# Basse Data Packages

## User Guide for XML Documents

**12.12.2025**

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# 1 Terms and Definitions

*Table 1 Terms and definitions*

| Term | Definition |
|---|---|
| **Basse** | eSett Settlement system. Refers to the Basse System in terms of technical communication. |
| **BRS** | BRS is an abbreviation of Business Requirement Specification available at https://www.ediel.org. |
| **BSS** | BSS is an abbreviation of Balance Settlement Solution. |
| **MPS** | MPS is an abbreviation of Market Participant System – Market Participant's information system communicating with Balance Settlement System |
| **Message** | Any business data sent between MPS and Balance Settlement System. The data must conform to one of the supported data flows. |
| **XSD** | XSD is an abbreviation for XML Schema Definition. Specifies how to formally describe the elements in an Extensible Markup Language (XML) document. It can be used by programmers to verify each piece of item content in a document. |
| **Data Packages** | Data packages are a functionality that enables market participants (BRPs and DSOs) to receive settlement data by subscription. eSett defines the content of a data package and also defines when the data packages will be compiled and sent out automatically.<br>Data packages are divided into "specific" and "generic". |
| **Specific Data Packages** | Specific data packages utilize ENTSO-E and ebiX documents (formats) defined and specified in the BRS, but adjusted for NBS purposes by Basse vendor. Data sent into Basse (via Inbound data flows) are available in the same format in form of data package sent from Basse to MPS. E.g. Consumption data reported to Basse in document NEG (ebIX® based) Aggregated Data per MGA (E31, E44) are available in the same format via Data Package Consumption. |
| **Generic Data Packages** | Generic data packages utilize Basse generic format capable to carry almost any Basse time series data using one simplified XML format based on ENTSO-E. Generic data packages will mainly cover settlement aggregation time series. E.g. Data Package Aggregated Consumption per BRP and MBA uses the same XML format as Aggregated Bilateral Trade Purchase per BRP and MBA. |
| **Basse Generic Format** | Simplified ENTSO-E based XML format for Basse Time Series used across multiple data packages with various content. |
| **NBS Handbook** | Overview to the Nordic Imbalance Settlement Model from market participant's perspective available at http://www.esett.com/handbook/ |
| **Inbound** | Message sent from MPS to Balance Settlement System. |
| **Outbound** | Message sent from Balance Settlement System to MPS. |
| **Transition Date** | The Go-Live date of Single Balance Settlement model. It has been agreed this will be any Monday at 00:00 CET. |

# 2 Introduction

## 2.1 Background

Data packages are a functionality that enables market participants, such as Balance responsible parties (BRP) and Distribution System Operators (DSO) to receive settlement data by subscription. eSett defines the content of a data package and defines when the data packages will be compiled and sent out automatically. Data packages are divided into 2 types: “specific” and “generic”.

**Specific Data Packages** utilize ENTSO-E and ebIX® documents (formats) defined and specified in the BRS, but adjusted for NBS purposes by Basse vendor. Data sent into Basse (via Inbound data flows) are available in the same format using data package sent from Basse to MPS. E.g. Consumption data reported to Basse in document ebIX® based NEG Aggregated Data per MGA (E31, E44) are available in the same format via Data Package ‘REs consumption data per type and MGA’.

**Generic Data Packages** utilize Basse generic format capable to carry almost any Basse time series data using one XML format based on simplified ENTSO-E format. Generic data packages will mainly contain settlement aggregation time series. E.g. Data Package ‘Aggregated Consumption per BRP and MBA’ uses the same XML format as ‘Aggregated Bilateral Trade Purchase per BRP and MBA’.

Data Packages are available for subscriptions in Online Service.

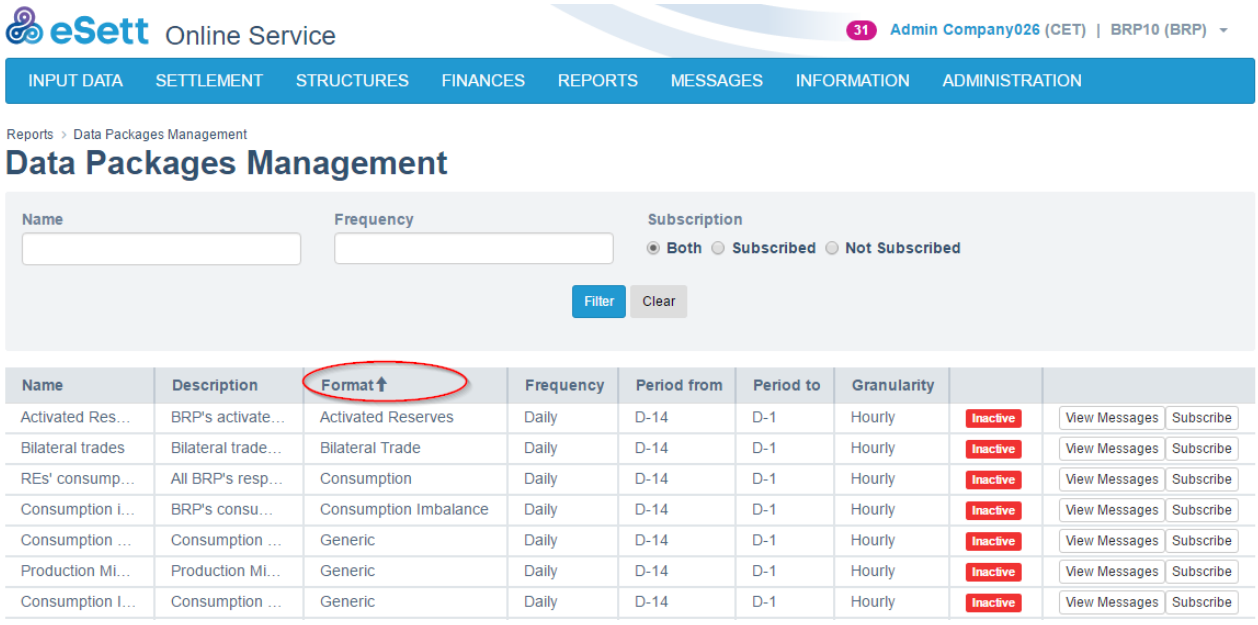



*Figure 1 - Online Service Data Package Subscriptions*

Column ’Format’ determines the format used by each data package. View the mapping table to see what document standard each format refers to.

## 2.2 Summary

This document is a detailed User Guide for the Data Package documents used in the Nordic Balancing System. The focus of the document is the technical aspects of the documents to be exchanged.

**Important Notice:** Basse Data Packages are not involved in Acknowledgement process. **Basse does not expect any acknowledgement to distributed documents.**

## 2.3 References

*Table 2 - References*

| Reference | Note |
|---|---|
| The BRS for Nordic Balance Settlement (NBS) | |
| Generic Data Packages XSD and XML Examples | Package with XSD and XML samples. |
| **Basse Specific Data Package XML Samples** | Package with XML samples. |
| | |
| | |
| | |

# 3 Generic Data Package Documents

## 3.1 Introduction

Term 'Generic' is used for all those Data Packages using the generic XML format *Basse Time Series Document*. Basse Data Packages are not part of an Acknowledgement process which means that Basse does not expect any acknowledgement to this document.

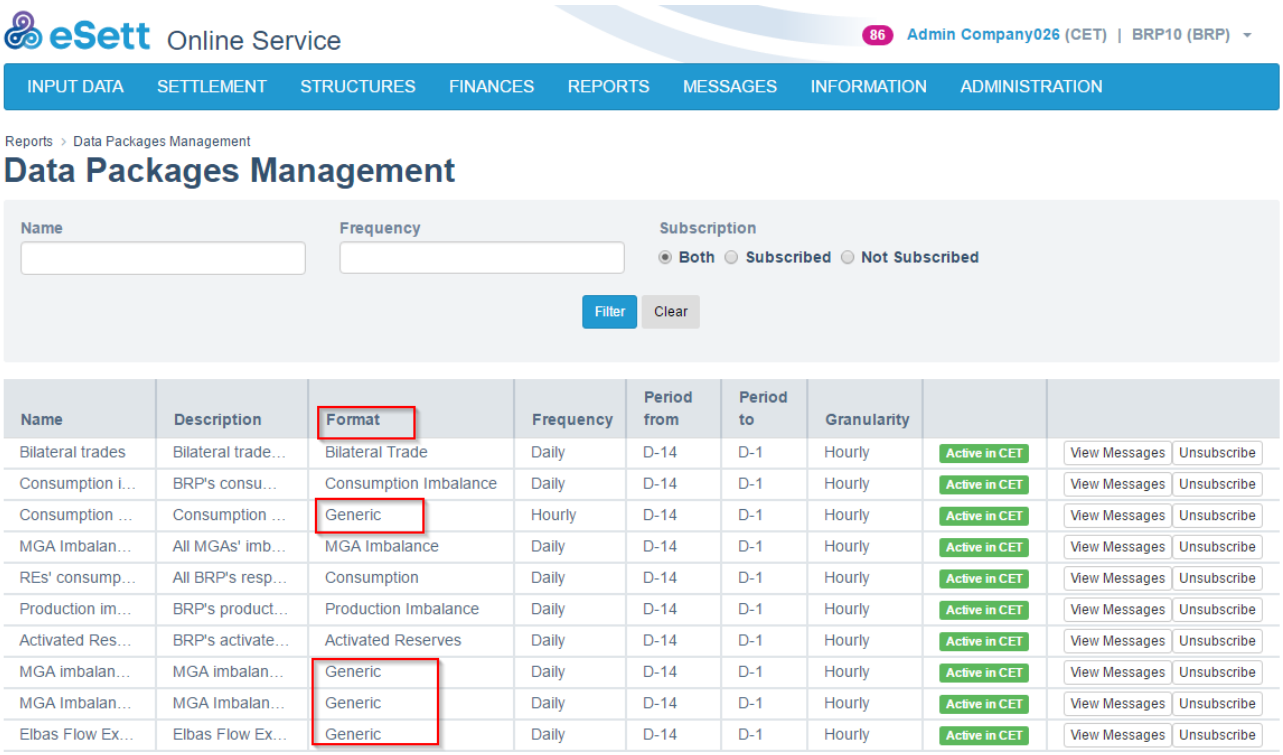
Basse Time Series Document Format is a simplified ENTSO-E based XML format that can hold almost any Basse time series data. This format is called 'Generic' for its capability to be populated by various settlement data without having different XSD.

Generic data packages contain various settlement data on different aggregation levels (areas, market participants or time aggregation). Receiver of this data package must adopt only one format (one XSD) with recognition what data it contains. Thus, new data package can be added without publishing new interface (XSD).

See the list of available generic data packages in Data Package Overview.

Data Packages using Basse Time Series Documents are distinguished by value 'Generic' in column 'Format' in Online Service Data Package Management.

*Figure 2 - Generic Data Packages in Online Service*




Basse Time Series Document is described in following chapter.

## 3.2 Basse Time Series Document

Basse Time Series Document is a XML document based on ENTSO-E standards.

General XML document features:

- Data are stored in attribute ‘v’. No data are stored to child elements.

Basse Time Series Document Format is described in following table. Please note that

- sign [x] (e.g. [2]) in Element column determines the level in the XML structure for easy navigation

*Table 3 - Basse Time Series Document Attribute Usage*

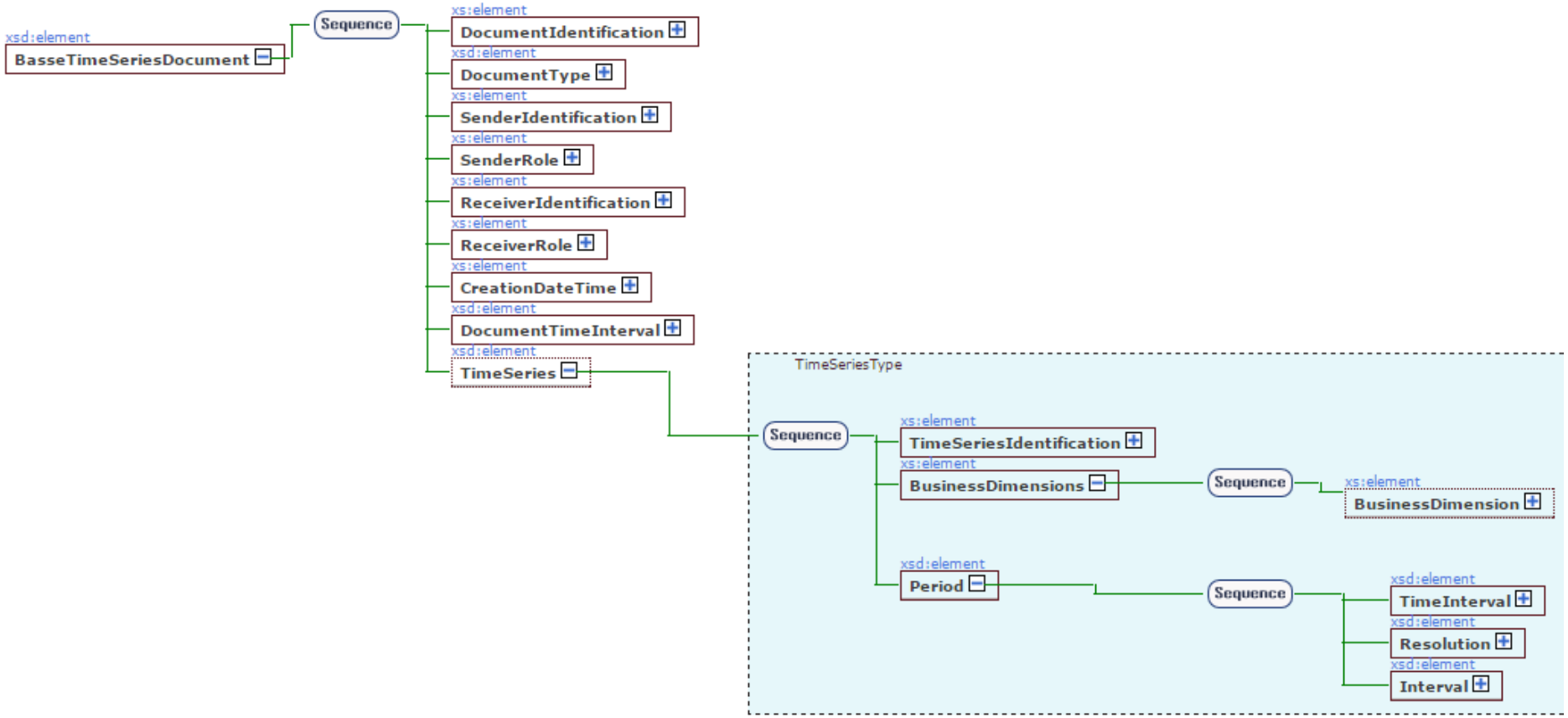
| Element<br>***Attribute*** | Card. | Description | Max Size | XML Example |
|---|---|---|---|---|
| **[1] Basse Time Series Document** | [1] | The root of the document. | | |
| **[2] Document Identification** | [1] | Unique identification of the business document. | A35 | <DocumentIdentification v="9e4ceec7825544b7a7d7203aaa10a451"> |
| **[2] Document Type** | [1] | Type of document. Document Type uniquely identifies the data package to which the market party subscribed. E.g. Document Type 'PROD_MINOR_BRP_MBA' identifies data package 'Production Minor Aggregated per BRP and MBA'. Data Package specifies what data will be populated in XML document.<br>See Table 6 - Generic Data Package Document Types with mapping between data package name and document type.<br>*Note: Document Type Codes List is not part of XML Scheme Definition (XSD) to allow adding a new data package without changing the interface.* | A255 | <DocumentType v="GDP_PROD_MINOR_BRP_MBA"/> |
| **[2] Sender Identification** | [1] | Sender Identification is unique identification of the sender (eSett ID). ENTSO-E document code and scheme identifiers are used. | A16 | <SenderIdentification v="44X-00000000004B" codingScheme="A01" /> |
| ***Coding Scheme*** | [1] | Coding scheme for sender identification.<br>**A01** – EIC | A3 | |
| **[2] Sender Role** | [1] | The sender role, which identifies the role of the sender within the document.<br>**A05** - Imbalance settlement responsible | A3 | <SenderRole v="A05" /> |
| **[2] Receiver Identification** | [1] | The receiver of the document is identified by a unique coded identification. | A16 | <ReceiverIdentification v="11XHYDROENERGIEG" codingScheme="A01" /> |
| ***Coding Scheme*** | [1] | Coding scheme for receiver identification. | A3 | |

| | | | | |
|---|---|---|---|---|
| | | • **A01** - EIC<br>• **A10 -** GS1<br>• **NFI** - Finland National coding scheme<br>• **NSE -** Sweden National coding scheme | | |
| **[2] Receiver Role** | [1] | The receiver role, which identifies the role of the receiver within the document.<br>• **A08** – Balance Responsible Party (BRP)<br>• **A09 –** Metered Data Aggregator (DSO) | A3 | <ReceiverRole v="A08" /> |
| **[2] Creation Date Time** | [1] | The date and time that the document was prepared for transmission by the application of the sender. The date and time expressed in UTC as YYYY-MM-DDTHH:MM:SSZ. | A20 | <CreationDateTime v="2016-02-27T07:35:08Z" /> |
| **[2] Document Time Interval** | [1] | The beginning and ending date and time of the period covered by the document containing the time series.<br>The start and end date and time is expressed as YYYY-MM-DDTHH:MMZ/YYYYMM-DDTHH:MMZ. The time is expressed in UTC. | A35 | <DocumentTimeInterval v="2015-01-13T00:00Z/2015-01-13T23:00Z"/> |
| **[2] Time Series** | [1..*] | Document may contain one or more time series identified by business dimensions and time series ID. | | <TimeSeries> |
| **[3] Time Series Identification** | [1] | Unique ID of the Time Series (unique over time for the sender in question) | A35 | <TimeSeriesIdentification v="b4c02bbdd20e46e8b6988d859b837b5a" /> |
| **[3] Business Dimensions** | [1] | Definition of business dimensions of data. The basis of the generic Basse format. Most Basse time series are defined by area, market party, type/product (e.g. Production Minor, Pumped Storage Consumption) and in addition there might be units (PU, RO). The list of these business dimensions determines the time series data. Business dimensions may vary for each data package.<br>See the list of business dimensions used by each data package in Table 6 - Generic Data Package Document Types. | | <BusinessDimensions> |

| | | | | |
|---|---|---|---|---|
| **[4] Business Dimension** | [1..*] | A reference of business dimension to which the data is bound. Business dimension contains name, value and coding scheme if it is used.<br>See Table 4 - Business Dimension Types. | | <BusinessDimension name="MBA" codingScheme="A01 v="TD_MBA1" /><br><BusinessDimension name="BRP" codingScheme="A01" v="TD_BRP1" /> |
| ***Name*** | [1] | Unique name of the business dimension, e.g. MBA, BRP etc. Different data packages use different dimensions. See Table 4 - Business Dimension Types. | A35 | |
| ***Coding Scheme*** | [0..1] | Coding scheme is used only if an object, such as a party, a domain (area, unit) has identifier scheme to uniquely identify responsible agency for the code. | A3 | |
| **[4] Period** | [1..*] | There is at least one Period class in a time series. | | |
| **[5] Time Interval** | [1] | This information provides the start and end date and time of the period being reported. The start and end date and time must is expressed in UTC with the following format: YYYY-MM-DDTHH:MMZ/YYYY-MMDDTHH:MMZ. | A35 | <TimeInterval v="2015-01-13T00:00Z/2015-01-13T23:00Z "/> |
| **[5] Resolution** | [1] | This information defines the resolution of a single period. The resolution is expressed in compliance with ISO 8601 in the following format: PnYnMnDTnHnMnS. Where nY expresses a number of years, nM a number of months, nD a number of days. The letter “T” separates the date expression from the time expression and after it nH identifies a number of hours, nM a number of minutes and nS a number of seconds.<br>**PT15M** for 15-minute resolution, **PT60M (**PT1H**)** for hourly resolution, P1D – Day, P7D -Week | A14 | <Resolution v="PT60M"/> |
| **[5] Interval** | [1..*] | The interval class contains the relative position within a time interval period and the value associated with that position. The position begins with 1 and increment by 1 for each subsequent position forming a series of contiguous numbers covering the complete range of the period. | | <Interval> |

| | | | | |
|---|---|---|---|---|
| **[6] Pos** | [1] | This information provides the relative position of a period within a time interval. The relative position must be expressed as a numeric integer. Value beginning with 1. | I6 | <Pos v="4"/> |
| **[6] Value** | [1] | A value specified for the given position. 'Name' attribute specifies type of the value (currently only quantity is supported).<br>The maximum length of this information is 17 numeric characters (decimal point and sign, if used, included).<br>The resolution is in **MWh** with max 6 decimals for value of type 'Quantity'. | DE17 | <Value name="Q" v="26"/> |
| ***Name*** | [1] | Value type: **Q (**quantity**)** | A35 | |

*Figure 3 - XML Scheme Visualization*




### 3.2.1 Coding Schemes

Basse Time Series Format uses ENTSO-E coding schemes to identify uniquely the responsible agency for the code or identifier of an object, such as a party, a domain (Metering Point, Area etc.).

Coding Schemes are used currently for following objects:

- Areas (MBA, MGA)

- Market Parties (RE, BRP, BSP, DSO)

Coding Schemes are not used for code list items like e.g. Consumption types.

Coding Schemes in BASSE (EIC, GS1) are converted to ENTSO-E coding scheme according to following table.

| BASSE Coding Scheme | Attribute 'codingScheme' |
|---|---|
| EIC | A01 |
| GS1 | A10 |
| NFI | NFI |
| NSE | NSE |
| NNO | NNO |
| NDK | NDK |

Example of BRP in BASSE (Online Service):

Code: BRP1, Coding Scheme: EIC

Data package XML document will include:

```
<ReceiverIdentification v="BRP1" codingScheme="A01" />
<BusinessDimension name="BRP" codingScheme="A01" v="BRP1" />
```

### 3.2.2 Business Dimension Types

Basse uses following list of business dimensions to describe time series in the Basse Time Series Document.

*Table 4 - Business Dimension Types*

| XML Attribute 'Name' Value | Coding Scheme | Description |
|---|---|---|
| BRP | Yes | Value contains Balance Responsible Party (BRP) unique code with Coding Scheme attribute set (see Coding Schemes). XML element sample:<br>`<BusinessDimension name="BRP" codingScheme="A01" v="BRP1" />` |
| RE | Yes | Value contains Retailer (RE) unique code with Coding Scheme attribute set (see Coding Schemes). XML element sample:<br>`<BusinessDimension name="RE" codingScheme="A01" v="RE1" />` |
| MGA | Yes | Value contains Metering Grid Area (MGA) unique code with Coding Scheme attribute set (see Coding Schemes). XML element sample:<br>`<BusinessDimension name="MGA" codingScheme="A01" v="MGA1" />` |
| MBA | Yes | Contains Market Balance Area (MBA) unique code with Coding Scheme attribute set (see Coding Schemes).<br>`<BusinessDimension name="MBA" codingScheme="A01" v="MBA1" />` |
| CONSUMPTION_ TYPE | No | Identifies the type of the consumption together with Measurement Type. See Consumption Type Code List. XML element sample:<br>`<BusinessDimension name="CONSUMPTION_TYPE" v="A04" />` |
| MEASUREMENT_TYPE | No | Identifies the type of consumption together with Consumption Business Type. See Consumption Type Code List. XML element sample:<br>`<BusinessDimension name="MEASUREMENT_TYPE" v="E01" />` |
| PU_TYPE | No | Identifies the type of Production Unit. XML element sample:<br>`<BusinessDimension name="PU_TYPE" v="WIND" />` |

#### 3.2.2.1 *Consumption Type Code List*

Basse consumption metering data interchange uses ebIX® format and business types.

Generic data-packages containing consumption data use ebIX business types codes published in BRS (e.g. 'Aggregated Data per MGA (E31, E44)') to determine the type of consumption.

*Table 5 - Consumption Type Code List*

| Basse Measurement Type | Basse Consumption Type | XML Measurement Type Code | XML Consumption Type Code |
|---|---|---|---|
| Profiled | General | E01 | A04 |
| Profiled | Pumped | E01 | B27 |
| Profiled | Grid Losses | E01 | A15 |
| Metered | General | E02 | A04 |
| Metered | Large Installation | E02 | B28 |
| Metered | Pumped | E02 | B27 |
| Metered | Pumped Storage | E02 | A07 |
| Metered | Interruptible | E02 | A72 |
| Metered | Grid Losses | E02 | A15 |
| Metered | Production Unit Own Consumption | E02 | B36 |

## 3.2.3 Values & Units

Rules governing values & units:

- Measurement unit for quantities is MWh
- Positive values are sent without sign and negative values are sent with a leading minus
- Number scale is six (maximum number of decimal places)

## 3.3 Data Package Overview

Following table contains the list of currently available data packages using Basse Time Series Document (Generic Format). There is a mapping between Document Type, Business Dimensions used in XML and data package name as is available for subscription in Online Service.

*Table 6 - Generic Data Package Document Types*

| Data Package Name | Recepient | Document Type | Business Dimensions |
|---|---|---|---|
| **Consumption per BRP and MBA** | BRP | CONS_BRP_MBA_HOUR | BRP, MBA |
| **Consumption per type per BRP and MBA** | BRP | CONS_BRP_MBA_TYPE_HOUR | BRP, MBA, CONSUMPTION_TYPE, MEASUREMENT_TYPE |
| **Consumption per RE and MGA** | BRP | CONS_RE_MGA_HOUR | RE, MGA |
| **Production Minor per BRP and MBA** | BRP | PROD_MINOR_BRP_MBA_HOUR | BRP, MBA |
| **Production Plan per BRP and MBA** | BRP | PP_BRP_MBA_HOUR | BRP, MBA |
| **Bilateral Trade Purchase per BRP and MBA** | BRP | BIT_PURCHASE_BRP_MBA_HOUR | BRP, MBA |
| **Bilateral Trade Sales per BRP and MBA** | BRP | BIT_SALES_BRP_MBA_HOUR | BRP, MBA |
| **Day-ahead Purchase per BRP and MBA** | BRP | DAY_AHEAD_PURCHASE_BRP_MBA_HOUR | BRP, MBA |
| **Day-ahead Sales per BRP and MBA** | BRP | DAY_AHEAD_SALES_BRP_MBA_HOUR | BRP, MBA |
| **Intraday Purchase per BRP and MBA** | BRP | INTRADAY_PURCHASE_BRP_MBA_HOUR | BRP, MBA |
| **Intraday Sales per BRP and MBA** | BRP | INTRADAY_SALES_BRP_MBA_HOUR | BRP, MBA |
| **Day-ahead Flow Import per BRP and MBA** | BRP | DAY_AHEAD_IMPORT_BRP_MBA_HOUR | BRP, MBA |
| **Day-ahead Flow Export per BRP and MBA** | BRP | DAY_AHEAD_EXPORT_BRP_MBA_HOUR | BRP, MBA |
| **Intraday Flow Import per BRP and MBA** | BRP | INTRADAY_IMPORT_BRP_MBA_HOUR | BRP, MBA |
| **Intraday Flow Export per BRP and MBA** | BRP | INTRADAY_EXPORT_BRP_MBA_HOUR | BRP, MBA |
| **MGA Imbalance Surplus per BRP and MBA** | BRP | MGI_SURPLUS_BRP_MBA_HOUR | BRP, MBA |
| **MGA imbalance Deficit per BRP and MBA** | BRP | MGI_DEFICIT_BRP_MBA_HOUR | BRP, MBA |

| | | | |
|---|---|---|---|
| **Consumption Imbalance Adjustment Up per BRP and MBA** | BRP | CONS_IA_UP_BRP_MBA_HOUR | BRP, MBA |
| **Consumption Imbalance Adjustment Down per BRP and MBA** | BRP | CONS_IA_DOWN_BRP_MBA_HOUR | BRP, MBA |
| **MGA Trade Import per BRP and MBA** | BRP | MGT_IMPORT_BRP_MBA_HOUR | BRP, MBA |
| **MGA trade Export per BRP and MBA** | BRP | MGT_EXPORT_BRP_MBA_HOUR | BRP, MBA |
| **Consumption Pump Storage per BRP and MBA** | BRP | CONS_PS_BRP_MBA_HOUR | BRP, MBA |
| **Normal Production per BRP and MBA** | BRP | NORMAL_PROD_BRP_MBA_HOUR | BRP, MBA |
| **Production Imbalance Adjustment Up per BRP and MBA** | BRP | PROD_IA_UP_BRP_MBA_HOUR | BRP, MBA |
| **Production imbalance Adjustment Down per BRP and MBA** | BRP | PROD_IA_DOWN_BRP_MBA_HOUR | BRP, MBA |

## 3.4 XML Samples and XSD

Complete set of Generic Data Packages examples and XSD is available on the following link: Basse Generic Data Package XSD and XML Samples.

Each example has Document Type in the file name to identify the data package. E.g. GDP_CONS_BRP_MBA_HOUR_06_02_2017_13_41.xml refers CONS_BRP_MBA_HOUR (Consumption per BRP and MBA). File name suffix determines the creation date of the example.

# 4 Specific Data Package Documents

## 4.1 Introduction

Specific Data Packages utilize ENTSO-E and ebIX® document standards adjusted for NBS purposes by NEG organization and specified in the BRS. Data sent into Basse (via Inbound data flows) are available in the same format in specific data package sent from Basse to market party system. E.g. Consumption data reported to Basse in document ebIX® based NEG Aggregated Data per MGA (E31, E44) are available in the same format via Data Package 'REs consumption data per type and MGA'.

There is a list of supported specific data packages available for market party subscription in Online Service.

## 4.2 Data Package Overview

Following table describes the list of specific data packages with supported recipients (subscribers) and used document format. One format can be used by multiple data packages populated by the same type of data with different filter (e.g. Consumption - Losses, Consumption - All). Format name in this table is the format short name displayed in Online Service Data Package Management.

*Table 7 - Specific Data Packages Overview*

| Name | Recipient | Frequency (Trigger) | Format [Short Name] | Message Type |
|---|---|---|---|---|
| **Consumption Imbalance – Preliminary Results** | BRP | Preliminary Calculation | Consumption Imbalance | (SERO) Send Settlement Results - Consumption |
| **Production Imbalance - Preliminary Results** | BRP | Preliminary Calculation | Production Imbalance | SERO) Send Settlement Results - Production |
| **Consumption Imbalance – Final Results** | BRP | Final Calculation | Consumption Imbalance | (SERO) Send Settlement Results - Consumption |
| **Production Imbalance – Final Results** | BRP | Final Calculation | Production Imbalance | (SERO) Send Settlement Results - Production |
| **Consumption Imbalance – Invoiced Results** | BRP | Invoicing Calculation | Consumption Imbalance | (SERO) Send Settlement Results - Consumption |
| **Production Imbalance – Invoiced Results** | BRP | Invoicing Calculation | Production Imbalance | SERO) Send Settlement Results - Production |
| **MGA Imbalance – Preliminary Results** | DSO, Datahub, BRP | Preliminary Calculation | MGA Imbalance | (MGIO) Send MGA Imbalance Results |
| **MGA Imbalance – Final Results** | DSO, Datahub, BRP | Final Calculation | MGA Imbalance | (MGIO) Send MGA Imbalance Results |
| **MGA Exchange Intermediate Confirmation Report** | DSO, Datahub | MGCO Intermediate Confirmation | MGCO Confirmation Report | (MGCO) Send Intermediate Confirmation Report |

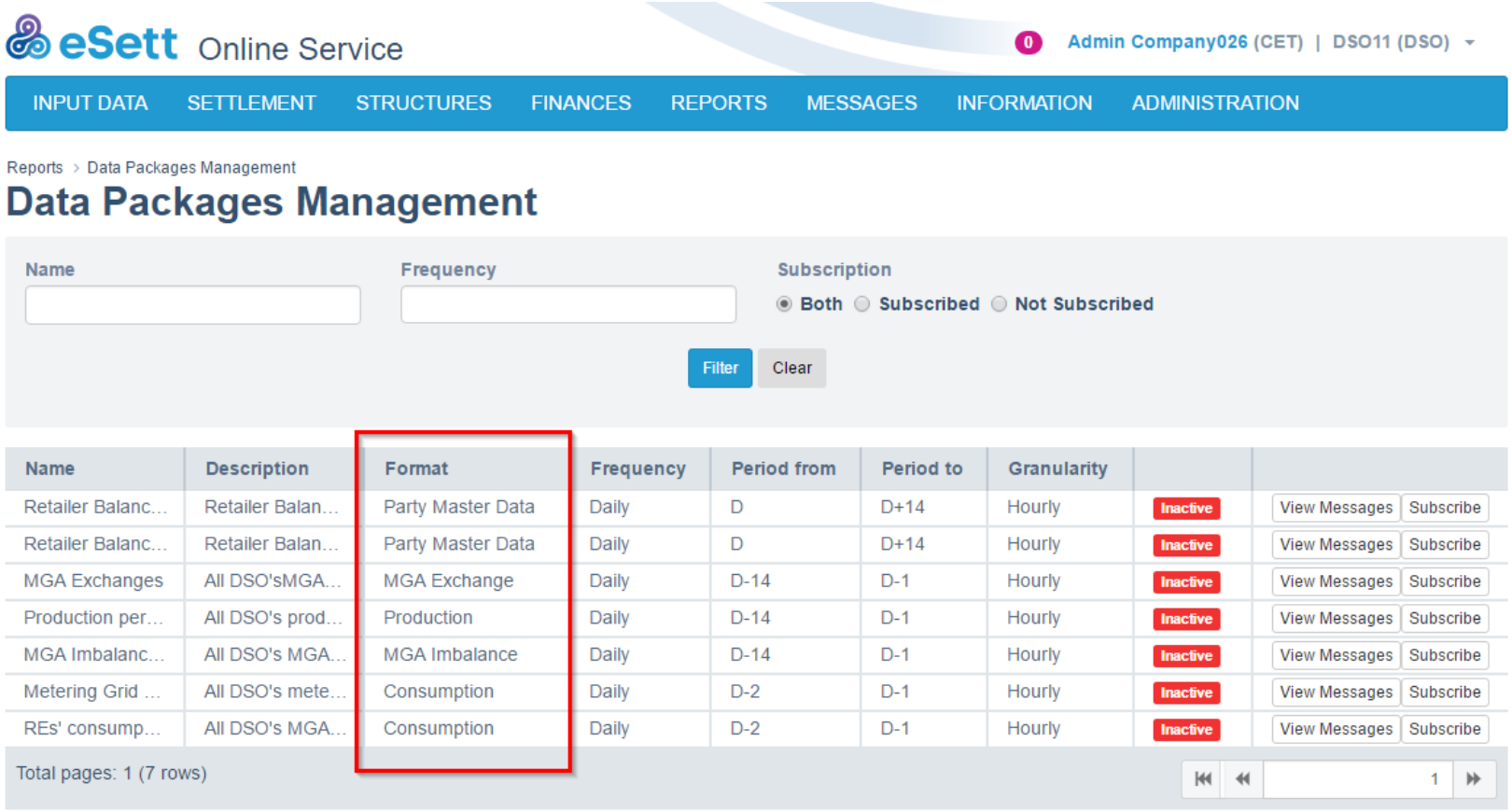
| | | | | |
|---|---|---|---|---|
| **MGA Exchange Final Confirmation Report** | DSO, Datahub | MGCO Final Confirmation | MGCO Confirmation Report | (MGCO) Send Final Confirmation Report |
| **Bilateral Trade Intermediate Confirmation Report** | BRP | BICO Final Confirmation | BICO Confirmation Report | (BICO) Send Intermediate Confirmation Report |
| **Bilateral Trade Final Confirmation Report** | BRP | BICO Final Confirmation | BICO Confirmation Report | (BICO) Send Final Confirmation Report |
| **Metering Grid Area (MGA) Losses per MGA** | DSO | Daily | Consumption | DP Consumption |
| **REs' Consumption Data per Type and MGA** | DSO, BRP | Daily | Consumption | DP Consumption |
| **MGA Imbalances** | DSO, BRP, Datahub | Daily | MGA Imbalance | DP MGA Imbalance |
| **MGA Exchanges** | DSO, Datahub | Daily | MGA Exchange | DP MGA Exchange |
| **Production Per Production unit (PU)** | DSO, BRP | Daily | Production | DP Production |
| **Production Plan per BRP and RO** | BRP | Daily | Production Plan | DP Production Plan |
| **Bilateral Trades** | BRP | Daily | Bilateral Trade | DP Bilateral Trade |
| **Imbalance Prices per Market Balance Area (MBA)** | BRP, BSP | Daily | Prices | DP Prices |
| **Consumption Imbalance per BRP per MBA (Volume and Amount)** | BRP | Daily | Consumption Imbalance | DP Consumption Imbalance |
| **Production Imbalance per BRP per MBA (Volume and Amount)** | BRP | Daily | Production Imbalance | DP Production Imbalance |
| **Primary Frequency Containment Reserves (FCR)** | BSP | Daily | Activated Reserves | DP BSP Activated Reserves |
| **Secondary Frequency Restoration Reserves (FRR)** | BSP | Daily | Activated Reserves | DP BSP Activated Reserves |

| | | | | |
|---|---|---|---|---|
| **Tertiary Replacement Reserves (RR)** | BSP | Daily | Activated Reserves | DP BSP Activated Reserves |
| **Primary Frequency Containment Reserves (FCR)** | BRP | Daily | Activated Reserves | DP BRP Activated Reserves |
| **Secondary Frequency Restoration Reserves (FRR)** | BRP | Daily | Activated Reserves | DP BRP Activated Reserves |
| **Tertiary Replacement Reserves (RR)** | BRP | Daily | Activated Reserves | DP BRP Activated Reserves |
| **PX Trades – Day Ahead** | BRP | Daily | PX Market Trades | DP PX Market Trades |
| **PX Trades – Day Ahead (NSL)** | BRP | Daily | PX Market Trades | DP PX Market Trades |
| **PX Trades – Intraday Continuous** | BRP | Daily | PX Market Trades | DP PX Market Trades |
| **PX Trades – Intraday Auction** | BRP | Daily | PX Market Trades | DP PX Market Trades |
| **Retailer Balance Responsibility - Delta** | DSO, Datahub | Daily | Party Master Data | DP Party Relations (Delta) |
| **Retailer Balance Responsibility - All** | DSO, Datahub | Daily | Party Master Data | DP Party Relations (Active) |
| **Primary Frequency Containment Reserves (FCR) – contracted reserves** | BRP | Daily | Capacity Reserves | DP BRP Capacity Reserves |
| **Secondary Frequency Restoration Reserves (FRR) – contracted reserves** | BRP | Daily | Capacity Reserves | DP BRP Capacity Reserves |
| **Tertiary Replacement Reserves (RR) – contracted reserves** | BRP | Daily | Capacity Reserves | DP BRP Capacity Reserves |
| **Primary Frequency Containment Reserves (FCR) – contracted reserves** | BSP | Daily | Capacity Reserves | DP BSP Capacity Reserves |

| | | | | |
|---|---|---|---|---|
| **Secondary Frequency Restoration Reserves (FRR) – contracted reserves** | BSP | Daily | Capacity Reserves | DP BSP Capacity Reserves |
| **Tertiary Replacement Reserves (RR) – contracted reserves** | BSP | Daily | Capacity Reserves | DP BSP Capacity Reserves |
| **Merged Production** | DSO, BRP | Daily | Merged Production | DP Merged Production |
| **PX Flows** | TSO | Daily | PX Market Flows | DP PX Market Flow |

See chapter Supported Formats and BRS Mapping.

*Figure 4 - Online Service Data Package Management and Format Information*




## 4.3 Supported Formats and BRS Mapping

Following table provides the list of supported formats and mapping between data package format short name and ENTSO-E, ebIX® and NEG document including the reference to BRS.

*Table 8 – SDP Supported Formats and BRS Mapping*

| Format Name (Short Name) | Related BRS Document | Based on Standard |
|---|---|---|
| **Consumption** | NEG Aggregated Data per MGA (E31, E44) | ebIX® |
| **MGA Imbalance** | NEG ESP Energy Account Report Document (EAR) | ENTSO-E |
| **MGA Exchange** | NEG Aggregated Data per Neighbouring Grid for Settlement Responsible (E31, E44) | ebIX® |
| **Production** | NEG Validated Data for Settlement for Aggregator (E66, E44) | ebIX® |
| **Production Plan** | ERRP Planned Resource Schedule Document | ENTSO-E |
| **Bilateral Trade** | ESS Schedule Document | ENTSO-E |
| **Prices** | NEG ECAN Publication Document | ENTSO-E |
| **Consumption Imbalance** | NEG ESP Energy Account Report Document (EAR) | ENTSO-E |
| **Production Imbalance** | NEG ESP Energy Account Report Document (EAR) | ENTSO-E |
| **Activated Reserves** | NEG ERRP Reserve Allocation Result Document | ENTSO-E |
| **PX Market Trades** | ESS Schedule Document | ENTSO-E |
| **Party Master Data** | NEG Party Master Data | NEG |
| **Capacity Reserves** | NEG ERRP Reserve Allocation Result Document | ENTSO-E |
| **Merged Production** | NEG Aggregated Data per MGA (E31, E44) - production | ebIX® |
| **PX Market Flow** | - | ENTSO-E |

*Data Packages are data exchange from Basse to Market Party. BRS does not contain attribute usage for this data exchange and are described within this document.*

## 4.4 Data Packages per Type

### 4.4.1 Consumption

#### 4.4.1.1 *SDP: Metering Grid Area (MGA) Losses per MGA*

| **Attribute** | |
|---|---|
| **Name** | Metering Grid Area (MGA) Losses per MGA |
| **Receiver** | DSO |
| **Description** | All DSO's metering grid areas' (MGA) losses per MGA |
| **Format (Short Name)** | Consumption |
| **Document Standard** | NEG Aggregated Data per MGA for Settlement Responsible (E31, E44) |
| **Aggregation** | Time Aggregation – H (Hourly) |
| **Time Period From** | D-14 |
| **Time Period To** | D-1 |
| **Time Trigger (Words)** | Daily basis, delivered till 10:05 CET<br>Data package is not distributed when there are no data reported. |
| **Data Scope (Filter)** | System selects all DSO consumptions of type **Losses**<br>**Business Type = 'A15'** |

#### 4.4.1.2 *SDP: Metering Grid Area (MGA) Losses per MGA 15-minutes*

This Data Package will be sent from the Transition Date in parallel with the previous one. The DP sent on the first day will contain data for one day only (because there will be 15-minutes data only for one day from the period covered by this DP) and every day data for one more day will be added until the whole period is covered.

| **Attribute** |
|---|

| | |
|---|---|
| **Name** | Metering Grid Area (MGA) Losses per MGA |
| **Receiver** | DSO |
| **Description** | All DSO's metering grid areas' (MGA) losses per MGA |
| **Format (Short Name)** | Consumption |
| **Document Standard** | NEG Aggregated Data per MGA for Settlement Responsible (E31, E44) |
| **Aggregation** | Time Aggregation – 15 (15-minutes) |
| **Time Period From** | D-14 |
| **Time Period To** | D-1 |
| **Time Trigger (Words)** | Daily basis, delivered till 06:35 CET<br>Data package is not distributed when there are no data reported. |
| **Data Scope (Filter)** | System selects all DSO consumptions of type **Losses**<br>**Business Type = 'A15'** |

#### 4.4.1.3 *SDP: REs' Consumption Data per Type and MGA (DSO)*

| **Attribute** | |
|---|---|
| **Name** | REs' Consumption Data per Type and MGA |
| **Receiver** | DSO |
| **Description** | All DSO's metering grid areas' (MGA) per MGA and Consumption Type |
| **Format (Short Name)** | Consumption |
| **Document Standard** | NEG Aggregated Data per MGA for Settlement Responsible (E31, E44) |
| **Aggregation** | Time Aggregation – H (Hourly) |
| **Time Period From** | D-14 |

| | |
|---|---|
| **Time Period To** | D-1 |
| **Time Trigger (Words)** | Daily basis, delivered till 09:45 CET<br>Data package is not distributed when there are no data reported. |
| **Data Scope (Filter)** | System selects all DSO consumptions. DSO is Consumption MEC attribute. |

#### 4.4.1.4 *SDP: REs' Consumption Data per Type and MGA (DSO) 15-minute*

| **Attribute** | |
|---|---|
| **Name** | REs' Consumption Data per Type and MGA |
| **Receiver** | DSO |
| **Description** | All DSO's metering grid areas' (MGA) per MGA and Consumption Type in 15-minute resolution |
| **Format (Short Name)** | Consumption |
| **Document Standard** | NEG Aggregated Data per MGA for Settlement Responsible (E31, E44) |
| **Aggregation** | Time Aggregation – 15M (15-minute) |
| **Time Period From** | D-14 |
| **Time Period To** | D-1 |
| **Time Trigger (Words)** | Daily basis, delivered till 06:45 CET<br>Data package is not distributed when there are no data reported. |
| **Data Scope (Filter)** | System selects all DSO consumptions. DSO is Consumption MEC attribute. |

#### 4.4.1.5 *SDP: REs' Consumption Data per Type and MGA (BRP)*

| **Attribute** |
|---|

| | |
|---|---|
| **Name** | REs' Consumption Data per Type and MGA |
| **Receiver** | BRP |
| **Description** | All DSO's metering grid areas' (MGA) per MGA and Consumption Type |
| **Format (Short Name)** | Consumption |
| **Document Standard** | NEG Aggregated Data per MGA for Settlement Responsible (E31, E44) |
| **Aggregation** | Time Aggregation – H (Hourly) |
| **Time Period From** | D-14 |
| **Time Period To** | D-1 |
| **Time Trigger (Words)** | Daily basis, delivered 09:50 / 13:05 CET |
| **Data Scope (Filter)** | System selects all BRP consumptions. BRP is Consumption MEC attribute. |

#### 4.4.1.6 *SDP: REs' Consumption Data per Type and MGA (BRP) 15-minute*

| **Attribute** | |
|---|---|
| **Name** | REs' Consumption Data per Type and MGA |
| **Receiver** | BRP |
| **Description** | All DSO's metering grid areas' (MGA) per MGA and Consumption Type in 15-minute resolution |
| **Format (Short Name)** | Consumption |
| **Document Standard** | NEG Aggregated Data per MGA for Settlement Responsible (E31, E44) |
| **Aggregation** | Time Aggregation – 15M (15-minute) |
| **Time Period From** | D-14 |
| **Time Period To** | D-1 |
| **Time Trigger (Words)** | Daily basis, delivered 06:40 / 12:55 CET |

| | |
|---|---|
| **Data Scope (Filter)** | System selects all BRP consumptions. BRP is Consumption MEC attribute. |

#### 4.4.1.7 *Consumption Imbalance Adjustment Down per BRP and MBA*

| **Attribute** | |
|---|---|
| **Name** | Consumption Imbalance Adjustment Down per BRP and MBA |
| **Receiver** | BRP |
| **Description** | Consumption Imbalance Adjustment Down per BRP and MBA |
| **Format (Short Name)** | Generic |
| **Document Standard** | Generic Basse Time Series Document |
| **Aggregation** | Time Aggregation – 15M (15-minute) |
| **Time Period From** | D-14 |
| **Time Period To** | D-1 |
| **Time Trigger (Words)** | Daily basis, delivered 15:00 CET |

#### 4.4.1.8 *Consumption Imbalance Adjustment Up per BRP and MBA*

| **Attribute** | |
|---|---|
| **Name** | Consumption Imbalance Adjustment Up per BRP and MBA |
| **Receiver** | BRP |
| **Description** | Consumption Imbalance Adjustment Down per BRP and MBA |
| **Format (Short Name)** | Generic |
| **Document Standard** | Generic Basse Time Series Document |

| | |
|---|---|
| **Aggregation** | Time Aggregation – 15M (15-minute) |
| **Time Period From** | D-14 |
| **Time Period To** | D-1 |
| **Time Trigger (Words)** | Daily basis, delivered 15:00 CET |

#### 4.4.1.9 *Consumption per BRP and MBA*

| **Attribute** | |
|---|---|
| **Name** | Consumption per BRP and MBA |
| **Receiver** | BRP |
| **Description** | Consumption per BRP and MBA |
| **Format (Short Name)** | Generic |
| **Document Standard** | Generic Basse Time Series Document |
| **Aggregation** | Time Aggregation – 15M (15-minute) |
| **Time Period From** | D-14 |
| **Time Period To** | D-1 |
| **Time Trigger (Words)** | Daily basis, delivered 15:00 CET |

#### 4.4.1.10 *Consumption per RE and MGA*

| **Attribute** | |
|---|---|
| **Name** | Consumption per RE and MGA |
| **Receiver** | BRP |

| | |
|---|---|
| **Description** | Consumption per RE and MGA |
| **Format (Short Name)** | Generic |
| **Document Standard** | Generic Basse Time Series Document |
| **Aggregation** | Time Aggregation – 15M (15-minute) |
| **Time Period From** | D-14 |
| **Time Period To** | D-1 |
| **Time Trigger (Words)** | Daily basis, delivered 15:00 CET |

#### 4.4.1.11 *Consumption per type per BRP and MBA*

| **Attribute** | |
|---|---|
| **Name** | Consumption per type per BRP and MBA |
| **Receiver** | BRP |
| **Description** | Consumption per type per BRP and MBA |
| **Format (Short Name)** | Generic |
| **Document Standard** | Generic Basse Time Series Document |
| **Aggregation** | Time Aggregation – 15M (15-minute) |
| **Time Period From** | D-14 |
| **Time Period To** | D-1 |
| **Time Trigger (Words)** | Daily basis, delivered 15:00 CET |

#### 4.4.1.12 *Consumption Pump Storage per BRP and MBA*

| **Attribute** | |
|---|---|
| **Name** | Consumption Pump Storage per BRP and MBA |
| **Receiver** | BRP |
| **Description** | Consumption Pump Storage per BRP and MBA |
| **Format (Short Name)** | Generic |
| **Document Standard** | Generic Basse Time Series Document |
| **Aggregation** | Time Aggregation – 15M (15-minute) |
| **Time Period From** | D-14 |
| **Time Period To** | D-1 |
| **Time Trigger (Words)** | Daily basis, delivered 15:00 CET |

#### 4.4.1.13 *Document Format Attribute Usage*

Document used for consumption data is 'NEG Aggregated Data per MGA for Settlement Responsible (E31, E44)'. Attribute usage is specified separately for document header and time series part for better navigation.

Mark [x] indicates the level in the document structure.

##### 4.4.1.13.1 Header - NEG Aggregated Data per MGA for Settlement Responsible (E31, E44)

| **Attribute (XML schema)** | **Cl.** | **Value Description** |
|---|---|---|
| Aggregated Data Per MGA For Settlement for Settlement Responsible | | |
| **[1] Header** | [1] | |
| [2] Identification | [1] | *Unique identification of the business document.* |
| [2] Document Type | [1] | **E31** – Aggregated Metered Data from the Metered Data Aggregator |

| | | |
|---|---|---|
| [2] Creation | [1] | *Document Creation Time Stamp.* |
| [2] Sender Energy Party | [1] | eSett Code and Coding Scheme |
| [2] Recipient Energy Party | [1] | Subscriber<br>• BRP Code and Coding Scheme<br>• DSO Code and Coding Scheme |
| **[1] Process Energy Content** | [1] | |
| [2] Energy Business Process | [1] | **E44** – stands for Imbalance Settlement |
| [2] Energy Business Process Role | [1] | **DDX** - Imbalance settlement responsible |
| [2] Energy Industry Classification | [1] | **23** - Electricity supply industry |
| **[1] Payload Energy Time Series** | [1..*] | *See Time Series Attribute Description* |

#### 4.4.1.13.2 Time Series - NEG Aggregated Data per MGA for Settlement Responsible (E31, E44)

| Attribute (XML schema) | Cl. | Value Description |
|---|---|---|
| **[1] Payload Energy Time Series** | 1..*] | |
| [2] Identification | [1] | Unique Time Series Identification |
| [2] Registration Date Time | [1] | Time of document creation. |
| [2] Observation Period Time Series Period | [1] | |
| **[3] Resolution Duration** | [1] | **PT1H** – for hourly data<br>**PT15M** – for 15-minute data |
| **[3] Start** | [1] | Date and time for a start of a time series in format “YYYY-MM-DDTHH:MM:SSZ” |
| **[3] End** | [1] | Date and time for a end of a time series in format “YYYY-MM-DDTHH:MM:SSZ” |
| **[2] Balance Responsible Involved Party** | [0..1] | |
| **[3] Identification** | [1] | Code and Coding Scheme of BRP. |
| **[2] Balance Supplier Involved Party** | [0..1] | Not available if time series is a consumption on BRP level (Profiled Consumption in Sweden) |
| **[3] Identification** | [1] | Retailer code and coding scheme. |
| **[2] Product Included Product Characteristics** | [1] | |
| **[3] Identification** | [1] | Product: “**8716867000030**” - Energy active |

| | | |
|---|---|---|
| **[3] Unit Type** | [1] | **MWH** |
| **[2] MP Detail Measurement Metering Point Characteristics** | [1] | |
| **[3] Metering Point Type** | [1] | **E17** - Consumption |
| **[3] Settlement Method Type** | [1] | **E01** - Profiled<br>**E02** - Metered |
| **[3] Business Type** | [1] | **A04** – for General<br>**B28** – for Large Installation<br>**B27** – for Pumped<br>**A15** – for Losses<br>**A07** – for Pumped Storage<br>**A72** – for Interruptible |
| [2] Metering Grid Area Used Domain Location | [1] | Metering Grid Area of consumption. |
| [3] Identification | [1] | MGA Code and Coding Scheme |
| [2] Observation Interval Observation Period | [1..*] | |
| [3] Sequence | [1] | Sequence number of the observation in the time series |
| [3] Observation Detail Energy Observation | [1] | |
| **[4] Energy Quantity** | [1] | Positive value with maximal 6 decimals |
| **[4] Quantity Quality** | [0..1] | Quality:<br>• **"21"** Temporary<br>• **"56"** Estimated, approved for billing<br>The default Quantity Quality is "**Metered**", i.e. Quantity Quality is only used if ≠ "Metered". |

## 4.4.2 MGA Exchange Data Packages

4.4.2.1 *SDP: MGA Exchanges*

| **Attribute** | |
|---|---|
| **Name** | MGA Exchanges |

| | |
|---|---|
| **Receiver** | DSO |
| **Description** | All DSO's MGA Exchanges |
| **Format (Short name)** | MGA Exchange |
| **Document Standard** | NEG Aggregated Data per Neighbouring Grid for Settlement Responsible (E31, E44) |
| **Aggregation** | Time Aggregation – H (Hourly) |
| **Time Period From** | D-14 |
| **Time Period To** | D-1 |
| **Time Trigger (Words)** | Daily basis, delivered till 10:05 CET<br>Data package is not distributed when there are no data reported. |
| **Data Scope (Filter)** | System selects all DSO's MGA Exchanges (DSO is Out or In Party of MGA Exchange MEC) |

#### 4.4.2.2 *SDP: MGA Exchanges 15-minute*

| **Attribute** | |
|---|---|
| **Name** | MGA Exchanges |
| **Receiver** | DSO |
| **Description** | All DSO's MGA Exchanges in 15-minute resolution |
| **Format (Short name)** | MGA Exchange |
| **Document Standard** | NEG Aggregated Data per Neighbouring Grid for Settlement Responsible (E31, E44) |
| **Aggregation** | Time Aggregation – 15M (15-minute) |
| **Time Period From** | D-14 |
| **Time Period To** | D-1 |
| **Time Trigger (Words)** | Daily basis, delivered till 06:35 CET |

| | |
|---|---|
| | Data package is not distributed when there are no data reported. |
| **Data Scope (Filter)** | System selects all DSO's MGA Exchanges (DSO is Out or In Party of MGA Exchange MEC) |

#### 4.4.2.3 *MGA Exchange Final Confirmation Report*

| **Attribute** | |
|---|---|
| **Name** | MGA Exchange Final Confirmation Report |
| **Market Party (Receiver)** | DSO, Datahub |
| **Document Standard** | NEG document Confirmation of Aggregated Data Per Neighboring Grid |
| **Format (Short Name)** | MGCO Confirmation Report |
| **Message Type** | (MGCO) Send Final Confirmation Report |
| **Frequency (Trigger)** | MGCO Final Confirmation |
| **Aggregation** | H (Hourly) |
| **Time Period From** | D-13 |
| **Time Period To** | D-13 |
| **Data Scope** | BackOffice process workflow closes delivery day of all MGA Exchanges.<br>• When both (In MGA and Out MGA) of MGA Exchange do not have a relation to Datahub, the DSO final GC is used<br>• When at least one MGA of MGA Exchange has a relation to Datahub, the Datahub final GC is used<br>System selects all these MGA Exchanges and group them by DSO<br>**DSO** receives closed delivery days in one document for all its MGA Exchanges. If DSO is responsible for both MGAs in MGA Exchange, then document includes time series for both his MGAs.<br>**Datahub** receives messages on behalf of the DSO. Datahub receives closed delivery days in one document for those MGA Exchanges where it has a relation to at least one of MGAs. If Datahub has a connection to both MGAs in MGA Exchange, then document includes time series for both its MGAs.<br>Data Context: |

| | |
|---|---|
| | • DSO<br>• Time Period is Delivery Day closed by final GC<br>Type of Report - Final |

#### 4.4.2.4 *MGA Exchange Final Confirmation Report 15-minutes*

| **Attribute** | |
|---|---|
| **Name** | MGA Exchange Final Confirmation Report |
| **Market Party (Receiver)** | DSO, Datahub |
| **Document Standard** | NEG document Confirmation of Aggregated Data Per Neighboring Grid |
| **Format (Short Name)** | MGCO Confirmation Report |
| **Message Type** | (MGCO) Send Final Confirmation Report |
| **Frequency (Trigger)** | MGCO Final Confirmation |
| **Aggregation** | QH (15-minute) |
| **Time Period From** | D-13 |
| **Time Period To** | D-13 |
| **Data Scope** | BackOffice process workflow closes delivery day of all MGA Exchanges.<br>• When both (In MGA and Out MGA) of MGA Exchange do not have a relation to Datahub, the DSO final GC is used<br>• When at least one MGA of MGA Exchange has a relation to Datahub, the Datahub final GC is used<br>System selects all these MGA Exchanges and group them by DSO<br>**DSO** receives closed delivery days in one document for all its MGA Exchanges. If DSO is responsible for both MGAs in MGA Exchange, then document includes time series for both his MGAs.<br>**Datahub** receives messages on behalf of the DSO. Datahub receives closed delivery days in one document for those MGA Exchanges where it has a relation to at least one of MGAs. If Datahub has a connection to both MGAs in MGA Exchange, then document includes time series for both its MGAs. |

| | |
|---|---|
| | Data Context:<br>• DSO<br>• Time Period is Delivery Day closed by final GC<br>Type of Report - Final |

#### 4.4.2.5 *MGA Exchange Intermediate Confirmation Report*

| **Attribute** | |
|---|---|
| **Name** | MGA Exchange Intermediate Confirmation Report |
| **Market Party (Receiver)** | DSO, Datahub |
| **Document Standard** | NEG document Confirmation of Aggregated Data Per Neighboring Grid |
| **Format (Short Name)** | MGCO Confirmation Report |
| **Message Type** | (MGCO) Send Intermediate Confirmation Report |
| **Frequency (Trigger)** | MGCO Intermediate Confirmation |
| **Aggregation** | H (Hourly) |
| **Time Period From** | N/A |
| **Time Period To** | N/A |
| **Data Scope** | Dataflow is triggered with these input data (data context):<br>• DSO – data submitter<br>• MGA Exchange MEC<br>• Time Interval - One or more whole days submitted via MGXI data-flow (Payload Energy Time Series with Observation Period)<br>•<br>• Scenario:<br>1. DSO (or Datahub on behalf of this DSO) successfully submits his MGA Exchange own values (In or Out) via data flow (MGXI)<br>2. Systems performs value matching immediately |

| | |
|---|---|
| | 3. Systems sends calculated matched quantity and delta quantity<br>a. **DSO receivers**<br>i. System sends to both DSOs (data submitter and counter DSO)<br>ii. Each DSO gets quantities from its own point of view.<br>iii. DSO see all the data of its MGA<br>b. **Datahub receivers**<br>i. System sends to both Datahubs (data submitter and counter Datahub).<br>Each Datahub gets quantities from its own point of view. Datahub see only MGA data that are within time validity of MGA-Datahub relation. |

#### 4.4.2.6 *MGA Exchange Intermediate Confirmation Report 15-minute*

| **Attribute** | |
|---|---|
| **Name** | MGA Exchange Intermediate Confirmation Report |
| **Market Party (Receiver)** | DSO, Datahub |
| **Document Standard** | NEG document Confirmation of Aggregated Data Per Neighboring Grid |
| **Format (Short Name)** | MGCO Confirmation Report |
| **Message Type** | (MGCO) Send Intermediate Confirmation Report |
| **Frequency (Trigger)** | MGCO Intermediate Confirmation |
| **Aggregation** | QH (15-minute) |
| **Time Period From** | N/A |
| **Time Period To** | N/A |
| **Data Scope** | Dataflow is triggered with these input data (data context):<br>• DSO – data submitter<br>• MGA Exchange MEC<br>• Time Interval - One or more whole days submitted via MGXI data-flow (Payload Energy Time Series with Observation Period)<br>• |

| | |
|---|---|
| | • Scenario:<br>4. DSO (or Datahub on behalf of this DSO) successfully submits his MGA Exchange own values (In or Out) via data flow (MGXI)<br>5. Systems performs value matching immediately<br>**6.** Systems sends calculated matched quantity and delta quantity<br>**c. DSO receivers**<br>i. System sends to both DSOs (data submitter and counter DSO)<br>ii. Each DSO gets quantities from its own point of view.<br>iii. DSO see all the data of its MGA<br>**d. Datahub receivers**<br>i. System sends to both Datahubs (data submitter and counter Datahub).<br>Each Datahub gets quantities from its own point of view. Datahub see only MGA data that are within time validity of MGA-Datahub relation. |

#### 4.4.2.7 *Document Format Attribute Usage*

Document used for consumption data is 'NEG Aggregated Data per Neighbouring Grid for Settlement Responsible (E31, E44)'. Attribute usage is specified separately for document header and time series part for easy navigation.

Mark [x] indicates the level in the document structure.

##### 4.4.2.7.1 Header - NEG Aggregated Data per Neighbouring Grid for Settlement Responsible (E31, E44)

| Attribute (XML schema) | Cl. | Value Description |
|---|---|---|
| **Aggregated Data Per Neighbouring Grid for Settlement for Settlement Responsible** | | |
| **[1] Header** | [1] | |
| [2] Identification | [1] | Document ID is unique identification of the business document. |
| [2] Document Type | [1] | **E31** |
| [2] Creation | [1] | Document Creation Time Stamp. |
| [2] Sender Energy Party | [1] | eSett Code and Coding Scheme |
| [2] Recipient Energy Party | [1] | DSO Code and Coding Scheme |
| **[1] Process Energy Content** | [1] | |

| | | |
|---|---|---|
| [2] Energy Business Process | [1] | **E44** - Imbalance Settlement |
| [2] Energy Business Process Role | [1] | **DDX** - Imbalance Settlement Responsible |
| [2] Energy Industry Classification | [1] | **23 -** Electricity supply industry |
| **[1] Payload Energy Time Series** | [1..*] | *See Time Series part.* |

#### 4.4.2.7.2 Time Series - NEG Aggregated Data per Neighbouring Grid for Settlement Responsible (E31, E44)

| Attribute (XML schema) | Cl. | Value Description |
|---|---|---|
| **[1] Payload Energy Time Series** | [1..*] | *Each time series has an In Area (Metering Grid Area) and an Out Area (Metering Grid Area) defining the direction of the flow. There is only one time series for each exchange, i.e. netted values are exchanged.* |
| [2] Identification | [1] | Unique Time Series Identification |
| [2] Registration Date Time | [1] | Same as Document Creation date. |
| **[2] Observation Period Time Series Period** | [1] | |
| [3] Resolution Duration | [1] | In NBS hourly/15-minute resolution is used, i.e. **PT1H** or **PT60M** for hourly resolution, **PT15M** for 15-minute resolution |
| [3] Start | [1] | Date and time for the start of the time series |
| [3] End | [1] | Date and time for the end of the time series |
| **[2] Product Included Product Characteristics** | [1] | |
| [3] Identification | [1] | Product: "**8716867000030**" (Energy active) |
| [3] Unit Type | [1] | **MWH** |
| **[2] MP Detail Measurement Metering Point Characteristics** | [1] | |
| [3] Metering Point Type | [1] | **E20** - Metering Point Type (Exchange) |
| **[2] Metering Grid Area Used Domain Location** | [1] | MGA code and coding scheme for which the DSO is responsible. |

| | | |
|---|---|---|
| [3] Identification | [1] | MGA Code and Coding Scheme |
| **[2] In Area Used Domain Location** | [1] | **In MGA** |
| [3] Identification | [1] | MGA Code and Coding Scheme |
| **[2] Out Area Used Domain Location** | [1] | **Out MGA** |
| [3] Identification | [1] | MGA Code and Coding Scheme |
| **[2] Observation Interval Observation Period** | [1..*] | *The number of occurrences with incremental sequence within Observation Time Period interval.* |
| [3] Sequence | [1] | Position/index in the time series. |
| **[3] Observation Detail Energy Observation** | [1] | |
| [4] Energy Quantity | [1] | Quantity can be positive or negative decimal number.<br>*NOTE: Netted values are exchanged. The flow from Out Area to In Area will be reported as positive quantities, while the opposite direction will be reported as negative quantities (with a leading minus sign).* |
| [4] Energy Quantity | [0..1] | Quality is present only if it is different from 'Metered':<br>• **21** Temporary<br>• **56** Estimated (*approved for billing*) |

### 4.4.3 Merged Production Data Packages

#### 4.4.3.1 *SDP: REs' Merged Production Data per Type and MGA (DSO)*

| **Attribute** | |
|---|---|
| **Name** | REs' Merged Production Data per Type and MGA |
| **Receiver** | DSO |
| **Description** | All DSO's metering grid areas' (MGA) per MGA, Production Type and Production Unit Type |
| **Format (Short Name)** | Merged Production |

| | |
|---|---|
| **Document Standard** | NEG (ebIX® based) Aggregated Data per MGA (E31, E44) - production |
| **Aggregation** | Time Aggregation – H (Hourly) |
| **Time Period From** | D-14 |
| **Time Period To** | D-1 |
| **Time Trigger (Words)** | Daily basis, delivered 09:45 CET<br>Data package is not distributed when there are no data reported. |
| **Data Scope (Filter)** | System selects all DSO merged productions. DSO is merged production MEC attribute. |

#### 4.4.3.2 *SDP: REs' Merged Production Data per Type and MGA (BRP)*

| **Attribute** | |
|---|---|
| **Name** | REs' Merged Production Data per Type and MGA |
| **Receiver** | BRP |
| **Description** | All DSO's metering grid areas' (MGA) per MGA, Production Type and Production Unit Type |
| **Format (Short Name)** | Merged Production |
| **Document Standard** | NEG (ebIX® based) Aggregated Data per MGA (E31, E44) - production |
| **Aggregation** | Time Aggregation – H (Hourly) |
| **Time Period From** | D-14 |
| **Time Period To** | D-1 |
| **Time Trigger (Words)** | Daily basis, delivered 10:00 CET<br>Data package is not distributed when there are no data reported. |
| **Data Scope (Filter)** | System selects all BRP merged productions. BRP is merged production MEC attribute. |

#### 4.4.3.3 *SDP: REs' Merged Production Data per Type and MGA (DSO) 15-minute*

| **Attribute** | |
|---|---|
| **Name** | REs' Merged Production Data per Type and MGA |
| **Receiver** | DSO |
| **Description** | All DSO's metering grid areas' (MGA) per MGA, Production Type and Production Unit Type |
| **Format (Short Name)** | Merged Production |
| **Document Standard** | NEG (ebIX® based) Aggregated Data per MGA (E31, E44) - production |
| **Aggregation** | Time Aggregation – QH (15-minute) |
| **Time Period From** | D-14 |
| **Time Period To** | D-1 |
| **Time Trigger (Words)** | Daily basis, 06:55<br>Data package is not distributed when there are no data reported. |
| **Data Scope (Filter)** | System selects all DSO merged productions. DSO is merged production MEC attribute. |

#### 4.4.3.4 *SDP: REs' Merged Production Data per Type and MGA (BRP) 15-minute*

| **Attribute** | |
|---|---|
| **Name** | REs' Merged Production Data per Type and MGA |
| **Receiver** | BRP |
| **Description** | All DSO's metering grid areas' (MGA) per MGA, Production Type and Production Unit Type |
| **Format (Short Name)** | Merged Production |
| **Document Standard** | NEG (ebIX® based) Aggregated Data per MGA (E31, E44) - production |
| **Aggregation** | Time Aggregation – QH (15-minute) |

| | |
|---|---|
| **Time Period From** | D-14 |
| **Time Period To** | D-1 |
| **Time Trigger (Words)** | Daily basis, 06:50 / 10:00 CET<br>Data package is not distributed when there are no data reported. |
| **Data Scope (Filter)** | System selects all BRP merged productions. BRP is merged production MEC attribute. |

#### 4.4.3.5 *Document Format Attribute Usage*

Document used for consumption data is 'NEG (ebIX® based) Aggregated Data per MGA (E31, E44) - production'. Attribute usage is specified separately for document header and time series part for easy navigation.

Mark [x] indicates the level in the document structure.

##### 4.4.3.5.1 Header - NEG (ebIX® based) Aggregated Data per MGA (E31, E44) - production

| **Attribute (XML schema)** | Cl. | Value Description and Mapping |
|---|---|---|
| | | Aggregated Data Per MGA - production |
| **[1] Header** | [1] | |
| [2] Identification | [1] | *Unique identification of the business document.* |
| [2] Document Type | [1] | '**E31**' – stands for Aggregate metered data from the Metered Data Aggregator |
| [2] Creation | [1] | *Document Creation Time Stamp.* |
| [2] Sender Energy Party | [1] | eSett Code and Coding Scheme |
| [2] Recipient Energy Party | [1] | Subscriber<br>• BRP Code and Coding Scheme<br>• DSO Code and Coding Scheme |
| **[1] Process Energy Content** | [1] | |
| [2] Energy Business Process | [1] | '**E44**' – stands for Imbalance Settlement |

| | | |
|---|---|---|
| [2] Energy Business Process Role | [1] | **'DDX'** - Imbalance settlement responsible |
| [2] Energy Industry Classification | [1] | '**23**'- Electricity supply industry |
| **[1] Payload Energy Time Series** | [1..*] | *See Time Series Attribute Description* |

#### 4.4.3.5.2 Time Series - NEG (ebIX® based) Aggregated Data per MGA (E31, E44) - production

| Attribute (XML schema) | Cl. | Value Description and Mapping |
|---|---|---|
| **[1] Payload Energy Time Series** | 1..*] | |
| [2] Identification | [1] | Merged Production MEC ID |
| [2] Registration Date Time | [1] | Time of document creation. |
| [2] Observation Period Time Series Period | [1] | |
| [3] Resolution Duration | [1] | '**PT1H**' – for hourly data |
| [3] Start | [1] | Date and time for a start of a time series in format "YYYY-MM-DDTHH:MM:SSZ" |
| [3] End | [1] | Date and time for a end of a time series in format "YYYY-MM-DDTHH:MM:SSZ" |
| [2] Balance Responsible Involved Party | [0..1] | |
| [3] Identification | [1] | Code and Coding Scheme of BRP. |
| [2] Balance Supplier Involved Party | [0..1] | |
| [3] Identification | [1] | Retailer code and coding scheme. |
| [2] Product Included Product Characteristics | [1] | |
| [3] Identification | [1] | Product: "**8716867000030**" - Energy active |
| [3] Unit Type | [1] | **'MWH'** |
| [2] MP Detail Measurement Metering Point Characteristics | [1] | |
| [3] Metering Point Type | [1] | **'E18'** - Production |
| [3] Settlement Method Type | [1] | **'E02'** – Non-profiled |

| | | |
|---|---|---|
| [3] Business Type | [1] | • "**A01**" - Production |
| [3] Asset Type | [0..1] | **"B14"** Nuclear<br>**"B16"** Solar<br>**"B20"** Other production<br>**"Z04", "B37"** Thermal, after October 2025 deployment, only **"B37"** is supported.<br>**"Z05", "B19"** Wind onshore, after October 2025, only **"B19"** is supported.<br>**"B18"** Wind offshore<br>**"B25"** Energy storage<br>**"Z06"** Hydro |
| [3] Production Type | [0..1] | • "**Z01**" – Normal<br>• "**Z02**" - Minor |
| [2] Metering Grid Area Used Domain Location | [1] | Metering Grid Area of consumption. |
| [3] Identification | [1] | MGA Code and Coding Scheme |
| [2] Observation Interval Observation Period | [1..*] | |
| [3] Sequence | [1] | Sequence number of the observation in the time series |
| [3] Observation Detail Energy Observation | [1] | |
| [4] Energy Quantity | [1] | Positive value with maximal 6 decimals |
| [4] Quantity Quality | [0..1] | Quality:<br>• **"21"** Temporary<br>• **"56"** Estimated, approved for billing<br>The default Quantity Quality is "**Metered**", i.e. Quantity Quality is only used if ≠ "Metered". |

### 4.4.4 MGA Imbalance Data Packages

#### 4.4.4.1 *Time-Based: MGA Imbalances - BRP*

| Attribute | |
|---|---|
| **Name** | MGA imbalances |
| **Receiver** | BRP |
| **Description** | All MGAs' imbalances per MGA under BRP's balance responsibility |
| **Format (Short Name)** | MGA Imbalance |
| **Document Standard** | NEG ESP Energy Account Report Document |
| **Aggregation** | Time Aggregation – H (Hourly) |
| **Time Period From** | D-14 |
| **Time Period To** | D-1 |
| **Time Trigger (Words)** | Daily basis, 10:15 CET<br>Data package is not distributed when there are no data reported. |
| **Data Scope (Filter)** | All BRP MGAs' imbalances per MGA under BRP's balance responsibility |

#### 4.4.4.2 *Time-Based: MGA Imbalances – DSO*

| Attribute | |
|---|---|
| **Name** | MGA imbalances |
| **Receiver** | DSO, Datahub |
| **Description** | All DSO's MGAs' imbalances per MGA |
| **Format (Short Name)** | MGA Imbalance |
| **Document Standard** | NEG ESP Energy Account Report Document |
| **Aggregation** | Time Aggregation – H (Hourly) |

| | |
|---|---|
| **Time Period From** | D-14 |
| **Time Period To** | D-1 |
| **Time Trigger (Words)** | Daily basis, 13:30 CET<br>Data package is not distributed when there are no data reported. |
| **Data Scope (Filter)** | All DSO's MGAs' imbalances per MGA<br>**For Datahub receiver:**<br>• Only those DSO's MGAs are listed to which the Datahub has a connection (MGA-Datahub relation).<br>• Hourly values are limited by MGA-Datahub relation validity (Datahub cannot see MGA data which are out of MGA-Datahub relation validity). |

#### 4.4.4.3 *Time-Based: MGA Imbalances - BRP 15-minute*

| **Attribute** | |
|---|---|
| **Name** | MGA imbalances |
| **Receiver** | BRP |
| **Description** | All MGAs' imbalances per MGA under BRP's balance responsibility |
| **Format (Short Name)** | MGA Imbalance |
| **Document Standard** | NEG ESP Energy Account Report Document |
| **Aggregation** | Time Aggregation – QH (15-minute) |
| **Time Period From** | D-14 |
| **Time Period To** | D-1 |
| **Time Trigger (Words)** | Daily basis, 07:10 / 13:00 CET |

| | |
|---|---|
| | Data package is not distributed when there are no data reported. |
| **Data Scope (Filter)** | All BRP MGAs' imbalances per MGA under BRP's balance responsibility |

#### 4.4.4.4 *Time-Based: MGA Imbalances – DSO 15-minute*

| **Attribute** | |
|---|---|
| **Name** | MGA imbalances |
| **Receiver** | DSO, Datahub |
| **Description** | All DSO's MGAs' imbalances per MGA |
| **Format (Short Name)** | MGA Imbalance |
| **Document Standard** | NEG ESP Energy Account Report Document |
| **Aggregation** | Time Aggregation – QH (15-minute) |
| **Time Period From** | D-14 |
| **Time Period To** | D-1 |
| **Time Trigger (Words)** | Daily basis, 07:10<br>Data package is not distributed when there are no data reported. |
| **Data Scope (Filter)** | All DSO's MGAs' imbalances per MGA<br>**For Datahub receiver:**<br>• Only those DSO's MGAs are listed to which the Datahub has a connection (MGA-Datahub relation).<br>• 15-minute values are limited by MGA-Datahub relation validity (Datahub cannot see MGA data which are out of MGA-Datahub relation validity). |

#### 4.4.4.5 *MGA Imbalance – Final Results*

| Attribute | |
|---|---|
| **Name** | MGA Imbalance – Final Results |
| **Market Party (Receiver)** | DSO, Datahub |
| **Document Standard** | NEG ESP Energy Account Report Document |
| **Format (Short Name)** | MGA Imbalance |
| **Message Type** | (MGIO) Send MGA Imbalance Results |
| **Frequency (Trigger)** | Final Calculation |
| **Aggregation** | H (Hourly) |
| **Time Period From** | D-13 |
| **Time Period To** | D-13 |
| **Data Scope** | DP contains all MGA Imbalance Results of DSO for period in CET. MGA Imbalance has attributes MGA, DSO, RE, BRP. DSO may have many MGA Imbalances within one document.<br>**For Datahub receiver:**<br>• Only those DSO's MGAs are listed to which the Datahub has a connection (MGA-Datahub relation).<br>• Hourly values are limited by MGA-Datahub relation validity (Datahub cannot see MGA data which are out of MGA-Datahub relation validity).<br>***Additional Rules:***<br>• If there are no input values for the results calculation, then zeros are used and reported<br>• In case of there is some day with not calculated results then this day is omitted from the report<br>Calculated day is period of 24 hours, one day in CET |

#### 4.4.4.6 *MGA Imbalance – Final Results 15-minute*

| Attribute |
|---|

| | |
|---|---|
| **Name** | MGA Imbalance – Final Results |
| **Market Party (Receiver)** | DSO, Datahub |
| **Document Standard** | NEG ESP Energy Account Report Document |
| **Format (Short Name)** | MGA Imbalance |
| **Message Type** | (MGIO) Send MGA Imbalance Results |
| **Frequency (Trigger)** | Final Calculation |
| **Aggregation** | QH (15-minute) |
| **Time Period From** | D-13 |
| **Time Period To** | D-13 |
| **Data Scope** | DP contains all MGA Imbalance Results of DSO for period in CET. MGA Imbalance has attributes MGA, DSO, RE, BRP. DSO may have many MGA Imbalances within one document.<br>**For Datahub receiver:**<br>• Only those DSO's MGAs are listed to which the Datahub has a connection (MGA-Datahub relation).<br>• 15-minute values are limited by MGA-Datahub relation validity (Datahub cannot see MGA data which are out of MGA-Datahub relation validity).<br>***Additional Rules:***<br>• If there are no input values for the results calculation, then zeros are used and<br>• In case of there is some day with not calculated results then this day is omitted from the report<br>Calculated day is period of 96 15-minute intervals in one day in CET |

#### 4.4.4.7 *MGA Imbalance – Preliminary Results*

| **Attribute** | |
|---|---|
| **Name** | MGA Imbalance – Preliminary Results |

| | |
|---|---|
| **Market Party (Receiver)** | DSO, Datahub |
| **Document Standard** | NEG ESP Energy Account Report Document |
| **Format (Short Name)** | MGA Imbalance |
| **Message Type** | (MGIO) Send MGA Imbalance Results |
| **Frequency (Trigger)** | Preliminary Calculation |
| **Aggregation** | H (Hourly) |
| **Time Period From** | D-12 |
| **Time Period To** | D-1 |
| **Data Scope** | DP contains all MGA Imbalance Results of DSO for period in CET. MGA Imbalance has attributes MGA, DSO, RE, BRP. DSO may have many MGA Imbalances within one document.<br>**For Datahub receiver:**<br>• Only those DSO's MGAs are listed to which the Datahub has a connection (MGA-Datahub relation).<br>• Hourly values are limited by MGA-Datahub relation validity (Datahub cannot see MGA data which are out of MGA-Datahub relation validity).<br>***Additional Rules:***<br>• If there are no input values for the results calculation, then zeros are used and reported<br>• In case of there is some day with not calculated results then this day is omitted from the report<br>Calculated day is period of 24 hours, one day in CET |

#### 4.4.4.8 *MGA Imbalance – Preliminary Results 15-minute*

| **Attribute** | |
|---|---|
| **Name** | MGA Imbalance – Preliminary Results |
| **Market Party (Receiver)** | DSO, Datahub |

| | |
|---|---|
| **Document Standard** | NEG ESP Energy Account Report Document |
| **Format (Short Name)** | MGA Imbalance |
| **Message Type** | (MGIO) Send MGA Imbalance Results |
| **Frequency (Trigger)** | Preliminary Calculation |
| **Aggregation** | QH (15-minute) |
| **Time Period From** | D-12 |
| **Time Period To** | D-1 |
| **Data Scope** | DP contains all MGA Imbalance Results of DSO for period in CET. MGA Imbalance has attributes MGA, DSO, RE, BRP. DSO may have many MGA Imbalances within one document.<br>**For Datahub receiver:**<br>• Only those DSO's MGAs are listed to which the Datahub has a connection (MGA-Datahub relation).<br>• 15-minute values are limited by MGA-Datahub relation validity (Datahub cannot see MGA data which are out of MGA-Datahub relation validity).<br>***Additional Rules:***<br>• If there are no input values for the results calculation, then zeros are used and reported<br>• In case of there is some day with not calculated results then this day is omitted from the report<br>Calculated day is period of 96 15-minute intervals in one day in CET |

#### 4.4.4.9 *Document Format Attribute Usage*

Document used for settlement data is 'NEG ESP Energy Account Report Document'. Attribute usage is specified separately for document header and time series part is specified separately for MGA Imbalance and Settlement Results data.

Mark [x] indicates the level in the document structure.

##### 4.4.4.9.1 Header - NEG ESP Energy Account Report Document

| Attribute (XML Schema) | Cl. | Description |
|---|---|---|
| **[1] Energy Account Report Document** | | |

| | | |
|---|---|---|
| [2] Document Identification | [1] | Globally unique identifier (GUID) is used as generated Document ID. GUID is used without dashes to meet maximal length 35 characters.<br>Example: “5ae1c0ba922c420b891c69356e6e746b” |
| [2] Document Version | [1] | Fixed value “**1**” |
| [2] Document Type | [1] | **A12 -** Imbalance report |
| [2] Document Status | [1] | **A01** - Intermediate – used for Preliminary Calculation event, time-based data-packages<br>**A02** – Final - used for Final/Invoicing Calculation event<br>*Note: MGA Imbalance Results has Business Type B29 in Account Time Series* |
| [2] Process Type | [1] | **A06** - Imbalance settlement |
| [2] Classification Type | [1] | **A02 -** Summary type |
| [2] Sender Identification | [1] | *eSett Code and Coding Scheme* |
| [2] Sender role | [1] | **A05** - Imbalance Settlement Responsible |
| [2] Receiver Identification | [1] | Market Party identification: DSO or BRP code and coding scheme |
| [2] Receiver role | [1] | **A09** - Metered Data Aggregator for DSO<br>**A08** - Balance Responsible Party for BRP |
| [2] Document Date and Time | [1] | The time stamp of the calculation (time stamp of the document creation is sufficient) |
| [2] Accounting period | [1] | The beginning and ending date and time of the period covered. The beginning and ending date and time are calculated as minimum and maximum of all Time Intervals from all Accounting Time Series, respectively.<br>YYYY-MM-DDTHH:MMZ/YYYY-MM-DDTHH:MMZ |
| [2] Domain | [1] | Class *Global Parameter*, attribute *NBS Domain and NBS Domain Coding Scheme* |
| [2] **Account Time Series** | [1..*] | Settlement Results:<br>Per each MBA and Currency (if BRP’s company has preferred currency different than EUR then imbalance amounts are sent in preferred currency and also in EUR)<br>MGA Imbalance: |

| | | |
|---|---|---|
| | | Per each MGA and BRP. MGA Imbalance has dimensions: MGA, DSO, RE and BRP. |

#### 4.4.4.9.2 Time Series for MGA Imbalance 15-minute

| Attribute (XML Schema) | Cl. | Description |
|---|---|---|
| [2] **Account Time Series** | [1..*] | The number of occurrences depends on the number of MGA Imbalances related to the subscriber – DSO or BRP. Note that if the receiver is DSO then there can be more than one MGA Imbalance with the same MGA but with different BRP (via Retailer Balance Responsibility relation).<br>MGA Imbalance has dimensions: MGA, DSO, RE and BRP. |
| [3] Senders Time Series Identification | [1] | Globally unique identifier (GUID) is used as generated Time Series ID. GUID is used without dashes to meet maximal length 35 characters.<br>Example: "5ae1c0ba922c420b891c69356e6e746b" |
| [3] Business Type | [1] | **B29** - MGA imbalance |
| [3] Product | [1] | '**8716867000030**' (Active energy) |
| [3] Object Aggregation | [1] | **A01** – Area |
| [3] Area | • 1] | • **MGA** Code and Coding Scheme |
| [3] Party | [1] | BRP ID: The Balance Responsible Party for which the imbalance settlement is calculated. BRP is one of the dimensions of MGA Imbalance (MGA, DSO, RE, BRP). |
| [3] Measurement Unit | [1] | '**MWH**' |
| [3] Currency | [0..*] | *Not used for MGA Imbalance* |
| [3] **Period** | [1..*] | |
| [4] Time Interval | [1] | Time interval of reported values. It is subset of Accounting Period time interval from the document header.<br>Note: In case of starting or ending validity of MGA within Accounting Period the Time Interval can be smaller than Accounting Period time interval. |
| [4] Resolution | [1] | **PT15M –** 15-minute Resolution |
| [4] **Account Interval** | [1..*] | |

| | | |
|---|---|---|
| [5] Pos | [1] | Sequence number of the time interval |
| [5] In Qty | • 1] | • MGA Imbalance Deficit |
| [5] Out Qty | • 1] | • MGA Imbalance Surplus |
| [5] Settlement Amount | • 0..1] | • *Not used for MGA Imbalance* |

## 4.4.5 Production Data Packages

4.4.5.1 *SDP: Production Per Production Unit (for DSO)*

| **Attribute** | |
|---|---|
| **Name** | Production Per Production unit (PU) |
| **Receiver** | DSO |
| **Description** | All DSO's productions per production unit (PU) |
| **Format (Short name)** | Production |
| **Document Standard** | Validated Data for Settlement for Aggregator (E66, E44) |
| **Aggregation** | Time Aggregation – H (Hourly) |
| **Time Period From** | D-14 |
| **Time Period To** | D-1 |
| **Time Trigger (Words)** | Daily basis, delivered till 09:45 CET<br>Data package is not distributed when there are no data reported. |

| | |
|---|---|
| **Data Scope (Filter)** | System selects all DSO's productions per production unit (PU) |

#### 4.4.5.2 *SDP: Production Per Production Unit (for DSO) 15-minute*

| **Attribute** | |
|---|---|
| **Name** | Production Per Production Unit (PU) |
| **Receiver** | DSO |
| **Description** | All DSO's productions per production unit (PU) in 15-minute resolution |
| **Format (Short name)** | Production |
| **Document Standard** | Validated Data for Settlement for Aggregator (E66, E44) |
| **Aggregation** | Time Aggregation – 15M (15-minute) |
| **Time Period From** | D-14 |
| **Time Period To** | D-1 |
| **Time Trigger (Words)** | Daily basis, delivered till 02:30 CET<br>Data package is not distributed when there are no data reported. |
| **Data Scope (Filter)** | System selects all DSO's productions per production unit (PU) |

#### 4.4.5.3 *SDP: Production per Production Unit (PU) (for BRP)*

| **Attribute** | |
|---|---|
| **Name** | Production per Production Unit (PU) |
| **Receiver** | BRP |
| **Description** | All productions per production unit under BRP's balance responsibility |
| **Format (Short name)** | Production |
| **Document Standard** | Validated Data for Settlement for Aggregator (E66, E44) |

| | |
|---|---|
| **Aggregation** | Time Aggregation – H (Hourly) |
| **Time Period From** | D-14 |
| **Time Period To** | D-1 |
| **Time Trigger (Words)** | Daily basis, delivered 09:55 / 13:00 CET<br>Data package is not distributed when there are no data reported. |
| **Data Scope (Filter)** | System selects all productions per production unit under BRP's balance responsibility |

#### 4.4.5.4 *SDP: Production per Production Unit (PU) (for BRP) 15-minute*

| **Attribute** | |
|---|---|
| **Name** | Production per Production Unit (PU) |
| **Receiver** | BRP |
| **Description** | All productions per production unit under BRP's balance responsibility in 15-minute resolution |
| **Format (Short name)** | Production |
| **Document Standard** | Validated Data for Settlement for Aggregator (E66, E44) |
| **Aggregation** | Time Aggregation – 15M (15-minute) |
| **Time Period From** | D-14 |
| **Time Period To** | D-1 |
| **Time Trigger (Words)** | Daily basis, delivered 02:25 / 13:00 CET<br>Data package is not distributed when there are no data reported. |
| **Data Scope (Filter)** | System selects all productions per production unit under BRP's balance responsibility |

#### 4.4.5.5 *Normal Production per BRP and MBA*

| **Attribute** |
|---|

| | |
|---|---|
| **Name** | Normal Production per BRP and MBA |
| **Receiver** | BRP |
| **Description** | Normal Production per BRP and MBA |
| **Format (Short Name)** | Generic |
| **Document Standard** | Generic Basse Time Series Document |
| **Aggregation** | Time Aggregation – 15M (15-minute) |
| **Time Period From** | D-14 |
| **Time Period To** | D-1 |
| **Time Trigger (Words)** | Daily basis, delivered till 15:00 CET<br>Data package is not distributed when there are no data available. |

#### 4.4.5.6 *Production Imbalance Adjustment Down per BRP and MBA*

| **Attribute** | |
|---|---|
| **Name** | Production Imbalance Adjustment Down per BRP and MBA |
| **Receiver** | BRP |
| **Description** | Production Imbalance Adjustment Up per BRP and MBA |
| **Format (Short Name)** | Generic |
| **Document Standard** | Generic Basse Time Series Document |
| **Aggregation** | Time Aggregation – 15M (15-minute) |
| **Time Period From** | D-14 |
| **Time Period To** | D-1 |
| **Time Trigger (Words)** | Daily basis, delivered till 15:00 CET |

| | |
|---|---|
| | Data package is not distributed when there are no data available. |

#### 4.4.5.7 *Production Imbalance Adjustment Down per BRP and MBA*

| **Attribute** | |
|---|---|
| **Name** | Production Imbalance Adjustment Up per BRP and MBA |
| **Receiver** | BRP |
| **Description** | Production Imbalance Adjustment Up per BRP and MBA |
| **Format (Short Name)** | Generic |
| **Document Standard** | Generic Basse Time Series Document |
| **Aggregation** | Time Aggregation – 15M (15-minute) |
| **Time Period From** | D-14 |
| **Time Period To** | D-1 |
| **Time Trigger (Words)** | Daily basis, delivered till 15:00 CET<br>Data package is not distributed when there are no data available. |

#### 4.4.5.8 *Production Imbalance Adjustment Down per BRP and MBA*

| **Attribute** | |
|---|---|
| **Name** | Production Minor per BRP and MBA |
| **Receiver** | BRP |
| **Description** | Production Minor per BRP and MBA |
| **Format (Short Name)** | Generic |
| **Document Standard** | Generic Basse Time Series Document |

| | |
|---|---|
| **Aggregation** | Time Aggregation – 15M (15-minute) |
| **Time Period From** | D-14 |
| **Time Period To** | D-1 |
| **Time Trigger (Words)** | Daily basis, delivered till 15:00 CET<br>Data package is not distributed when there are no data available. |

#### 4.4.5.9 *Production Imbalance Adjustment Down per BRP and MBA*

| **Attribute** | |
|---|---|
| **Name** | Production Plan per BRP and MBA |
| **Receiver** | BRP |
| **Description** | Production Plan per BRP and MBA |
| **Format (Short Name)** | Generic |
| **Document Standard** | Generic Basse Time Series Document |
| **Aggregation** | Time Aggregation – 15M (15-minute) |
| **Time Period From** | D-14 |
| **Time Period To** | D-1 |
| **Time Trigger (Words)** | Daily basis, delivered till 15:00 CET<br>Data package is not distributed when there are no data available. |

#### 4.4.5.10 *Document Format Attribute Usage*

Document used for consumption data is 'Validated Data for Settlement for Aggregator (E66, E44)'. Attribute usage is specified separately for document header and time series part for easy navigation.

Mark [x] indicates the level in the document structure.

##### 4.4.5.10.1 Header - Validated Data for Settlement for Aggregator (E66, E44)

| Attribute (XML schema) | Cl. | Value Description |
|---|---|---|
| **Validated Data for Settlement for Aggregator** | | |
| **[1] Header** | [1] | |
| [2] Identification | [1] | *Document ID Unique identification of the business document*. |
| [2] Document Type | [1] | **E66** |
| [2] Creation | [1] | Document Creation Time Stamp |
| [2] Sender Energy Party | [1] | Basse |
| [3] Identification | [1] | eSett Code and Coding Scheme |
| [2] Recipient Energy Party | [1] | Subscriber |
| [3] Identification | [1] | Receiver according to subscribed data package:<br>• BRP Code and Coding Scheme<br>• DSO Code and Coding Scheme |
| **[1] Process Energy Content** | [1] | |
| [2] Energy Business Process | [1] | **E44** - Imbalance Settlement |
| [2] Energy Business Process Role | [1] | **DEA** – ISR in role of Metered Data Aggregator |
| [2] Energy Industry Classification | [1] | **23** - Electricity supply industry |
| **[1] Payload Energy Time Series** | [1..*] | *See Time Series part* |

##### 4.4.5.10.2 Time Series - Validated Data for Settlement for Aggregator (E66, E44)

| Attribute (XML schema) | Cl. | Value Description |
|---|---|---|

| | | |
|---|---|---|
| **[1] Payload Energy Time Series** | [1..*] | Repeated for each Production MEC found for the subscriber DSO or BRP. If there are no production data within the reported period than the time series is omitted from the message. If there are missing quantities at some time intervals, then Missing Quantity indicator is used. |
| [2] Identification | [1] | Unique Time Series Identification |
| [2] Registration Date Time | [1] | Same as Document Creation date |
| **[2] Observation Period Time Series Period** | [1] | |
| [3] Resolution Duration | [1] | **PT1H** – hourly resolution<br>**PT15M** – 15-minute resolution |
| [3] Start | [1] | Date and time for the start of the time series |
| [3] End | [1] | Date and time for the end of the time series |
| **[2] Product Included Product Characteristics** | [1] | |
| [3] Identification | [1] | Product: "**8716867000030**" (Energy active) |
| [3] Unit Type | [1] | **MWH** |
| **[2] MP Detail Measurement Metering Point Characteristics** | [1] | |
| [3] Metering Point Type | [1] | **E18** - Production |
| **[2] Metering Point Used Domain Location** | [1] | Production Unit |
| [3] Identification | [1] | Unique identification of the Production Unit |
| **[2] Observation Interval Observation Period** | [1..*] | *The number of occurrences with incremental sequence within Observation Time Period interval* |
| [3] Sequence | [1] | Position/index in the time series. |
| **[3] Observation Detail Energy Observation** | [1] | |
| [4] Energy Quantity | [0..1] | Quantity is not used (not available) if Quantity Missing Indicator is True. |

| | | |
|---|---|---|
| [4] Quantity Quality | [0..1] | Quantity Quality is only used if ≠ “Metered”:<br>• **“21”** Temporary<br>• **“56”** Estimated, approved for billing. |
| [4] Quantity Missing | [0..1] | **True** (Used for missing quantity – quantity is null). |

#### 4.4.5.11 *SDP: REs' Production Data per Type and MGA (DSO) 15-minute*

| **Attribute** | |
|---|---|
| **Name** | REs' Production Data per Type and MGA |
| **Receiver** | DSO |
| **Description** | All DSO's metering grid areas' (MGA) per MGA, Production Type and Production Unit Type |
| **Format (Short Name)** | Production |
| **Document Standard** | NEG (ebIX® based) Aggregated Data per MGA (E31, E44) - production |
| **Aggregation** | Time Aggregation – QH (15-minute) |
| **Time Period From** | D-14 |
| **Time Period To** | D-1 |
| **Time Trigger (Words)** | Daily basis, morning 04:00<br>Data package is not distributed when there are no data reported. |
| **Data Scope (Filter)** | System selects all DSO productions. DSO is production MEC attribute. |

#### 4.4.5.12 *SDP: REs' Production Data per Type and MGA (BRP) 15-minute*

| **Attribute** | |
|---|---|
| **Name** | REs' Production Data per Type and MGA |
| **Receiver** | BRP |
| **Description** | All DSO's metering grid areas' (MGA) per MGA, Production Type and Production Unit Type |
| **Format (Short Name)** | Production |
| **Document Standard** | NEG (ebIX® based) Aggregated Data per MGA (E31, E44) - production |
| **Aggregation** | Time Aggregation – QH (15-minute) |
| **Time Period From** | D-14 |
| **Time Period To** | D-1 |
| **Time Trigger (Words)** | Daily basis, morning 04:00 and evening 21:00<br>Data package is not distributed when there are no data reported. |
| **Data Scope (Filter)** | System selects all BRP productions. BRP is production MEC attribute. |

#### 4.4.5.13 *Document Format Attribute Usage*

Document used for consumption data is 'NEG (ebIX® based) Aggregated Data per MGA (E31, E44) - production'. Attribute usage is specified separately for document header and time series part for easy navigation.

Mark [x] indicates the level in the document structure.

##### 4.4.5.13.1 Header - NEG (ebIX® based) Aggregated Data per MGA (E31, E44) - production

| **Attribute (XML schema)** | Cl. | Value Description and Mapping |
|---|---|---|

| Aggregated Data Per MGA - production | | |
|---|---|---|
| **[1] Header** | [1] | |
| [2] Identification | [1] | *Unique identification of the business document.* |
| [2] Document Type | [1] | '**E31**' – stands for Aggregate metered data from the Metered Data Aggregator |
| [2] Creation | [1] | *Document Creation Time Stamp.* |
| [2] Sender Energy Party | [1] | eSett Code and Coding Scheme |
| [2] Recipient Energy Party | [1] | Subscriber<br>• BRP Code and Coding Scheme<br>• DSO Code and Coding Scheme |
| **[1] Process Energy Content** | [1] | |
| [2] Energy Business Process | [1] | '**E44**' – stands for Imbalance Settlement |
| [2] Energy Business Process Role | [1] | **'DDX'** - Imbalance settlement responsible |
| [2] Energy Industry Classification | [1] | '**23**'- Electricity supply industry |
| **[1] Payload Energy Time Series** | [1..*] | *See Time Series Attribute Description* |

#### 4.4.5.13.2 Time Series - NEG (ebIX® based) Aggregated Data per MGA (E31, E44) - production

| Attribute (XML schema) | Cl. | Value Description and Mapping |
|---|---|---|
| **[1] Payload Energy Time Series** | 1..*] | |
| [2] Identification | [1] | Production MEC ID |
| [2] Registration Date Time | [1] | Time of document creation. |
| [2] Observation Period Time Series Period | [1] | |

| | | |
|---|---|---|
| [3] Resolution Duration | [1] | '**PT15M**' – for 15-minute data |
| [3] Start | [1] | Date and time for a start of a time series in format "YYYY-MM-DDTHH:MM:SSZ" |
| [3] End | [1] | Date and time for a end of a time series in format "YYYY-MM-DDTHH:MM:SSZ" |
| [2] Balance Responsible Involved Party | [0..1] | |
| [3] Identification | [1] | Code and Coding Scheme of BRP. |
| [2] Balance Supplier Involved Party | [0..1] | |
| [3] Identification | [1] | Retailer code and coding scheme. |
| [2] Product Included Product Characteristics | [1] | |
| [3] Identification | [1] | Product: "**8716867000030**" - Energy active |
| [3] Unit Type | [1] | **'MWH'** |
| [2] MP Detail Measurement Metering Point Characteristics | [1] | |
| [3] Metering Point Type | [1] | **'E18'** - Production |
| [3] Settlement Method Type | [1] | **'E02'** – Non-profiled |
| [3] Business Type | [1] | • "**A01**" - Production |
| [3] Asset Type | [0..1] | **"B14"** Nuclear<br>**"B16"** Solar<br>**"B20"** Other production<br>**"Z04", "B37"** Thermal, after October 2025, only **"B37"** is supported.<br>**"Z05", "B19"** Wind onshore, after October 2025, only **"B19"** is supported.<br>**"B18"** Wind offshore<br>**"B25"** Energy storage<br>**"Z06"** Hydro |
| [3] Production Type | [0..1] | • "**Z01**" – Normal<br>• "**Z02**" - Minor |

| | | |
|---|---|---|
| [2] Metering Grid Area Used Domain Location | [1] | Metering Grid Area of consumption. |
| [3] Identification | [1] | MGA Code and Coding Scheme |
| [2] Observation Interval Observation Period | [1..*] | |
| [3] Sequence | [1] | Sequence number of the observation in the time series |
| [3] Observation Detail Energy Observation | [1] | |
| [4] Energy Quantity | [1] | Positive value with maximal 6 decimals |
| [4] Quantity Quality | [0..1] | Quality:<br>• **"21"** Temporary<br>• **"56"** Estimated, approved for billing<br>The default Quantity Quality is "**Metered**", i.e. Quantity Quality is only used if ≠ "Metered". |

## 4.4.6 Production Plan Data Packages

4.4.6.1 *SDP: Production Plan per BRP and RO*

| **Attribute** | |
|---|---|
| **Name** | Production Plan per BRP and RO |
| **Receiver** | BRP |
| **Description** | All BRP's production plans per RO |
| **Format (Short name)** | Production Plan |
| **Document Standard** | ERRP Planned Resource Schedule Document |
| **Aggregation** | Time Aggregation – H (Hourly) |

| | |
|---|---|
| **Time Period From** | D-14 |
| **Time Period To** | D-1 |
| **Time Trigger (Words)** | Daily basis, morning 04:40<br>Data package is not distributed when there are no data reported. |
| **Data Scope (Filter)** | System selects all BRP's production plans per RO and MBA |

#### 4.4.6.2 *SDP: Production Plan per BRP and RO 15-minute*

| **Attribute** | |
|---|---|
| **Name** | Production Plan per BRP and RO |
| **Receiver** | BRP |
| **Description** | All BRP's production plans per RO in 15-minute resolution |
| **Format (Short name)** | Production Plan |
| **Document Standard** | ERRP Planned Resource Schedule Document |
| **Aggregation** | Time Aggregation – 15M (15-minute) |
| **Time Period From** | D-14 |
| **Time Period To** | D-1 |
| **Time Trigger (Words)** | Daily basis, morning 04:40<br>Data package is not distributed when there are no data reported. |
| **Data Scope (Filter)** | System selects all BRP's production plans per RO and MBA |

#### 4.4.6.3 *Document Format Attribute Usage*

Document used for consumption data is ‘ERRP Planned Resource Schedule Document’. Attribute usage is specified separately for document header and time series part for easy navigation.

Mark [x] indicates the level in the document structure.

#### 4.4.6.3.1 Header - ERRP Planned Resource Schedule Document

| Attribute (XML Schema) | Cl. | Value Description |
|---|---|---|
| **Planned Resource Schedule Document** | | |
| [1] Document Identification | [1] | *Document ID - unique identification of the business document.* |
| [1] Document Version | [1] | *Document Version is Unique identification of the document. Should be fixed "1".* |
| [1] Document Type | [1] | **A14** |
| [1] Process Type | [1] | **A17** |
| [1] Sender Identification | [1] | eSett Code and Coding Scheme |
| [1] Sender Role | [1] | **A05** - Imbalance Settlement Responsible |
| [1] Receiver Identification | [1] | Subscriber: BRP Code and Coding Scheme |
| [1] Receiver Role | [1] | **A08** – Balance Responsible Party |
| [1] Creation Date Time | [1] | Creation Date Time (represents time stamp of file generation in UTC). |
| [1] Time Period Covered | [1] | Period covered by the document containing the schedule.<br>YYYY-MM-DDTHH:MM:SSZ/YYYY-MM-DDTHH:MM:SSZ |
| [1] Domain | [1] | Nordic Market Area ID = "10Y1001A1001A91G" |
| [1] Subject Party | [0..1] | *Not used by Basse* |
| [1] Subject Role | [0..1] | *Not used by Basse* |
| **[1] Planned Resource Schedule Time Series** | [1..*] | *See Time Series Attributes* |

#### 4.4.6.3.2 Time Series - ERRP Planned Resource Schedule Document

| Attribute (XML schema) | Cl. | Value Description |
|---|---|---|
| **[1] Planned Resource Schedule Time Series** | [1..*] | *There can be one and more Production Plans for BRP receiver. If there no data, then the data package is not sent at all.* |

| | | |
|---|---|---|
| [2] Time Series Identification | [1] | Unique Time Series Identification |
| [2] Business Type | [1] | Designates resource plan type.<br>**A01** Production |
| [2] Product | [1] | '**8716867000030**' - Code of the product |
| [2] Connecting Area | [1] | **MBA** Code and Coding Scheme |
| [2] Resource Object | [1] | Regulation Object (RO) Code and Coding Scheme |
| [2] Resource Provider | [1] | BRP Code and Coding Scheme |
| [2] Measurement Unit | [1] | **MWH -** Unit of measurement |
| [2] Object Aggregation | [1] | **A06** - Aggregation |
| **[2] Period** | [1..*] | Period with time interval and positions (sequence of hours/15-minutes). There can be more than one period in one time series to enable gaps in reported values. |
| [3] Time Interval | [1] | YYYY-MM-DDTHH:MM:SSZ/YYYY-MM-DDTHH:MM:SSZ |
| [3] Resolution | [1] | **PT1H** – for hourly data<br>**PT15M** – for 15-minute data |
| **[3] Interval** | [1..*] | |
| [4] Pos | [1] | Relative position within the time interval. |
| [4] Qty | [1] | Production Plan Quantity in MWH with 6 decimal precision. |

## 4.4.7 Bilateral Trades Data Packages

#### 4.4.7.1 *SDP: Bilateral Trades Data Packages*

| **Attribute** | |
|---|---|
| **Name** | Bilateral Trades |
| **Receiver** | BRP |

| | |
|---|---|
| **Description** | Bilateral trades under BRP's balance responsibility |
| **Format (Short name)** | Bilateral Trade |
| **Document Standard** | ESS Schedule Document |
| **Aggregation** | Time Aggregation – H (Hourly) |
| **Time Period From** | D-14 |
| **Time Period To** | D-1 |
| **Time Trigger (Words)** | Daily basis, morning 05:00<br>Data package is not distributed when there are no data reported. |
| **Data Scope (Filter)** | System selects all Bilateral trades under BRP's balance responsibility |

#### 4.4.7.2 *SDP: Bilateral Trades Data Packages 15-minute*

| **Attribute** | |
|---|---|
| **Name** | Bilateral Trades |
| **Receiver** | BRP |
| **Description** | Bilateral trades under BRP's balance responsibility in 15-minute resolution |
| **Format (Short name)** | Bilateral Trade |
| **Document Standard** | ESS Schedule Document |
| **Aggregation** | Time Aggregation – 15M (15-minute) |
| **Time Period From** | D-14 |
| **Time Period To** | D-1 |
| **Time Trigger (Words)** | Daily basis, morning 05:00<br>Data package is not distributed when there are no data reported. |

| | |
|---|---|
| **Data Scope (Filter)** | System selects all Bilateral trades under BRP's balance responsibility |

#### 4.4.7.3 *Bilateral Trade Purchase per BRP and MBA*

| **Attribute** | |
|---|---|
| **Name** | Bilateral Trade Purchase per BRP and MBA |
| **Receiver** | BRP |
| **Description** | Bilateral Trade Purchase per BRP and MBA |
| **Format (Short name)** | Generic |
| **Document Standard** | Generic Basse Time Series Document |
| **Aggregation** | Time Aggregation – 15M (15-minute) |
| **Time Period From** | D-14 |
| **Time Period To** | D-1 |
| **Time Trigger (Words)** | Daily basis, morning 15:00<br>Data package is not distributed when there are no data reported. |

#### 4.4.7.4 *Bilateral Trade Sales per BRP and MBA*

| **Attribute** | |
|---|---|
| **Name** | Bilateral Trade Sales per BRP and MBA |
| **Receiver** | BRP |
| **Description** | Bilateral Trade Sales per BRP and MBA |
| **Format (Short name)** | Generic |
| **Document Standard** | Generic Basse Time Series Document |

| | |
|---|---|
| **Aggregation** | Time Aggregation – 15M (15-minute) |
| **Time Period From** | D-14 |
| **Time Period To** | D-1 |
| **Time Trigger (Words)** | Daily basis, morning 15:00<br>Data package is not distributed when there are no data reported. |

#### 4.4.7.5 *Document Format Attribute Usage*

Document used for bilateral trade data is 'ESS Scheduled Document'.

Mark [x] indicates the level in the document structure.

| Attribute (XML schema) | Cl. | Value Description |
|---|---|---|
| **[1] Schedule Document** | [1] | |
| [2] Document Identification | [1] | Document ID is unique identification of the document. |
| [2] Document Version | [1] | Document Version = '**1**' |
| [2] Document Type | [1] | **A01** |
| [2] Process Type | [1] | **Z05** - Bilateral Trade |
| [2] Schedule Classification Type | [1] | **A02 -** Summary type |
| [2] Sender Identification | [1] | eSett Code and Coding Scheme |
| [2] Sender Role | [1] | **A05** – Imbalance Settlement Responsible |
| [2] Receiver Identification | [1] | Subscriber BRP Code and Coding scheme |
| [2] Receiver Role | [1] | **A08** – Balance Responsible Party |
| [2] Creation Date Time | [1] | Creation Date Time (represents time stamp of file generation in UTC). |
| [2] Schedule Time Interval | [1] | Period covered by the document containing the schedule. |

| | | |
|---|---|---|
| [2] Domain | [1] | Nordic Market Area ID = “10Y1001A1001A91G” with “A01” Coding Scheme |
| **[2] Schedule Time Series** | [1..*] | |
| [3] Senders Time Series Identification | [1] | Unique Time Series Identification |
| [3] Senders Time Series Version | [1] | Time Series version. For NBS: **“1”** |
| [3] Business Type | [1] | **A08** - Net internal trade |
| [3] Product | [1] | ‘**8716867000030**’ - Active energy |
| [3] Object Aggregation | [1] | Identifies to what extent object is aggregated: **‘A01’** Area |
| [3] In Area | [1] | MBA Code and Coding Scheme - Market Balance Area where trade has taken place. |
| [3] Out Area | [1] | Out Area same as In Area |
| [3] In Party | [1] | **BRP** Code and Coding Scheme acting as the **Buyer** in the Bilateral Trade. |
| [3] Out Party | [1] | **BRP** Code and Coding Scheme acting as the **Seller** in the Bilateral Trade. |
| [3] Capacity Agreement Identification | [0..1] | An ID, only used when reporting trade on a Balance Supplier (Retailer) level, identifying the two involved Balance Suppliers and the related Market Balance Area. The Bilateral Trade ID will be unique in combination with In Party, Out Party and MBA. |
| [3] Measurement Unit | [1] | **MWH** – Unit of Measurement |
| **[3] Period** | [1..*] | Period with time interval and positions (sequence of hours/15-minutes). There can be more than one period in one time series due to gaps in reported values. |
| [4] Time Interval | [1] | The start and end date and time of the time interval of the period in question. |
| [4] Resolution | [1] | **PT1H** – hourly resolution<br>**PT15M** – 15-minute resolution |
| **[4] Interval** | [1..*] | |
| [5] Pos | [1] | Relative position within the time interval. |
| [5] Qty | [1] | *Quantity of the product scheduled for the position.*<br>The direction from out party (seller) to in party (buyer) is positive, while the opposite direction is negative (with minus signs)). |

## 4.4.8 Bilateral Trades Confirmation Report

4.4.8.1 *SPD: Bilateral Trade Final Confirmation Report 15-minutes*

| **Attribute** | |
|---|---|
| Name | Bilateral Trade Final Confirmation Report |
| Receiver | BRP |
| Document Standard | ENTSO-E ESS Confirmation Report v4r1 |
| Format (Short Name) | BICO Confirmation Report |
| Message Type | (BICO) Send Final Confirmation Report |
| Frequency (Trigger) | BICO Final Confirmation |
| Aggregation | Time Aggregation – 15M (15-minute) |
| Time Period From | D-1 (or D-N in case previous day(s) were non-working) |
| Time Period To | D-1 (or D-N in case previous day(s) were non-working – N is the same for Time Period From and Time Period To) |
| Data Scope | BackOffice process workflow closes delivery day D or more delivery days D…$D_n$ (e.g. when crossing non-working days) of all Bilateral Trades per each MBA (GC can be configured for each MBA differently). System selects all bilateral trades from the MBA with closed day D (or days) and group them by BRP. Business Event inputs are:<br>• MBA<br>• BRP<br>• Delivery Day(s) - whole days in CET<br>• BRP receives this delivery day(s) for all its bilateral trades and one MBA in one confirmation<br>• report. If BRP has Bilateral Trades in more MBAs, BRP receives one final confirmation report per each MBA.<br>If BRP is responsible for both REs in Bilateral Trade, then document includes time series from both point of views (One Imposed Time Series where BRP is In Party and second one where BRP is Out Party). |
| Document Recognition | ESS Confirmation Report<br>Document Type = A08 - Final confirmation report |

#### 4.4.8.2 *SPD: Bilateral Trade Intermediate Confirmation Report 15-minutes*

| **Attribute** | |
|---|---|
| **Name** | Bilateral Trade Intermediate Confirmation Report |
| **Receiver** | BRP |
| **Document Standard** | ENTSO-E ESS Confirmation Report v4r1 |
| **Format (Short Name)** | BICO Confirmation Report |
| **Message Type** | (BICO) Send Intermediate Confirmation Report |
| **Frequency (Trigger)** | BICO Intermediate Confirmation |
| **Aggregation** | Time Aggregation – 15M (15-minute) |
| **Time Period From** | N/A |
| **Time Period To** | N/A |
| **Data Scope** | Dataflow is triggered with these input data:<br>• BRP<br>  ○ sender who receives time series confirmation<br>  ○ counterpart receives imposed time series<br>• Bilateral Trade (uniquely identified trade)<br>• Sequence of hours (there can be gaps in the sequence to able to confirm only single hours of a day) |
| **Document Recognition** | **ESS Confirmation Report**<br>Document Type = **A07** - Intermediate confirmation report |

## 4.4.9 Prices Data Packages

### 4.4.9.1 *SDP: Imbalance Prices per Market Balance Area (MBA)*

| Attribute | |
|---|---|
| **Name** | Imbalance Prices per Market Balance Area (MBA) |
| **Receiver** | BRP/BSP |
| **Description** | Production and consumption imbalance prices per MBA |
| **Format (Short name)** | Prices |
| **Document Standard** | Publication Document |
| **Aggregation** | Time Aggregation – H (Hourly) |
| **Time Period From** | D-14 |
| **Time Period To** | D-1 |
| **Time Trigger (Words)** | Daily basis, morning 09:00<br>Data package is not distributed when there are no data reported. |
| **Data Scope (Filter)** | System selects all Production and Consumption Imbalance Prices per MBA. Prices from all MBAs are selected regardless BRP is active in given MBA or not. Document contains following prices in EUR currency (Business Type):<br>**B23** - Consumption imbalance price<br>**B24** - Production sales imbalance price<br>**B25** - Production purchase imbalance price<br>**Z74** – Imbalance sales price<br>**Z75** – Imbalance purchase price |

### 4.4.9.2 *SDP: Imbalance Prices per Market Balance Area (MBA) 15-minute*

| Attribute | |
|---|---|
| **Name** | Imbalance Prices per Market Balance Area (MBA) |

| | |
|---|---|
| **Receiver** | BRP/BSP |
| **Description** | Production and consumption imbalance prices per MBA in 15-minute resolution |
| **Format (Short name)** | Prices |
| **Document Standard** | Publication Document |
| **Aggregation** | Time Aggregation – 15M (15-minute) |
| **Time Period From** | D-14 |
| **Time Period To** | D-1 |
| **Time Trigger (Words)** | Daily basis, morning 09:00<br>Data package is not distributed when there are no data reported. |
| **Data Scope (Filter)** | System selects all Production and Consumption Imbalance Prices per MBA. Prices from all MBAs are selected regardless BRP is active in given MBA or not. Document contains following prices in EUR currency (Business Type):<br>**B23** - Consumption imbalance price<br>**B24** - Production sales imbalance price<br>**B25** - Production purchase imbalance price<br>**Z74** – Imbalance sales price<br>**Z75** – Imbalance purchase price |

#### 4.4.9.3 *Document Format Attribute Usage*

Document used for prices data is 'Publication Document'.

Mark [x] indicates the level in document structure.

| Attribute (XML schema) | Cl. | Value Description |
|---|---|---|
| **[1] Publication Document** | [1] | |
| [2] Document Identification | [1] | Document ID is unique identification of the Document. |
| [2] Document Version | [1] | Document Version is Unique identification of the business version. |
| [2] Document Type | [1] | **A44** - Price document |

| | | |
|---|---|---|
| [2] Process Type | [1] | **A30 -** Tertiary Reserves Process |
| [2] Sender Identification | [1] | eSett Code and Coding Scheme |
| [2] Sender Role | [1] | **A05** – Imbalance Settlement Responsible |
| [2] Receiver Identification | [1] | Subscriber **BRP** Code and Coding Scheme |
| [2] Receiver Role | [1] | **A08** – **BRP** (Balance Responsible Party) |
| [2] Creation Date Time | [1] | Creation Date Time (represents time stamp of file generation in UTC). |
| [2] Publication Time Interval | [1] | Period covered by the document. |
| [2] Domain | [1] | Nordic Market Area ID = “10Y1001A1001A91G” with “A01” coding Scheme |
| **[2] Publication Time Series** | [1..*] | Prices per price type and MBA |
| [3] Senders Time Series Identification | [1] | Time series ID - Unique ID of the Time Series |
| [3] Business Type | [1] | Price type:<br>**B23** - Consumption imbalance price<br>**B24** - Production sales imbalance price<br>**B25** - Production purchase imbalance price<br>**Z74** – Imbalance sales price<br>**Z75** – Imbalance purchase price |
| [3] In Area | [1] | **MBA** - Relevant Market Balance Area for the market. |
| [3] Out Area | [1] | Market Balance Area is same as In Area |
| [3] Currency | [1] | **EUR** |
| [3] Measurement Unit Price | [1] | **MWH** |
| **[3] Period** | [1..*] | |
| [4] Time Interval | [1] | The start and end date and time of the time interval of the period in question. |
| [4] Resolution | [1] | **PT1H** – hourly resolution<br>**PT15M** – 15-minute resolution |

| | | |
|---|---|---|
| **[4] Interval** | [1..*] | |
| [5] Pos | [1] | Relative position within the time interval |
| [5] Price | [0..1] | Price in EUR currency |
| [5] Direction | [0..1] | *Not used by this data package* |

#### 4.4.9.4 *SDP: FRR-A volume-weighted average price per MBA 15-minute – BSP/BRP*

| **Attribute** | |
|---|---|
| **Name** | FRR-A volume-weighted average price per MBA |
| **Receiver** | BSP/BRP |
| **Description** | Production and consumption imbalance prices per MBA |
| **Format (Short name)** | Prices |
| **Document Standard** | Ediel ECAN Publication document |
| **Aggregation** | Time Aggregation – QH (15-minute) |
| **Time Period From** | D-14 |
| **Time Period To** | D-1 |
| **Time Trigger (Words)** | Daily basis, afternoon 14:00<br>Data package is not distributed when there are no data reported. |
| **Data Scope (Filter)** | System selects all Production and Consumption Imbalance Prices and Imbalance Prices per MBA. Prices from all MBAs are selected regardless BSP/BRP is active in given MBA or not. Document contains following prices in EUR currency (Business Type):<br>**'B20'** – FRR-A Up Regulation Price<br>**'B21'** – FRR-A Down Regulation Price |

#### 4.4.9.5 *Document Format Attribute Usage*

Document used for prices data is 'Publication Document'.

Mark [x] indicates the level in document structure.

| Attribute (XML schema) | Cl. | Value Description |
|---|---|---|
| **[1] Publication Document** | [1] | |
| [2] Document Identification | [1] | Document ID is unique identification of the Document. |
| [2] Document Version | [1] | Document Version is Unique identification of the business version. |
| [2] Document Type | [1] | '**A44**' - Price document |
| [2] Process Type | [1] | **'A51'** – Automatic frequency restoration reserve |
| [2] Sender Identification | [1] | eSett Code and Coding Scheme |
| [2] Sender Role | [1] | '**A05**' – Imbalance Settlement Responsible |
| [2] Receiver Identification | [1] | Subscriber **BSP** Code and Coding Scheme<br>or<br>Subscriber **BRP** Code and Coding Scheme |
| [2] Receiver Role | [1] | '**A08**' – **BRP** (Balance Responsible Party)<br>'**A46**' – Balance Service Provider |
| [2] Creation Date Time | [1] | Creation Date Time (represents time stamp of file generation in UTC). |
| [2] Publication Time Interval | [1] | Period covered by the document. |
| [2] Domain | [1] | Nordic Market Area ID = "10Y1001A1001A91G" with "A01" coding Scheme |
| **[2] Publication Time Series** | [1..*] | Prices per price type and MBA |
| [3] Senders Time Series Identification | [1] | Time series ID - Unique ID of the Time Series |
| [3] Business Type | [1] | Designates price type.<br>**'B20'** – FRR-A Up Regulation Price<br>**'B21'** – FRR-A Down Regulation Price |
| [3] In Area | [1] | **MBA** - Relevant Market Balance Area for the market. |
| [3] Out Area | [1] | Market Balance Area is same as In Area |

| | | |
|---|---|---|
| [3] Currency | [1] | **'EUR'** |
| [3] Measurement Unit Price | [1] | '**MWH**' |
| **[3] Period** | [1..*] | |
| [4] Time Interval | [1] | |
| [4] Resolution | [1] | **'PT15M'** – 15-minute resolution |
| **[4] Interval** | [1..*] | |
| [5] Pos | [1] | Relative position within the time interval |
| [5] Price | [0..1] | Price in EUR currency |
| [5] Direction | [0..1] | Not used |

#### 4.4.9.6 *SDP: FRR-M prices per MBA– BSP/BRP*

| **Attribute** | |
|---|---|
| **Name** | FRR-M prices per MBA |
| **Receiver** | BSP/BRP |
| **Description** | FRR-M prices per MBA. The data package contains the mFRR up and down prices on 15-minute resolution per MBA in EUR for the period D-14…D-1. |
| **Format (Short name)** | Prices |
| **Document Standard** | Ediel ECAN Publication document |
| **Aggregation** | Time Aggregation – QH (15-minute) |
| **Time Period From** | D-14 |
| **Time Period To** | D-1 |
| **Time Trigger (Words)** | Daily basis, 9:02 CET<br>Data package is not distributed when there are no data reported. |

| | |
|---|---|
| **Data Scope (Filter)** | System selects all Production and Consumption Imbalance Prices and Imbalance Prices per MBA. Prices from all MBAs are selected regardless BSP/BRP is active in given MBA or not. Document contains following prices in EUR currency (Business Type):<br>**'B20'** – Balance up regulation price<br>**'B21'** – Balance down regulation price |

#### 4.4.9.7 *Document Format Attribute Usage*

Document used for prices data is 'Publication Document'.

Mark [x] indicates the level in document structure.

| Attribute (XML schema) | Cl. | Value Description |
|---|---|---|
| **[1] Publication Document** | [1] | |
| [2] Document Identification | [1] | Document ID is unique identification of the Document. |
| [2] Document Version | [1] | Document Version is Unique identification of the business version. |
| [2] Document Type | [1] | '**A44**' - Price document |
| [2] Process Type | [1] | **'A30'** – Automatic frequency restoration reserve |
| [2] Sender Identification | [1] | eSett Code and Coding Scheme |
| [2] Sender Role | [1] | '**A05**' – Imbalance Settlement Responsible |
| [2] Receiver Identification | [1] | Subscriber **BSP** Code and Coding Scheme<br>or<br>Subscriber **BRP** Code and Coding Scheme |
| [2] Receiver Role | [1] | '**A08**' – **BRP** (Balance Responsible Party)<br>'**A46**' – Balance Service Provider |
| [2] Creation Date Time | [1] | Creation Date Time (represents time stamp of file generation in UTC). |
| [2] Publication Time Interval | [1] | Period covered by the document. |
| [2] Domain | [1] | Nordic Market Area ID = "10Y1001A1001A91G" with "A01" coding Scheme |
| **[2] Publication Time Series** | [1..*] | Prices per price type and MBA |

| | | |
|---|---|---|
| [3] Senders Time Series Identification | [1] | Time series ID - Unique ID of the Time Series |
| [3] Business Type | [1] | Designates price type.<br>**'B20'** – Balance up regulation price<br>**'B21'** – Balance down regulation price |
| [3] In Area | [1] | **MBA** - Relevant Market Balance Area for the market. |
| [3] Out Area | [1] | Market Balance Area is same as In Area |
| [3] Currency | [1] | **'EUR'** |
| [3] Measurement Unit Price | [1] | '**MWH'** |
| **[3] Period** | [1..*] | |
| [4] Time Interval | [1] | |
| [4] Resolution | [1] | **'PT15M'** – 15-minute resolution |
| **[4] Interval** | [1..*] | |
| [5] Pos | [1] | Relative position within the time interval |
| [5] Price | [0..1] | Price in EUR currency |
| [5] Direction | [0..1] | Not used |

## 4.4.10 PX Trades Data Packages

### 4.4.10.1 *SDP: PX Trades – Intraday Continuous*

| **Attribute** | |
|---|---|
| **Name** | PX Trades - Intraday Continuous |
| **Receiver** | BRP |

| | |
|---|---|
| **Description** | BRP's PX market trades (intraday Continuous) |
| **Format (Short name)** | PX Market Trades |
| **Document Standard** | ESS Schedule Document |
| **Aggregation** | Time Aggregation – H (Hourly) |
| **Time Period From** | D-14 |
| **Time Period To** | D-1 |
| **Time Trigger (Words)** | Daily basis, morning 05:40<br>Data package is not distributed when there are no data reported. |
| **Data Scope (Filter)** | System selects all BRP's PX market trades of Elbas. Document Process Type is '**A19**' (Intraday Continuous). |

#### 4.4.10.2 *SDP: PX Trades – Intraday Auction*

| **Attribute** | |
|---|---|
| **Name** | PX Trades - Intraday Auction |
| **Receiver** | BRP |
| **Description** | BRP's PX market trades (intraday Auction) |
| **Format (Short name)** | PX Market Trades |
| **Document Standard** | ESS Schedule Document |
| **Aggregation** | Time Aggregation – H (Hourly) |
| **Time Period From** | D-14 |
| **Time Period To** | D-1 |
| **Time Trigger (Words)** | Daily basis, morning 05:40<br>Data package is not distributed when there are no data reported. |

| | |
|---|---|
| **Data Scope (Filter)** | System selects all BRP's PX market trades of Elbas. Document Process Type is ‘A02’ (Intraday Auction). |

#### 4.4.10.3 *SDP: PX Trades – Intraday Auction 15-minute*

| **Attribute** | |
|---|---|
| **Name** | PX Trades - Intraday Auction |
| **Receiver** | BRP |
| **Description** | BRP's PX market trades (Intraday Auction) |
| **Format (Short name)** | PX Market Trades |
| **Document Standard** | ESS Schedule Document |
| **Aggregation** | Time Aggregation – QH (15-minute) |
| **Time Period From** | D-14 |
| **Time Period To** | D-1 |
| **Time Trigger (Words)** | Daily basis, morning 05:40<br>Data package is not distributed when there are no data reported. |
| **Data Scope (Filter)** | System selects all BRP's Intraday Auction PX Market Trades. Document Process Type is ‘A02‘ - (Intraday Auction). |

#### 4.4.10.4 *SDP: PX Trades – Intraday Continuous 15-minute*

| Attribute | |
|---|---|
| Name | PX Trades – Intraday Continuous |

| | |
|---|---|
| Receiver | BRP |
| Description | BRP's PX market trades (Intraday Continuous) |
| Format (Short name) | PX Market Trades |
| Document Standard | ESS Schedule Document |
| Aggregation | Time Aggregation – QH (15-minute) |
| Time Period From | D-14 |
| Time Period To | D-1 |
| Time Trigger (Words) | Daily basis, morning 05:40<br>Data package is not distributed when there are no data reported. |
| Data Scope (Filter) | System selects all BRP's Intraday Continuous PX Market Trades. Document Process Type is 'A19' (Intraday Continuous). |

#### 4.4.10.5 *SDP: PX Trades – Day-ahead*

| **Attribute** | |
|---|---|
| **Name** | PX Trades - Day-ahead |
| **Receiver** | BRP |
| **Description** | BRP's PX market trades (Day-ahead) |
| **Format (Short name)** | PX Market Trades |
| **Document Standard** | ESS Schedule Document |
| **Aggregation** | Time Aggregation – H (Hourly) |
| **Time Period From** | D-14 |
| **Time Period To** | D-1 |

| | |
|---|---|
| **Time Trigger (Words)** | Daily basis, afternoon 13:40<br>Data package is not distributed when there are no data reported. |
| **Data Scope (Filter)** | System selects all BRP's PX market trades of Day-ahead. Document Process Type is **'A01'** (Day-ahead). |

#### 4.4.10.6 *SDP: PX Trades – Day-ahead 15-minute*

| **Attribute** | |
|---|---|
| **Name** | PX Trades - Day-ahead |
| **Receiver** | BRP |
| **Description** | BRP's PX market trades (Day-ahead) in 15-minute resolution |
| **Format (Short name)** | PX Market Trades |
| **Document Standard** | ESS Schedule Document |
| **Aggregation** | Time Aggregation – 15M (15-minute) |
| **Time Period From** | D-14 |
| **Time Period To** | D-1 |
| **Time Trigger (Words)** | Daily basis, afternoon 13:40<br>Data package is not distributed when there are no data reported. |
| **Data Scope (Filter)** | System selects all BRP's PX market trades of Day-ahead. Document Process Type is **'A01'** (Day-ahead). |

#### 4.4.10.7 *SDP: PX Trades – Day-ahead (NSL)*

| **Attribute** | |
|---|---|
| **Name** | PX Trades - Day-ahead (NSL) |
| **Receiver** | BRP |
| **Description** | BRP's PX market trades for Day-ahead (NSL) |

| | |
|---|---|
| **Format (Short name)** | PX Market Trades |
| **Document Standard** | ESS Schedule Document |
| **Aggregation** | Time Aggregation – H (Hourly) |
| **Time Period From** | D-14 |
| **Time Period To** | D+1 |
| **Time Trigger (Words)** | Daily basis, afternoon 13:40<br>Data package is not distributed when there are no data reported. |
| **Data Scope (Filter)** | System selects all BRP's PX market trades for Day-ahead NSL. Document Process Type is **'Z15'** (Day-ahead NSL). |

#### 4.4.10.8 *SDP: PX Trades – Day-ahead (NSL) 15-minute*

| **Attribute** | |
|---|---|
| **Name** | PX Trades - Day-ahead (NSL) |
| **Receiver** | BRP |
| **Description** | BRP's PX market trades for Day-ahead (NSL) |
| **Format (Short name)** | PX Market Trades |
| **Document Standard** | ESS Schedule Document |
| **Aggregation** | Time Aggregation – QH (15-minute) |
| **Time Period From** | D-14 |

| | |
|---|---|
| **Time Period To** | D-1 |
| **Time Trigger (Words)** | Daily basis, afternoon 13:40<br>Data package is not distributed when there are no data reported. |
| **Data Scope (Filter)** | System selects all BRP's PX market trades for Day-ahead NSL. Document Process Type is **'Z15'** (Day-ahead NSL). |

#### 4.4.10.9 *Intraday Continuous Trades Purchase per BRP and MBA*

| Attribute | |
|---|---|
| Name | Intraday Continuous Trades Purchase per BRP and MBA |
| Receiver | BRP |
| Description | Intraday (Continuous) Trades Purchase per BRP and MBA |
| Format (Short name) | Generic |
| Document Standard | Generic Basse Time Series Document |
| Aggregation | Time Aggregation – QH (15-minute) |
| Time Period From | D-14 |
| Time Period To | D-1 |
| Time Trigger (Words) | Daily basis, morning 15:00<br>Data package is not distributed when there are no data reported. |

#### 4.4.10.10 *Intraday Continuous Trades Purchase per BRP and MBA*

| Attribute | |
|---|---|
| Name | Intraday Continuous Trades Sales per BRP and MBA |
| Receiver | BRP |
| Description | Intraday (Continuous) Trades Sales per BRP and MBA |
| Format (Short name) | Generic |
| Document Standard | Generic Basse Time Series Document |
| Aggregation | Time Aggregation – QH (15-minute) |
| Time Period From | D-14 |
| Time Period To | D-1 |
| Time Trigger (Words) | Daily basis, morning 15:00<br>Data package is not distributed when there are no data reported. |

#### 4.4.10.11 *Day-ahead (NSL) Trades Purchase per BRP and MBA 15-minute*

| **Attribute** | |
|---|---|
| **Name** | Day-ahead (NSL) Trades Purchase per BRP and MBA 15-minute |
| **Receiver** | BRP |
| **Description** | Day-ahead (NSL) Trades Purchase per BRP and MBA 15-minute |
| **Format (Short name)** | Generic |
| **Document Standard** | Generic Basse Time Series Document |

| | |
|---|---|
| **Aggregation** | Time Aggregation – QH (15-minute) |
| **Time Period From** | D-14 |
| **Time Period To** | D-1 |
| **Time Trigger (Words)** | Daily basis, afternoon 15:00<br>Data package is not distributed when there are no data reported. |
| **Data Scope (Filter)** | System selects all BRP's PX market trades for Day-ahead NSL. Document Process Type is **'Z15'** (Day-ahead NSL). |

#### 4.4.10.12 *Day-ahead (NSL) Trades Sales per BRP and MBA*

| **Attribute** | |
|---|---|
| **Name** | Day-ahead (NSL) Trades Sales per BRP and MBA |
| **Receiver** | BRP |
| **Description** | Day-ahead (NSL) Trades Sales per BRP and MBA |
| **Format (Short name)** | Generic |
| **Document Standard** | Generic Basse Time Series Document |
| **Aggregation** | Time Aggregation – QH (15-minute) |
| **Time Period From** | D-14 |
| **Time Period To** | D-1 |
| **Time Trigger (Words)** | Daily basis, afternoon 15:00<br>Data package is not distributed when there are no data reported. |

| | |
|---|---|
| **Data Scope (Filter)** | System selects all BRP's PX market trades for Day-ahead NSL. Document Process Type is **'Z15'** (Day-ahead NSL). |

4.4.10.13 *Day-ahead Trades Purchase per BRP and MBA*

| **Attribute** | |
|---|---|
| **Name** | Day-ahead Trades Purchase per BRP and MBA |
| **Receiver** | BRP |
| **Description** | Day-ahead Trades Purchase per BRP and MBA |
| **Format (Short name)** | Generic |
| **Document Standard** | Generic Basse Time Series Document |
| **Aggregation** | Time Aggregation – QH (15-minute) |
| **Time Period From** | D-14 |
| **Time Period To** | D-1 |
| **Time Trigger (Words)** | Daily basis, afternoon 15:00<br>Data package is not distributed when there are no data reported. |

4.4.10.14 *Day-ahead Trades Sales per BRP and MBA*

| **Attribute** | |
|---|---|
| **Name** | Day-ahead Trades Sales per BRP and MBA |

| | |
|---|---|
| **Receiver** | BRP |
| **Description** | Day-ahead Trades Sales per BRP and MBA |
| **Format (Short name)** | Generic |
| **Document Standard** | Generic Basse Time Series Document |
| **Aggregation** | Time Aggregation – QH (15-minute) |
| **Time Period From** | D-14 |
| **Time Period To** | D-1 |
| **Time Trigger (Words)** | Daily basis, afternoon 15:00<br>Data package is not distributed when there are no data reported. |

#### 4.4.10.15 *Intraday Auction Trades Purchase per BRP and MBA*

| Attribute | |
|---|---|
| Name | Intraday Auction Trades Purchase per BRP and MBA |
| Receiver | BRP |
| Description | Intraday Auction Trades Purchase per BRP and MBA |
| Format (Short name) | Generic |
| Document Standard | Generic Basse Time Series Document |
| Aggregation | Time Aggregation – QH (15-minute) |

| | |
|---|---|
| Time Period From | D-14 |
| Time Period To | D-1 |
| Time Trigger (Words) | Daily basis, morning 15:00<br>Data package is not distributed when there are no data reported. |

#### 4.4.10.16 *Intraday Auction Trades Sales per BRP and MBA*

| Attribute | |
|---|---|
| Name | Intraday Auction Trades Sales per BRP and MBA |
| Receiver | BRP |
| Description | Intraday Auction Trades Sales per BRP and MBA |
| Format (Short name) | Generic |
| Document Standard | Generic Basse Time Series Document |
| Aggregation | Time Aggregation – QH (15-minute) |
| Time Period From | D-14 |
| Time Period To | D-1 |
| Time Trigger (Words) | Daily basis, morning 15:00<br>Data package is not distributed when there are no data reported. |

#### 4.4.10.17 *Document Format Attribute Usage*

Document used for prices data is ‘ESS Schedule Document’.

Mark [x] indicates the level in the document structure.

| **Attribute (XML schema)** | **Cl.** | **Value Description** |
|---|---|---|
| **[1] Schedule Document** | [1] | |

| | | |
|---|---|---|
| [2] Document Identification | [1] | Document ID is unique identification of the document |
| [2] Document Version | [1] | Document Version is Unique identification of the business version. |
| [2] Document Type | [1] | '**A01**' - Balance Responsible schedule |
| [2] Process Type | [1] | '**A01'** (Day-ahead) – SDP PX Market Trades Day-ahead 15-minute<br>**'A19'** (Intraday Continuous) – SDP PX Market Trades Intraday 15-minute<br>**'Z15'** (Day-ahead NSL) - External trade – SDP PX Market Trades – Day-ahead (NSL) 15-minute<br>"A02" Intraday Auction |
| [2] Schedule Classification Type | [1] | **'A02'** (Summary type) |
| [2] Sender Identification | [1] | eSett Code and Coding Scheme |
| [2] Sender Role | [1] | '**A05**' - Imbalance Settlement Responsible |
| [2] Receiver Identification | [1] | Subscriber **BRP** Code and Coding Scheme |
| [2] Receiver Role | [1] | '**A08**' – BRP (Balance Responsible Party) |
| [2] Creation Date Time | [1] | Creation Date Time (represents time stamp of file generation in UTC). |
| [2] Schedule Time Interval | [1] | Period covered by the document containing the schedule. |
| [2] Subject Party | [1] | **BRP** Code and Coding Scheme. Same as the receiver. |
| [2] Subject Role | [1] | '**A08**' – BRP (Balance Responsible Party) |
| [2] Domain | [1] | Domain covered by the schedule document.<br>Nordic Market Area ID = "10Y1001A1001A91G" with "A01" coding Scheme |
| **[2] Schedule Time Series** | [1..*] | |
| [3] Senders Time Series Identification | [1] | PX Market Trade MEC ID |
| [3] Senders Time Series Version | [1] | Time Series version. For NBS: **"1"** |
| [3] Business Type | [1] | '**A08'** - Net Internal trade |

| | | |
|---|---|---|
| [3] Product | [1] | '**8716867000030**' (Active energy) |
| [3] Object Aggregation | [1] | **'A01'** Area (Identifies to what extent object is aggregated) |
| [3] In Area | [1] | **MBA** – Market Balance Area Code and Coding Scheme |
| [3] In Party | [0..1] | **Retailer** Code and Coding Scheme (Trader) - the unique identification of the Retailer. This is required for PX Trade where Retailer is the trader. |
| [3] Measurement Unit | [1] | **'MWH' -** Unit of measurement |
| **[3] Period** | [1..*] | Period with time interval and positions (sequence of time series). There can be more than one period in one time series to enable gaps in reported values. |
| [4] Time Interval | [1] | The start and end date and time of the time interval of the period in question. |
| [4] Resolution | [1] | **'PT15M'** for 15-minute resolution |
| **[4] Interval** | [1..*] | |
| [5] Pos | [1] | Relative position within the time interval. |
| [5] Qty | [1] | Quantity of the product scheduled for the position.<br>The direction from out party (seller) to in party (buyer) is positive, while the opposite direction is negative (with minus signs) |

## 4.4.11 PX Flows 15-minute

| **SDP: PX Market Flows** | |
|---|---|
| **Name** | PX Market Flows 15-minute |
| **Receiver** | TSO |
| **Description** | PX Market Flows reported by NEMOs |
| **Format (Short Name)** | PX Flows |

| | |
|---|---|
| **Document Standard** | ENTSO-E Publication document – UML model and schema version 1.1<br>The document must be compliant with the XSD: Schedule_MarketDocument v5.1 |
| **Aggregation** | Time Aggregation – QH (15-minute) |
| **Time Period From** | D-1 |
| **Time Period To** | D-1 |
| **Time Trigger (Words)** | Daily basis, 10:00 CET<br>Data package is not distributed when there are no data reported. |
| **Data Scope (Filter)** | System selects all PX flows reported by NEMOs for MBAs related to the recipient TSO |

#### 4.4.11.1 *Document Format Attribute Usage*

Mark [x] indicates the level in the document structure.

| Attribute (XML Schema) | Cl. | Value description |
|---|---|---|
| [1] Schedule_MarketDocument | | |
| [2] mRID | [1..1] | The unique identification of the document being exchanged within a business process flow. |
| [2] revisionNumber | [1..1] | Version of the document. |
| [2] type | [1..1] | The coded type of a document. The document type describes the principal characteristic of the document.<br>“A04” – stands for System Operator area schedule. |
| [2] process.processType | [1..1] | Indicated the nature of the process that document addresses.<br>“A17” – stands for Schedule day |
| [2] process_classificationType | [1..1] | Indicates the classification mechanism used to group a set of objects together.<br>“A02” – Summary type |

| | | |
|---|---|---|
| [2] sender_MarketParticipant.mRID | [1..1] | BASSE identification should be Code=”44X-00000000004B” and Coding Scheme=”EIC”. Configurable in Global Parameters. |
| *[A] coding Scheme* | [1] | *See* **Error! Reference source not found.** |
| [2] sender_MarketParticipant.marketRole.type | [1..1] | Basse identification should be A05=Imbalance Settlement Responsible |
| [2] receiver_MarketParticipant.mRID | [1..1] | EIC code of the TSO which requested the data<br>A01=EIC<br>The coding scheme is the Energy Identification Coding Scheme (EIC), maintained by ENTSO-E. |
| *[A] coding Scheme* | [1] | *See* **Error! Reference source not found.** |
| [2] receiver_MarketParticipant.marketRole.type | [1..1] | A04 – System Operator |
| [2] createdDateTime | [1..1] | The date and time of the creation of the document in format YYYY-MM-DDTHH:MM:SS |
| [2] period.timeInterval | [1..1] | The start and end date and time for a given interval.<br>- The beginning and ending date and time of the period that the publication document is covering<br>Period covered (in ISO 8601 UTC format)<br><period.timeInterval><br><start>YYYY-MM-DDTHH:MMZ</start><br><end>YYYY-MM-DDTHH:MMZ</end><br></period.timeInterval> |
| [2] Domain.mRID | [1..1] | Domain covered by the schedule document. Code of the Nordic Market Area = 10Y1001A1001A91G |
| *[A] coding Scheme* | [1] | *See* ***Error! Reference source not found.*** |
| [2] TimeSeries | [1..*] | Repeating element |

| | | |
|---|---|---|
| [3] mRID | [1..1] | An unique identification of the time series |
| [3] version | [1..1] | The version of the time-series |
| [3] businessType | [1..1] | The identification of the nature of the time series.<br>Value must be one of following:<br>“A06” – stand for External trade without explicit capacity<br>**“B67”** – stands for DC flow with losses, i.e. importing end<br>**“B68”** – stands for DC flow without losses, i.e. exporting end |
| [3] product | [1..1] | The identification of the nature of the energy product<br>“8716867000016” - Active Power |
| [3] object_aggregation | [1..1] | Identifies to what extent object is aggregated:<br>“A01” Area |
| [3] in_Domain.mRID | [1..1] | The unique identification of the domain. The area where the product is being delivered.<br>EIC code of the area where the energy price for is being detailed. codingScheme = ‘A01’ |
| [3] out_Domain.mRID | [1..1] | The unique identification of the domain. The area where the product is being extracted.<br>EIC code of the area where the energy price for is being detailed. codingScheme = ‘A01’ |
| [3] in_MarketParticipant.mRID | [0..1] | EIC code of NEMO where the energy is going to (Importing NEMO)<br>For NordPoolSpot = 11XNORDPOOLSPOT2, for EEC = 17X100A100M006F3 |
| [3] out_MarketParticipant.mRID | [0..1] | EIC code of NEMO where the energy is coming from (Exporting NEMO) |

| | | |
|---|---|---|
| | | For NordPoolSpot = 11XNORDPOOLSPOT2, for EEC = 17X100A100M006F3 |
| [3] marketAgreement.type | [0..1] | Indicated the nature of the market of the time series.<br>Contract should be one of the following options.<br>A01 for day-ahead.<br>A07 for Intraday Continuous<br>A02 for Intraday Auction |
| [3] measurement_Unit.name | [1..1] | The unit of measurement used for the quantities expressed within the time series (MAW for MWh) |
| [3] curveType | [0..1] | The identification of the coded representation of the type of curve being described.<br>“A01” - Sequential Fixed Size Blocks |
| [3] Period | [1..*] | Repeating element |
| [4] timeInterval | [1..1] | The start and end time of the period.<br><period.timeInterval><br><start>YYYY-MM-DDTHH:MMZ</start><br><end>YYYY-MM-DDTHH:MMZ</end><br></period.timeInterval> |
| [4] resolution | [1..1] | The definition of the number of units of time that compose an individual step within a period.<br>PT15M |
| [4] Point | [1..*] | Repeating element |
| [5] position | [1..1] | A sequential value representing the relative position within a given time interval |
| [5] quantity | [1..1] | NEMO’s PX Flows quantity received via PXFI data-flow as attribute Quantity, Quantity Without Loss or Quantity With Loss. |

| | | |
|---|---|---|
| | | Conversion from MWh to MW is performed. Values are stored in MWh in BO. Data Package returns MW. Input (15-minute) MWh values are multiplied by 4. |

#### 4.4.11.2 *Intraday Auction Flow Export per BRP and MBA 15-minute*

| Attribute | |
|---|---|
| Name | Intraday Auction Flow Export per BRP and MBA 15-minute |
| Receiver | BRP |
| Description | Intraday Auction Flow Export per BRP and MBA 15-minute |
| Format (Short name) | Generic |
| Document Standard | |
| Aggregation | Time Aggregation – QH (15-minute) |
| Time Period From | D-14 |
| Time Period To | D-1 |
| Time Trigger (Words) | Daily basis, morning 15:00<br>Data package is not distributed when there are no data reported. |

#### 4.4.11.3 *Intraday Auction Flow Import per BRP and MBA 15-minute*

| Attribute | |
|---|---|
| Name | Intraday Auction Flow Import per BRP and MBA 15-minute |
| Receiver | BRP |
| Description | Intraday Auction Flow Import per BRP and MBA 15-minute |
| Format (Short name) | Generic |

| | |
|---|---|
| Document Standard | Generic Basse Time Series Document |
| Aggregation | Time Aggregation – QH (15-minute) |
| Time Period From | D-14 |
| Time Period To | D-1 |
| Time Trigger (Words) | Daily basis, morning 15:00<br>Data package is not distributed when there are no data reported. |

#### 4.4.11.4 *Intraday Continuous Flow Export per BRP and MBA*

| Attribute | |
|---|---|
| Name | Intraday Continuous Flow Export per BRP and MBA |
| Receiver | BRP |
| Description | Intraday (Continuous) Flow Export per BRP and MBA |
| Format (Short name) | Generic |
| Document Standard | Generic Basse Time Series Document |
| Aggregation | Time Aggregation – QH (15-minute) |
| Time Period From | D-14 |
| Time Period To | D-1 |
| Time Trigger (Words) | Daily basis, morning 15:00<br>Data package is not distributed when there are no data reported. |

#### 4.4.11.5 *Intraday Continuous Flow Import per BRP and MBA*

| Attribute | |
|---|---|
| Name | Intraday Continuous Flow Import per BRP and MBA |
| Receiver | BRP |
| Description | Intraday (Continuous) Flow Import per BRP and MBA |
| Format (Short name) | Generic |
| Document Standard | Generic Basse Time Series Document |
| Aggregation | Time Aggregation – QH (15-minute) |
| Time Period From | D-14 |
| Time Period To | D-1 |
| Time Trigger (Words) | Daily basis, morning 15:00<br>Data package is not distributed when there are no data reported. |

#### 4.4.11.6 *Day-ahead (NSL) Flow Export per BRP and MBA*

| **Attribute** | |
|---|---|
| **Name** | Day-ahead (NSL) Flow Export per BRP and MBA |
| **Receiver** | BRP |
| **Description** | Day-ahead (NSL) Flow Export per BRP and MBA |
| **Format (Short name)** | Generic |

| | |
|---|---|
| **Document Standard** | Generic Basse Time Series Document |
| **Aggregation** | Time Aggregation – QH (15-minute) |
| **Time Period From** | D-14 |
| **Time Period To** | D-1 |
| **Time Trigger (Words)** | Daily basis, afternoon 15:00<br>Data package is not distributed when there are no data reported. |
| **Data Scope (Filter)** | System selects all BRP's PX market trades for Day-ahead NSL. Document Process Type is **'Z15'** (Day-ahead NSL). |

#### 4.4.11.7 *Day-ahead (NSL) Flow Import per BRP and MBA*

| **Attribute** | |
|---|---|
| **Name** | Day-ahead (NSL) Flow Import per BRP and MBA |
| **Receiver** | BRP |
| **Description** | Day-ahead (NSL) Flow Export per BRP and MBA |
| **Format (Short name)** | Generic |
| **Document Standard** | Generic Basse Time Series Document |
| **Aggregation** | Time Aggregation – QH (15-minute) |
| **Time Period From** | D-14 |
| **Time Period To** | D-1 |

| | |
|---|---|
| **Time Trigger (Words)** | Daily basis, afternoon 15:00<br>Data package is not distributed when there are no data reported. |
| **Data Scope (Filter)** | System selects all BRP's PX market trades for Day-ahead NSL. Document Process Type is **'Z15'** (Day-ahead NSL). |

#### 4.4.11.8 *Day-ahead Flow Export per BRP and MBA*

| **Attribute** | |
|---|---|
| **Name** | Day-ahead Flow Export per BRP and MBA |
| **Receiver** | BRP |
| **Description** | Intraday (Continuous) Flow Import per BRP and MBA |
| **Format (Short name)** | Generic |
| **Document Standard** | Generic Basse Time Series Document |
| **Aggregation** | Time Aggregation – QH (15-minute) |
| **Time Period From** | D-14 |
| **Time Period To** | D-1 |
| **Time Trigger (Words)** | Daily basis, afternoon 15:00<br>Data package is not distributed when there are no data reported. |

#### 4.4.11.9 *Day-ahead Flow Import per BRP and MBA*

| Attribute | |
|---|---|
| **Name** | Day-ahead Flow Import per BRP and MBA |
| **Receiver** | BRP |
| **Description** | Day-ahead Flow Import per BRP and MBA |
| **Format (Short name)** | Generic |
| **Document Standard** | Generic Basse Time Series Document |
| **Aggregation** | Time Aggregation – QH (15-minute) |
| **Time Period From** | D-14 |
| **Time Period To** | D-1 |
| **Time Trigger (Words)** | Daily basis, afternoon 15:00<br>Data package is not distributed when there are no data reported. |

4.4.11.10 *Document Format Attribute Usage*

Document used for prices data is 'ESS Schedule Document'.

Mark [x] indicates the level in the document structure.

| Attribute (XML schema) | Cl. | Value Description |
|---|---|---|
| **[1] Schedule Document** | [1] | |
| [2] Document Identification | [1] | Document ID is unique identification of the document |

| | | |
|---|---|---|
| [2] Document Version | [1] | Document Version is Unique identification of the business version. |
| [2] Document Type | [1] | **A01** - Balance Responsible schedule |
| [2] Process Type | [1] | **A01** (Day-ahead) – SDP PX Market Trades Day-ahead<br>**A19** (Intraday accumulated) – SDP PX Market Trades Intraday |
| [2] Schedule Classification Type | [1] | **A02** (Summary type) |
| [2] Sender Identification | [1] | eSett Code and Coding Scheme |
| [2] Sender Role | [1] | **A05** - Imbalance Settlement Responsible |
| [2] Receiver Identification | [1] | Subscriber **BRP** Code and Coding Scheme |
| [2] Receiver Role | [1] | **A08** – BRP (Balance Responsible Party) |
| [2] Creation Date Time | [1] | Creation Date Time (represents time stamp of file generation in UTC). |
| [2] Schedule Time Interval | [1] | Period covered by the document containing the schedule. |
| [2] Subject Party | [1] | **BRP** Code and Coding Scheme. Same as the receiver. |
| [2] Subject Role | [1] | **A08** – BRP (Balance Responsible Party) |
| [2] Domain | [1] | Domain covered by the schedule document.<br>Nordic Market Area ID = “10Y1001A1001A91G” with “A01” coding Scheme |
| **[2] Schedule Time Series** | [1..*] | |
| [3] Senders Time Series Identification | [1] | Time series ID - Unique ID of the Time Series |
| [3] Senders Time Series Version | [1] | Time Series version. For NBS: **“1”** |
| [3] Business Type | [1] | **A08** - Net Internal trade |
| [3] Product | [1] | ‘**8716867000030**’ (Active energy) |
| [3] Object Aggregation | [1] | **A01** Area (Identifies to what extent object is aggregated) |
| [3] In Area | [1] | **MBA** – Market Balance Area Code and Coding Scheme |

| | | |
|---|---|---|
| [3] In Party | [0..1] | **Retailer** Code and Coding Scheme (Trader) - the unique identification of the Retailer. This is required for PX Trade where Retailer is the trader. |
| [3] Measurement Unit | [1] | **MWH -** Unit of measurement |
| **[3] Period** | [1..*] | Period with time interval and positions (sequence of hours/15-minutes). There can be more than one period in one time series to enable gaps in reported values. |
| [4] Time Interval | [1] | The start and end date and time of the time interval of the period in question. |
| [4] Resolution | [1] | **PT1H** – hourly resolution<br>**PT15M** – 15-minute resolution |
| **[4] Interval** | [1..*] | |
| [5] Pos | [1] | Relative position within the time interval. |
| [5] Qty | [1] | Quantity of the product scheduled for the position.<br>The direction from out party (seller) to in party (buyer) is positive, while the opposite direction is negative (with minus signs) |

### 4.4.12 Settlement Results/MGA Imbalance Data Packages

The NEG ESP Energy Account Report Document (EAR) is available in form of data package subscription.

Data packages for BRP receiver:

- Production Imbalance (result of the imbalance settlement) - *data package will be terminated 14 days after go-live of Single Balance Settlement regime*
- Consumption Imbalance (result of the imbalance settlement) - *data package will be terminated 14 days after go-live of Single Balance Settlement regime*
- Single Imbalance (result of the imbalance settlement) - *data package will be introduced as of go-live of Single Balance Settlement regime.*
- MGA Imbalance (quality assurance of area balance per MGA)

Data packages for DSO receiver:

- MGA Imbalance (quality assurance of area balance per MGA)

Although all data packages use physically the one document format (EAR) they are distinguished by format short name to determine type of the report.

#### 4.4.12.1 *Imbalance – Final Results*

| Attribute | |
|---|---|
| **Name** | Imbalance – Final Results |
| **Market Party (Receiver)** | BRP |
| **Document Standard** | NEG ESP Energy Account Report Document |
| **Format (Short Name)** | Imbalance |
| **Message Type** | (SERO) Send Settlement Results |
| **Frequency (Trigger)** | Final Calculation |
| **Aggregation** | QH (15-minute) |
| **Time Period From** | D-13 |
| **Time Period To** | D-13 |
| **Data Scope** | DP contains BRP imbalance results for all respective MBAs and period in CET. Calculations are per couple BRP and MBA.<br>If BRP Branch has different preferred currency from EUR, then the file contains results in local currency and also results in EUR currency.<br>***Additional Rules:***<br>• If there are no input values for the results calculation, then zeros are used and reported<br>• In case of there is some day with not calculated results then this day is omitted from the report<br>Calculated day is period of 96 15-minute intervals in one day in CET |

#### 4.4.12.2 *Imbalance – Invoiced Results*

| Attribute | |
|---|---|
| **Name** | Imbalance – Invoiced Results |

| | |
|---|---|
| **Market Party (Receiver)** | BRP |
| **Document Standard** | NEG ESP Energy Account Report Document |
| **Format (Short Name)** | Imbalance |
| **Message Type** | (SERO) Send Settlement Results |
| **Frequency (Trigger)** | Invoicing Calculation |
| **Aggregation** | H (Hourly) |
| **Time Period From** | W-3 |
| **Time Period To** | W-3 |
| **Data Scope** | DP contains BRP production imbalance results for all respective MBAs and period in CET. Calculations are per couple BRP and MBA.<br>If BRP Branch has different preferred currency from EUR, then the file contains results in local currency and also results in EUR currency.<br>***Additional Rules:***<br>• If there are no input values for the results calculation, then zeros are used and reported<br>• In case of there is some day with not calculated results then this day is omitted from the report<br>Calculated day is period of 24 hours, one day in CET |

4.4.12.3 *Imbalance – Preliminary Results*

| **Attribute** | |
|---|---|
| **Name** | Imbalance – Preliminary Results |
| **Market Party (Receiver)** | BRP |
| **Document Standard** | NEG ESP Energy Account Report Document |
| **Format (Short Name)** | Imbalance |

| | |
|---|---|
| **Message Type** | (SERO) Send Settlement Results |
| **Frequency (Trigger)** | Preliminary Calculation |
| **Aggregation** | QH (15-minute) |
| **Time Period From** | D-12 |
| **Time Period To** | D-1 |
| **Data Scope** | DP contains BRP imbalance results for all respective MBAs and period in CET. Calculations are per couple BRP and MBA.<br>If BRP Branch has different preferred currency from EUR, then the file contains results in local currency and also results in EUR currency.<br>***Additional Rules:***<br>• If there are no input values for the results calculation, then zeros are used and reported<br>• In case of there is some day with not calculated results then this day is omitted from the report<br>Calculated day is period of 24 hours, one day in CET |

#### 4.4.12.4 *MGA Imbalance – Final Results*

| **Attribute** | |
|---|---|
| **Name** | MGA Imbalance – Final Results |
| **Market Party (Receiver)** | BRP |
| **Document Standard** | NEG ESP Energy Account Report Document |
| **Format (Short Name)** | MGA Imbalance |
| **Message Type** | (MGIO) Send MGA Imbalance Results |
| **Frequency (Trigger)** | Final Calculation |
| **Aggregation** | QH (15-minute) |

| | |
|---|---|
| **Time Period From** | D-13 |
| **Time Period To** | D-13 |
| **Data Scope** | DP contains all MGA Imbalance Results for BRP and period in CET. BRP is part of MGA Imbalance attributes. If BRP has more MGA Imbalance Retailers, then more MGA Imbalance Results are sent within one document.<br>***Additional Rules:***<br>• If there are no input values for the results calculation, then zeros are used and reported<br>• In case of there is some day with not calculated results then this day is omitted from the report<br>Calculated day is period of 24 hours, one day in CET |

#### 4.4.12.5 *MGA Imbalance – Invoiced Results*

| **Attribute** | |
|---|---|
| **Name** | MGA Imbalance – Invoiced Results |
| **Market Party (Receiver)** | BRP |
| **Document Standard** | NEG ESP Energy Account Report Document |
| **Format (Short Name)** | MGA Imbalance |
| **Message Type** | (MGIO) Send MGA Imbalance Results |
| **Frequency (Trigger)** | Invoicing Calculation |
| **Aggregation** | QH (15-minute) |
| **Time Period From** | W-3 |
| **Time Period To** | W-3 |

| | |
|---|---|
| **Data Scope** | DP contains all MGA Imbalance Results for BRP and period in CET. BRP is part of MGA Imbalance attributes. If BRP has more MGA Imbalance Retailers, then more MGA Imbalance Results are sent within one document.<br>***Additional Rules:***<br>• If there are no input values for the results calculation, then zeros are used and reported<br>• In case of there is some day with not calculated results then this day is omitted from the report<br>Calculated day is period of 96 15-minute intervals in one day in CET |

#### 4.4.12.6 *MGA Imbalance – Preliminary Results*

| **Attribute** | |
|---|---|
| **Name** | MGA Imbalance – Preliminary Results |
| **Market Party (Receiver)** | BRP |
| **Document Standard** | NEG ESP Energy Account Report Document |
| **Format (Short Name)** | MGA Imbalance |
| **Message Type** | (MGIO) Send MGA Imbalance Results |
| **Frequency (Trigger)** | Preliminary Calculation |
| **Aggregation** | QH (15-minute) |
| **Time Period From** | D-12 |
| **Time Period To** | D-1 |
| **Data Scope** | DP contains all MGA Imbalance Results for BRP and period in CET. BRP is derived via relation Retailer – Imbalance in the register MGA and via relation Retailer Balance Responsibility for Consumption. If BRP has more MGA Imbalance Retailers, then more MGA Imbalance Results are sent within one document.<br>***Additional Rules:*** |

| | |
|---|---|
| | • If there are no input values for the results calculation, then zeros are used and reported<br>• In case of there is some day with not calculated results then this day is omitted from the report<br>Calculated day is period of 96 15-minute intervals in one day in CET |

#### 4.4.12.7 *SDP: Imbalance per BRP per MBA (Volume and Amount) 15-minutes*

| **Attribute** | |
|---|---|
| **Name** | Imbalance per BRP per MBA (Volume and Amount) |
| **Receiver** | BRP |
| **Description** | BRP's imbalance volumes (MWh) and amounts (EUR) per MBA |
| **Format (Short Name)** | Imbalance |
| **Document Standard** | NEG ESP Energy Account Report Document |
| **Aggregation** | QH (15-minute) |
| **Time Period From** | D-14 |
| **Time Period To** | D-1 |
| **Time Trigger (Words)** | Daily basis, afternoon 14:00<br>Data package is not distributed when there are no data reported. |
| **Data Scope (Filter)** | All BRP's imbalance volumes (MWh) and amounts (EUR) per MBA |

#### 4.4.12.8 *SDP: Production Imbalance per BRP per MBA (Volume and Amount)*

| **Attribute** | |
|---|---|
| **Name** | Imbalance per BRP per MBA (Volume and Amount) |
| **Receiver** | BRP |

| | |
|---|---|
| **Description** | BRP's imbalance volumes (MWh) and amounts (EUR) per MBA |
| **Format (Short Name)** | Imbalance |
| **Document Standard** | NEG ESP Energy Account Report Document |
| **Aggregation** | Time Aggregation – H (Hourly) |
| **Time Period From** | D-14 |
| **Time Period To** | D-1 |
| **Time Trigger (Words)** | Daily basis, afternoon 14:00<br>Data package is not distributed when there are no data reported. |
| **Data Scope (Filter)** | All BRP's imbalance volumes (MWh) and amounts (EUR) per MBA |

#### 4.4.12.9 *SDP: MGA Imbalances - BRP*

| **Attribute** | |
|---|---|
| **Name** | MGA imbalances |
| **Receiver** | BRP |
| **Description** | All MGAs' imbalances per MGA under BRP's balance responsibility |
| **Format (Short Name)** | MGA Imbalance |
| **Document Standard** | NEG ESP Energy Account Report Document |
| **Aggregation** | Time Aggregation – H (Hourly) |
| **Time Period From** | D-14 |
| **Time Period To** | D-1 |
| **Time Trigger (Words)** | Daily basis, delivered till 16:00 CET |

| | |
|---|---|
| | Data package is not distributed when there are no data available. |
| **Data Scope (Filter)** | All BRP MGAs' imbalances per MGA under BRP's balance responsibility |

#### 4.4.12.10 *SDP: MGA Imbalances – BRP 15-minute*

| **Attribute** | |
|---|---|
| **Name** | MGA imbalances |
| **Receiver** | BRP |
| **Description** | All MGAs' imbalances per MGA under BRP's balance responsibility in 15-minute resolution |
| **Format (Short Name)** | MGA Imbalance |
| **Document Standard** | NEG ESP Energy Account Report Document |
| **Aggregation** | Time Aggregation – 15M (15-minute) |
| **Time Period From** | D-14 |
| **Time Period To** | D-1 |
| **Time Trigger (Words)** | Daily basis, delivered till 16:00 CET<br>Data package is not distributed when there are no data available. |
| **Data Scope (Filter)** | All BRP MGAs' imbalances per MGA under BRP's balance responsibility |

#### 4.4.12.11 *MGA Imbalance Deficit per BRP and MBA*

| **Attribute** | |
|---|---|
| **Name** | MGA Imbalance Deficit per BRP and MBA |
| **Receiver** | BRP |
| **Description** | MGA Imbalance Deficit per BRP and MBA |

| | |
|---|---|
| **Format (Short Name)** | Generic |
| **Document Standard** | Generic Basse Time Series Document |
| **Aggregation** | Time Aggregation – 15M (15-minute) |
| **Time Period From** | D-14 |
| **Time Period To** | D-1 |
| **Time Trigger (Words)** | Daily basis, delivered till 15:00 CET<br>Data package is not distributed when there are no data available. |
| **Data Scope (Filter)** | All BRP MGAs' imbalances per MGA under BRP's balance responsibility |

#### 4.4.12.12 *MGA Imbalance Surplus per BRP and MBA*

| **Attribute** | |
|---|---|
| **Name** | MGA Imbalance Surplus per BRP and MBA |
| **Receiver** | BRP |
| **Description** | MGA Imbalance Surplus per BRP and MBA |
| **Format (Short Name)** | Generic |
| **Document Standard** | Generic Basse Time Series Document |
| **Aggregation** | Time Aggregation – 15M (15-minute) |
| **Time Period From** | D-14 |
| **Time Period To** | D-1 |
| **Time Trigger (Words)** | Daily basis, delivered till 15:00 CET<br>Data package is not distributed when there are no data available. |
| **Data Scope (Filter)** | All BRP MGAs' imbalances per MGA under BRP's balance responsibility |

4.4.12.13 *MGA trade Export per BRP and MBA*

| Attribute | |
|---|---|
| **Name** | MGA trade Export per BRP and MBA |
| **Receiver** | BRP |
| **Description** | MGA Imbalance Surplus per BRP and MBA |
| **Format (Short Name)** | Generic |
| **Document Standard** | Generic Basse Time Series Document |
| **Aggregation** | Time Aggregation – 15M (15-minute) |
| **Time Period From** | D-14 |
| **Time Period To** | D-1 |
| **Time Trigger (Words)** | Daily basis, delivered till 15:00 CET<br>Data package is not distributed when there are no data available. |

4.4.12.14 *MGA trade Export per BRP and MBA*

| Attribute | |
|---|---|
| **Name** | MGA Trade Import per BRP and MBA |
| **Receiver** | BRP |
| **Description** | MGA Trade Import per BRP and MBA |
| **Format (Short Name)** | Generic |
| **Document Standard** | Generic Basse Time Series Document |
| **Aggregation** | Time Aggregation – 15M (15-minute) |

| | |
|---|---|
| **Time Period From** | D-14 |
| **Time Period To** | D-1 |
| **Time Trigger (Words)** | Daily basis, delivered till 15:00 CET<br>Data package is not distributed when there are no data available. |

#### 4.4.12.15 *MGA Trade Import per BRP and MBA*

| **Attribute** | |
|---|---|
| **Name** | MGA Trade Import per BRP and MBA |
| **Receiver** | BRP |
| **Description** | MGA Trade Import per BRP and MBA |
| **Format (Short Name)** | Generic |
| **Document Standard** | Generic Basse Time Series Document |
| **Aggregation** | Time Aggregation – 15M (15-minute) |
| **Time Period From** | D-14 |
| **Time Period To** | D-1 |
| **Time Trigger (Words)** | Daily basis, delivered till 15:00 CET<br>Data package is not distributed when there are no data available. |

#### 4.4.12.16 *SDP: MGA Imbalances – DSO*

| **Attribute** | |
|---|---|
| **Name** | MGA imbalances |

| | |
|---|---|
| **Receiver** | DSO |
| **Description** | All DSO's MGAs' imbalances per MGA |
| **Format (Short Name)** | MGA Imbalance |
| **Document Standard** | NEG ESP Energy Account Report Document |
| **Aggregation** | Time Aggregation – H (Hourly) |
| **Time Period From** | D-14 |
| **Time Period To** | D-1 |
| **Time Trigger (Words)** | Daily basis, delivered till 16:00 CET<br>Data package is not distributed when there are no data available. |
| **Data Scope (Filter)** | All DSO's MGAs' imbalances per MGA |

#### 4.4.12.17 *SDP: MGA Imbalances – DSO 15-minute*

| **Attribute** | |
|---|---|
| **Name** | MGA imbalances |
| **Receiver** | DSO |
| **Description** | All DSO's MGAs' imbalances per MGA in 15-minute resolution |
| **Format (Short Name)** | MGA Imbalance |
| **Document Standard** | NEG ESP Energy Account Report Document |
| **Aggregation** | Time Aggregation – 15M (15-minute) |
| **Time Period From** | D-14 |
| **Time Period To** | D-1 |
| **Time Trigger (Words)** | Daily basis, delivered till 16:00 CET |

| | |
|---|---|
| | Data package is not distributed when there are no data available. |
| **Data Scope (Filter)** | All DSO's MGAs' imbalances per MGA |

#### 4.4.12.18 *Document Format Attribute Usage*

Document used for consumption data is 'NEG ESP Energy Account Report Document'. Attribute usage is specified separately for document header and time series part is specified separately for MGA Imbalance and Settlement Results data.

Mark [x] indicates the level in the document structure.

##### 4.4.12.18.1 Header - NEG ESP Energy Account Report Document

| Attribute (XML Schema) | Cl. | Description |
|---|---|---|
| **[1] Energy Account Report Document** | | |
| [2] Document Identification | [1] | Document ID is unique identification of the document |
| [2] Document Version | [1] | Fixed value "1" |
| [2] Document Type | [1] | **A12** - Imbalance report |
| [2] Document Status | [1] | **A01** - Intermediate – data package sends open settlement period ('A02' (Final) is not used) |
| [2] Process Type | [1] | **A06** - Imbalance settlement |
| [2] Classification Type | [1] | **A02** - Summary type |
| [2] Sender Identification | [1] | eSett Code and Coding Scheme |
| [2] Sender role | [1] | **A05** - (Imbalance Settlement Responsible) |
| [2] Receiver Identification | [1] | Data Package Subscriber – DSO or BRP code and coding scheme |
| [2] Receiver role | [1] | A**09** - Metered Data Aggregator for DSO subscriber<br>**A08** - Balance Responsible Party for BRP subscriber |
| [2] Document Date and Time | [1] | The time stamp of the calculation (time stamp of the document creation is sufficient) |
| [2] Accounting period | [1] | The beginning and ending date and time of the period covered. Always the range one calculated day. |

| | | |
|---|---|---|
| | | YYYY-MM-DDTHH:MM:SSZ/YYYY-MM-DDTHH:MM:SSZ |
| [2] Domain | [1] | Nordic Market Area ID = “10Y1001A1001A91G” |
| [2] **Account Time Series** | [1..*] | The number of occurrences depends on the number of MGA Imbalances/Settlement Results related to the subscriber – DSO or BRP. |

#### 4.4.12.18.2 Time Series – Attribute Usage for MGA Imbalance

| Attribute (XML Schema) | Cl. | Description |
|---|---|---|
| [2] **Account Time Series** | [1..*] | The number of occurrences depends on the number of MGA Imbalances related to the subscriber – DSO or BRP. Note that if the receiver is DSO then there can be more than one MGA Imbalance with the same MGA but with different BRP (via Retailer Balance Responsibility relation).<br>MGA Imbalance is defined by: MGA, DSO, RE and BRP. |
| [3] Senders Time Series Identification | [1] | Unique Time Series Identification |
| [3] Business Type | [1] | **B29** - MGA imbalance |
| [3] Product | [1] | ‘**8716867000030**’ (Active energy) |
| [3] Object Aggregation | [1] | **A01** (Area) |
| [3] Area | [1] | MGA Code and Coding Scheme |
| [3] Party | [1] | BRP ID: The Balance Responsible Party for which the imbalance settlement is calculated. BRP is one of the attributes of MGA Imbalance (MGA, DSO, RE, BRP). |
| [3] Measurement Unit | [1] | **MWH** |
| [3] Currency | [0..*] | *Not used for MGA Imbalance* |
| [3] **Period** | [1..*] | |
| [4] Time Interval | [1] | Time interval of reported data. |
| [4] Resolution | [1] | **PT1H** – hourly resolution<br>**PT15M** – 15-minute resolution |
| [4] **Account Interval** | [1..*] | |

| | | |
|---|---|---|
| [5] Pos | [1] | Sequence number of the time interval |
| [5] In Qty | [1] | MGA Imbalance Deficit |
| [5] Out Qty | [1] | MGA Imbalance Surplus |

#### 4.4.12.18.3 Time Series – Attribute Usage for Settlement Results

| Attribute (XML Schema) | Cl. | Description |
|---|---|---|
| [2] **Account Time Series** | [1..*] | Production or Consumption results per each MBA. |
| [3] Senders Time Series Identification | [1] | Unique Time Series Identification |
| [3] Business Type | [1] | **B15** - Consumption deviation for Consumption Imbalance Data Package<br>**B14** - Production deviation for Production Imbalance Data Package<br>**A17** – Settlement deviation for Single Imbalance Data Package |
| [3] Product | [1] | **8716867000030** - Active energy |
| [3] Object Aggregation | [1] | **A01** - Area |
| [3] Area | [1] | MBA Code and Coding Scheme |
| [3] Party | [1] | BRP Code and Coding Scheme<br>The Balance Responsible Party for which the imbalance settlement is calculated. Same as receiver. |
| [3] Measurement Unit | [1] | **MWH** |
| [3] Currency | [0..*] | **EUR** |
| [3] **Period** | [1..*] | |
| [4] Time Interval | [1] | Time interval of reported data. |
| [4] Resolution | [1] | **PT1H** – hourly resolution<br>**PT15M** – 15-minute resolution |
| [4] **Account Interval** | [1..*] | |

| | | |
|---|---|---|
| [5] Pos | [1] | Sequence number of the time interval |
| [5] In Qty | [1] | If Business Type = 'B15' then BRP Consumption Imbalance - *Imbalance Purchase*<br>If Business Type = "B14" then BRP Production Imbalance - *Imbalance Purchase*<br>If Business Type – 'A17' then BRP Imbalance – *Imbalance Purchase* |
| [5] Out Qty | [1] | If Business Type = 'B15' then BRP Consumption Imbalance - *Imbalance Sales*<br>If Business Type = "B14" then BRP Production Imbalance - *Imbalance Sales*<br>If Business Type – 'A17' then BRP Imbalance – *Imbalance Sales* |
| [5] Settlement Amount | [1] | If Business Type = 'B15' then BRP Consumption Imbalance, *Imbalance Amount* – positive value<br>If Business Type = 'B14' then BRP Production Imbalance, *Imbalance Amount* –negative value<br>If Business Type – 'A17' then BRP Imbalance – *Imbalance Amount value* |

### 4.4.13 Activated Reserves Data Packages

There are three data packages with Activated Reserves available for BRP subscribers. Each of the data package contains only one balancing type.

#### 4.4.13.1 *SDP: Primary Frequency Containment Reserves (FCR)*

| **Attribute** | |
|---|---|
| **Name** | Primary Frequency Containment Reserves (FCR) 15-minute |
| **Receiver** | BRP |
| **Description** | All BRP's activated reserves of type FCR (Frequency Containment Reserve). FCR is an automatic and momentarily regulation, to adjust the physical balance in the power system. |
| **Format (Short Name)** | Activated Reserves |
| **Document Standard** | NEG ERRP Reserve Allocation Result Document |
| **Aggregation** | Time Aggregation – H (Hourly) |
| **Time Period From** | D-14 |

| | |
|---|---|
| **Time Period To** | D-1 |
| **Time Trigger (Words)** | Daily basis, delivered till 06:40 CET<br>Data package is not distributed when there are no data reported. |
| **Data Scope (Filter)** | System selects all BRP's activated reserves of FCR sub-type.<br>Data Scope: Reason Code = 'Z29' |
| **Attribute Usage Specifics** | Document contains following business types:<br>• Process Type = 'A28' (Primary Reserve Process)<br>• Business Type = 'A11' (Primary Control)<br>• Reason Code = 'Z29' (FCR) |

#### 4.4.13.2 *SDP: Primary Frequency Containment Reserves (FCR) 15-minute*

| **Attribute** | |
|---|---|
| **Name** | Primary Frequency Containment Reserves (FCR) 15-minute |
| **Receiver** | BRP |
| **Description** | All BRP's activated reserves of type FCR (Frequency Containment Reserve) in 15-minute resolution. FCR is an automatic and momentarily regulation, to adjust the physical balance in the power system. |
| **Format (Short Name)** | Activated Reserves |
| **Document Standard** | NEG ERRP Reserve Allocation Result Document |
| **Aggregation** | Time Aggregation – 15M (15-minute) |
| **Time Period From** | D-14 |
| **Time Period To** | D-1 |
| **Time Trigger (Words)** | Daily basis, delivered till 06:40 CET<br>Data package is not distributed when there are no data reported. |

| | |
|---|---|
| **Data Scope (Filter)** | System selects all BRP's activated reserves of FCR sub-type.<br>Data Scope: Reason Code = 'Z29' |
| **Attribute Usage Specifics** | Document contains following business types:<br>• Process Type = 'A28' (Primary Reserve Process)<br>• Business Type = 'A11' (Primary Control)<br>• Reason Code = 'Z29' (FCR) |

#### 4.4.13.3 *SDP: Primary Frequency Containment Reserves (FCR)*

| **Attribute** | |
|---|---|
| **Name** | Primary Frequency Containment Reserves (FCR) |
| **Receiver** | BSP |
| **Description** | All BSP's activated reserves of type FCR (Frequency Containment Reserve). FCR is an automatic and momentarily regulation, to adjust the physical balance in the power system.<br>System decides what data should be sent to the BSP based on the RO-BSP relation of the RO assigned to the activated reserves MEC.<br>The data package validity starts on BSP Go-live Date + 1D. |
| **Format (Short Name)** | Activated Reserves |
| **Document Standard** | NEG ERRP Reserve Allocation Result Document |
| **Aggregation** | Time Aggregation – H (Hourly) |
| **Time Period From** | D-14 |
| **Time Period To** | D-1 |
| **Time Trigger (Words)** | Daily basis, morning 04:01 / 06:40<br>Data package is not distributed when there are no data reported. |
| **Data Scope (Filter)** | System selects all BSP's activated reserves of FCR sub-type. |

| | |
|---|---|
| | Data Scope: Reason Code = ‘Z29’ |
| **Attribute Usage Specifics** | Document contains following business types:<br>• Process Type = ‘A28’ (Primary Reserve Process)<br>• Business Type = ‘A11’ (Primary Control)<br>• Reason Code in<br>  ○ ‘Z29’ - FCR - Normal<br>  ○ ‘Z40’ – FCR – Normal - SWE<br>• ‘Z41’ – FCR - Disturbance |

#### 4.4.13.4 *SDP: Primary Frequency Containment Reserves (FCR) 15-minute*

| **Attribute** | |
|---|---|
| **Name** | Primary Frequency Containment Reserves (FCR) |
| **Receiver** | BSP |
| **Description** | All BSP's activated reserves of type FCR (Frequency Containment Reserve). FCR is an automatic and momentarily regulation, to adjust the physical balance in the power system.<br>System decides what data should be sent to the BSP based on the RO-BSP relation of the RO assigned to the activated reserves MEC.<br>The data package validity starts on BSP Go-live Date + 1D. |
| **Format (Short Name)** | Activated Reserves |
| **Document Standard** | NEG ERRP Reserve Allocation Result Document |
| **Aggregation** | Time Aggregation – 15M (15-minute) |
| **Time Period From** | D-14 |
| **Time Period To** | D-1 |
| **Time Trigger (Words)** | Daily basis, morning 06:40<br>Data package is not distributed when there are no data reported. |

| | |
|---|---|
| **Data Scope (Filter)** | System selects all BSP's activated reserves of FCR sub-type.<br>Data Scope: Reason Code = 'Z29' |
| **Attribute Usage Specifics** | Document contains following business types:<br>• Process Type = 'A28' (Primary Reserve Process)<br>• Business Type = 'A11' (Primary Control)<br>• Reason Code in<br>  ○ 'Z29' - FCR - Normal<br>  ○ 'Z40' – FCR – Normal - SWE<br>• 'Z41' – FCR - Disturbance |

#### 4.4.13.5 *SDP: Secondary Frequency Restoration Reserves (FRR)*

| **Attribute** | |
|---|---|
| **Name** | Secondary Frequency Restoration Reserves (FRR) 15-minute |
| **Receiver** | BRP |
| **Description** | All BRP's activated reserves of type FRR-A (Frequency Restoration Reserve - Automatic). FRR-A is an automatic reserve, activated continuously by the frequency. |
| **Format (Short Name)** | Activated Reserves |
| **Document Standard** | NEG ERRP Reserve Allocation Result Document |
| **Aggregation** | Time Aggregation – H (Hourly) |
| **Time Period From** | D-14 |
| **Time Period To** | D-1 |
| **Time Trigger (Words)** | Daily basis, delivered till 06:40 CET<br>Data package is not distributed when there are no data reported. |
| **Data Scope (Filter)** | System selects all BRP's activated reserves of sub-type FRR-A. |

| | |
|---|---|
| | Data Scope: Reason Code = ‘Z30’ |
| **Attribute Usage Specifics** | Document contains following business types:<br>• Process Type = ‘A29’ (Secondary Reserve Process)<br>• Business Type = ‘A12’ (Secondary Control)<br>• Reason Code = ‘Z30’ (FRR-A) |

#### 4.4.13.6 *SDP: Secondary Frequency Restoration Reserves (FRR) 15-minute*

| **Attribute** | |
|---|---|
| **Name** | Secondary Frequency Restoration Reserves (FRR) 15-minute |
| **Receiver** | BRP |
| **Description** | All BRP's activated reserves of type FRR-A (Frequency Restoration Reserve - Automatic) in 15-minute resolution. FRR-A is an automatic reserve, activated continuously by the frequency. |
| **Format (Short Name)** | Activated Reserves |
| **Document Standard** | NEG ERRP Reserve Allocation Result Document |
| **Aggregation** | Time Aggregation – 15M (15-minute) |
| **Time Period From** | D-14 |
| **Time Period To** | D-1 |
| **Time Trigger (Words)** | Daily basis, delivered till 06:40 CET<br>Data package is not distributed when there are no data reported. |
| **Data Scope (Filter)** | System selects all BRP's activated reserves of sub-type FRR-A.<br>Data Scope: Reason Code = ‘Z30’ |
| **Attribute Usage Specifics** | Document contains following business types:<br>• Process Type = ‘A29’ (Secondary Reserve Process) |

| | |
|---|---|
| | • Business Type = ‘A12’ (Secondary Control)<br>• Reason Code = ‘Z30’ (FRR-A) |

#### 4.4.13.7 *SDP: Secondary Frequency Restoration Reserves (FRR)*

| **Attribute** | |
|---|---|
| **Name** | Secondary Frequency Restoration Reserves (FRR) |
| **Receiver** | BSP |
| **Description** | All BSP's activated reserves of type FRR-A (Frequency Restoration Reserve - Automatic). FRR-A is an automatic reserve, activated continuously by the frequency.<br>System decides what data should be sent to the BSP based on the RO-BSP relation of the RO assigned to the activated reserves MEC.<br>The data package validity starts on BSP Go-live Date +1D. |
| **Format (Short Name)** | Activated Reserves |
| **Document Standard** | NEG ERRP Reserve Allocation Result Document |
| **Aggregation** | Time Aggregation – H (Hourly) |
| **Time Period From** | D-14 |
| **Time Period To** | D-1 |
| **Time Trigger (Words)** | Daily basis, morning 04:20 / 06.40<br>Data package is not distributed when there are no data reported. |
| **Data Scope (Filter)** | System selects all BSP's activated reserves of sub-type FRR-A.<br>Data Scope: Reason Code = ‘Z30’ |
| **Attribute Usage Specifics** | Document contains following business types:<br>• Process Type = ‘A29’ (Secondary Reserve Process)<br>• Business Type = ‘A12’ (Secondary Control) |

| | |
|---|---|
| | • Reason Code = ‘Z30’ (FRR-A) |

#### 4.4.13.8 *SDP: Secondary Frequency Restoration Reserves (FRR) 15-minute*

| **Attribute** | |
|---|---|
| **Name** | Secondary Frequency Restoration Reserves (FRR) |
| **Receiver** | BSP |
| **Description** | All BSP's activated reserves of type FRR-A (Frequency Restoration Reserve - Automatic). FRR-A is an automatic reserve, activated continuously by the frequency.<br>System decides what data should be sent to the BSP based on the RO-BSP relation of the RO assigned to the activated reserves MEC.<br>The data package validity starts on BSP Go-live Date +1D. |
| **Format (Short Name)** | Activated Reserves |
| **Document Standard** | NEG ERRP Reserve Allocation Result Document |
| **Aggregation** | Time Aggregation – QH (15-minute) |
| **Time Period From** | D-14 |
| **Time Period To** | D-1 |
| **Time Trigger (Words)** | Daily basis, morning 06:40<br>Data package is not distributed when there are no data reported. |
| **Data Scope (Filter)** | System selects all BSP's activated reserves of sub-type FRR-A.<br>Data Scope: Reason Code = ‘Z30’ |
| **Attribute Usage Specifics** | Document contains following business types:<br>• Process Type = ‘A29’ (Secondary Reserve Process)<br>• Business Type = ‘A12’ (Secondary Control)<br>• Reason Code in<br>  ○ ‘Z30’ (FRR-A) |

| | |
|---|---|
| | ○ ‘Z54’ (FRR-A, AOF activation)<br>• ‘Z55’ (FRR-A, non-AOF activation) |

#### 4.4.13.9 *SDP: Tertiary Replacement Reserves (RR) 15-minute*

| **Attribute** | |
|---|---|
| **Name** | Tertiary Replacement Reserves (RR) 15-minute |
| **Receiver** | BRP |
| **Description** | All BRP's activated reserves of type RR (Tertiary Control).<br>System decides what data should be sent to the BRP based on the RO-BRP relation of the RO assigned to the activated reserves MEC.<br>The data package validity starts on 15-min Go-Live date. |
| **Format (Short Name)** | Activated Reserves |
| **Document Standard** | NEG ERRP Reserve Allocation Result Document |
| **Aggregation** | Time Aggregation – QH (15-minute) |
| **Time Period From** | D-14 |
| **Time Period To** | D-1 |
| **Time Trigger (Words)** | Daily basis, morning 04:20<br>Data package is not distributed when there are no data reported. |
| **Data Scope (Filter)** | System selects all BRP's Tertiary activated reserves. Activated Reserves are filtered by Balancing Sub-service (Reason Code) listed below.<br>Data Scope: Reason Code in (’Z31’, ’Z34’, ’Z35’, ’Z36’, ‘Z37’, ‘Z38’, ‘Z39’)<br>*Note: Configuration pattern is: BusinessType=A10;ReasonCode=Z31;ReasonCode=Z34;ReasonCode=...* |
| **Attribute Usage Specifics** | Document contains following business types:<br>• Process Type = ‘A30’ (Tertiary Reserve Process)<br>• Business Type = ‘A10’ (Tertiary Control) |

| | |
|---|---|
| | • Reason Code in<br>  ○ 'Z31' - FRR-M, Balancing Power (for Norway the code means Ordinary regulation)<br>  ○ 'Z34' - FRR-M, Quarter regulation<br>  ○ 'Z35' - FRR-M, Special Regulation (for Norway the code means Specially regulation)<br>  ○ 'Z36' - Hour Change Regulation (for Norway the code means Move of production)<br>  ○ 'Z37' - Power Transaction<br>  ○ 'Z38' - TSO Internal Countertrades<br>  ○ 'Z39' - Day Ahead Production Adjustment (for Norway the code means Production smoothing) |

#### 4.4.13.10 *SDP: Tertiary Replacement Reserves (RR)*

| **Attribute** | |
|---|---|
| **Name** | Tertiary Replacement Reserves (RR) |
| **Receiver** | BSP |
| **Description** | All BSP's activated reserves of type RR (Tertiary Control).<br>System decides what data should be sent to the BSP based on the RO-BSP relation of the RO assigned to the activated reserves MEC.<br>The data package validity starts on BSP Go-live Date +1D. |
| **Format (Short Name)** | Activated Reserves |
| **Document Standard** | NEG ERRP Reserve Allocation Result Document |
| **Aggregation** | Time Aggregation – H (Hourly) |
| **Time Period From** | D-14 |
| **Time Period To** | D-1 |
| **Time Trigger (Words)** | Daily basis, morning 04:20 / 06:40<br>Data package is not distributed when there are no data reported. |
| **Data Scope (Filter)** | System selects all BSP's Tertiary activated reserves. Activated Reserves are filtered by Balancing Sub-service (Reason Code) listed below. |

| | |
|---|---|
| | Data Scope: Reason Code in ('Z31', 'Z34', 'Z35', 'Z36', 'Z37', 'Z38', 'Z39')<br>*Note: Configuration pattern is: BusinessType=A10;ReasonCode=Z31;ReasonCode=Z34;ReasonCode=...* |
| **Attribute Usage Specifics** | Document contains following business types:<br>• Process Type = 'A30' (Tertiary Reserve Process)<br>• Business Type = 'A10' (Tertiary Control)<br>• Reason Code in<br>  ○ 'Z31' - FRR-M, Balancing Power (for Norway the code means Ordinary regulation)<br>  ○ 'Z34' - FRR-M, Quarter regulation<br>  ○ 'Z35' - FRR-M, Special Regulation (for Norway the code means Specially regulation)<br>  ○ 'Z36' - Hour Change Regulation (for Norway the code means Move of production)<br>  ○ 'Z37' - Power Transaction<br>  ○ 'Z38' - TSO Internal Countertrades<br>  ○ 'Z39' - Day Ahead Production Adjustment (for Norway the code means Production smoothing) |

#### 4.4.13.11 *SDP: Tertiary Replacement Reserves (RR) - BSP 15-minute*

| **Attribute** | |
|---|---|
| **Name** | Tertiary Replacement Reserves (RR) |
| **Receiver** | BSP |
| **Description** | All BSP's activated reserves of type RR (Tertiary Control).<br>System decides what data should be sent to the BSP based on the RO-BSP relation of the RO assigned to the activated reserves MEC.<br>The data package validity starts on BSP Go-live Date +1D. |
| **Format (Short Name)** | Activated Reserves |
| **Document Standard** | NEG ERRP Reserve Allocation Result Document |

| | |
|---|---|
| **Aggregation** | Time Aggregation – QH (15-minute) |
| **Time Period From** | D-14 |
| **Time Period To** | D-1 |
| **Time Trigger (Words)** | Daily basis, morning 06:40<br>Data package is not distributed when there are no data reported. |
| **Data Scope (Filter)** | System selects all BSP's Tertiary activated reserves. Activated Reserves are filtered by Balancing Sub-service (Reason Code) listed below.<br>Data Scope: Reason Code in (’Z31’, ’Z34’, ’Z35’, ’Z36’, ‘Z37’, ‘Z38’, ‘Z39’, ‘Z63’, ‘Z89’, ‘Z74’)<br>**2nd Reason Code in (**’Z58’, ’Z59’, ’Z60’, ’Z61’, ’Z62’**)** |
| **Attribute Usage Specifics** | Document contains following business types:<br>• Process Type = ‘A30’ (Tertiary Reserve Process)<br>• Business Type = ‘A10’ (Tertiary Control)<br>• Reason Code in<br>  ○ ’Z31’ - FRR-M, Balancing Power (for Norway the code means Ordinary regulation)<br>  ○ ’Z34’ - FRR-M, Quarter regulation<br>  ○ ’Z35’ - FRR-M, Special Regulation (for Norway the code means Specially regulation)<br>  ○ ’Z36’ - Hour Change Regulation (for Norway the code means Move of production)<br>  ○ ‘Z37’ - Power Transaction<br>  ○ ‘Z38’ - TSO Internal Countertrades<br>  ○ ‘Z39’ - Day Ahead Production Adjustment (for Norway the code means Production smoothing)<br>  ○ ‘Z74’ - FRR-M Disturbance<br>  ○ ‘Z63’ - Period shift activation<br>  ○ ‘Z89’ - Bidless activation (Activation without BSP bid)<br>• Reason Code and 2nd Reason Code combination in |

| | |
|---|---|
| | ○ ‘Z31’ ‘Z58’ - FRR-M, Balancing Power, Scheduled activation<br>○ ‘Z31’ ‘Z59’ - FRR-M, Balancing Power, Direct activation<br>○ ‘Z31’ ‘Z60’ - FRR-M, Balancing Power, Faster activation<br>○ ‘Z31’ ‘Z61’ - FRR-M, Balancing Power, Faster deactivation<br>○ ‘Z31’ ‘Z62’ - FRR-M, Balancing Power, Slower activation<br>○ ‘Z35’ ‘Z58’ - FRR-M, Special Regulation, Scheduled activation<br>○ ‘Z35’ ‘Z59’ - FRR-M, Special Regulation, Direct activation<br>○ ‘Z35’ ‘Z60’ - FRR-M, Special Regulation, Faster activation<br>○ ‘Z35’ ‘Z61’ - FRR-M, Special Regulation, Faster deactivation<br>○ ‘Z35’ ‘Z62’ - FRR-M, Special Regulation, Slower activation |

4.4.13.12 *SDP: Production Ramp - BSP 15-minute*

| **Attribute** | |
|---|---|
| **Name** | Production Ramp – 15-minute |
| **Receiver** | BSP |
| **Description** | All BSP's activated reserves for BSS: Production Ramp<br>System decides what data should be sent to the BSP based on the RO-BSP relation of the RO assigned to the activated reserves MEC.<br>The data package validity starts on BSP Go-live Date +1D. |
| **Format (Short Name)** | Activated Reserves |
| **Document Standard** | NEG ERRP Reserve Allocation Result Document |

| | |
|---|---|
| **Aggregation** | Time Aggregation – QH (15-minute) |
| **Time Period From** | D-14 |
| **Time Period To** | D-1 |
| **Time Trigger (Words)** | Daily basis, morning 04:20<br>Data package is not distributed when there are no data reported. |
| **Data Scope (Filter)** | System selects BSP's Tertiary activated reserves – Production Ramp. Activated Reserves are filtered by Balancing Sub-service (Reason Code) listed below.<br>Data Scope: Reason Code in ('ZA9') |
| **Attribute Usage Specifics** | Document contains following business types:<br>• Process Type = 'A30' (Tertiary Reserve Process)<br>• Business Type = 'A10' (Tertiary Control)<br>• Reason Code in<br>  ○ 'ZA9' - FRR-M, Production Ramp |

#### 4.4.13.13 *SDP: Production Ramp - BRP 15-minute*

| **Attribute** | |
|---|---|
| **Name** | Production Ramp – 15-minute |
| **Receiver** | BRP |
| **Description** | All BRP's activated reserves for BSS: Production Ramp |

| | |
|---|---|
| | System decides what data should be sent to the BRP based on the RO-BRP relation of the RO assigned to the activated reserves MEC.<br>The data package validity starts on 15-min Go-Live date. |
| **Format (Short Name)** | Activated Reserves |
| **Document Standard** | NEG ERRP Reserve Allocation Result Document |
| **Aggregation** | Time Aggregation – QH (15-minute) |
| **Time Period From** | D-14 |
| **Time Period To** | D-1 |
| **Time Trigger (Words)** | Daily basis, morning 04:20<br>Data package is not distributed when there are no data reported. |
| **Data Scope (Filter)** | System selects BRP's Tertiary activated reserves – Production Ramp. Activated Reserves are filtered by Balancing Sub-service (Reason Code) listed below.<br>Data Scope: Reason Code in ('ZA9') |
| **Attribute Usage Specifics** | Document contains following business types:<br>• Process Type = 'A30' (Tertiary Reserve Process)<br>• Business Type = 'A10' (Tertiary Control)<br>• Reason Code in<br>  ○ 'ZA9' - FRR-M, Production Ramp |

#### 4.4.13.14 *Document Format Attribute Usage*

Document used for activated reserves data is 'ERRP Planned Resource Schedule'. Attribute usage is specified separately for document header and time series part for easy navigation.

Mark [x] indicates the level in document structure.

#### 4.4.13.14.1 Header - ERRP Planned Resource Schedule

| Attribute (XML schema) | Cl. | Value Description |
|---|---|---|
| **[1] Reserve Allocation Result Document** | [1] | |
| [2] Document Identification | [1] | Document ID - Unique identification of the business document. |
| [2] Document Version | [1] | Version = "**1**" |
| [2] Document Type | [1] | **A38** - Document Type |
| [2] Process Type | [1] | Process Type set according to data package type:<br>**A28 –** SDP Activated Reserves Primary<br>**A29 –** SDP Activated Reserves Secondary<br>**A30 –** SDP Activated Reserves Tertiary |
| [2] Sender Identification | [1] | eSett Code and Coding Scheme |
| [2] Sender Role | [1] | **A05** - Imbalance Settlement Responsible |
| [2] Receiver Identification | | BRP Code and Coding scheme |
| [2] Receiver Role | [1] | '**A46**' – Balance Service Provider |
| [2] Creation Date Time | [1] | Creation Date Time (represents time stamp of file generation in UTC). |
| [2] Reserve Bid Time Interval | [1] | Period covered by the document containing the schedule.<br>YYYY-MM-DDTHH:MM:SSZ/YYYY-MM-DDTHH:MM:SSZ |
| [2] Domain | [1] | Domain covered by the schedule document.<br>Nordic Market Area ID = 10Y1001A1001A91G |
| **[2] Reserve Allocation Result Time Series** | [0..*] | *See Time Series Attributes* |

#### 4.4.13.14.2 Time Series - ERRP Planned Resource Schedule

| Attribute (XML schema) | Cl. | Value Description |
|---|---|---|
| **[2] Reserve Allocation Result Time Series** | [0..*] | For each activated reserve occurs twice. Once with Up values and second with Down values. |

| | | |
|---|---|---|
| [3] Time Series Identification | [1] | Time series ID - Unique ID of the Time Series (unique over time for the sender in question) |
| [3] Tendering Party | [1] | Tendering party must be BSP ID. See Business Validations. |
| [3] Business Type | [1] | Business Type set according to Data Package Type:<br>**'A10' –** SDP Activated Reserves Tertiary 15-minute<br>**'A11' –** SDP Activated Reserves Primary 15-minute<br>**'A12' –** SDP Activated Reserves Secondary 15-minute |
| [3] Acquiring Area | [1] | Same MBA as the Connecting Area |
| [3] Connecting Area | [1] | Market Balance Area Code and Coding Scheme |
| [3] Measure Unit Quantity | [1] | **'MWH'** - Unit of measurement |
| [3] Currency | [1] | **'EUR'** |
| [3] Reserve Object | [0..1] | Regulation Object (RO) Code and Coding Scheme |
| [3] Direction | [1] | **'A01'** Up<br>**'A02'** Down |
| [3] **Reason** | [1] | |
| [4] Reason Code | [1] | **'A10' Tertiary control:**<br>• 'Z31' - FRR-M, Balancing Power<br>• 'Z34' - FRR-M, Quarter regulation<br>• 'Z35' - FRR-M, Special Regulation<br>• 'Z36' - Hour Change Regulation<br>• 'Z37' - Power Transaction<br>• 'Z38' - TSO Internal Countertrades<br>• 'Z39' - Day Ahead Production Adjustment<br>• 'Z74' - FRR-M Disturbance<br>• 'Z63' - Period shift activation<br>• 'Z89' - Bidless activation (Activation without BSP bid)<br>• 'ZA9' – Production Ramp<br><br>**'A11' Primary control:** |

| | | |
|---|---|---|
| | | • 'Z29' – FCR – Normal<br>• 'Z40' – FCR – Normal – SWE<br>• 'Z41' – FCR - Disturbance<br>**'A12' Secondary control:**<br>• 'Z30' - FRR-A<br>• 'Z54' – FRR-A, AOF activation<br>• 'Z55' – FRR-A, non-AOF activation |
| [4] **2nd** Reason Code | [0..*] | **'A10' Tertiary control:**<br>• 'Z58' - Scheduled activation<br>• ''Z59' Direct activation<br>• 'Z60' - Faster activation<br>• 'Z61' - Faster deactivation<br>• 'Z62' - Slower activation |
| **[3] Period** | [1..*] | |
| [4] Time Interval | [1] | Period covered by the document containing the schedule. |
| [4] Resolution | [1] | '**PT15M**' – for 15-minute data |
| **[4] Interval** | [1..*] | |
| [5] Pos | [1] | Relative position of a period within the time interval. |
| [5] Qty | [1] | Activated Reserves - Up/Down Quantity |
| [5] Settlement Amount | [0..1] | Activated Reserves - Up/Down Amount, Not included in BRP Data Packages |

## 4.4.14 Capacity Reserves Data Packages

There are three data packages with Capacity Reserves available for BSP subscribers. The data packages will be available from the BSP Go-live Date +1 day. Each of the data package contains only one balancing type.

#### 4.4.14.1.1 SDP: Primary Frequency Containment Reserves (FCR) – contracted reserves

| Attribute |
|---|

| | |
|---|---|
| **Name** | Primary Frequency Containment Reserves (FCR) – contracted reserves |
| **Receiver** | BSP |
| **Description** | All BSP's contracted reserves of type FCR (Frequency Containment Reserve). FCR is an automatic and momentarily regulation, to adjust the physical balance in the power system.<br>The data package validity starts on BSP Go-live Date + 1D. |
| **Format (Short Name)** | Contracted Reserves |
| **Document Standard** | NEG ERRP Reserve Allocation Result Document |
| **Aggregation** | Time Aggregation – H (Hourly) |
| **Time Period From** | D-14 |
| **Time Period To** | D-1 |
| **Time Trigger (Words)** | Daily basis, morning 04:01<br>Data package is not distributed when there are no data reported. |
| **Data Scope (Filter)** | System selects all BSP's contracted reserves of FCR sub-type.<br>Data Scope: Reason Code in ('Z29', 'Z42', 'Z43', 'Z44', 'Z45', 'Z46', 'Z47', 'Z48', 'Z49', 'Z56') |
| **Attribute Usage Specifics** | Document contains following business types:<br>• Process Type = 'A28' (Primary Reserve Process)<br>• Business Type = 'A11' (Primary Control)<br>• Reason Code in<br>  ○ 'Z29' - FCR<br>  ○ 'Z42' – FCR-N, D-1 |

| | |
|---|---|
| | ○ ‘Z43’ – FCR-N, D-2<br>○ ‘Z44’ – FCR-N, D-1, correction<br>○ ‘Z45’ – FCR-N, D-2, correction<br>○ ‘Z46’ – FCR-D, D-1<br>○ ‘Z47’ - FCR-D, D-2<br>○ ‘Z48’ - FCR-D, D-1, correction<br>○ ‘Z49’ - FCR-D, D-2, correction<br>○ ‘Z56’ – FFR |

#### 4.4.14.1.2 SDP: Secondary Frequency Restoration Reserves (FRR) – contracted reserves

| **Attribute** | |
|---|---|
| **Name** | Secondary Frequency Restoration Reserves (FRR) – contracted reserves |
| **Receiver** | BSP |
| **Description** | All BSP's activated reserves of type FRR-A (Frequency Restoration Reserve - Automatic). FRR-A is an automatic reserve, activated continuously by the frequency.<br>The data package validity starts on BSP Go-live Date + 1D. |
| **Format (Short Name)** | Contracted Reserves |
| **Document Standard** | NEG ERRP Reserve Allocation Result Document |
| **Aggregation** | Time Aggregation – H (Hourly) |
| **Time Period From** | D-14 |

| | |
|---|---|
| **Time Period To** | D-1 |
| **Time Trigger (Words)** | Daily basis, morning 04:20<br>Data package is not distributed when there are no data reported. |
| **Data Scope (Filter)** | System selects all BSP's activated reserves of sub-type FRR-A.<br>Data Scope: Reason Code in = (‘Z30’, ’Z75’) |
| **Attribute Usage Specifics** | Document contains following business types:<br>• Process Type = ‘A29’ (Secondary Reserve Process)<br>• Business Type = ‘A12’ (Secondary Control)<br>• Reason Code in<br>  ○ ‘Z30’ – FRR-A<br>  ○ ‘Z75’ – FRR-A, correction |

#### 4.4.14.1.3 SDP: Tertiary Replacement Reserves (RR) – contracted reserves

| **Attribute** | |
|---|---|
| **Name** | Tertiary Replacement Reserves (RR) – contracted reserves |
| **Receiver** | BSP |
| **Description** | All BSP's activated reserves of type RR (Tertiary Control)<br>The data package validity starts on BSP Go-live Date + 1D. |
| **Format (Short Name)** | Contracted Reserves |

| | |
|---|---|
| **Document Standard** | NEG ERRP Reserve Allocation Result Document |
| **Aggregation** | Time Aggregation – H (Hourly) |
| **Time Period From** | D-14 |
| **Time Period To** | D-1 |
| **Time Trigger (Words)** | Daily basis, morning 04:20<br>Data package is not distributed when there are no data reported. |
| **Data Scope (Filter)** | System selects all BSP's Tertiary activated reserves. Activated Reserves are filtered by Balancing Sub-service (Reason Code) listed below.<br>Data Scope: Reason Code in ('Z31', 'Z35', 'Z76') |
| **Attribute Usage Specifics** | Document contains following business types:<br>• Process Type = 'A30' (Tertiary Reserve Process)<br>• Business Type = 'A10' (Tertiary Control)<br>• Reason Code in<br>  ○ 'Z31' - FRR-M, Balancing Power (for Norway the code means Ordinary regulation)<br>  ○ 'Z35' - FRR-M, Special Regulation (for Norway the code means Specially regulation)<br>  ○ Z76' – FRR-M, correction<br>  ○ 'Z74' - FRR-M-D<br>  ○ 'Z93' - FRR-M-D |

#### 4.4.14.1.4 Document Format Attribute Usage

Document used for contracted reserves data is 'ERRP Reserve Allocation Result Document'. Attribute usage is specified separately for document header and time series part for easy navigation.

Mark [x] indicates the level in document structure.

#### 4.4.14.1.4.1 Header - ERRP Reserve Allocation Result Document

| Attribute (XML schema) | Cl. | Value Description |
|---|---|---|
| **[1] Reserve Allocation Result Document** | [1] | |
| [2] Document Identification | [1] | Document ID - Unique identification of the business document. |
| [2] Document Version | [1] | Version = "**1**" |
| [2] Document Type | [1] | '**A81**' - Document Type |
| [2] Process Type | [1] | Process Type set according to data package type:<br>**'A28' –** SDP Contracted Reserves Primary<br>**'A29' –** SDP Contracted Reserves Secondary<br>**'A30' –** SDP Contracted Reserves Tertiary |
| [2] Sender Identification | [1] | eSett Code and Coding Scheme |
| [2] Sender Role | [1] | '**A05**' - Imbalance Settlement Responsible |
| [2] Receiver Identification | | BSP Code and Coding scheme |
| [2] Receiver Role | [1] | '**A46**' – Balance Service Provider |
| [2] Creation Date Time | [1] | Creation Date Time (represents time stamp of file generation in UTC). |
| [2] Reserve Bid Time Interval | [1] | Period covered by the document containing the schedule.<br>YYYY-MM-DDTHH:MM:SSZ/YYYY-MM-DDTHH:MM:SSZ |
| [2] Domain | [1] | Domain covered by the schedule document.<br>Nordic Market Area ID = 10Y1001A1001A91G |
| **[2] Reserve Allocation Result Time Series** | [0..*] | *See Time Series Attributes* |

#### 4.4.14.1.4.2 Time Series - ERRP Reserve Allocation Result Document

| Attribute (XML schema) | Cl. | Value Description |
|---|---|---|
| **[2] Reserve Allocation Result Time Series** | [0..*] | For each Contracted reserve occurs either once or twice. Two occurrences are for Contracted Reserves with both direction types (A01 - Up, A02 – Down) and one occurrence for Contracted Reserves with single direction type (A03 – Up and Down, A01 – Up). |
| **[3] Time Series Identification** | [1] | Time series ID - Unique ID of the Time Series (unique over time for the sender in question) |
| **[3] Tendering Party** | [1] | Tendering party must be BSP ID. See Business Validations. |
| **[3] Business Type** | [1] | Business Type set according to Data Package Type:<br>**'A10' –** SDP Activated Reserves Tertiary<br>**'A11' –** SDP Activated Reserves Primary<br>**'A12' –** SDP Activated Reserves Secondary |
| **[3] Acquiring Area** | [1] | Same MBA as the Connecting Area |
| **[3] Connecting Area** | [1] | Market Balance Area Code and Coding Scheme |
| **[3] Measure Unit Quantity** | [1] | **'MAW'** - Unit of measurement (Megawatt) |
| **[3] Currency** | [1] | **'EUR'** |
| **[3] Direction** | [1] | **'A01'** Up<br>**'A02'** Down<br>'**A03**' Up and Down |
| **[3] Reason** | [1] | |
| **[4] Reason Code** | [1] | **'A11' Primary control:**<br>• 'Z29' - FCR<br>• 'Z42' – FCR-N, D-1<br>• 'Z43' – FCR-N, D-2 |

| | | |
|---|---|---|
| | | • 'Z44' – FCR-N, D-1, correction<br>• 'Z45' – FCR-N, D-2, correction<br>• 'Z46' – FCR-D, D-1<br>• 'Z47' - FCR-D, D-2<br>• 'Z48' - FCR-D, D-1, correction<br>• 'Z49' - FCR-D, D-2, correction<br>• 'Z56' - FFR<br>**'A12' Secondary control:**<br>• 'Z30' (FRR-A)<br>• 'Z75' - FRR-A, correction<br>**'A10' Tertiary control:**<br>• 'Z31' - FRR-M, Balancing Power (for Norway the code means Ordinary regulation)<br>• 'Z35' - FRR-M, Special Regulation (for Norway the code means Specially regulation)<br>• 'Z76' - FRR-M, correction<br>• 'Z74' - FRR-M-D<br>• 'Z93' - FRR-M-D |
| **[3] Period** | [1..*] | |
| **[4] Time Interval** | [1] | Period covered by the document containing the schedule. |
| **[4] Resolution** | [1] | '**PT1H**' – for hourly data |
| **[4] Interval** | [1..*] | |
| **[5] Pos** | [1] | Relative position of a period within the time interval. |
| **[5] Qty** | [1] | Contracted Reserves – Up Quantity and/or Down Quantity or Quantity |
| **[5] Settlement Amount** | [1] | Contracted Reserves – Up Amount and/or Down Amount or Amount |

## 4.4.15 Party Relations (RBR) Data Packages

### 4.4.15.1 *SDP: Retailer Balance Responsibility – All*

| Attribute | |
|---|---|
| **Name** | Retailer Balance Responsibility – All |
| **Receiver** | DSO |
| **Description** | All DSO's Retailer Balance Responsibilities (RBR) valid sometime in upcoming 14 days (at least some period). |
| **Format (Short Name)** | Party Master Data |
| **Document Standard** | NEG Party Master Data Document |
| **Aggregation** | N/A |
| **Time Period From** | D |
| **Time Period To** | D+14 |
| **Time Trigger (Words)** | Daily basis, delivered till 07:00 CET<br>Data package is not distributed when there are no data reported. |
| **Data Scope (Filter)** | System selects all RBRs which are in DSO's MGAs via time dependent MGA-DSO relation. RBR validity is filtered together with MGA-DSO validity to return only RBRs in MGAs for which is DSO responsible in searched period. |

#### 4.4.15.2 *SDP: Retailer Balance Responsibility - Delta*

| Attribute | |
|---|---|
| **Name** | Retailer Balance Responsibility - Delta |
| **Receiver** | DSO |
| **Description** | All DSO's Retailer Balance Responsibilities (RBR) starting or ending in upcoming 14 days. |
| **Format (Short Name)** | Party Master Data |
| **Document Standard** | NEG Party Master Data Document |
| **Aggregation** | Hourly |
| **Time Period From** | D |
| **Time Period To** | D+14 |
| **Time Trigger (Words)** | Daily basis, delivered till 02:00 CET<br>Data package is not distributed when there are no data reported. |
| **Data Scope (Filter)** | System selects all RBRs starting or ending in upcoming 14 days which are in DSO's MGAs via time dependent MGA-DSO relation. RBR is returned to DSO even though DSO MGA responsibility starts/ends within different period of RBR validity. |

#### 4.4.15.3 *Document Format Attribute Usage*

Retailer Balance Responsibility (RBR) relations use document standard NEG Party Master Data Document specified in NBS BRS Master Data.

Mark [x] indicates the level in document structure.

| Attribute (XML schema) | Cl. | Value Description |
|---|---|---|
| **[1] Party Master Data Document** | [1] | Document header |
| [2] Document Identification | [1] | Document ID - Unique identification of the business document. |
| [2] Document Type | [1] | **Z18 -** Party Relation Master Data Document containing master data changed within the Validity Time Interval (Start date/time inclusive and End date/time exclusive) |

| | | |
|---|---|---|
| | | **Z19 -** Party Relation Master Data Document containing all valid master data within the Validity Time Interval (Start date/time inclusive and End date/time exclusive) |
| [2] Process Type | [1] | **Z07** - Master data |
| [2] Sender Identification | [1] | ***eSett*** *Code and Coding Scheme* |
| [2] Sender Role | [1] | **A05** - Imbalance settlement responsible |
| [2] Receiver Identification | [1] | **DSO** subscriber code and coding scheme |
| [2] Receiver Role | [1] | **A26** - Metering Point Administrator |
| [2] Creation Date Time | [1] | The date and time of the document creation. The date and time must be expressed in UTC as YYYY-MM-DDTHH:MM:SSZ |
| **[2] Party Details** | [1..*] | *Repeated for each DSO's RBR* |
| [3] Subject Party | [1] | **BRP** Code and Coding Scheme of Retailer Balance Responsibility |
| [3] Subject Party Role | [1] | **A08** - Balance Responsible Party (BRP) |
| [3] Metering Grid Area Identification | [1] | **MGA** Code and Coding Scheme of Retailer Balance Responsibility |
| [3] Validity Start | [1] | RBR **Validity Start**<br>*Date and time of validity start in UTC, format "YYYY-MM-DDTHH:MMZ".* |
| [3] Validity End | [0..1] | RBR **Validity End**<br>If validity end is infinite, then this element is omitted.<br>*Date and time of validity end in UTC, format "YYYY-MM-DDTHH:MMZ".* |
| [3] Business Type | [1] | Retailer Balance Responsibility Imbalance Type:<br>**A01** – for Retailer Balance Responsibility for Production<br>**A04** – for Retailer Balance Responsibility for Consumption |
| **[3] Related Party** | [0..*] | Always occurs once per one Retailer Balance Responsibility |
| [3] Related Party | [1] | **Retailer** Code and Coding Scheme of Retailer Balance Responsibility |
| [3] Related Party Role | [1] | **A12** - Retailer |

## 4.4.16 Consumption MEC Data Packages

XML sample of Consumption MEC structure is available on Ediel.org in common package 'Complete set of NBS Documents': file 'NEG Retailer Consumption MD from ISR 20170329'.

### 4.4.16.1 *SDP: Consumption MEC – Active*

| **Attribute** | |
|---|---|
| **Name** | Consumption MEC (Active) |
| **Receiver** | DSO |
| **Description** | DSO's Consumption MECs which are valid sometime within the configured period. Data package is populated with Consumption MEC validities as they are currently in Basse.<br>*Note: BRP level MECs (maintained by TSO in Sweden) are also involved.* |
| **Format (Short Name)** | Party Master Data |
| **Document Standard** | NEG Party Master Data Document |
| **Aggregation** | N/A |
| **Time Period From** | D |
| **Time Period To** | D+14 |
| **Time Trigger (Words)** | Daily Basis, delivered till 06:20 CET<br>Data Package is distributed only if any data found. |
| **Data Scope (Filter)** | System selects all DSO Consumption MECs (DSO is strong attribute of the MEC) valid sometime within the configured period. |

### 4.4.16.2 *SDP: Consumption MEC - Delta*

| **Attribute** | |
|---|---|
| **Name** | Consumption MEC (Delta) |

| | |
|---|---|
| **Receiver** | DSO |
| **Description** | DSO's Consumption MECs starting or ending within the configured time period. Data package is populated with Consumption MEC validities as they are currently in Basse.<br>*Note: BRP level MECs (maintained by TSO in Sweden) are also involved.* |
| **Format (Short Name)** | Party Master Data |
| **Document Standard** | NEG Party Master Data Document |
| **Aggregation** | N/A |
| **Time Period From** | D |
| **Time Period To** | D+14 |
| **Time Trigger (Words)** | Daily basis, delivered till 06:20 CET<br>Data Package is distributed only if any data found. |
| **Data Scope (Filter)** | System selects all DSO Consumption MECs (DSO is strong attribute of the MEC) starting or ending within the configured period. |

#### 4.4.16.3 *Document Format Attribute Usage*

Consumption MEC use document standard NEG Party Master Data Document specified in NBS BRS Master Data.

Mark [x] indicates the level in document structure.

| Attribute (XML schema) | Cl. | Value Description |
|---|---|---|
| **[1] Party Master Data Document** | [1] | Document header |
| [2] Document Identification | [1] | Document ID - Unique identification of the business document. |
| [2] Document Type | [1] | **Z20** - Retailer consumption master data document containing master data changed within the Validity Time Interval (Start date/time inclusive and End date/time exclusive)<br><br>**Z21** - Retailer consumption master data document containing all valid master data within the Validity Time Interval (Start date/time inclusive and End date/time exclusive) |

| | | |
|---|---|---|
| [2] Process Type | [1] | **Z07** Master data |
| [2] Sender Identification | [1] | **eSett** code and coding scheme |
| [2] Sender Role | [1] | **A05** Imbalance Settlement Responsible |
| [2] Receiver Identification | [1] | **DSO** code and coding scheme (Subscriber) |
| [2] Receiver Role | [1] | **A26** Metering Point Administrator (DSO) |
| [2] Creation Date Time | [1] | The date and time that the document was prepared for transmission by the application of the sender. The date and time is expressed in UTC as YYYY-MM-DDTHH:MM:SSZ. |
| **[2] Party Details** | [1..*] | Repeated for each DSO's Consumption MEC. |
| [3] Subject Party | [1] | **Retailer (RE)** Code and Coding scheme or<br>**BRP** Code and Coding scheme in case of BRP level consumption (no Retailer) |
| [3] Subject Party Role | [1] | **A12** Balance Supplier (Retailer)<br>**A08** Balance Responsible Party (for BRP level consumption) |
| [3] Metering Grid Area Identification | [1] | **MGA** Code and Coding scheme |
| [3] Validity Start | [1] | Consumption MEC Validity Start expressed in UTC as YYYY-MM-DDTHH:MM:SSZ7 |
| [3] Validity End | [0..1] | Consumption MEC Validity End expressed in UTC as YYYY-MM-DDTHH:MM:SSZ7. Omitted if Validity End is unlimited. |
| [3] Business Type | [1] | **A04** - Consumption (total consumption) – General<br>**A07** - Net production/consumption – Pumped Storage<br>**A15** - Losses<br>**A72** - Interruptible Consumption<br>**B27** - Pumped<br>**B28** - Large installation consumption<br>**B36 -** Production Units Own Consumption (Only used in Finland) |

| | | |
|---|---|---|
| [3] Settlement Method | [0..1] | **E01** Profiled<br>**E02** Non-profiled (Metered) |
| [3] Reference | [0..1] | Consumption **MEC ID** |
| **[3] Related Party** | [0..*] | A BRP responsible for Consumption Retailer in given MGA (MEC attribute).<br>Not available for BRP level consumption. Occurs always once per Party Details. |
| [3] Related Party | [1] | **BRP** Code and Coding Scheme |
| [3] Related Party Role | [1] | **A08** Balance Responsible Party |

## 4.4.17 MGA Imbalance Retailer Data Packages

XML sample of MGA Imbalance Retailer structure is available on Ediel.org in common package 'Complete set of NBS Documents': file 'NEG Retailer Consumption MD from ISR 20170329'.

#### 4.4.17.1 *SDP: MGA Imbalance Retailer – Active*

| **Attribute** | |
|---|---|
| **Name** | MGA Imbalance Retailer (Active) |
| **Receiver** | DSO |
| **Description** | All DSO's MGA Imbalance Retailers which are valid sometime within the configured Period. Data package is populated with MGA Retailer relations and validities as they are currently in Basse. |
| **Format (Short Name)** | Party Master Data |
| **Document Standard** | NEG Party Master Data Document |
| **Aggregation** | N/A |
| **Time Period From** | D |
| **Time Period To** | D+14 |

| | |
|---|---|
| **Time Trigger (Words)** | Daily Basis, delivered till 08:00 CET<br>Data Package is distributed only if any data found. |
| **Data Scope (Filter)** | System selects all DSO's MGA Imbalance Retailers valid sometime within the configured Period. |

#### 4.4.17.2 *SDP: MGA Imbalance Retailer - Delta*

| **Attribute** | |
|---|---|
| **Name** | MGA Imbalance Retailer (Delta) |
| **Receiver** | DSO |
| **Description** | All DSO's MGA Retailers starting or ending within the configured period. Data package is populated with MGA Retailer relations and validities as they are currently in Basse. |
| **Format (Short Name)** | Party Master Data |
| **Document Standard** | NEG Party Master Data Document |
| **Aggregation** | N/A |
| **Time Period From** | D |
| **Time Period To** | D+14 |
| **Time Trigger (Words)** | Daily basis, delivered till 07:00 CET<br>Data Package is distributed only if any data found. |
| **Data Scope (Filter)** | System selects all DSO's MGA Imbalance Retailers starting or ending within the configured period. |

#### 4.4.17.3 *Document Format Attribute Usage*

MGA Retailer Imbalance use document standard NEG Party Master Data Document specified in NBS BRS Master Data.

Mark [x] indicates the level in document structure.

| **Attribute (XML schema)** | **Cl.** | **Value Description** |
|---|---|---|

| | | |
|---|---|---|
| **[1] Party Master Data Document** | [1] | Document header |
| [2] Document Identification | [1] | Document ID - Unique identification of the business document. |
| [2] Document Type | [1] | **Z20** - Retailer consumption master data document containing master data changed within the Validity Time Interval (Start date/time inclusive and End date/time exclusive)<br>**Z21** - Retailer consumption master data document containing all valid master data within the Validity Time Interval (Start date/time inclusive and End date/time exclusive) |
| [2] Process Type | [1] | **Z07** Master data |
| [2] Sender Identification | [1] | **eSett** code and coding scheme |
| [2] Sender Role | [1] | **A05** Imbalance Settlement Responsible |
| [2] Receiver Identification | [1] | **DSO** code and coding scheme (Subscriber) |
| [2] Receiver Role | [1] | **A26** Metering Point Administrator (DSO) |
| [2] Creation Date Time | [1] | The date and time that the document was prepared for transmission by the application of the sender. The date and time is expressed in UTC as YYYY-MM-DDTHH:MM:SSZ. |
| **[2] Party Details** | [1..*] | Repeated for each DSO MGA Retailer Imbalance Relation. |
| [3] Subject Party | [1] | **Retailer** Imbalance Code and Coding Scheme |
| [3] Subject Party Role | [1] | **A12** Balance Supplier (Retailer) |
| [3] Metering Grid Area Identification | [1] | Unique Identification of **MGA** with coding scheme. |
| [3] Validity Start | [1] | Validity start of MGA Imbalance Retailer.<br>*The start date and time is expressed in UTC as YYYY-MM-DDTHH:MM:SSZ7* |
| [3] Validity End | [0..1] | Validity End of MGA Imbalance Retailer. If omitted than validity is undefined.<br>*The end date and time is expressed in UTC as YYYY-MM-DDTHH:MM:SSZ7* |
| [3] Business Type | [1] | **B29** – MGA Imbalance |

## 4.4.18 Production Unit Data Packages

XML sample of Production Unit structure is available on Ediel.org in common package 'Complete set of NBS Documents': file 'NEG Resource Object Master Data from eSett 20170327'.

### 4.4.18.1 *SDP: Production Unit – Active*

| **Attribute** | |
|---|---|
| **Name** | Production Units (Active) |
| **Receiver** | DSO |
| **Description** | DSO's Production Units which are valid sometime within the configured time period. Data package contains complete Production Unit structure information available for DSO role. |
| **Format (Short Name)** | Resource Object |
| **Document Standard** | NEG Resource Object (Production Unit) Master Data |
| **Aggregation** | Hourly |
| **Time Period From** | D |
| **Time Period To** | D+14 |
| **Time Trigger (Words)** | Daily Basis, delivered till 06:30 CET<br>Data Package is distributed only if any data found. |
| **Data Scope (Filter)** | System selects all DSO Production Units valid sometime within the Period From and Period To. DSO time-dependent responsibility for Production Unit via PU-MGA-DSO relation is considered. |

### 4.4.18.2 *SDP: Production Unit - Delta*

| **Attribute** | |
|---|---|
| **Name** | Production Units (Delta) |
| **Receiver** | DSO |

| | |
|---|---|
| **Description** | DSO's Production Units which are valid sometime within the configured time period. Data package contains complete Production Unit structure information available for DSO role. |
| **Format (Short Name)** | Resource Object |
| **Document Standard** | NEG Resource Object (Production Unit) Master Data |
| **Aggregation** | Hourly |
| **Time Period From** | D |
| **Time Period To** | D+14 |
| **Time Trigger (Words)** | Daily basis, delivered till 06:30 CET<br>Data Package is distributed only if any data found. |
| **Data Scope (Filter)** | System selects all DSO Production Units starting or ending within the configured period. DSO time-dependent responsibility for Production Unit via PU-MGA-DSO relation is considered.<br>Starting/ending means that DSO responsibility for production unit starts/ends. |

#### 4.4.18.3 *Document Format Attribute Usage*

Production Unit structure use document standard NEG Resource Object (Production Unit) Master Data Document specified in NBS BRS Master Data (Ediel.org).

Mark [x] indicates the level in document structure.

| Attribute (XML schema) | Cl. | Value Description |
|---|---|---|
| **[1] NEG Resource Object Master Data Document** | [1] | Document header |
| [2] Document Identification | [1] | Basse generated unique identification of the document. |
| [2] Document Type | [1] | **Z22** Resource Object master data document containing master data changed within the Validity Time Interval (Start date/time inclusive and End date/time exclusive)<br>**Z23** Resource Object master data document containing all valid master data within the Validity Time Interval (Start date/time inclusive and End date/time exclusive) |
| [2] Process Type | [1] | **Z07** Master data |

| | | |
|---|---|---|
| [2] Sender Identification | [1] | **eSett** Code and Coding Scheme |
| [2] Sender Role | [1] | **A05** Imbalance Settlement Responsible |
| [2] Receiver Identification | [1] | **DSO** code and coding scheme |
| [2] Receiver Role | [1] | **A26** Metering Point Administrator (DSO) |
| [2] Creation Date Time | [1] | The date and time of document creation. The date and time is expressed in UTC as YYYY-MM-DDTHH:MM:SSZ. |
| **[2] Resource Object Details** | [1..*] | Repeated for each found DSO's Production Unit. One Production Unit might be repeated also when there is a change of time-dependent attribute. PU validity is split to contain attributes valid for the respective period.<br>Resource Object Details contain all attributes if values are available. |
| [3] Resource Object Identification | [1] | **Production Unit code and coding scheme** |
| [3] Resource Object Name | [0..1] | **Production Unit Name** |
| [3] Object Aggregation | [1] | **A06** Resource object |
| [3] Validity Start | [0..1] | **Validity start** date time expressed in UTC as YYYY-MM-DDTHH:MM:SSZ7 |
| [3] Validity End | [0..1] | **Validity end** date time expressed in UTC as YYYY-MM-DDTHH:MM:SSZ7<br>If omitted, then it is considered as unlimited validity. |
| [3] Asset Type | [0..1] | Type of Production Unit<br>**"B14"** Nuclear<br>**"B16"** Solar<br>**"B20"** Other production<br>**"Z04", "B37"** Thermal, after October 2025 deployment, only **"B37"** is supported.<br>**"Z05", "B19"** Wind onshore, after October 2025, only **"B19"** is supported.<br>**"B18"** Wind offshore<br>**"B25"** Energy storage<br>**"Z06"** Hydro |

| | | |
|---|---|---|
| [3] Production Type | [0..1] | **Z01** Normal<br>**Z02** Minor<br>Time dependent attribute. |
| [3] Measure Unit | [0..1] | **MAW** Megawatt |
| [3] Capacity | [0..1] | Production Unit **capacity** (positive decimal).<br>Time dependent attribute. |
| **[3] Party Details** | [0..1] | Production Unit **Retailer**<br>Time dependent attribute. |
| [4] Subject Party | [1] | **Retailer** code and coding scheme. |
| [4] Subject Party Role | [1] | **A12** Balance Supplier (Retailer) |
| **[3] Related Area** | [0..*] | Production Unit MGA<br>Time dependent attribute. Always only one occurrence within Resource Object Details. |
| [4] Area Identification | [1] | **MGA code and coding scheme**. |
| [4] Type of Area | [1] | **Z02** Metering Grid Area (MGA) |

Following XML snippets shows how Resource Object Details is used to describe PU structure when some of the time-dependent attributes is changed during entire PU validity.

**Change of Production Unit Retailer**

There is a change of retailer from RE1 to RE2 on 2017-06-01T22:00Z UTC of PU1. Resource Object Details is repeated with split validity. Second occurrence contains new RE2 with validity during which is assigned to PU. Other attributes are same as in the first occurrence with original retailer because none of them have been changed.

```
<ResourceObjectDetails>
        <ResourceObjectIdentification v="PU1" codingScheme="A10" />
        <ResourceObjectName v="TestPU1" />
        <ObjectAggregation v="A06" />
        <ValidityStart v="2017-01-01T23:00:00Z" />
        <ValidityEnd v="2017-06-01T22:00:00Z" />
        <AssetType v="B16" />
        <ProductionType v="Z02" />
        <MeasureUnit v="MAW" />
        <Capacity v="23" />
        <PartyDetails>
                <SubjectParty v="RE1" codingScheme="A10" />
                <SubjectPartyRole v="A12" />
        </PartyDetails>
        <RelatedArea>
                <AreaIdentification v="MGA1" codingScheme="A10" />
                <TypeOfArea v="Z02" />
        </RelatedArea>
</ResourceObjectDetails>
```

```
<ResourceObjectDetails>
        <ResourceObjectIdentification v="PU1" codingScheme="A10" />
        <ResourceObjectName v="TestPU1" />
        <ObjectAggregation v="A06" />
        <ValidityStart v="2017-06-01T22:00:00Z" />
        <AssetType v="B16" />
        <ProductionType v="Z02" />
        <MeasureUnit v="MAW" />
        <Capacity v="23" />
        <PartyDetails>
                <SubjectParty v="RE2" codingScheme="A10" />
                <SubjectPartyRole v="A12" />
        </PartyDetails>
        <RelatedArea>
                <AreaIdentification v="MGA1" codingScheme="A10" />
                <TypeOfArea v="Z02" />
        </RelatedArea>
</ResourceObjectDetails>
```

## 4.4.19 Consumption Mec Data Packages

### 4.4.19.1 *BRP's Consumption MEC (Active)*

| Attribute | Description |
|---|---|
| **Name** | BRP's Consumption MEC (Active) |
| **Receiver** | BRP |
| **Description** | BRP's Consumption MECs which are valid sometime within the configured period. Data package is populated with Consumption MEC validities as they are currently in Basse. |
| **Format (Short Name)** | Resource Object |

| | |
|---|---|
| **Document Standard** | NEG Party Master Data Document |
| **Aggregation** | Hourly |
| **Time Period From** | D -14 |
| **Time Period To** | D+14 |
| **Time Trigger (Words)** | Daily basis, morning 06:10<br>Data package is not distributed when there are no data reported. |
| **Data Scope (Filter)** | System selects all active BRP's Consumption that has validity or validity end in selected period. |
| **Message Type** | DP Party Relations (Active) |

#### 4.4.19.2 *BRP's Consumption MEC (Active)*

| Attribute | Description |
|---|---|
| **Name** | BRP's Consumption MEC (Delta) |
| **Receiver** | BRP |
| **Description** | BRP's Consumption MECs starting or ending within the configured time period. Data package is populated with Consumption MEC validities as they are currently in Basse. |
| **Format (Short Name)** | Resource Object |
| **Document Standard** | NEG Party Master Data Document |
| **Aggregation** | Hourly |
| **Time Period From** | D -14 |
| **Time Period To** | D+14 |
| **Time Trigger (Words)** | Daily basis, morning 06:10<br>Data package is not distributed when there are no data reported. |
| **Data Scope (Filter)** | System selects all active BRP's Consumption that has validity or validity end in selected period. |

| | |
|---|---|
| **Message Type** | DP Party Relations (Delta) |

## 4.4.20 PX Market Trade MEC Data Packages

4.4.20.1 *SDP PX Market Trade MEC – All - Configuration*

| Attribute | Description |
|---|---|
| **Name** | PX Market Trades – Structure (Active) |
| **Receiver** | Market Operator in BRP role |
| **Description** | Data package is populated by structural MECs of PX Market Trades where Market Operator is responsible and MEC is valid sometime within the defined period. Data package is available in Online Service when logged as particular Market Operator. |
| **Format (Short Name)** | Trade Structure Document |
| **Document Standard** | Ediel Notify Trade Structure Document version 1.0 (CIM based) |
| **Document Recognition** | Document Type = **Z29** |
| **Period From** | D |
| **Period To** | D+14 |
| **Time Trigger (Words)** | Daily Basis, delivered till 07:00 CET<br>Data Package is distributed only if any data found |
| **Data Scope (Filter)** | System selects all structural PX Market Trades MECs where BRP is responsible and the MECs are valid sometime within the configured time period. |
| **Message Type** | DP PX Market Trades – Structure (All)<br>SDP_PXT_A |

#### 4.4.20.2 *SDP – PX Market Trade MEC – Delta – Configuration*

| Attribute | Description |
|---|---|
| **Name** | PX Market Trades – Structure (Delta) |
| **Receiver** | Market Operator in BRP role |
| **Description** | Data package is populated by PX Market Trades MECs that are related to subscriber (Market Operator) and their validity starts or ends within the configured time period. Data package contains PX Market Trade structure MECs with validity.<br>Data package is available in Online Service when logged as particular BRP. |
| **Format (Short Name)** | Trade Structure Document |
| **Document Standard** | Ediel Notify Trade Structure Document version 1.0 (CIM based) |
| **Document Recognition** | Document Type = **Z28** |
| **Period From** | D |
| **Period To** | D+14 |
| **Time Trigger (Words)** | Daily Basis, delivered till 07:00 CET<br>Data Package is distributed only if any data found |
| **Data Scope (Filter)** | System selects structural PX Market Trades MECs where BRP is responsible and the MEC's validity starts or ends sometime within the configured time period. |
| **Message Type** | DP PX Market Trades – Structure (Delta)<br>SDP_PXT_D |

#### 4.4.20.3 *Ediel Notify PX Trade Structure Document – Attribute Usage for PX Market Trade DP*

| *BRS Attribute [XML Attribute]* | *Cardi-nality* | *Code and description* |
|---|---|---|
| ***Notify Trade Structure Document*** *[NotifyTradeStructure_MarketDocument]* | [1] | |

| | | |
|---|---|---|
| **Document Identification**<br>[mRID] | [1] | Unique identification of the document |
| **Document Type**<br>[type] | [1] | **Z28** PX trade structure master data document containing **master data changed** within the Validity Time Interval<br>**Z29** PX trade structure master data document containing **all valid master data** within the Validity Time Interval |
| **Process Type**<br>[Process.processType] | [1] | **Z07** Master data |
| **Sender Identification**<br>[Sender_MarketParticipant.mRID] | [1] | **eSett's** Code with Coding scheme |
| **Sender Role**<br>[Sender_MarketParticipant.marketRole.type] | [1] | **A05** Imbalance Settlement Responsible |
| **Receiver Identification**<br>[Reciever_MarketParticipant.mRID] | [1] | Data Package Subscriber's (BRP as Market Operator) Code and Coding scheme<br>Balance Responsible Party / Code<br>Balance Responsible Party / Coding Scheme |
| **Receiver Role**<br>[Reciever_MarketParticipant.marketRole.type] | [1] | **A11** Market operator |
| **Creation Date Time**<br>[createdDateTime] | [1] | Date and time of the document creation<br>The date and time must be expressed in UTC in format YYYY-MM-DDTHH:MM:SSZ |
| ***Notify Trade Structure Details***<br>*[NotifyTradeStructure_TimeSeries]* | [1..*] | *Details about PX Market Trade Structures. Repeated for each of PX Market Trade MEC.* |
| **Transaction Identification**<br>*[mRID]* | [1] | Unique ID of the transaction |
| **Validity Start**<br>[validityStart_DateAndOrTime.dateTime] | [0..1] | Business Date Time From<br>Expressed in UTC as YYYY-MM-DDTHH:MM:SSZ (See Validities in Documents)<br>Validity Start of PX Market Trade |
| **Validity End**<br>[validityEnd_DateAndOrTime.dateTime] | [0..1] | Business Date Time To<br>Expressed in UTC as YYYY-MM-DDTHH:MM:SSZ (See Validities in Documents)<br>Validity End of PX Market Trade |

| | | |
|---|---|---|
| | | Not present if Validity End is Undefined |
| **Area**<br>[domain.mRID] | [1] | Unique ID of the PX Market Trade's MBA where Trade can take a place – Code and Coding Scheme:<br><br>Market Balance Area / Code<br>Market Balance Area / Coding Scheme |
| **Contract type**<br>[marketAgreement.type] | [1] | PX Market / PX Market Type<br>**A01** Daily (Day Ahead) – Day Ahead<br>**A07** Intraday contract – Intraday |
| ***In Party***<br>*[In_MarketParticipant]* | [2..3] | **BRP** (A08) - mandatory<br>**Market Operator** (A11) – mandatory<br>**RE** (Z05) – optional |
| **Identification**<br>[mRid] | [1] | Market Operator, BRP's and Retailer's Code and Coding scheme depending on the Role.<br>PX Market / Operator / Code<br>PX Market / Operator / Coding Scheme<br><br>Balance Responsible Party / Code<br>Balance Responsible Party / Coding Scheme<br><br>Retailer / Code<br>Retailer / Coding Scheme |
| **Role**<br>[marketRole.type] | [1] | **A08** Balance Responsible Party<br>**A11** Market operator<br>**Z05** Trader (non-balance responsible party) |

#### 4.4.20.4 *SDP PX Market Trade MEC – XML Snippet Example*

```
<cim:TimeSeries>
   <cim:mRID>mRID-TransactionID001a</cim:mRID>
   <cim:validityStart_DateAndOrTime.dateTime>2018-01-01T01:00:00Z</cim:validityStart_DateAndOr-
   Time.dateTime>
   <cim:domain.mRID codingScheme="A01">10YNO-1--------2</cim:domain.mRID>
   <cim:marketAgreement.type>A07</cim:marketAgreement.type>
   <cim:In_MarketParticipant>
      <cim:mRID codingScheme="A10">7080003940117</cim:mRID>
            <cim:marketRole.type>A08</cim:marketRole.type>
   </cim:In_MarketParticipant>
   <cim:In_MarketParticipant>
      <cim:mRID codingScheme="A10">7080003819260</cim:mRID>
            <cim:marketRole.type>A11</cim:marketRole.type>
   </cim:In_MarketParticipant>
   <cim:In_MarketParticipant>
      <cim:mRID codingScheme="A10">7080003873841</cim:mRID>
            <cim:marketRole.type>Z05</cim:marketRole.type>
   </cim:In_MarketParticipant>
</cim:TimeSeries>
```

## 4.4.21 Delivered Reserves

Delivered Reserves data are split into BRP and RE Delivered Reserves, Both BRP and RE structural DER MECs indicate BSP and BRP. BSP has access to all Delivered Reserves on its own ROs. BRP has access to all its own BRP Delivered Reserves and those for which it has Retailer Balance Responsibility on RE Reserves.

Delivered Reserves consist of delivered Quantity and misdelivered Quantity (Misdelivery). If any misdelivery is indicated per market party, it will also be sent in the data package in a separate time series segment.

Both BRP and RE Delivered Reserves are contained in one message. All existing MECs with data for respective BSP/BRP are reported in multiple time series segments inside of the message. BRP Reserves are indicated with BRP + MBA combination. RE Reserves are indicated with RE + MGA combination.

| SDP: Delivered Reserves for BSP | |
|---|---|
| **Name** | Delivered Reserves for BSP |
| **Receiver** | BSP |
| **Description** | Energy up/down for BSP per MBA/MGA, market party, RO, Balancing Sub-Service and Activation Method |
| **Format (Short Name)** | Delivered Reserves |
| **Document Standard** | CIM Activation_MarketDocument |
| **Aggregation** | Time Aggregation – QH (15-minute) |
| **Time Period From** | D-14 |
| **Time Period To** | D-1 |
| **Time Trigger (Words)** | Daily basis, morning 06:04<br>Data package is not distributed when there are no data reported. |
| **Data Scope (Filter)** | System selects all Delivered Reserves that belong to the BSP. BSP dimension exists on both BRP and RE Delivered Reserves structural MECs. |

| SDP: Delivered Reserves for BRP | |
|---|---|
| **Name** | SDP Delivered Reserves for BRP |
| **Receiver** | BRP |
| **Description** | Energy up/down for BRP per MBA/MGA, market party, RO,Balancing Sub-Service and Activation Method |
| **Format (Short Name)** | Delivered Reserves |
| **Document Standard** | CIM Activation_MarketDocument |
| **Aggregation** | Time Aggregation – QH (15-minute) |
| **Time Period From** | D-14 |

| | |
|---|---|
| **Time Period To** | D-1 |
| **Time Trigger (Words)** | Daily basis, morning 06:04<br>Data package is not distributed when there are no data reported. |
| **Data Scope (Filter)** | System selects all Delivered Reserves that belong to the BRP. BRP dimension exists on both BRP and RE Delivered Reserves structural MECs. |

#### 4.4.21.1 *Document Format Attribute Usage – Delivered Reserves for BSP*

Mark [x] indicates the level in the document structure.

| Index – Attribute (XML Schema) | Cl. | Description incl. Document Validations |
|---|---|---|
| **[1.0] Reserve Activation Result Document** | [1] | |
| [1.1] Document Identification (mRID) | [1] | Unique identification of the document. |
| [1.2] Document Version | [1] | Running number incrementing by 1 for each update. |
| [1.3] Document Type | [1] | Document Type = "**A83**" |
| [1.4] Process Type | [1] | Process Type is following:<br>**A16** Realised |
| [1.5] Sender Identification | [1] | eSett ID Code and Coding Scheme |
| *[A] codingScheme* | [1] | *See* **Error! Reference source not found.** |
| [1.6] Sender Role | [1] | Sender Role:<br>"**A05**" (Imbalance Settlement Responsible) |
| [1.7] Receiver Identification | [1] | BSP Code and Coding Scheme |
| *[A] codingScheme* | [1] | *See* **Error! Reference source not found.** |
| [1.8] Receiver Role | [1] | Receiver Role:<br>**A46** Balancing Service Provider (BSP) |

| | | |
|---|---|---|
| [1.9] Creation Date Time | [1] | The date and time that the document was prepared for transmission by the application of the sender. |
| [1.10] Reserve Bid Time Interval | [1] | The beginning and ending date and time of the period covered by the document. |
| [1.11] Domain | [1] | Domain covered by the schedule document.<br>Nordic Market Area ID = 10Y1001A1001A91G |
| *[A] codingScheme* | [1] | Domain coding scheme |
| **[2.0] Time Series** | [1..*] | |
| [2.1] Time Series Identification (mRID) | [1] | Time series ID – Unique ID of the Time Series (generated by BASSE) |
| [2.2] Resource Provider Party Identification | [1] | Unique identification of the party providing the resources (**BSP**) |
| *[A] codingScheme* | [1] | *See* **Error! Reference source not found.** |
| [2.3] Related Party Identification | | Unique identification of the party whose resource is activated |
| *[A] codingScheme* | [1] | *See* **Error! Reference source not found.** |
| [2.4] Related Party Role | | Related party role indicates BRP or RE Delivered Reserve:<br>**A08** Balance Responsible Party (BRP)<br>**A12** Energy Supplier (RE) |
| [2.5] Business Type | [1] | Identifies reported reserve type, used in combination with Reason code:<br>**A95** Frequency containment reserve<br>**A96** Automatic frequency restoration reserve<br>**A97** Manual frequency restoration reserve<br>**C26** Frequency Containment Reserve-Normal (FCR-N)<br>**C27** Frequency Containment Reserve-Disturbance (FCR-D)<br>**Z85** Fast frequency reserve |
| [2.6] Acquiring Area | [1] | Unique identification of the Market Balance Area (MBA) where the energy is purchased.<br>In case of BRP Delivered reserves this will be the same as Connecting Area. |

| | | |
|---|---|---|
| | | In case of RE Delivered Reserves, connecting area will be MGA. |
| *[A] codingScheme* | [1] | *MBA coding scheme* |
| [2.7] Connecting Area | [1] | In case of BRP Delivered reserves this attribute represents MBA and will be equal to Acquiring Area attribute,<br>In case of RE Delivered Reserves this attribute represents MGA.<br>Depends on Related Party Role:<br>**A08** = MBA<br>**A12** = MGA |
| *[A] codingScheme* | [1] | *MBA/MGA Coding Scheme* |
| [2.8] Measure Unit Quantity | [1] | Unit of measurement **"MWH"** |
| [2.9] Direction | [1] | Indicated direction of reported reserve values:<br>**A01** Up<br>**A02** Down |
| [2.10] Reserve Object Status | [1] | Defines reported Quantity values as Up / Down Quantity or Up / Down Misdelivery:<br>**A07** Activated (Quantity)<br>**A73** Delta (Misdelivery)<br>*Note:*<br>*Reserve Object Status "A73 Delta" uses signed values, i.e. will be negative in case of an 'underdelivery' and positive in case of an 'overdelivery'."* |
| [2.11] Reserve Object | [1] | Identification of Regulation Object. |
| *[A] codingScheme* | [1] | *RO Coding Scheme* |
| **[2.12] Period (Reserve Activation Time Series Level)** | [1..*] | |
| [2.12.1] Time Interval | [1] | Period covered by the document. |
| [2.12.2] Resolution | [1] | Resolution of reported values:<br>**PT15M** – 15-minute values |

| | | |
|---|---|---|
| **[2.13] Point** | [1] | |
| [2.13.1] Position | [1] | Relative position of a period within the time interval. |
| [2.13.2] Quantity | [1] | Quantity of the product scheduled for the position.<br>Up / Down Quantity for Reserve Object Status **= A07**<br>Up / Down Misdelivery for Reserve Object Status = **A73** |
| **[2.14] Reason (Reserve Activation Time Series Level)** | [1..*] | |
| [2.14.1] Reason Code<br>1st repetition | [1] | Reason code indicates one of values listed in column “Reason Code” of table Delivered Reserves Types Combination. The combination will indicated which BSS is reported. |
| [2.14.2] Reason Code<br>2nd repetition | [1] | Reason code 2nd repetition indicated which Activation Method is reported:<br>**Z84** Activation of Own resources<br>**Z85** Activation of Contracted resources<br>**Z86** Independent Aggregation |

4.4.21.2 *Document Format Attribute Usage – Delivered Reserves for BRP*

Mark [x] indicates the level in the document structure.

| Index – Attribute (XML Schema) | Cl. | Description incl. Document Validations |
|---|---|---|
| **[1.0] Reserve Activation Result Document** | [1] | |
| [1.1] Document Identification (mRID) | [1] | Unique identification of the document. |
| [1.2] Document Version | [1] | Running number incrementing by 1 for each update. |
| [1.3] Document Type | [1] | Document Type = “**A83**” |
| [1.4] Process Type | [1] | Process Type is following:<br>**A16** Realised |
| [1.5] Sender Identification | [1] | eSett ID Code and Coding Scheme |

| | | |
|---|---|---|
| *[A] codingScheme* | [1] | *See* **Error! Reference source not found.** |
| [1.6] Sender Role | [1] | Sender Role:<br>"**A05**" (Imbalance Settlement Responsible) |
| [1.7] Receiver Identification | [1] | BRP Code and Coding Scheme |
| *[A] codingScheme* | [1] | *See* **Error! Reference source not found.** |
| [1.8] Receiver Role | [1] | Receiver Role:<br>**A08** Balance Responsible Party (BRP) |
| [1.9] Creation Date Time | [1] | The date and time that the document was prepared for transmission by the application of the sender. |
| [1.10] Reserve Bid Time Interval | [1] | The beginning and ending date and time of the period covered by the document. |
| [1.11] Domain | [1] | Domain covered by the schedule document.<br>Nordic Market Area ID = 10Y1001A1001A91G |
| *[A] codingScheme* | [1] | Domain coding scheme |
| **[2.0] Time Series** | [1..*] | |
| [2.1] Time Series Identification (mRID) | [1] | Time series ID – Unique ID of the Time Series (generated by BASSE) |
| [2.2] Resource Provider Party Identification | [1] | Unique identification of the party providing the resources (**BSP**)<br>For the following combination this attribute is replaced by "NotAuthorized":<br>- Acquiring Area = FI (Finland)<br>- 2nd Reason Code = Z86 (Independent Aggregation) |
| *[A] codingScheme* | [1] | *See* **Error! Reference source not found.** |
| [2.3] Related Party Identification | | Unique identification of the party whose resource is activated |
| *[A] codingScheme* | [1] | *See* **Error! Reference source not found.** |
| [2.4] Related Party Role | | Related party role indicates BRP or RE Delivered Reserve:<br>**A08** Balance Responsible Party (BRP) |

| | | |
|---|---|---|
| | | **A12** Energy Supplier (RE) |
| [2.5] Business Type | [1] | Identifies reported reserve type, used in combination with Reason code:<br>**A95** Frequency containment reserve<br>**A96** Automatic frequency restoration reserve<br>**A97** Manual frequency restoration reserve<br>**C26** Frequency Containment Reserve-Normal (FCR-N)<br>**C27** Frequency Containment Reserve-Disturbance (FCR-D)<br>**Z85** Fast frequency reserve |
| [2.6] Acquiring Area | [1] | Unique identification of the Market Balance Area (MBA) where the energy is purchased.<br>In case of BRP Delivered reserves this will be the same as Connecting Area.<br>In case of RE Delivered Reserves, connecting area will be MGA. |
| *[A] codingScheme* | [1] | *MBA coding scheme* |
| [2.7] Connecting Area | [1] | In case of BRP Delivered reserves this attribute represents MBA and will be equal to Acquiring Area attribute,<br>In case of RE Delivered Reserves this attribute represents MGA.<br>Depends on Related Party Role:<br>**A08** = MBA<br>**A12** = MGA |
| *[A] codingScheme* | [1] | *MBA/MGA Coding Scheme* |
| [2.8] Measure Unit Quantity | [1] | Unit of measurement **"MWH"** |
| [2.9] Direction | [1] | Indicated direction of reported reserve values:<br>**A01** Up<br>**A02** Down |
| [2.10] Reserve Object Status | [1] | Defines reported Quantity values as Up / Down Quantity or Up / Down Misdelivery:<br>**A07** Activated (Quantity)<br>**A73** Delta (Misdelivery)<br>*Note:* |

| | | |
|---|---|---|
| | | *Reserve Object Status "A73 Delta" uses signed values, i.e. will be negative in case of an 'underdelivery' and positive in case of an 'overdelivery'."* |
| [2.11] Reserve Object | [1] | Identification of Regulation Object.<br>For the following combination this attribute is replaced by "NotAuthorized":<br>- Acquiring Area = FI (Finland)<br>- 2nd Reason Code = Z86 (Independent Aggregation) |
| *[A] codingScheme* | [1] | *RO Coding Scheme* |
| **[2.12] Period (Reserve Activation Time Series Level)** | [1..*] | |
| [2.12.1] Time Interval | [1] | Period covered by the document. |
| [2.12.2] Resolution | [1] | Resolution of reported values:<br>**PT15M** – 15-minute values |
| **[2.13] Point** | [1] | |
| [2.13.1] Position | [1] | Relative position of a period within the time interval. |
| [2.13.2] Quantity | [1] | Quantity of the product scheduled for the position.<br>Up / Down Quantity for Reserve Object Status **= A07**<br>Up / Down Misdelivery for Reserve Object Status = **A73** |
| **[2.14] Reason (Reserve Activation Time Series Level)** | [1..*] | |
| [2.14.1] Reason Code<br>1st repetition | [1] | Reason code indicates one of values listed in column "Reason Code" of table Delivered Reserves Types Combination. The combination will indicated which BSS is reported. |
| [2.14.2] Reason Code<br>2nd repetition | [1] | Reason code 2nd repetition indicated which Activation Method is reported:<br>**Z84** Activation of Own resources<br>**Z85** Activation of Contracted resources<br>**Z86** Independent Aggregation |

4.4.21.3 *Supported Delivered Reserves Types*

| Process type | Business type | Direction | Reason code (1st repetition) |
|---|---|---|---|
| **A16 Realised** | **A95** Frequency containment reserve | **A01** Up<br>**A02** Down | **Z29** FCR (Frequency Containment Reserve) |
| | **Z85** Fast frequency reserve | **A01** Up<br>**A02** Down | **Z56** Fast Frequency Reserve (FFR) |
| | **A96** Automatic frequency restoration reserve | **A01** Up<br>**A02** Down | **Z30** aFRR (Frequency Restoration Reserve - Automatic) |
| | | | **Z54** aFRR AOF activation |
| | | | **Z55** aFRR non-AOF activation |
| | **A97** Manual frequency restoration reserve | **A01** Up<br>**A02** Down | **Z31** mFRR, Balancing Power (Frequency Restoration Reserve - Manual activated reserves, Balancing Power) |
| | | | **Z34** mFRR, Quarter regulation (Frequency Restoration Reserve - Manual activated reserves, Quarter regulation) |
| | | | **Z35** mFRR, Special Regulation (Frequency Restoration Reserve - Manual activated reserves, Special Regulation) |
| | | | **Z36** Hour Change Regulation |
| | | | **Z37** Power Transaction |
| | | | **Z38** TSO Internal Countertrades |
| | | | **Z39** Day Ahead Production Adjustment |
| | | | **Z63** Period shift activation |
| | **C26** Frequency Containment Reserve-Normal (FCR-N) | **A01** Up<br>**A02** Down | **Z40** Frequency Containment Reserve, Normal operation (FCR-N). |
| | **C27** Frequency Containment Reserve-Disturbance (FCR-D) | **A01** Up<br>**A02** Down | **Z41** Frequency Containment Reserve, Disturbance (FCR-D). |

## 4.4.22 Compensations/Regulation Imbalance Data Packages 15-minute

**Time-based** Data packages for BSP role:

- Reserve Compensations
- Regulation Imbalance

**Time-based** Data packages for BRP role:

- Reserve Compensations

#### 4.4.22.1 *BRP Compensation*

| **Attribute** | |
|---|---|
| **Name** | BRP Compensation |
| **Receiver** | BRP |
| **Description** | BRP's Reserve Compensations per RE volumes (MWh) and amounts (EUR) per MGA and Balancing Sub-Service |
| **Format (Short Name)** | BRP Compensation |
| **Document Standard** | |
| **Aggregation** | Time Aggregation – QH (15-minute) |
| **Time Period From** | D-14 |
| **Time Period To** | D-1 |
| **Time Trigger (Words)** | Daily basis, afternoon 10:04<br>Data package is not distributed when there are no data reported. |
| **Data Scope (Filter)** | All BRP's Reserve Compensations per RE volumes (MWh) and amounts (EUR) per MGA, BSS |

#### 4.4.22.2 *BSP Compensation*

| Attribute | |
|---|---|
| **Name** | BSP Compensation |
| **Receiver** | BSP |
| **Description** | BSP's Reserve Compensations per RE volumes (MWh) and amounts (EUR) per MGA and Balancing Sub-Service |
| **Format (Short Name)** | BSP Compensation |
| **Document Standard** | |
| **Aggregation** | Time Aggregation – QH (15-minute) |
| **Time Period From** | D-14 |
| **Time Period To** | D-1 |
| **Time Trigger (Words)** | Daily basis, afternoon 10:04<br>Data package is not distributed when there are no data reported. |
| **Data Scope (Filter)** | All BRP's Reserve Compensations per RE volumes (MWh) and amounts (EUR) per MGA, BSS |

#### 4.4.22.3 *Regulation Imbalance*

| Attribute | |
|---|---|
| **Name** | Regulation Imbalance |
| **Receiver** | BSP |
| **Description** | BSP's Regulation Imbalance per MBA volumes (MWh) and amounts (EUR) |
| **Format (Short Name)** | Regulation Imbalance |
| **Document Standard** | NEG ESP Energy Account Report Document (EAR) |
| **Aggregation** | Time Aggregation – QH (15-minute) |

| | |
|---|---|
| **Time Period From** | D-14 |
| **Time Period To** | D-1 |
| **Time Trigger (Words)** | Daily basis, afternoon 12:04<br>Data package is not distributed when there are no data reported. |
| **Data Scope (Filter)** | All BSP's Regulation Imbalance per MBA volumes (MWh) and amounts (EUR) |

#### 4.4.22.4 *Document Format Attribute Usage*

Document used for settlement data is 'NEG ESP Energy Account Report Document'. Attribute usage is specified separately for document header and time series part is specified separately for Reserve Compensation and Regulation Imbalance data.

Mark [x] indicates the level in the document structure.

##### 4.4.22.4.1 Header - NEG ESP Energy Account Report Document – Reserve Compensations

| Attribute (XML Schema) | Cl. | Description |
|---|---|---|
| **[1] Energy Account Report Document** | | |
| [2] Document Identification | [1] | Globally unique identifier (GUID) is used as generated Document ID. GUID is used without dashes to meet maximal length 35 characters.<br>Example: "5ae1c0ba922c420b891c69356e6e746b" |
| [2] Document Version | [1] | Fixed value "**1**" |
| [2] Document Type | [1] | **A56** - Compensation Program Schedule |
| [2] Document Status | [1] | **A01** - Intermediate |
| [2] Process Type | [1] | **A06 -** Imbalance settlement |
| [2] Classification Type | [1] | **A02 -** Summary type |
| [2] Sender Identification | [1] | *eSett Code and Coding Scheme* |
| [2] Sender role | [1] | **A05** - Imbalance Settlement Responsible |

| | | |
|---|---|---|
| [2] Receiver Identification | [1] | Market Party identification: BSP or BRP code and coding scheme |
| [2] Receiver role | [1] | **A46** - Balancing Service Provider for BSP<br>**A08** - Balance Responsible Party for BRP |
| [2] Document Date and Time | [1] | The time stamp of the calculation (time stamp of the document creation is sufficient) |
| [2] Accounting period | [1] | The beginning and ending date and time of the period covered. The beginning and ending date and time are calculated as minimum and maximum of all Time Intervals from all Accounting Time Series, respectively.<br>YYYY-MM-DDTHH:MMZ/YYYY-MM-DDTHH:MMZ |
| [2] Domain | [1] | Class *Global Parameter*, attribute *NBS Domain and NBS Domain Coding Scheme* |
| [2] **Account Time Series** | [1..*] | Settlement Results:<br>Compensations for BSP per RE, MGA and Balancing Service<br>Compensations for BRP per RE, MGA and Balancing Service<br>The data is aggregated on Balancing Service level from Balancing Sub-Services. The data per BSP and BRP is available from Compensations volumes per RE per MGA related to the relevant BSP / BRP. |

#### 4.4.22.4.2 Time Series for Reserve Compensations

| Attribute (XML Schema) | Cl. | Description |
|---|---|---|
| [2] **Account Time Series** | [1..*] | The number of occurrences depends on the number of Retailers which have Compensations calculated related to the BSP or BRP.<br>BSP is derived from the Regulation Object for relevant RE Compensation.<br>BRP is derived from the RBR for the relevant RE Compensation. |
| [3] Senders Time Series Identification | [1] | Globally unique identifier (GUID) is used as generated Time Series ID. GUID is used without dashes to meet maximal length 35 characters.<br>Example: “5ae1c0ba922c420b891c69356e6e746b” |
| [3] Business Type | [1] | **A95** - Frequency containment reserve<br>**A96** - Automatic frequency restoration reserve |

| | | |
|---|---|---|
| | | **A97** - Manual frequency restoration reserve<br>**C26** - Frequency Containment Reserve-Normal (FCR-N)<br>**C27** - Frequency Containment Reserve-Disturbance (FCR-D)<br>**Z85** - Fast frequency reserve |
| [3] Product | [1] | '**8716867000030**' (Active energy) |
| [3] Object Aggregation | [1] | **A01** – Area |
| [3] Area | • 1] | • **MGA** Code and Coding Scheme |
| [3] Party | [1] | RE ID: The Retailer for which the Compensation is applied aggregated on MGA and Balancing Service level. |
| [3] Measurement Unit | [1] | '**MWH**' |
| [3] Currency | [0..*] | • Time-based data-package contains only EUR currency. |
| [3] **Period** | [1..*] | |
| [4] Time Interval | [1] | Time interval of reported values. It is subset of Accounting Period time interval from the document header.<br>Note: In case of starting or ending validity of MGA within Accounting Period the Time Interval can be smaller than Accounting Period time interval. |
| [4] Resolution | [1] | **PT15M –** 15-minute Resolution |
| [4] **Account Interval** | [1..*] | |
| [5] Pos | [1] | Sequence number of the time interval |
| [5] In Qty | • 1] | In Compensation RE Quantity |
| [5] Out Qty | • 1] | Out Compensation RE Quantity |
| [5] Settlement Amount | • 0..1] | The Compensation amount due for the account interval in question.<br>This information defines the settlement amount taking into consideration the in and out quantities and the pricing scheme based on local market rules. |

| | | |
|---|---|---|
| | | A negative value indicates that the settlement amount is due by the party in question (party to be debited). If the amount is positive it is due by the imbalance settlement responsible (party to be credited). |

#### 4.4.22.4.3 Header - NEG ESP Energy Account Report Document – Regulation Imbalance

| Attribute (XML Schema) | Cl. | Description |
|---|---|---|
| **[1] Energy Account Report Document** | | |
| [2] Document Identification | [1] | Globally unique identifier (GUID) is used as generated Document ID. GUID is used without dashes to meet maximal length 35 characters.<br>Example: “5ae1c0ba922c420b891c69356e6e746b” |
| [2] Document Version | [1] | Fixed value “**1**” |
| [2] Document Type | [1] | **A12** - Imbalance report |
| [2] Document Status | [1] | **A01** - Intermediate |
| [2] Process Type | [1] | **A27** - Reserve resource process |
| [2] Classification Type | [1] | **A02 -** Summary type |
| [2] Sender Identification | [1] | *eSett Code and Coding Scheme* |
| [2] Sender role | [1] | **A05** - Imbalance Settlement Responsible |
| [2] Receiver Identification | [1] | Market Party identification: BSP code and coding scheme |
| [2] Receiver role | [1] | **A46** - Balancing Service Provider for BSP |
| [2] Document Date and Time | [1] | The time stamp of the calculation (time stamp of the document creation is sufficient) |
| [2] Accounting period | [1] | The beginning and ending date and time of the period covered. The beginning and ending date and time are calculated as minimum and maximum of all Time Intervals from all Accounting Time Series, respectively.<br>YYYY-MM-DDTHH:MMZ/YYYY-MM-DDTHH:MMZ |

| | | |
|---|---|---|
| [2] Domain | [1] | Class *Global Parameter*, attribute *NBS Domain and NBS Domain Coding Scheme* |
| [2] **Account Time Series** | [1..*] | Settlement Results:<br>Regulation Imbalance for BSP per MBA |

#### 4.4.22.4.4 Time Series for Regulation Imbalance

| Attribute (XML Schema) | Cl. | Description |
|---|---|---|
| [2] **Account Time Series** | [1..*] | The number of occurrences depends on the number of MBAs the relevant BSP have Regulation Imbalance in. |
| [3] Senders Time Series Identification | [1] | Globally unique identifier (GUID) is used as generated Time Series ID. GUID is used without dashes to meet maximal length 35 characters.<br>Example: "5ae1c0ba922c420b891c69356e6e746b" |
| [3] Business Type | [1] | **A23** - Balance Management |
| [3] Product | [1] | '**8716867000030**' (Active energy) |
| [3] Object Aggregation | [1] | **A01** – Area |
| [3] Area | • 1] | **MBA** Code and Coding Scheme |
| [3] Party | [1] | **BSP**: The BSP for which the Regulation Imbalance is reported. |
| [3] Measurement Unit | [1] | '**MWH**' |
| [3] Currency | [0..*] | Time-based data-package contains only EUR currency. |
| [3] **Period** | [1..*] | |
| [4] Time Interval | [1] | Time interval of reported values. It is subset of Accounting Period time interval from the document header. |
| [4] Resolution | [1] | **PT15M –** 15-minute Resolution |
| [4] **Account Interval** | [1..*] | |
| [5] Pos | [1] | Sequence number of the time interval |

| | | |
|---|---|---|
| [5] In Qty | • 1] | In Regulation Imbalance Quantity |
| [5] Out Qty | • 1] | Out Regulation Imbalance Quantity |
| [5] Settlement Amount | • 0..1] | The Regulation Imbalance amount due for the account interval in question.<br><br>*This information defines the settlement amount taking into consideration the in and out quantities and the pricing scheme based on local market rules.*<br><br>*A negative value indicates that the settlement amount is due by the party in question (party to be debited). If the amount is positive it is due by the imbalance settlement responsible (party to be credited).* |

## 4.4.23 Exchange Rates

### 4.4.23.1 *DP Exchange Rates - Daily (BRP)*

| **Attribute** | |
|---|---|
| **Name** | DP Exchange Rates - Daily (BRP) |
| **Receiver** | BRP |
| **Description** | Reporting of daily received Exchange Rates. Specific Data Package. |
| **Format (Short name)** | Exchange Rates – Daily |
| **Document Standard** | Ediel Currency Exchange Rate Document v2-0 |
| **Aggregation** | Time Aggregation – D (Daily) |
| **Time Period From** | W-2 |
| **Time Period To** | D |
| **Time Trigger (Words)** | Time based package triggered on daily basis at 5:15 AM. The Data Package is supposed to be triggered once per day. Since the DP is implemented as Time Based, it can be also triggered manually on demand.<br>Data package is not distributed when there are no data reported. |

| | |
|---|---|
| **Data Scope (Filter)** | System selects Exchange Rates of previous business day. The Data Package contains data received by EXRI on daily basis at 5:00 AM. |

#### 4.4.23.2 *DP Exchange Rates - Invoicing Results (BRP) 15-minutes*

| **Attribute** | |
|---|---|
| **Name** | DP Exchange Rates – Invoicing Results (BRP) |
| **Receiver** | BRP |
| **Description** | Exchange Rates for Invoiced time period. Specific Data Package. |
| **Format (Short name)** | Exchange Rates – Invoicing Results |
| **Document Standard** | Ediel Currency Exchange Rate Document v2-0 |
| **Aggregation** | Time Aggregation – D (Daily) |
| **Time Period From** | D |
| **Time Period To** | D+6 |
| **Data Scope (Filter)** | System selects Exchange Rates for each day of the invoiced time period. |

#### 4.4.23.3 *DP Exchange Rates - Daily (BSP)*

| **Attribute** | |
|---|---|
| ***Name*** | *DP Exchange Rates – Daily (BSP)* |
| ***Receiver*** | *BSP* |
| ***Description*** | *Reporting of daily received Exchange Rates. Specific Data Package.* |
| ***Format (Short name)*** | *Exchange Rates – Daily* |
| ***Document Standard*** | *Ediel Currency Exchange Rate Document v2-0* |
| ***Aggregation*** | *Time Aggregation – D (Daily)* |

| | |
|---|---|
| ***Time Period From*** | *W-2* |
| ***Time Period To*** | *D* |
| ***Time Trigger (Words)*** | *Time based package triggered on daily basis at 5:15 AM. The Data Package is supposed to be triggered once per day. Since the DP is implemented as Time Based, it can be also triggered manually on demand.*<br>*Data package is not distributed when there are no data reported.* |
| ***Data Scope (Filter)*** | *System selects Exchange Rates of previous business day. The Data Package contains data received by EXRI on daily basis at 5:00 AM.* |

#### 4.4.23.4 *DP Exchange Rates - Invoicing Results (BSP)*

| **Attribute** | |
|---|---|
| **Name** | DP Imbalance prices per Market Balance Area (MBA)Exchange Rates – Invoicing Results (BSP) |
| **Receiver** | BSP |
| **Description** | Exchange Rates for Invoiced time period. Specific Data Package. |
| **Format (Short name)** | Exchange Rates – Invoicing Results |
| **Document Standard** | Ediel Currency Exchange Rate Document v2-0 |
| **Aggregation** | Time Aggregation – D (Daily) |
| **Time Period From** | D |
| **Time Period To** | D+6 |
| **Data Scope (Filter)** | System selects Exchange Rates for each day of the invoiced time period. |

##### 4.4.23.4.1.1 Document Format Attribute Usage

Document used for bilateral trade data is ‘Ediel Currency Exchange Rate Document ‘.

Mark [x] indicates the level in the document structure.

| Attribute (XML Schema) | Cl. | Description |
|---|---|---|
| [1] Schedule Document | [1] | |
| [2] mRID | [1] | Unique identification of the document |
| [2] revisionNumber | [1] | Document Version = '**1**' (fixed value) |
| [2] type | [1] | '**Z07**' |
| [2] sender_MarketParticipant.mRID | [1] | eSett Code and Coding Scheme |
| [2] sender_MarketParticipant.marketRole.type | • 1] | • '**A05**' – Imbalance Settlement Responsible |
| [2] reciever_MarketParticipant.mRID | [1] | Identification of the party who is receiving the data package.<br>Subscriber BRP Code and Coding scheme |
| [2] reciever_MarketParticipant.marketRole.type | [1] | '**A08**' – Balance Responsible Party |
| [2] createdDateTime | [1] | • Creation Date Time (represents time stamp of file generation in UTC). |
| [2] currencyExchangeRate_Period.timeInterval | [1] | The time interval for which the Currency Exchange Rate is valid. Business day(s) of the Exchange Rate<br>Period covered (in ISO 8601 UTC format)<br><period.timeInterval><br><start>YYYY-MM-DDTHH:MMZ</start><br><end>YYYY-MM-DDTHH:MMZ</end><br></period.timeInterval> |
| [3] CurrencyExchangeRate_TimeSeries | | |
| [4] mRID | [1] | Time series ID - Unique ID of the Time Series |

| | | |
|---|---|---|
| [4] reference_Currency_Unit.name | [1] | Reference currency. Any valid ISO 3 letter currency code, EURO is expected:<br>**'EUR'** (EURO) |
| [4] target_Currency_Unit.name | | Target currency. Any valid ISO 3 letter currency code, such as:<br>- **'DKK'** (Danish Kroner)<br>- **'NOK'** (Norwegian Kroner)<br>**'SEK'** (Swedish Kronor) |
| [4] Series_Period | • | • |
| [5] timeInterval | • | • <timeInterval><br><start>YYYY-MM-DDTHH:MMZ</start><br><end>YYYY-MM-DDTHH:MMZ</end><br></timeInterval> |
| [5] resolution | • 1] | • **'P1D'** – daily resolution |

## 4.4.24 Reconciliation

4.4.24.1 *Final Loadshare per MGA per BRP per Type*

| **Attribute** | |
|---|---|
| **Name** | Final Loadshare per MGA per BRP per type |
| **Receiver** | BRP |
| **Description** | All BRP's reported Final Loadshares per MGA per BRP per type |
| **Format (Short Name)** | Final Loadshares |
| **Document Standard** | UTILTS & APERAK model and schema: IG-version: E5SE1B IG-revision: 12 |
| **UTILTS Message Type** | S01 |

| | |
|---|---|
| **Aggregation** | Time Aggregation – M (Monthly) |
| **Time Period From** | M-3 |
| **Time Period To** | M-1 |
| **Time Trigger (Words)** | Reported for previous 3 months, daily at 04:00<br>Data package is not distributed when there are no data reported. |

#### 4.4.24.2 *Invoiced Reconciliation Quantity and Amount per MGA per BRP*

| **Attribute** | |
|---|---|
| **Name** | Invoiced Reconciliation Quantity and Amount per MGA per BRP |
| **Receiver** | BRP |
| **Description** | Invoiced Reconciliation Quantity and Amount per MGA per BRP<br>Only available in SNT time zone. |
| **Format (Short Name)** | Reconciliation Quantity and Amount Invoiced |
| **Document Standard** | UTILTS & APERAK model and schema: IG-version: E5SE1B IG-revision: 12 |
| **UTILTS Message Type** | S01 |
| **Aggregation** | Time Aggregation – M (Monthly) |
| **Time Period From** | M-3 |
| **Time Period To** | M-3 |
| **Time Trigger (Words)** | Triggered after Invoicing process is finished<br>Sent by process Publish Settlement Results BRP |

#### 4.4.24.3 *Load Profile per MGA*

| **Attribute** |
|---|

| | |
|---|---|
| **Name** | Load Profile per MGA |
| **Receiver** | BRP |
| **Description** | All Load Profiles per MGA in Sweden |
| **Format (Short Name)** | Load Profiles |
| **Document Standard** | UTILTS & APERAK model and schema version: IG-version: E5SE1B IG-revision: 12 |
| **UTILTS Message Type** | S01 |
| **Aggregation** | Time Aggregation – QH (15-minute) |
| **Time Period From** | D-14 |
| **Time Period To** | D-1 |
| **Time Trigger (Words)** | Daily basis, morning 04:00<br>Data package is not distributed when there are no data reported. |

#### 4.4.24.4 *Preliminary Loadshare per MGA per BRP per Type*

| **Attribute** | |
|---|---|
| **Name** | Preliminary Loadshare per MGA per BRP per Type |
| **Receiver** | BRP |
| **Description** | Reported Preliminary Loadshares per MGA per BRP per Consumption Type (General, Losses) |
| **Format (Short Name)** | Preliminary Loadshares |
| **Document Standard** | UTILTS & APERAK model and schema: IG-version: E5SE1B IG-revision: 12 |
| **UTILTS Message Type** | S04 |
| **Aggregation** | Time Aggregation – M (Monthly) |
| **Time Period From** | M |
| **Time Period To** | M+1 |

| | |
|---|---|
| **Time Trigger (Words)** | Reported for current and upcoming month, daily at 04:00<br>Data package is not distributed when there are no data reported. |

#### 4.4.24.5 *Profiled Consumption per MBA per BRP 15-minutes*

| **Attribute** | |
|---|---|
| **Name** | Profiled Consumption per MBA per BRP |
| **Receiver** | BRP |
| **Description** | Aggregated Profiled Consumption per MBA in Sweden for BRP |
| **Format (Short Name)** | Profiled Consumption per MBA |
| **Document Standard** | UTILTS & APERAK model and schema: IG-version: E5SE1B IG-revision: 12 |
| **UTILTS Message Type** | S01 |
| **Aggregation** | Time Aggregation – QH (15-minute) |
| **Time Period From** | D-14 |
| **Time Period To** | D-1 |
| **Time Trigger (Words)** | Daily basis, morning 04:00<br>Data package is not distributed when there are no data reported. |

#### 4.4.24.6 *Profiled Consumption per MBA per BRP Monthly*

| **Attribute** | |
|---|---|
| **Name** | Profiled Consumption per MGA per BRP |
| **Receiver** | BRP |
| **Description** | Aggregated Profiled Consumption per Month per MGA per BRP |
| **Format (Short Name)** | Profiled Consumption |

| | |
|---|---|
| **Document Standard** | UTILTS & APERAK model and schema: IG-version: E5SE1B IG-revision: 12 |
| **UTILTS Message Type** | S01 |
| **Aggregation** | Time Aggregation – M (Monthly) |
| **Time Period From** | M-3 |
| **Time Period To** | M |
| **Time Trigger (Words)** | Daily basis, morning 04:00<br>Data package is not distributed when there are no data reported. |

#### 4.4.24.7 *Profiled Imbalance per MGA Monthly*

| **Attribute** | |
|---|---|
| **Name** | Profiled Imbalance per MGA |
| **Receiver** | BRP |
| **Description** | BRP's Profiled Imbalance per MGA where BRP has Losses |
| **Format (Short Name)** | Profiled Imbalance |
| **Document Standard** | UTILTS & APERAK model and schema: IG-version: E5SE1B IG-revision: 12 |
| **UTILTS Message Type** | S01 |
| **Aggregation** | Time Aggregation – M (Monthly) |
| **Time Period From** | M-3 |
| **Time Period To** | M-1 |
| **Time Trigger (Words)** | Reported for previous 3 months, daily at 04:00<br>Data package is not distributed when there are no data reported. |

#### 4.4.24.8 *Reconciliation Price*

| Attribute | |
|---|---|
| **Name** | Reconciliation Price |
| **Receiver** | BRP |
| **Description** | Reconciliation Price per MBA |
| **Format (Short Name)** | Reconciliation Price |
| **Document Standard** | UTILTS & APERAK model and schema: IG-version: E5SE1B IG-revision: 12 |
| **UTILTS Message Type** | S01 |
| **Aggregation** | Time Aggregation – M (Monthly) |
| **Time Period From** | M-3 |
| **Time Period To** | M |
| **Time Trigger (Words)** | Daily basis, morning 04:00 |

#### 4.4.24.9 *Reconciliation Quantity and Amount per Country per BRP*

| Attribute | |
|---|---|
| **Name** | Reconciliation Quantity and Amount per MGA per BRP |
| **Receiver** | BRP |
| **Description** | Reconciliation Quantity and Amount per MGA per BRP |
| **Format (Short Name)** | Reconciliation Quantity and Amount |
| **Document Standard** | UTILTS & APERAK model and schema: IG-version: E5SE1B IG-revision: 12 |
| **UTILTS Message Type** | S01 |
| **Aggregation** | Time Aggregation – M (Monthly) |

| | |
|---|---|
| **Time Period From** | M-3 |
| **Time Period To** | M-1 |
| **Time Trigger (Words)** | Reported for previous 3 months, daily at 04:00 |
| **Data Scope (Filter)** | DP contains BRP Reconciliation results for all respective MGAs.<br>• Reconciliation Quantity<br>• Reconciliation Losses Quantity<br>• Bought Reconciliation Quantity<br>• Sold Reconciliation Quantity<br>• Bought Reconciliation Amount<br>• Sold Reconciliation Amount<br>If BRP Branch has different preferred currency from EUR, then the file contains results in local currency and also results in EUR currency.<br>The data is always sent with eSett as Buyer and BRP as Seller. The signs therefore follow these rules:<br>Bought Reconciliation amount is displayed as negative value.<br>Sold Reconciliation amount is displayed as positive value.<br>***Additional Rules:***<br>If there are no input values for the results calculation, then zeros are used and reported |

#### 4.4.24.10 *Reconciliation Quantity and Amount per MGA per BRP*

| **Attribute** | |
|---|---|
| **Name** | Reconciliation Quantity and Amount per MGA per BRP |
| **Receiver** | BRP |
| **Description** | Reconciliation Quantity and Amount per MGA per BRP |
| **Format (Short Name)** | Reconciliation Quantity and Amount |
| **Document Standard** | UTILTS & APERAK model and schema: IG-version: E5SE1B IG-revision: 12 |

| | |
|---|---|
| **UTILTS Message Type** | S01 |
| **Aggregation** | Time Aggregation – M (Monthly) |
| **Time Period From** | M-3 |
| **Time Period To** | M-1 |
| **Time Trigger (Words)** | Reported for previous 3 months, daily at 04:00 |
| **Data Scope (Filter)** | DP contains BRP Reconciliation results for all respective MGAs.<br>• Reconciliation Quantity<br>• Reconciliation Losses Quantity<br>• Bought Reconciliation Quantity<br>• Sold Reconciliation Quantity<br>• Bought Reconciliation Amount<br>• Sold Reconciliation Amount<br>If BRP Branch has different preferred currency from EUR, then the file contains results in local currency and also results in EUR currency.<br>The data is always sent with eSett as Buyer and BRP as Seller. The signs therefore follow these rules:<br>Bought Reconciliation amount is displayed as negative value.<br>Sold Reconciliation amount is displayed as positive value.<br>***Additional Rules:***<br>If there are no input values for the results calculation, then zeros are used and reported |

#### 4.4.24.11 *Load Profile per MGA (DSO)*

| **Attribute** | |
|---|---|
| **Name** | Load Profile per MGA |
| **Receiver** | DSO |
| **Description** | All Load Profiles per MGA in Sweden |

| | |
|---|---|
| **Format (Short Name)** | Load Profiles |
| **Document Standard** | UTILTS & APERAK model and schema: IG-version: E5SE1B IG-revision: 12 |
| **UTILTS Message Type** | S01 |
| **Aggregation** | Time Aggregation – QH (15-minute) |
| **Time Period From** | D-14 |
| **Time Period To** | D-1 |
| **Time Trigger (Words)** | Daily basis, morning 04:00<br>Data package is not distributed when there are no data reported. |
| **Data Scope (Filter)** | System selects all MGAs in Sweden. |

#### 4.4.24.12 *Load Profile per own MGA (BRP)*

| **Attribute** | |
|---|---|
| **Name** | Load Profile per MGA |
| **Receiver** | DSO |
| **Description** | All Load Profiles per MGA in Sweden |
| **Format (Short Name)** | Load Profiles |
| **Document Standard** | UTILTS & APERAK model and schema: IG-version: E5SE1B IG-revision: 12 |
| **UTILTS Message Type** | S01 |
| **Aggregation** | Time Aggregation – QH (15-minute) |
| **Time Period From** | D-14 |
| **Time Period To** | D-1 |
| **Time Trigger (Words)** | Daily basis, morning 04:00 |

| | |
|---|---|
| | Data package is not distributed when there are no data reported. |
| **Data Scope (Filter)** | System selects all MGAs in Sweden. |

4.4.24.13 *Load Profile per own MGA (DSO)*

| **Attribute** | |
|---|---|
| **Name** | Load Profile per MGA |
| **Receiver** | DSO |
| **Description** | All Load Profiles per MGA in Sweden |
| **Format (Short Name)** | Load Profiles |
| **Document Standard** | UTILTS & APERAK model and schema: IG-version: E5SE1B IG-revision: 12 |
| **UTILTS Message Type** | S01 |
| **Aggregation** | Time Aggregation – QH (15-minute) |
| **Time Period From** | D-14 |
| **Time Period To** | D-1 |
| **Time Trigger (Words)** | Daily basis, morning 04:00<br>Data package is not distributed when there are no data reported. |
| **Data Scope (Filter)** | System selects all MGAs in Sweden. |

#### 4.4.24.13.1 Document Format Attribute Usage

| **Attribute (UTILTS schema)** | **Cl.** | **Field** | **Value Description** |
|---|---|---|---|
| Transaction level (repeated several times per message) | | | |
| [1] SG5 Segment<br>SG5 | **1..999** | | **Segment Group 5 contains transaction data of the Data Package** |

| | | | |
|---|---|---|---|
| **[2] Identity segment**<br>SG5/IDE | 1..1 | | IDE segment<br>Example: *IDE+24+MD200205832148'* |
| **[3] Transaction identification**<br>SG5/IDE/7495 | 1..1 | | Transaction identification = *24* |
| **[3] Transaction ID**<br>SG5/IDE+24/C206/7402 | 1..1 | 505 | The sender's unique id of the transaction. Used for referencing to a specific transaction. |
| **[2] Place/location identification**<br>SG5/LOC | 1..1 | | LOC segment<br>Example: *LOC+239+TEX:SVK:260'* |
| **[3] Location Function code qualifier**<br>SG5/LOC/3227 | 1..1 | | Metering grid area (MGA) = 239 |
| **[3] Location name code**<br>SG5/LOC+239/C517/3225 | 1..1 | 260a | MGA reported per transaction<br>*MGA ID* |
| **[3] Code list identification code**<br>SG5/LOC+239/C517/1131 | 1..1 | | Code list identification code<br>*SVK = Svenska kraftnät* |
| **[3] Code list responsible agency**<br>SG5/LOC+239/C517/3055 | 1..1 | | Responsible agency for code list<br>*260 = eBIX* |
| **[2] Name and Address segment**<br>SG5/NAD | 1..1 | | NAD segment<br>Example: *NAD+DDK+55555:SVK:260'* |
| **[3] Party function code qualifier**<br>SG5/NAD/3035 | 1..1 | | DDK = Balance responsible (BRP) |

| | | | |
|---|---|---|---|
| **[3] Balance Responsible**<br>SG5/NAD+DDK/C082/3039 | 1..1 | 262 | Balance Responsible Party<br>*BRP's Ediel ID* |
| **[3] Code list identification code**<br>SG5/NAD+DDK/C082/1131 | 1..1 | | Code list identification code<br>*SVK = Svenska kraftnät* |
| **[3] Code list responsible agency**<br>SG5/NAD+DDK//C082/3055 | 1..1 | | Responsible agency for code list<br>*260 = eBIX* |
| **[2] Line item segment**<br>SG5/LIN | 1..1 | | LIN segment<br>Example: *LIN+++8716867000030:::9'* |
| **[3] Line item identifier**<br>SG5/LIN/1082 | 1..1 | | Empty value, not used |
| **[3] Action request/notification description code**<br>SG5/LIN/1229 | 1..1 | | Empty value, not used |
| **[3] Product Identification**<br>SG5/LIN/C212/7140 | 1..1 | 506 | Generic product code – Item identifier (8716867000030)<br>*8716867000030 = energy active* |
| **[3] Code list responsible agency**<br>SG5/LIN/C212/3055 | 1..1 | | Responsible agency for code list<br>*9 = GS1 (EAN)* |
| **[2] Additional Product ID**<br>SG5/PIA | 1..1 | | PIA segment<br>*Examples below* |
| **[3] Product identifier code qualifier**<br>SG5/PIA/4347 | 1..1 | | 1 = Additional information |
| **[3] Time series product** | 1..1 | 511 | Time series product |

| | | | |
|---|---|---|---|
| SG5/PIA+1 | | | • Final Loadshare per MGA per BRP (general)<br>  ○ *PIA+1+Z04:PC:SVK:260+U85:PT:SVK:260+Z04:OT:SVK:260+Z58:LOD:SVK:260+Z05:BAP:SVK:260'*<br>• *Final Loadshare per MGA per BRP (losses)*<br>  ○ *PIA+1+Z04:PC:SVK:260+Z86:PT:SVK:260+Z04:OT:SVK:260+Z58:LOD:SVK:260+Z05:BAP:SVK:260'* |
| **[3] Item identifier**<br>SG5/PIA+1/C212/7140 | 1..1 | 511**a** | Product characteristic<br>*Z04* |
| **[3] Item type identification code**<br>SG5/PIA+1/C212/7143 | 1..1 | | Item type identification code for Product Characteristic<br>*PC* |
| **[3] Code list identification code**<br>SG5/PIA+1/C212/1131 | 1..1 | | Code list identification code for PC<br>*SVK* |
| **[3] Code list responsible agency code**<br>SG5/PIA+1/C212/3055 | 1..1 | | Code list responsible agency for PC<br>*260 = eBIX* |
| **[3] Item identifier**<br>SG5/PIA+1/C212/7140 | 1..1 | 511**b** | Product Types:<br>*U85, Z86, TODO* |
| **[3] Item type identification code**<br>SG5/PIA+1/C212/7143 | 1..1 | | Item type identification code for Product Type<br>*PT* |
| **[3] Code list identification code**<br>SG5/PIA+1/C212/1131 | 1..1 | | Code list identification code for PT<br>*SVK* |
| **[3] Code list responsible agency code**<br>SG5/PIA+1/C212/3055 | 1..1 | | Code list responsible agency for PT<br>*260 = eBIX* |

| | | | |
|---|---|---|---|
| **[3] Item identifier**<br>SG5/PIA+1/C212/7140 | 1..1 | 511**c** | Identity Type<br>*Z04* |
| **[3] Item type identification code**<br>SG5/PIA+1/C212/7143 | 1..1 | | Item type identification code for Identity Type<br>*OT* |
| **[3] Code list identification code**<br>SG5/PIA+1/C212/1131 | 1..1 | | Code list identification code for OT<br>*SVK* |
| **[3] Code list responsible agency code**<br>SG5/PIA+1/C212/3055 | 1..1 | | Code list responsible agency for OT<br>*260 = eBIX* |
| **[3] Item identifier**<br>SG5/PIA+1/C212/7140 | 1..1 | 511**d** | Level of Details<br>*Z58* |
| **[3] Item type identification code**<br>SG5/PIA+1/C212/7143 | 1..1 | | Item type identification code for Level of Details<br>*LOD* |
| **[3] Code list identification code**<br>SG5/PIA+1/C212/1131 | 1..1 | | Code list identification code for OT<br>*SVK* |
| **[3] Code list responsible agency code**<br>SG5/PIA+1/C212/3055 | 1..1 | | Code list responsible agency for OT<br>*260 = eBIX* |
| **[3] Item identifier**<br>SG5/PIA+1/C212/7140 | 1..1 | 511**e** | Business Activity Phase<br>*Z05* |
| **[3] Item type identification code**<br>SG5/PIA+1/C212/7143 | 1..1 | | Item type identification code for Business Activity Phase<br>*BAP* |

| | | | |
|---|---|---|---|
| **[3] Code list identification code**<br>SG5/PIA+1/C212/1131 | 1..1 | | Code list identification code for BAP<br>*SVK* |
| **[3] Code list responsible agency code**<br>SG5/PIA+1/C212/3055 | 1..1 | | Code list responsible agency for BAP<br>*260 = eBIX* |
| **[2] Date/time/period segment**<br>SG5/DTM | 1..3 | | DTM segment |
| **[3] Date or time or period function code qualifier**<br>SG5/DTM/C507/2005 | 1..1 | | *324 = Processing period*<br>*368 = Latest update date*<br>*354 = Resolution (observation length default)* |
| **[3] Delivery period**<br>SG5/DTM+324/C507/2380 | 1..1 | 245 | Current period of the transaction<br>Example: *DTM+324:202201010000202203010000:719'*<br>• 2022 01.01. 00:00 – 2022 03.01. 00:00<br>  ○ Period for January + February 2022 |
| **[3] Delivery period format**<br>SG5/DTM+324/C507/2379 | 1..1 | | Period format<br>*719 = CCYYMMDDHHmmCCYYMMDDHHmm* |
| **[3] Latest update date**<br>SG5/DTM+368/C507/2380 | 1..1 | 532 | Latest update date<br>Example: *DTM+368:202210231336:203'*<br>• 2022-10-23 13:36 |
| **[3] Delivery period format**<br>SG5/DTM+368/C507/2379 | 1..1 | | Period format<br>*203 = CCYYMMDDHHmm* |
| **[3] Resolution**<br>SG5/DTM+354/C507/2380 | 1..1 | 508 | Resolution for the whole transaction<br>Example: *DTM+354:1:802'* |
| **[3] Period format code**<br>SG5/DTM+354/C507/2379 | 1..1 | | Resolution code<br>*802 = month* |

| | | | |
|---|---|---|---|
| **[2] Status segment**<br>SG5/STS | 1..1 | | STS segment<br>Example: *STS+7++E43::260'* |
| **[3] Status category code**<br>SG5/STS/C601/9015 | 1..1 | | *STS = 7 is always used in UTILTS transactions* |
| **[3] Code list identification code**<br>SG5/STS/C601/1131 | 1..1 | | Empty value, not used |
| **[3] Reason for transaction**<br>SG5/STS+7/C556/9013 | 1..1 | 223 | Reason for transaction<br>*E43 = Final Settlement* |
| **[3] Code list identification code**<br>SG5/STS+7/C556/1131 | 1..1 | | Empty value, not used |
| **[3] Code list responsible agency code**<br>SG5/STS+7/C556/3055 | 1..1 | | Code list agency code<br>*260 = eBIX* |
| **[2] Measurements segment**<br>SG5/MEA | 1..1 | | MEA segment<br>Example: *MEA+AAZ++KWH'* |
| **[3] Measurement purpose code qualifier**<br>SG5/MEA/6311 | 1..1 | | *AAZ = Handling unit measurement* |
| **[3] Measurement details**<br>SG5/MEA/C502 | 1..1 | | Empty value, not used |
| **[3] Unit measurement**<br>SG5/MEA+AAZ/C174/6411 | 1..1 | 264 | Specifies unit for the whole transaction<br>*KWH = Kilowatt Hour* |
| **[2] SG7 segment**<br>SG5/SG7 | 1..3 | | Segment Group 7 contains characteristic value data of the Data Package |

| | | | |
|---|---|---|---|
| **[3] Characteristic/class ID**<br>SG5/SG7/CCI | 1..1 | | CCI segment<br>*CCI+++E02::260'* |
| **[4] Class Type Code**<br>SG5/SG7/CCI/7059 | 1..1 | | Empty value, not used |
| **[4] Measurement details**<br>SG5/SG7/CCI/C502 | 1..1 | | Empty value, not used |
| **[4] Characteristic description**<br>SG5/SG7/CCI/C240/7037 | 1..1 | | *E02 = Settlement method* |
| **[4] Code list Identification code**<br>SG5/SG7/CCI/1131 | 1..1 | | Empty value, not used |
| **[4] Code list responsible agency**<br>SG5/SG7/CCI/3055 | 1..1 | | Code list responsible agency<br>*260 = eBIX* |
| **[3] Characteristic value**<br>SG5/SG7/CAV | 1..1 | | CAV segment<br>*CAV+E01::260'* |
| **[4] Characteristic value description code**<br>SG5/SG7/CAV/C889/7111 | 1..1 | 254 | Settlement method type<br>*E01 = profiled* |
| **[4] Code list identification code**<br>SG5/SG7/CAV/C889/1131 | 1..1 | | Empty value, not used |
| **[4] Code list responsible agency code**<br>SG5/SG7/CAV/C889/3055 | 1..1 | | Code list identification agency code<br>*260 = eBIX* |
| **Observation** | | | |

| | | | |
|---|---|---|---|
| **[2] SG8 Segment**<br>SG5/SG8 | 1..9999999 | | Segment Group 8 contains sequence data of the Data Package |
| **[3] Sequence details segment**<br>SG5/SG8/SEQ | 1..1 | | SEQ segment<br>Example: *SEQ++1'* |
| **[4] Action Request/notification description code**<br>SG5/SG8/SEQ/1229 | 1..1 | | Empty value, not used |
| **[4] Observation ID**<br>SG5/SG8/SEQ/C286/1050 | 1..1 | 514 | Sequence number for each line, start always at 1 and adjust upwards with 1 for each line<br>Example: *SEQ++1'* |
| **[3] SG11 Segment**<br>SG5/SG8/SG11 | 1..99 | | Segment Group 11 contains Quantity data of the Data Package |
| **[4] Quantity segment**<br>SG5/SG8/SG11/QTY | 1..1 | | QTY segment<br>Example: *QTY+136:-62''* |
| **[5] Quantity type code qualifier**<br>SG5/SG8/SG11/QTY/C186/6063 | 1..1 | | Quantity type code qualifier<br>*136 = Period quantity reached* |
| **[5] Period Quantity Planned**<br>SG5/SG8/SG11/QTY+135/C186/6060 | 1..1 | 515 | Planned energy volume<br>Example: *QTY+136:**-62'*** |

## 4.5 XML Samples and XSD

XML Scheme Definition (XSD) of all documents is available on Ediel.org in common package 'Complete set of NBS Documents'.

XML Samples available at esett.com Data Communications page.