>Code</th></tr> <tr> <td>Injection nomination</td><td>A01</td></tr> <tr> <td>Offtake nomination</td><td>A04</td></tr> <tr> <td>Internal nomination (total)</td><td>A02</td></tr> <tr> <td>Internal nomination (only Regular part)</td><td>Z02</td></tr> <tr> <td>Internal nomination (only Flexibility part)</td><td>Z03</td></tr> <tr> <td>International nomination</td><td>A03</td></tr> <tr> <td>All</td><td>A11</td></tr> <tr> <td>Net Position</td><td>B09</td></tr> <tr> <td>Summarised Market Balance Area Schedule (aggregated netted value)</td><td>A73</td></tr> <tr> <td>Template</td><td>Z99</td></tr> </table> | Nomination type | Code | Injection nomination | A01 | Offtake nomination | A04 | Internal nomination (total) | A02 | Internal nomination (only Regular part) | Z02 | Internal nomination (only Flexibility part) | Z03 | International nomination | A03 | All | A11 | Net Position | B09 | Summarised Market Balance Area Schedule (aggregated netted value) | A73 | Template | Z99 |
| Nomination type | Code | | | | | | | | | | | | | | | | | | | | | | |
| Injection nomination | A01 | | | | | | | | | | | | | | | | | | | | | | |
| Offtake nomination | A04 | | | | | | | | | | | | | | | | | | | | | | |
| Internal nomination (total) | A02 | | | | | | | | | | | | | | | | | | | | | | |
| Internal nomination (only Regular part) | Z02 | | | | | | | | | | | | | | | | | | | | | | |
| Internal nomination (only Flexibility part) | Z03 | | | | | | | | | | | | | | | | | | | | | | |
| International nomination | A03 | | | | | | | | | | | | | | | | | | | | | | |
| All | A11 | | | | | | | | | | | | | | | | | | | | | | |
| Net Position | B09 | | | | | | | | | | | | | | | | | | | | | | |
| Summarised Market Balance Area Schedule (aggregated netted value) | A73 | | | | | | | | | | | | | | | | | | | | | | |
| Template | Z99 | | | | | | | | | | | | | | | | | | | | | | |

8.6.3.5. The Resolution

The possible Resolutions:

| Property | Description | | | | | | |
|-----------------------|---|------------|------|---------------|-----|-----------------------|-----|
| Attribute name | Resolution | | | | | | |
| Cardinality | Optional. Default is A61 "Quarter" | | | | | | |
| CodingScheme | Z03 | | | | | | |
| Attribute Value | <div>Possible values:</div> <table> <tr> <th>Resolution</th><th>Code</th></tr> <tr> <td>Hourly values</td><td>A60</td></tr> <tr> <td>Quarter hourly values</td><td>A61</td></tr> </table> | Resolution | Code | Hourly values | A60 | Quarter hourly values | A61 |
| Resolution | Code | | | | | | |
| Hourly values | A60 | | | | | | |
| Quarter hourly values | A61 | | | | | | |

Calculation from one Resolution to the other:

| If the original nomination was given with a resolution of... | And the Report is requested with a resolution of | Algorithm |
|--|---|--|
| 15 minutes | 15 minutes | None (same values) |
| 15 minutes | 60 minutes | Hourly value returned is the <u>average</u> of the 4 related quarter hourly values |
| 60 minutes | 15 minutes | Quarter hourly value returned is the <u>same</u> as the hourly value |

| | | |
|------------|------------|--------------------|
| 60 minutes | 60 minutes | None (same values) |
|------------|------------|--------------------|

Example: the request for the hourly value is:

```
<AttributeInstanceComponent>
  <attribute>Resolution</attribute>
  <attributeValue codingScheme="Z03">A60</attributeValue>
</AttributeInstanceComponent>
```

8.6.3.6. The Domain

The possible Areas for International nominations

| Property | Description | | | | | | | | | | |
|------------------------|--|------|------|--------|-----------------|------------------------|------------------|-------------|-------------|----------------|-------------|
| Attribute name | Domain | | | | | | | | | | |
| Cardinality | Optional. If not present, international nominations (if required) are returned for All Areas Useless if no International nominations must be returned | | | | | | | | | | |
| CodingScheme | A01 | | | | | | | | | | |
| Attribute Value | Possible values: <table> <tr> <th>Area</th><th>Code</th></tr> <tr> <td>France</td><td>10YFR-RTE-----C</td></tr> <tr> <td>Germany (Amprion Area)</td><td>10YDE-RWENET---I</td></tr> <tr> <td>Netherlands</td><td>10YNL-----L</td></tr> <tr> <td>United Kingdom</td><td>10YGB-----A</td></tr> </table> | Area | Code | France | 10YFR-RTE-----C | Germany (Amprion Area) | 10YDE-RWENET---I | Netherlands | 10YNL-----L | United Kingdom | 10YGB-----A |
| Area | Code | | | | | | | | | | |
| France | 10YFR-RTE-----C | | | | | | | | | | |
| Germany (Amprion Area) | 10YDE-RWENET---I | | | | | | | | | | |
| Netherlands | 10YNL-----L | | | | | | | | | | |
| United Kingdom | 10YGB-----A | | | | | | | | | | |

Example:

```
<AttributeInstanceComponent>
  <attribute>Domain</attribute>
  <attributeValue codingScheme="A01">10YFR-RTE-----C</attributeValue>
</AttributeInstanceComponent>
```

8.6.4. Dependency matrices

Following matrix gives the returned report for the requested:

- Document type
- Process type: A02 is always returned (not A18)
- Business type
- Resolution

| Document Type | Process Type | Business Type | Resolution | Returned information |
|------------------------------|--------------------|-----------------------------------|--------------------------------|--|
| A07 (Confirmation report) | A01 (Day Ahead) | A01 (Injection nomination) | A60 (hourly values) | Confirmation report containing all existing Injection Day Ahead nomination(s) known in Elia nomination system at request time for the sender and the requested Date with hourly resolution (23, 24 or 25 values depending on the day) |
| A07 (Confirmation report) | A01 (Day Ahead) | A01 (Injection nomination) | A61 (quarter hourly values) | Confirmation report containing all existing Injection Day Ahead nomination(s) known in Elia nomination system at request time for the sender and the requested Date with quarter hourly resolution (92, 96 or 100 values depending on the day) |
| A07 (Confirmation report) | A01 (Day Ahead) | A04 (Offtake nomination) | A60 (hourly values) | Confirmation report containing all existing Offtake Day Ahead nomination(s) known in Elia nomination system at request time for the sender and the requested Date with hourly resolution (23, 24 or 25 values depending on the day) |
| A07 (Confirmation report) | A01 (Day Ahead) | A04 (Offtake nomination) | A61 (quarter hourly values) | Confirmation report containing all existing Offtake Day Ahead nomination(s) known in Elia nomination system at request time for the sender and the requested Date with quarter hourly resolution (92, 96 or 100 values depending on the day) |
| A07 (Confirmation report) | A01 (Day Ahead) | A02 (Internal nomination) | A60 (hourly values) | Confirmation report containing all existing Internal Day Ahead nomination(s) known in Elia nomination system at request time for the sender and the requested Date with hourly resolution (23, 24 or 25 values depending on the day) |
| A07 (Confirmation report) | A01 (Day Ahead) | A02 (Internal nomination) | A61 (quarter hourly values) | Confirmation report containing all existing Internal Day Ahead nomination(s) known in Elia nomination system at request time for the sender and the requested Date with quarter hourly resolution (92, 96 or 100 values depending on the day) |
| A07 (Confirmation report) | A01 (Day Ahead) | A03 (International nomination) | A60 (hourly values) | Confirmation report containing all existing International Day Ahead nomination(s) known in Elia nomination system at request time for the sender and the requested Date with hourly resolution (23, 24 or 25 values depending on the day) |
| A07 (Confirmation report) | A01 (Day Ahead) | A03 (International nomination) | A61 (quarter hourly values) | Confirmation report containing all existing International Day Ahead nomination(s) known in Elia nomination system at request time for the sender and the requested Date with quarter hourly resolution (92, 96 or 100 values depending on the day) |
| A07 (Confirmation report) | A01 (Day Ahead) | All | A60 (hourly values) | Confirmation report containing all existing Day Ahead (Injection, Offtake, Internal, International) nomination(s) known in Elia nomination system at request time for the sender and the requested Date with hourly resolution (23, 24 or 25 values depending on the day) |
| A07 (Confirmation report) | A01 (Day Ahead) | All | A61 (quarter hourly values) | Confirmation report containing all existing Day Ahead (Injection, Offtake, Internal, International) nomination(s) known in Elia nomination system at request time for the sender and the requested Date with quarter hourly resolution (92, 96 or 100 values depending on the day) |
| A07 (Confirmation report) | A01 (Day Ahead) | Z99 (template) | A60 (hourly values) | Confirmation report containing one time series with values 0 to be used as a template for the requested Date with hourly resolution (23, 24 or 25 values depending on the day) |
| A07 (Confirmation report) | A01 (Day Ahead) | Z99 (template) | A61 (quarter hourly values) | Confirmation report containing one time series with values 0 to be used as a template the requested Date with quarter hourly resolution (92, 96 or 100 values depending on the day) |
| A07 (Confirmation report) | A02 (Intra Day) | A01 (Injection nomination) | A60 (hourly values) | Acknowledge document with an error: Injection Intraday nomination(s) do not exist |
| A07 (Confirmation report) | A02 (Intra Day) | A01 (Injection nomination) | A61 (quarter hourly values) | Acknowledge document with an error: Injection Intraday nomination(s) do not exist |

| | | | | |
|------------------------------|--------------------|-----------------------------------|--------------------------------|--|
| A07 (Confirmation report) | A02 (Intra Day) | A04 (Oftake nomination) | A60 (hourly values) | Acknowledge document with an error: Oftung Intraday nomination(s) do not exist |
| A07 (Confirmation report) | A02 (Intra Day) | A04 (Oftake nomination) | A61 (quarter hourly values) | Acknowledge document with an error: Oftung Intraday nomination(s) do not exist |
| A07 (Confirmation report) | A02 (Intra Day) | A02 (Internal nomination) | A60 (hourly values) | Confirmation report containing all existing Internal Intra Day nomination(s) known in Elia nomination system at request time for the sender and the requested Date with hourly resolution (23, 24 or 25 values depending on the day) |
| A07 (Confirmation report) | A02 (Intra Day) | A02 (Internal nomination) | A61 (quarter hourly values) | Confirmation report containing all existing Internal Intra Day nomination(s) known in Elia nomination system at request time for the sender and the requested Date with quarter hourly resolution (92, 96 or 100 values depending on the day) |
| A07 (Confirmation report) | A02 (Intra Day) | A03 (International nomination) | A60 (hourly values) | Confirmation report containing all existing International Intra Day nomination(s) known in Elia nomination system at request time for the sender and the requested Date with hourly resolution (23, 24 or 25 values depending on the day) |
| A07 (Confirmation report) | A02 (Intra Day) | A03 (International nomination) | A61 (quarter hourly values) | Confirmation report containing all existing International Intra Day nomination(s) known in Elia nomination system at request time for the sender and the requested Date with quarter hourly resolution (92, 96 or 100 values depending on the day) |
| A07 (Confirmation report) | A02 (Intra Day) | All | A60 (hourly values) | Confirmation report containing all existing Intra Day (Internal, International) nomination(s) known in Elia nomination system at request time for the sender and the requested Date with hourly resolution (23, 24 or 25 values depending on the day) |
| A07 (Confirmation report) | A02 (Intra Day) | All | A61 (quarter hourly values) | Confirmation report containing all existing Intra Day (Internal, International) nomination(s) known in Elia nomination system at request time for the sender and the requested Date with quarter hourly resolution (92, 96 or 100 values depending on the day) |
| A07 (Confirmation report) | A02 (Intra Day) | Z99 (template) | A60 (hourly values) | Confirmation report containing one time series with values 0 to be used as a template for the requested Date with hourly resolution (23, 24 or 25 values depending on the day) |
| A07 (Confirmation report) | A02 (Intra Day) | Z99 (template) | A61 (quarter hourly values) | Confirmation report containing one time series with values 0 to be used as a template the requested Date with quarter hourly resolution (92, 96 or 100 values depending on the day) |
| A16 (Anomaly report) | A01 (Day Ahead) | A01 (Injection nomination) | A60 (hourly values) | Anomaly report containing all incorrect existing Injection Day Ahead nomination(s) known in Elia nomination system at request time for the sender and the requested Date with hourly resolution (23, 24 or 25 values depending on the day) |
| A16 (Anomaly report) | A01 (Day Ahead) | A01 (Injection nomination) | A61 (quarter hourly values) | Anomaly report containing all incorrect existing Injection Day Ahead nomination(s) known in Elia nomination system at request time for the sender and the requested Date with quarter hourly resolution (92, 96 or 100 values depending on the day) |
| A16 (Anomaly report) | A01 (Day Ahead) | A04 (Oftung nomination) | A60 (hourly values) | Anomaly report containing all incorrect existing Oftung Day Ahead nomination(s) known in Elia nomination system at request time for the sender and the requested Date with hourly resolution (23, 24 or 25 values depending on the day) |
| A16 (Anomaly report) | A01 (Day Ahead) | A04 (Oftung nomination) | A61 (quarter hourly values) | Anomaly report containing all incorrect existing Oftung Day Ahead nomination(s) known in Elia nomination system at request time for the sender and the requested Date with quarter hourly resolution (92, 96 or 100 values depending on the day) |

| | | | | |
|-------------------------|--------------------|-----------------------------------|--------------------------------|---|
| A16 (Anomaly report) | A01 (Day Ahead) | A02 (Internal nomination) | A60 (hourly values) | Anomaly report containing all incorrect existing Internal Day Ahead nomination(s) known in Elia nomination system at request time for the sender and the requested Date with hourly resolution (23, 24 or 25 values depending on the day) |
| A16 (Anomaly report) | A01 (Day Ahead) | A02 (Internal nomination) | A61 (quarter hourly values) | Anomaly report containing all incorrect existing Internal Day Ahead nomination(s) known in Elia nomination system at request time for the sender and the requested Date with quarter hourly resolution (92, 96 or 100 values depending on the day) |
| A16 (Anomaly report) | A01 (Day Ahead) | A03 (International nomination) | A60 (hourly values) | Anomaly report containing all incorrect existing International Day Ahead nomination(s) known in Elia nomination system at request time for the sender and the requested Date with hourly resolution (23, 24 or 25 values depending on the day) |
| A16 (Anomaly report) | A01 (Day Ahead) | A03 (International nomination) | A61 (quarter hourly values) | Anomaly report containing all incorrect existing International Day Ahead nomination(s) known in Elia nomination system at request time for the sender and the requested Date with quarter hourly resolution (92, 96 or 100 values depending on the day) |
| A16 (Anomaly report) | A01 (Day Ahead) | All | A60 (hourly values) | Anomaly report containing all incorrect existing Day Ahead nomination(s) (Injection, Offtake, Internal, International) known in Elia nomination system at request time for the sender and the requested Date with hourly resolution (23, 24 or 25 values depending on the day) |
| A16 (Anomaly report) | A01 (Day Ahead) | All | A61 (quarter hourly values) | Anomaly report containing all incorrect existing Day Ahead nomination(s) (Injection, Offtake, Internal, International) known in Elia nomination system at request time for the sender and the requested Date with quarter hourly resolution (92, 96 or 100 values depending on the day) |
| A16 (Anomaly report) | A02 (Intra Day) | A01 (Injection nomination) | A60 (hourly values) | Acknowledge document with an error: Injection Intraday nomination(s) do not exist |
| A16 (Anomaly report) | A02 (Intra Day) | A01 (Injection nomination) | A61 (quarter hourly values) | Acknowledge document with an error: Injection Intraday nomination(s) do not exist |
| A16 (Anomaly report) | A02 (Intra Day) | A04 (Offtake nomination) | A60 (hourly values) | Acknowledge document with an error: Offtake Intraday nomination(s) do not exist |
| A16 (Anomaly report) | A02 (Intra Day) | A04 (Offtake nomination) | A61 (quarter hourly values) | Acknowledge document with an error: Offtake Intraday nomination(s) do not exist |
| A16 (Anomaly report) | A02 (Intra Day) | A02 (Internal nomination) | A60 (hourly values) | Anomaly report containing all incorrect existing Internal Intra Day nomination(s) known in Elia nomination system at request time for the sender and the requested Date with hourly resolution (23, 24 or 25 values depending on the day) |
| A16 (Anomaly report) | A02 (Intra Day) | A02 (Internal nomination) | A61 (quarter hourly values) | Anomaly report containing all incorrect existing Internal Intra Day nomination(s) known in Elia nomination system at request time for the sender and the requested Date with quarter hourly resolution (92, 96 or 100 values depending on the day) |
| A16 (Anomaly report) | A02 (Intra Day) | A03 (International nomination) | A60 (hourly values) | Anomaly report containing all incorrect existing International Intra Day nomination(s) known in Elia nomination system at request time for the sender and the requested Date with hourly resolution (23, 24 or 25 values depending on the day) |
| A16 (Anomaly report) | A02 (Intra Day) | A03 (International nomination) | A61 (quarter hourly values) | Anomaly report containing all incorrect existing International Intra Day nomination(s) known in Elia nomination system at |

| | | | | |
|-------------------------|--------------------|-----|--------------------------------|---|
| | | | hourly values) | request time for the sender and the requested Date with quarter hourly resolution (92, 96 or 100 values depending on the day) |
| A16 (Anomaly report) | A02 (Intra Day) | All | A60 (hourly values) | Anomaly report containing all incorrect existing Intra Day nomination(s) (Internal, International) known in Elia nomination system at request time for the sender and the requested Date with hourly resolution (23, 24 or 25 values depending on the day) |
| A16 (Anomaly report) | A02 (Intra Day) | All | A61 (quarter hourly values) | Anomaly report containing all incorrect existing Intra Day nomination(s) (Internal, International) known in Elia nomination system at request time for the sender and the requested Date with quarter hourly resolution (92, 96 or 100 values depending on the day) |
| A16 (Anomaly report) | A02 (Intra Day) | Z99 | A60 (hourly values) | Acknowledge document with an error: Template only returned within a confirmation report |
| A16 (Anomaly report) | A02 (Intra Day) | Z99 | A61 (quarter hourly values) | Acknowledge document with an error: Template only returned within a confirmation report |

8.7. StatusRequest_MarketDocument example

Following example requests an Anomaly report related to Internal Intraday nominations for Execution date 15/10/2018

```
<StatusRequest_MarketDocument xmlns="urn:iec62325.351:tc57wg16:451-5:statusrequestdocument:4:0"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  <mRID>20181015_ A16_11X-BRP-EXAMP_A16</mRID>
  <type>A60</type>
  <sender_MarketParticipant.mRID codingScheme="A01"> 11X-BRP-
EXAMPLEX</sender_MarketParticipant.mRID>
  <sender_MarketParticipant.marketRole.type>A08</sender_MarketParticipant.marketRole.type>
  <receiver_MarketParticipant.mRID
codingScheme="A01">10X1001A1001A094</receiver_MarketParticipant.mRID>
  <receiver_MarketParticipant.marketRole.type>A04</receiver_MarketParticipant.marketRole.type>
e>

  <createdDateTime>2018-11-28T17:47:00Z</createdDateTime>
  <AttributeInstanceComponent>
    <attribute>RequestedReturnDocumentType</attribute>
    <attributeValue codingScheme="Z02">A16</attributeValue>
  </AttributeInstanceComponent>
  <AttributeInstanceComponent>
    <attribute>ProcessType</attribute>
    <attributeValue codingScheme="Z03">A01</attributeValue>
  </AttributeInstanceComponent>
  <AttributeInstanceComponent>
    <attribute>DateAndOrTime</attribute>
    <attributeValue codingScheme="Z01">2018-10-15</attributeValue>
  </AttributeInstanceComponent>
  <AttributeInstanceComponent>
    <attribute>BusinessType</attribute>
    <attributeValue codingScheme="Z03">A02</attributeValue>
  </AttributeInstanceComponent>
</StatusRequest_MarketDocument>
```


Chapter 9. Messages response from Elia to the BRP

This chapter describes the messages that Elia sends back to BRPs during the nomination submission and acceptance process. Details on the overall process are given in Chapter 5.

Note! Elia B2B E-nomination system never sends on its own initiative CIM XML messages. It always and only answers to the Schedule or Status Request messages sent by the BRP

9.1. Dependency matrix on returned messages

Based on the request, only one message is returned synchronously

| Message sent from BRP to Elia | Is the message sent well-formed, valid and correct? | Message returned by Elia B2B nomination system |
|-------------------------------|---|--|
| Schedule | Yes | Acknowledgement with code A01 |
| Schedule | No | Acknowledgement with code A02 |
| Schedule | Partially: the message is well-formed and valid but at least one time series is incorrect | Acknowledgement with code A03 |
| Status request | yes | Anomaly or Confirmation report |
| Status request | no | Acknowledgement with code A02 |

9.2. Acknowledgement message

Acknowledgement messages are issued when an initial assessment of the Schedule message has been made or if a Status Request message has errors. They are issued by the Elia B2B nomination system as part of the normal nomination process or as the response to a wrong Status Request. The process involved in acknowledging messages is shown in section 5.1.

It should be remembered that an Acknowledgement message that accepts a message only indicates that it is well-formed, valid and correct: basic rules (like door is open, etc.) are respected – not that the balance concerned is confirmed.

Acknowledgement message are also CIM XML files; they can be viewed in some browsers or in a text editor such as Notepad.

The structure of all Acknowledgement messages are identical. The Schema used to generate them is referenced in Chapter 11. They consist of a set of header elements and “reasons”. The header elements identify the sender, receiver and original Message, and a full list is given in section 9.2.1. The “reasons” indicate the result of the assessment of the message and are discussed in section 9.2.2.

Note! Never acknowledge an Acknowledgement message!

9.2.1. Acknowledgement message header elements

| Element | Meaning | Remark |
|---------|------------------------------------|--|
| mRID | Unique identifier for the message. | This element is Mandatory. This element forms a unique identification for the acknowledgment message. |

| | | | |
|---|---|--|------|
| createdDateTime | Date and time at which the message was submitted | This element is Mandatory. The date and the time of the creation and transmission of the acknowledgment message in UTC. | |
| sender_MarketParticipant.mRID | It consists of a unique identifier for the sender of the message (BRP) | This element is Mandatory. The value must be the EIC code for Elia. | |
| sender_MarketParticipant.marketRole.type | Identifies the role of the sender | This element is Mandatory. The value must be "A04" | |
| receiver_MarketParticipant.mRID | Identifies the receiver of the message. | This element is Mandatory. The value must be "A01". | |
| receiver_MarketParticipant.marketRole.type | Identifies the role of the receiver | This element is Mandatory. The value scheme must be "A01". The value must be the BRP EIC code. | |
| received_MarketDocument.mRID | This is unique identification of the message being acknowledged. | It is identical to the mRID of the original message | |
| received_MarketDocument.revisionNumber | The version number of the original Message. | | |
| received_MarketDocument.Type | The type of the received message | Possible values: | |
| | | Message | Code |
| | | Schedule | A01 |
| Status Request | A60 | | |
| received_MarketDocument.process.processType | The process type of the received message | This element is set to A01 or A02 of the original Message. | |
| received_MarketDocument.createdDateTime | This element is set to the date and time when the original message was treated by the Elia B2B nomination system and <u>not</u> when it was sent by the BRP | The date value is expressed in UTC See "4.1.3.1 Created Date and Time " p 17 | |

9.2.2. Reasons

The interesting content of an Acknowledgement message are the "reasons" which indicate either that the message has been completely accepted or that there is at least one problem.

For each <reason> there is a code as well as the corresponding text.

When a message has been completely accepted the reason part of the message will be as shown below:

```
<Reason>
  <code>A01</code>
  <text>Message fully accepted</text>
</Reason>
```

There may be several reasons listed if a message contains errors and so has been wholly or partly rejected.

The related reason text gives additional explanation. This text is not static and can change without notice.

The values of the code and their meanings are listed in Appendix B.

Remark: Some new reasons can be added in the future. They will be part of a new version of the documentation.

9.2.3. Acknowledgement message example

Here below an example of message returned on the example given on section "8.5 Schedule_MarketDocument with more than 1 type of nomination - example " p 55

In this example, we suppose that the doors are closed for the Internal Day Ahead but not yet for the Injection, offtake and International. Therefore the Hub nomination is rejected and the message is partially accepted

```
<Acknowledgement_MarketDocument xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns="urn:iec62325.351:tc57wg16:451-
1:acknowledgementdocument:8:0">
  <mRID>ACK_1_2020420200203135745</mRID>
  <createdDateTime>2020-02-03T13:07:49Z</createdDateTime>
  <sender_MarketParticipant.mRID
codingScheme="A01">10X1001A1001A094</sender_MarketParticipant.mRID>
  <sender_MarketParticipant.marketRole.type>A04</sender_MarketParticipant.marketRole.type>
  <receiver_MarketParticipant.mRID codingScheme="A01"> 11X-BRP-
EXAMPLEX</receiver_MarketParticipant.mRID>
  <receiver_MarketParticipant.marketRole.type>A08</receiver_MarketParticipant.marketRole.type>
  <received_MarketDocument.mRID>1_2020420200203135745</received_MarketDocument.mRID>
  <received_MarketDocument.revisionNumber>1</received_MarketDocument.revisionNumber>
  <received_MarketDocument.type>A01</received_MarketDocument.type>
  <received_MarketDocument.process.processType>A01</received_MarketDocument.process.processType>
  <Rejected_TimeSeries>
    <mRID>12_HUB_20200203135746</mRID>
    <version>6</version>
    <Reason>
      <code>302</code>
      <text>At this time of the day, internal energy transfer nominations for yesterday are only
accepted if they are corrections of existing nominations (which are unbalanced or waiting for
counterparty) or the counterparty has already been received.</text>
    </Reason>
  </Rejected_TimeSeries>
  <Reason>
    <code>A03</code>
    <text>Message partially accepted</text>
  </Reason>
</Acknowledgement_MarketDocument>
```

9.3. Anomaly report

AnomalyReport_MarketDocument is issued in response to a Status Request. To obtain an Anomaly report, the Status Request message must request the AttributeInstanceComponent attribute RequestedReturnDocumentType with a A16 value as explained in section 8.6.3.1 "The RequestedReturnDocumentType" p 60 .

Anomaly reports are also CIM XML files; they can be viewed in some browsers or in a text editor such as Notepad.

The structure of all Anomaly reports are identical. The Schema used to generate them is referenced in Chapter 11.

They consist of a set of header elements and "time series anomalies".

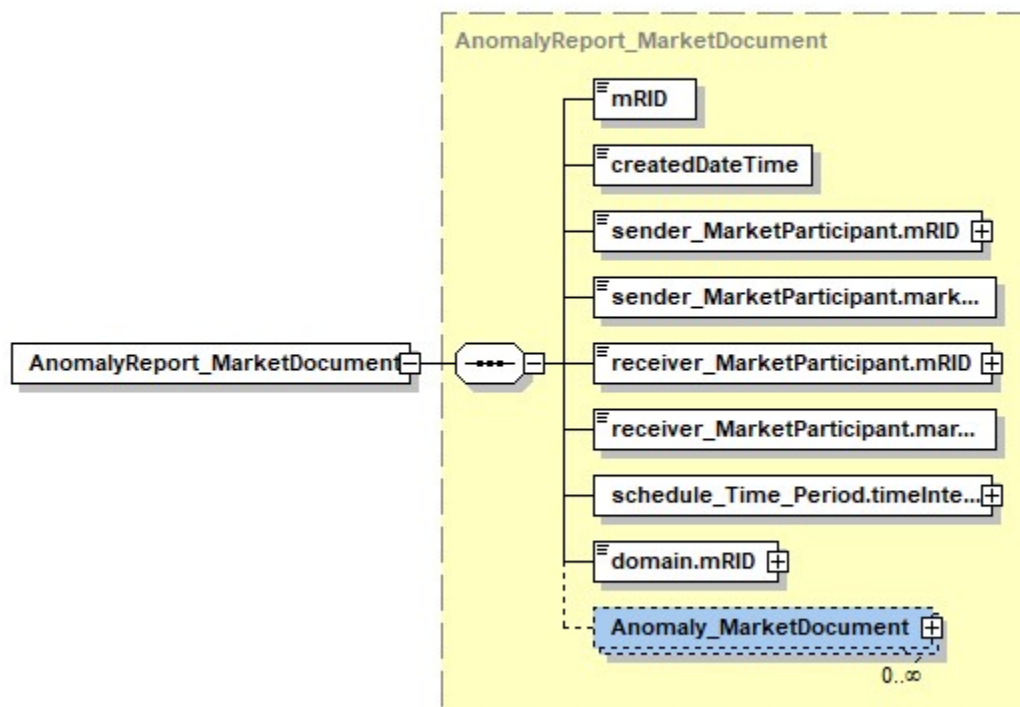
The header elements identify the report, the sender, receiver: a full list is given in section 9.3.1. The "time series anomalies" indicate the cause of the problems and are discussed in section 9.3.2.

Note! Only nominations that were accepted and saved by the Elia e-nomination web site are taken into account when returning an Anomaly report.

Specific cases:

- Any nomination refused (with a refused Acknowledgement message) are therefore never part of an Anomaly report
- If another BRP nominated against the current requesting BRP but the requested BRP did not nominate, nothing is returned to the current BRP.

9.3.1. Anomaly report header elements



| Element | Explanation |
|---|---|
| mRID | This element forms a unique identification for the Anomaly report. |
| createdDateTime | The date and the time of the creation of the report in UTC. |
| sender_MarketParticipant.mRID sender_MarketParticipant.marketRole.type | These elements identify the sender of the message. The value of the element is set to the EIC code for Elia. The sender role is always set to "A04" indicating a TSO. |
| receiver_MarketParticipant.mRID receiver_MarketParticipant.marketRole.type | These elements identify the receiver of the message. The value of the element is set to the EIC code for the BRP. The receiver role is set to "A08", indicating a BRP. |
| schedule_Time_Period.timeInterval | This identifies the value of the schedule time interval in the original message which contains the anomalies. |

Table 5 Anomaly report header elements

9.3.2. Anomaly_MarketDocument

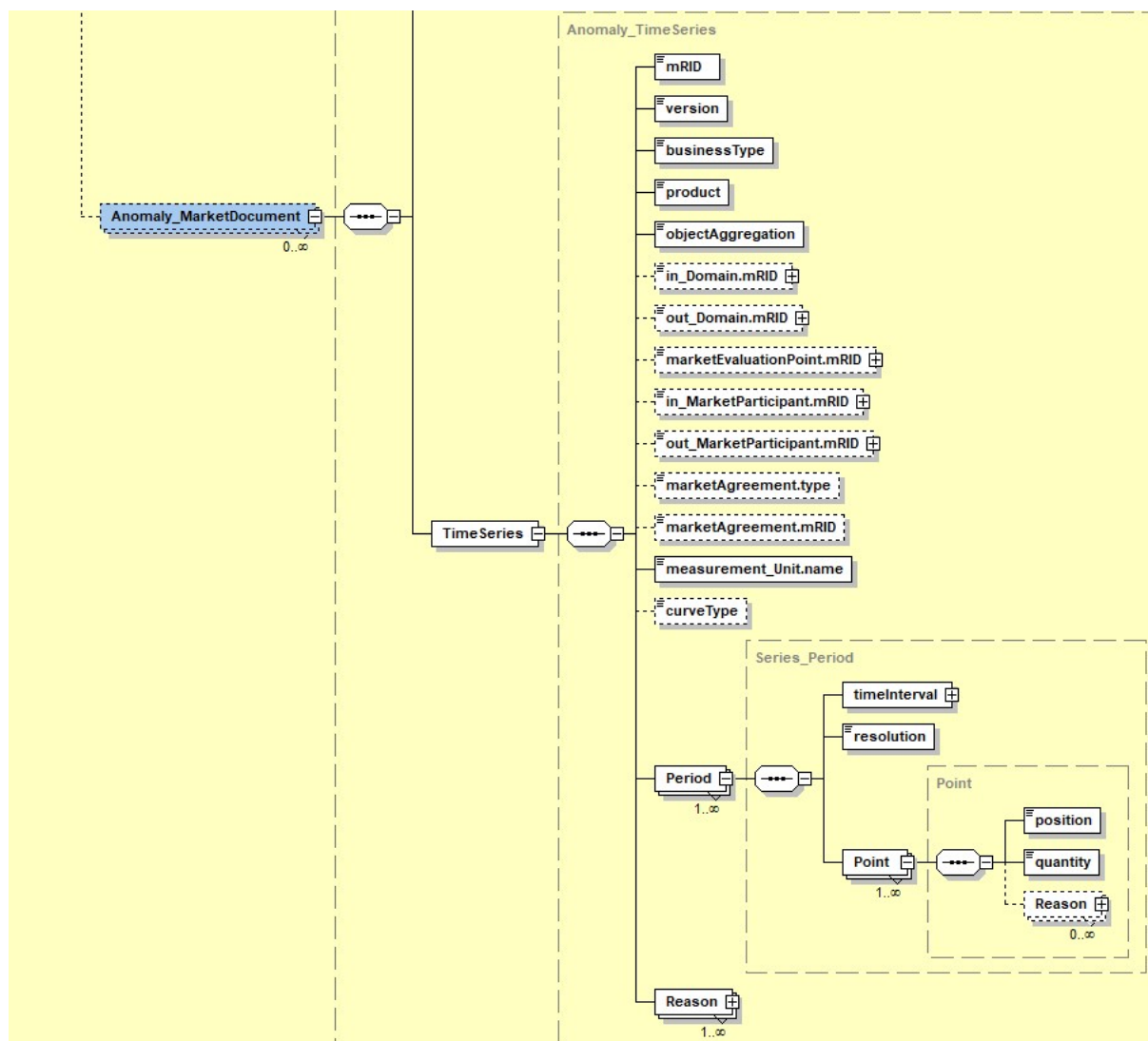
The Elia e-nomination web site, does not use this reference because all the nominations in the Elia e-nomination web site are taken into account and not only a particular schedule message.

| Element | Explanation |
|------------------------|----------------|
| marketParticipant.mRID | Always BRP EIC |
| mRID | Always BRP EIC |
| revisionNumber | Always 999 |
| TimeSeries | See here below |

9.3.3. Anomaly report time series

Only the TimeSeries being in error with the list of periods of the time series.

Note: If the reason associated is a "Balance error" then a second Period element giving only the values of the CounterParty being in balance error is present (see Appendix B or the example)



The elements have the same meaning as described in section "8.3.3 Schedule TimeSeries elements" p 52 except indicated in the table here below:

| Element | Explanation |
|-------------------|---|
| mRID | An identifier unique in this message. |
| version | Version of the BRP nomination on the Elia e-nomination web site |
| objectAggregation | The code value for this element is Always A03 |

The list of error codes and meaning is given in Appendix B

Note! If the nomination is in *BalanceError*, then the values given are the ones from the counterparty BRP

9.3.4. AnomalyReport_MarketDocument example

Following example describes an Anomaly report for Execution date 10/12/2018 concerning BRP 11X-BRP-EXAMPLEX and an Internal nomination where this BRP is in "Balance Error" with BRP 22XBRP-EXAMPLE26. The Period values are from BRP2.

```

<AnomalyReport_MarketDocument xmlns="urn:iec62325.351:tc57wg16:451-2:anomalydocument:5:1"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">

```

```

    <mRID>20181210_2_ 11X-BRP-EXAMPLEX</mRID>

```

```

        <createdDateTime>2018-12-09T17:31:00Z</createdDateTime>
        <sender_MarketParticipant.mRID
codingScheme="A01">10X1001A1001A094</sender_MarketParticipant.mRID>
        <sender_MarketParticipant.marketRole.type>A04</sender_MarketParticipant.marketRole.type>
        <receiver_MarketParticipant.mRID codingScheme="A01"> 11X-BRP-
EXAMPLEX</receiver_MarketParticipant.mRID>
        <receiver_MarketParticipant.marketRole.type>A08</receiver_MarketParticipant.marketRole.typ
e>
        <schedule_Time_Period.timeInterval>
            <start>2018-12-09T23:00Z</start>
            <end>2018-12-10T23:00Z</end>
        </schedule_Time_Period.timeInterval>
        <domain.mRID codingScheme="A01">10YBE-----2</domain.mRID>
        <Anomaly_MarketDocument>
            <marketParticipant.mRID codingScheme="A01"> 11X-BRP-
EXAMPLEX</marketParticipant.mRID>
            <mRID> 11X-BRP-EXAMPLEX</mRID>
            <revisionNumber>999</revisionNumber>
            <TimeSeries>
                <mRID>12345678901234567890123456789012345</mRID>
                <version>1</version>
                <businessType>A02</businessType>
                <product>8716867000016</product>
                <objectAggregation>A03</objectAggregation>
                <in_MarketParticipant.mRID codingScheme="A01"> 11X-BRP-
EXAMPLEX</in_MarketParticipant.mRID>
                <out_MarketParticipant.mRID codingScheme="A01">22XBRP-
EXAMPLE26</out_MarketParticipant.mRID>
                <measurement_Unit.name>MAW</measurement_Unit.name>
                <Period>
                    <timeInterval>
                        <start>2018-12-09T23:00Z</start>
                        <end>2018-12-10T23:00Z</end>
                    </timeInterval>
                    <resolution>PT15M</resolution>
                    <Point>
                        <position>1</position>
                        <quantity>45.2</quantity>
                    </Point>
                </Period>
                ... All 'Point' are present in the 'Period' for the BRP
            </Period>
            <Period>
                <timeInterval>
                    <start>2018-12-09T23:00Z</start>
                    <end>2018-12-10T23:00Z</end>
                </timeInterval>
                <resolution>PT15M</resolution>
                <Point>
                    <position>1</position>
                    <quantity>12.2</quantity>
                    <Reason>
                        <code>Z06</code>
                        <text>Value from the Counterparty</text>
                    </Reason>
                </Point>
            </Period>
        </Anomaly_MarketDocument>
    </in_MarketParticipant.mRID>
</EXAMPLEX>

```

```

        </Point>
... Only the 'Point' in balance error from the counterparty are present
    </Period>
    <Reason>
        <code>Z06</code>
        <text>List of period where the BRP are in Balance error - Period 1
contains All values from the sender BRP - period 2 contains only values in balance error from
other BRP - with a specific reason </text>
    </Reason>
</TimeSeries>
</Anomaly_MarketDocument>
</AnomalyReport_MarketDocument>

```

9.3.5. AnomalyReport_MarketDocument with TBC and no counterparty example

The following example returns 2 anomalies:

- *One is in TBC and matching the counterparty*
- *One is in TBC and there is no counterparty*

```

<AnomalyReport_MarketDocument xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns="urn:iec62325.351:tc57wg16:451-
2:anomalydocument:5:1">
    <mRID>4d4390c648f0405585460e9485943b2b</mRID>
    <createdDateTime>2020-02-03T13:54:42Z</createdDateTime>
    <sender_MarketParticipant.mRID
codingScheme="A01">10X1001A1001A094</sender_MarketParticipant.mRID>
    <sender_MarketParticipant.marketRole.type>A04</sender_MarketParticipant.marketRole.type>
    <receiver_MarketParticipant.mRID codingScheme="A01">11XELECTRABEL--
Z</receiver_MarketParticipant.mRID>
    <receiver_MarketParticipant.marketRole.type>A08</receiver_MarketParticipant.marketRole.type>
    <schedule_Time_Period.timeInterval>
        <start>2020-02-03T23:00Z</start>
        <end>2020-02-04T23:00Z</end>
    </schedule_Time_Period.timeInterval>
    <domain.mRID codingScheme="A01">10YBE-----2</domain.mRID>
    <Anomaly_MarketDocument>
        <marketParticipant.mRID codingScheme="A01">11XELECTRABEL--Z</marketParticipant.mRID>
        <mRID>11XELECTRABEL--Z</mRID>
        <revisionNumber>999</revisionNumber>
        <TimeSeries>
            <mRID>148d4308d37c454abfc2067956ae7429</mRID>
            <version>1</version>
            <businessType>A02</businessType>
            <product>8716867000016</product>
            <objectAggregation>A03</objectAggregation>
            <in_MarketParticipant.mRID codingScheme="A01">11XELECTRABEL--Z</in_MarketParticipant.mRID>
            <out_MarketParticipant.mRID codingScheme="A01">12XATEL-HANDEL-
K</out_MarketParticipant.mRID>
            <Period>
                <timeInterval>
                    <start>2020-02-03T23:00Z</start>
                    <end>2020-02-04T23:00Z</end>
                </timeInterval>
                <resolution>PT60M</resolution>
                <Point>
                    <position>1</position>

```

```

        <quantity>45.0</quantity>
    </Point>
... etc ...
    <Point>
        <position>24</position>
        <quantity>45.0</quantity>
    </Point>
</Period>
<Reason>
    <code>Z13</code>
    <text>The nomination is in 'Confirmed' or 'ImposedConfirmed' state and is in the matching
state "waiting for the nomination of the Counterparty" </text>
</Reason>
</TimeSeries>
</Anomaly_MarketDocument>
<Anomaly_MarketDocument>
    <marketParticipant.mRID codingScheme="A01">11XELECTRABEL--Z</marketParticipant.mRID>
    <mRID>11XELECTRABEL--Z</mRID>
    <revisionNumber>999</revisionNumber>
    <TimeSeries>
        <mRID>f9b46603c8d841d39bd5bfe4bc029532</mRID>
        <version>6</version>
        <businessType>A02</businessType>
        <product>8716867000016</product>
        <objectAggregation>A03</objectAggregation>
        <in_MarketParticipant.mRID codingScheme="A01">10X1001A1001A094</in_MarketParticipant.mRID>
        <out_MarketParticipant.mRID codingScheme="A01">11XELECTRABEL--
Z</out_MarketParticipant.mRID>
        <Period>
            <timeInterval>
                <start>2020-02-03T23:00Z</start>
                <end>2020-02-04T23:00Z</end>
            </timeInterval>
            <resolution>PT60M</resolution>
            <Point>
                <position>1</position>
                <quantity>0.0</quantity>
            </Point>
... etc ...
        <Point>
            <position>24</position>
            <quantity>111.1</quantity>
        </Point>
    </Period>
    <Reason>
        <code>Z12</code>
        <text>The nomination is in 'TBC' or 'ImposeTBC' state and is waiting for the nomination
of the Counterparty BRP</text>
    </Reason>
</TimeSeries>
</Anomaly_MarketDocument>
</Anomaly_MarketDocument>
</AnomalyReport_MarketDocument>

```

9.4. Confirmation report

Confirmation reports “confirms” the energy transfer values that are due to take place or have taken place and are saved in Elia e-nomination web site: It returns the list of nominations that are known by the Elia B2B nomination system at the request time and their state.

They are issued in response to a Status Request

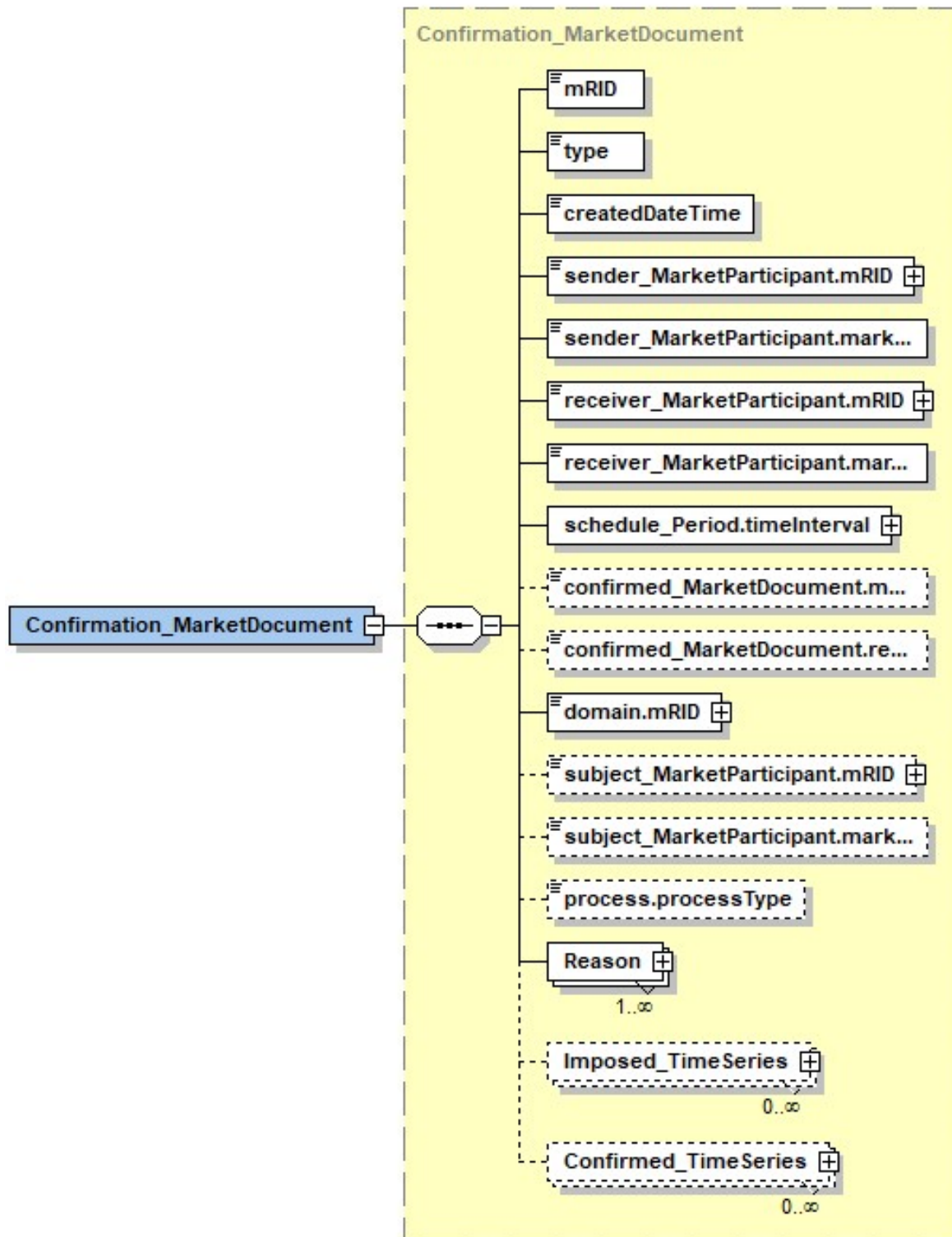
Confirmation reports are also CIM XML files: they can be viewed in some browsers or in a text editor such as Notepad.

The structure of all Confirmation reports are identical. The Schema used to generate them is referenced in Chapter 11. They consist of a set of header elements that identify the report, the sender and receiver. A full list of the header elements is given in section 9.4.1. Finally they contain a series of elements relating to the values in the time series and their status. These are listed in section 9.4.2.

Note! Only nominations that were accepted and saved by the Elia e-nomination web site or Elia B2B nomination systems are returned. Any nomination not accepted are therefore never part of a Confirmation report.

Template: A specific case is the response to the Status Request with a Business Type “A60” that return a time series with the expected number of position for a given day. It allows therefore to know the Elia B2B nomination system expects 23h, 24h or 25 hours or the related quarter hourly values. In this case, all the returned values = 0

9.4.1. Confirmation report header elements



| Element | Explanation |
|---|---|
| mRID | This element forms a unique identification for the Confirmation report. |
| Type | If the Confirmation report is always considered as intermediate even for dates in the past, this value is always set to "A07". |
| createdDateTime | The date and the time of the transmission of the report in UTC. |
| sender_MarketParticipant.mRID sender_MarketParticipant.marketRole.type | These elements identify the sender of the message. The value of the element is set to the EIC code for Elia. The sender role is always set to "A04" indicating a TSO. |
| receiver_MarketParticipant.mRID receiver_MarketParticipant.marketRole.type | These elements identify the receiver of the message. The value of the element is set to the EIC code for the BRP. The receiver role is set to "A08", indicating a BRP. |
| schedule_Period.timeInterval | This identifies the value of the schedule time interval in the request. |
| domain.mRID | The domain is Belgium |
| process.processType | The same as the ProcessType of the original Status Request message. |
| Reason | Generic reason. Possible values are given in "10.4 Confirmation report header reasons " p 84 |
| Confirmed_TimeSeries | See here below |

The other header elements are never present

9.4.2. Confirmed_TimeSeries elements

The Confirmed_TimeSeries elements contain the latest version of the original time series values and a reason code.

| Element | Explanation |
|----------------------------|--|
| Reason | The possible state. The reasons are listed in Appendix B |
| marketEvaluationPoint.mRID | The Gate ID with the format "Gate[nn]" Example: Gate01 Only present for International Intraday nominations |

The other element values are the same as for the Schedule message as described in section 8.3.3 "Schedule TimeSeries elements" p 52

9.4.3. Imposed_TimeSeries elements

There is no Imposed_TimeSeries

9.4.4. Confirmation_MarketDocument example

Following example describes a Confirmation message for Execution date 10/12/2018 concerning BRP 11X-BRP-EXAMPLEX and an Internal nomination where this BRP is in "Balance Error-Accepted"


```

<Confirmation_MarketDocument xmlns="urn:iec62325.351:tc57wg16:451-2:confirmationdocument:5:0"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  <mRID>12345678901234567890123456789012345</mRID>
  <type>A01</type>
  <createdDateTime>2018-10-27T17:31:00Z</createdDateTime>
  <sender_MarketParticipant.mRID
codingScheme="A01">10X1001A1001A094</sender_MarketParticipant.mRID>
  <sender_MarketParticipant.marketRole.type>A04</sender_MarketParticipant.marketRole.type>
  <receiver_MarketParticipant.mRID codingScheme="A01"> 11X-BRP-
EXAMPLEX</receiver_MarketParticipant.mRID>
  <receiver_MarketParticipant.marketRole.type>A08</receiver_MarketParticipant.marketRole.type>
e>

  <schedule_Period.timeInterval>
    <start>2018-12-09T23:00Z</start>
    <end>2018-12-10T23:00Z</end>
  </schedule_Period.timeInterval>
  <domain.mRID codingScheme="A01">10YBE-----2</domain.mRID>
  <process.processType>A01</process.processType>
  <Reason>
    <code>A03</code>
    <text>At least one nomination has an issue</text>
  </Reason>
  <Confirmed_TimeSeries>
    <mRID>0123456789</mRID>
    <version>1</version>
    <businessType>A02</businessType>
    <product>8716867000016</product>
    <objectAggregation>A03</objectAggregation>
    <in_MarketParticipant.mRID codingScheme="A01"> 11X-BRP-
EXAMPLEX</in_MarketParticipant.mRID>
    <out_MarketParticipant.mRID codingScheme="A01">22XBRP-
EXAMPLEE26</out_MarketParticipant.mRID>
    <measure_Unit.name>MAW</measure_Unit.name>
    <Period>
      <timeInterval>
        <start>2018-12-09T23:00Z</start>
        <end>2018-12-10T23:00Z</end>
      </timeInterval>
      <resolution>P15M</resolution>
      <Point>
        <position>1</position>
        <quantity>45.2</quantity>
      </Point>
      ... other <Point> elements ...
    </Period>
    <Reason>
      <code>Z06</code>
      <text>List of period where the BRP are in Balance error - values are the
ones from other BRP</text>
    </Reason>
  </Confirmed_TimeSeries>
</Confirmation_MarketDocument>

```

Chapter 10. List of reasons

10.1. Acknowledge message header reasons

Table of reasons given below

| Code | Reason | Description |
|------|------------------|---|
| A01 | OK | The message is fully accepted |
| A02 | Header error | Error in the message header. It is fully refused |
| A03 | TimeSeries error | At least one time series has an error <i>Note! even if all Time series are in error then A03 is used</i> |

10.2. Acknowledge time series error reasons

Table of reasons given below

| Code | Description |
|------|--|
| Z10 | Request made at a too high frequency |
| Z11 | Returned message size is too large. Narrow your request. This cover mainly returned Confirmation document. |
| Z30 | Message not well-formed or does not respect the related Schema (XSD). |
| Z31 | Invalid message. For example, if the document sent is empty or is not a Schedule or StatusRequest document |
| Z33 | Another Header error like a specific value not accepted. See related reason text |
| Z40 | Door closed for this type of nomination and execution date |
| Z41 | Incorrect number of <Point> elements for the given Execution Date. For example for the DST days |
| Z42 | Value too large. For example the Injection quarter hourly values are limited at 1000 MW. |
| Z43 | Incorrect Time Interval. For example not an exact complete day |
| Z44 | Energy quantities not specified in the unit MAW |
| Z45 | Header domain is incorrect |
| Z46 | Header process.processType is incorrect |
| Z47 | Sender participant is not the BRP EIC associated with the user id |
| Z48 | Header role(s) are incorrect |
| Z50 | Nomination version number is incorrect |
| Z51 | Internal Timeout error. The Nominations can have been saved or not |
| Z52 | Error in the in_MarketParticipant.mRID and out_MarketParticipant.mRID in an internal (the BRP is not present one and exactly one time) or international TimeSeries the BRP is not present on the Belgian Area) |
| Z53 | Error in the in_Domain or an out_Domain in an international nomination |
| Z54 | Error in the TimeSeries businessType |
| Z55 | Error in the TimeSeries marketAgreement.type (unknown or unauthorized) |
| Z56 | The Net Offtake Energy Responsible (NOER) may not create offtake nomination on the access point [EAN]. Only the Net Injection Energy Responsible (NIER) may create such a nomination. |
| Z60 | Some values may not be used (like use Elia as other market participant in an Internal nomination without specific contract) |

| | |
|-----|---|
| Z61 | The nomination of the counterparty is in a state that cannot be modified |
| Z62 | The BRP has no contract allowing this nomination. |
| Z63 | A nomination cannot be submitted without details. |
| Z64 | At least one power value is invalid |
| Z65 | At this time of the day, internal energy transfer nominations for yesterday are only accepted if they are corrections of existing nominations (which are unbalanced or waiting for counterparty) or the counterparty has already been received. |
| Z66 | The nomination state does not allow new versions. |
| Z67 | Invalid number of items in schedule for date {0} : received {1} instead of {2} |
| Z68 | The counterparty {0} has no right to nominate. |
| Z69 | {0} is not authorised to buy from ELIA. |
| Z70 | marketEvaluationPoint.mRID is not present for an offtake or an injection TimeSeries |
| Z71 | {0} is not authorised to sell to ELIA. |
| Z72 | A nomination for this date, this "ARP From" and this "ARP To" with version [{0}] has already been received. Use at least the version number [{1}] |
| Z73 | The Net Offtake Energy Responsible (NOER) may not create offtake nomination on the access point {0}. Only the Net Injection Energy Responsible (NIER) may create such a nomination. |
| Z74 | The Net Offtake Energy Responsible (GOER) may not create offtake nomination on the access point {0}. Only the Net Injection Energy Responsible (GIER) may create such a nomination. |
| Z75 | The Shared Energy Responsible (SER) may not create offtake nomination on the Offtake point {0}. Only the Balance Follow-Up Responsible (BFR) may create such a nomination. |
| Z76 | The buyer cannot be the same as the sender ({0}) |
| Z77 | The nomination with execution date [{0}] is not authorized. You can only nominate for a date later than [{1}] |
| Z80 | Status Request document has an incorrect Criteria element name or value |
| Z90 | Schedule document contains too many TimeSeries |
| Z99 | Any other business TimeSeries error (described in the associated reason text) |
| | |
| 999 | Technical error occurred within the B2B nomination system. Some reason can be indicated in the Reason text |

10.3. Anomaly time series second Period error reason

When the reason is a balance error (see here below codes Z07 until Z10), the Anomaly contains, for each time series being in balance error, two elements 'Period':

- The first element 'Period' contains all the value of the BRP and the related 'Points' do not contain any element 'Reason'
- The second element 'Period' only the value of the Counterparty and the related 'Points' have element 'Reason' with the value 'Z06'

- When the time series reason is not a balance error then the time series contains only one element 'Period' and all the value of the BRP and the related 'Points' do not contain any element 'Reason'

10.4. Confirmation report header reasons

Table of reasons given below

| Code | Reason | Description |
|------|------------------|--|
| A01 | OK | The message is fully accepted |
| A03 | TimeSeries error | At least one time series has an error <i>Note! even if all 'TimeSeries' are in error then A03 is used</i> |

Anomaly and Confirmation reports time series reasons

Table of reasons given below. The states are described in the e-nominations guide documentation. See "1.2 Related documents " p 6

| Code | Reason | Description | Returned in |
|------|-------------------------|--|---------------------------------------|
| Z01 | OK-Accepted | The nomination is in 'Accepted' state and is correct or 'Zero WFC' | Confirmation report |
| Z02 | OK-TBC | The nomination is in 'TBC' or 'ImposeTBC' state and is correct or 'Zero WFC' | Confirmation report |
| Z03 | OK-Confirmed | The nomination is in 'Confirmed' or 'ImposedConfirmed' state and is correct or 'Zero WFC' | Confirmation report |
| Z04 | OK-Rejected | The nomination is in 'Rejected' state and is correct or 'Zero WFC' | Confirmation report |
| Z05 | OK-Curtailed | The nomination is in 'Curtailed' state and is correct or 'Zero WFC' | Confirmation report |
| Z06 | Balance error-Accepted | The Internal or External nomination is in 'Accepted' state and at least one value does not match with the nomination given by the counterparty BRP | Confirmation report Anomaly report |
| Z07 | Balance error-TBC | The Internal or External nomination is in 'TBC' or 'ImposeTBC' state and at least one value does not match with the nomination given by the counterparty BRP | Confirmation report Anomaly report |
| Z08 | Balance error-Confirmed | The Internal or External nomination is in 'Confirmed' state and at least one value does not match with the nomination given by the counterparty BRP | Confirmation report Anomaly report |
| Z09 | Balance error-Rejected | The Internal or External nomination is in 'Rejected' state and at least one value does not match with the nomination given by the counterparty BRP | Confirmation report Anomaly report |
| Z10 | Balance error-Curtailed | The Internal or External nomination is in 'Curtailed' state and at least one value does not match with the nomination given by the counterparty BRP | Confirmation report Anomaly report |
| Z11 | WFC-Accepted | The nomination is in 'Accepted' state and is waiting for the nomination of the Counterparty BRP | Confirmation report Anomaly report |
| Z12 | WFC-TBC | The nomination is in 'TBC' or 'ImposeTBC' state and is waiting for the nomination of the Counterparty BRP | Confirmation report Anomaly report |

| | | | |
|-----|---------------|--|---------------------------------------|
| z13 | WFC-Confirmed | The nomination is in 'Confirmed' or 'ImposedConfirmed' state and is in the matching state "waiting for the nomination of the Counterparty" | Confirmation report Anomaly report |
| z14 | WFC-Rejected | The nomination is in 'Rejected' state and is in the matching state "waiting for the nomination of the Counterparty" | Confirmation report Anomaly report |
| z15 | WFC-Curtailed | The nomination is in 'Curtailed' state and is in the matching state "waiting for the nomination of the Counterparty" | Confirmation report Anomaly report |

Chapter 11. Schemas and namespaces

The messages structure reference is listed in section 1.1 “CIM – Electronic Scheduling System (ESS)”

The Schedule message is constructed on the basis of a single Schema that is used for all types of nominations. The distinction between the various types of nominations is made using different combinations of values and attributes for the elements set out in the Schema: See chapter 6 “Messages sent from the BRP to Elia” p 48

Since this Schema is designed to be used by all European TSO, it is by nature rather general. This has the advantage that it can be used to create Schedule messages that can ultimately be processed by any European operator. However each TSO has different business rules, and while a Schedule message may be valid according to the general Schema, that does not necessarily mean that it can be processed by a particular TSO.

If the general Schema is used then it is important that the client understands the specific conditions required for specific types of nominations. These are set out in Chapter 6 for each nomination type. Additional information is given in the explanatory sections in 6.4.4 devoted to creating Schedule messages using the “Message Generation tool” provided in the form of an Excel file.

As an example: in the general Schema, the marketEvaluationPoint.mRID element is optional but for an Injection or an Offtake Schedule message Elia requires that these elements are mandatory.

To facilitate the validation of Schedule messages for particular types of nominations, Elia provides an additional set of Schemas tailored to specific types. The different Schemas can be used to validate each type of messages and can be found at: <http://nedi1.elia.be/namespaces/public/Scheduling>

| Message | URL | Version | Reference in this document |
|-----------------|---|---------|---------------------------------------|
| acknowledgement | https://nedi1.elia.be/namespaces/public/scheduling/ELIA-iec62325-451-1-acknowledgement_v8_0.xsd | 8.0 | 9.2 Acknowledgement message p 69 |
| Anomaly | https://nedi1.elia.be/namespaces/public/scheduling/ELIA-iec62325-451-2-anomaly_v5_1.xsd | 5.1 | 9.3 Anomaly report p 72 |
| Confirmation | https://nedi1.elia.be/namespaces/public/scheduling/ELIA-iec62325-451-2-confirmation_v5_0.xsd | 5.0 | 9.4 Confirmation report p 78 |
| schedule | https://nedi1.elia.be/namespaces/public/scheduling/ELIA-iec62325-451-2-schedule_v5_1.xsd | 5.1 | 8.3 Schedule_MarketDocument p 48 |
| statusrequest | https://nedi1.elia.be/namespaces/public/scheduling/ELIA-iec62325-451-5-statusrequest_v4_0.xsd | 4.0 | 8.6 StatusRequest_MarketDocument p 59 |

Note! Even if XML recommends to refer to a Schema from within a XML message, Elia does not recommend to use the Elia URI within the CIM XML message sent to Elia. Because many tools make a call to this address and Elia does not guarantee that the URL to this Schema is always available.

The Schemas indicated here above import codes values from the following files:

| File | URL |
|--|---|
| List of standards codes | https://nedi1.elia.be/namespaces/public/Scheduling/urn-entsoe-eu-wgedi-codelists.xsd |
| List of codes existing only for the Elia B2B nomination system | https://nedi1.elia.be/namespaces/public/Scheduling/urn-entsoe-eu-local-extension-types.xsd |