



Basse Data Packages
User Guide for XML Documents

10.10.2024

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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. 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.

eSett Online Service 31 Admin Company026 (CET) | BRP10 (BRP) ▾

INPUT DATA SETTLEMENT STRUCTURES FINANCES REPORTS MESSAGES INFORMATION ADMINISTRATION

Reports > Data Packages Management

Data Packages Management

Name: Frequency: Subscription: ☒ Both ☐ Subscribed ☐ Not Subscribed

Name	Description	Format ↑	Frequency	Period from	Period to	Granularity		
Activated Res...	BRP's activate...	Activated Reserves	Daily	D-14	D-1	Hourly	Inactive	View Messages Subscribe
Bilateral trades	Bilateral trade...	Bilateral Trade	Daily	D-14	D-1	Hourly	Inactive	View Messages Subscribe
REs' consump...	All BRP's resp...	Consumption	Daily	D-14	D-1	Hourly	Inactive	View Messages Subscribe
Consumption i...	BRP's consu...	Consumption Imbalance	Daily	D-14	D-1	Hourly	Inactive	View Messages Subscribe
Consumption ...	Consumption ...	Generic	Daily	D-14	D-1	Hourly	Inactive	View Messages Subscribe
Production Mi...	Production Mi...	Generic	Daily	D-14	D-1	Hourly	Inactive	View Messages Subscribe
Consumption I...	Consumption ...	Generic	Daily	D-14	D-1	Hourly	Inactive	View Messages Subscribe

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

eSett Online Service 86 Admin Company026 (CET) | BRP10 (BRP) ▾

INPUT DATA SETTLEMENT STRUCTURES FINANCES REPORTS MESSAGES INFORMATION ADMINISTRATION

Reports > Data Packages Management

Data Packages Management

Name Frequency Subscription ☒ Both ☐ Subscribed ☐ Not Subscribed

[Filter](#) [Clear](#)

Name	Description	Format	Frequency	Period from	Period to	Granularity		
Bilateral trades	Bilateral trade...	Bilateral Trade	Daily	D-14	D-1	Hourly	Active in CET	View Messages Unsubscribe
Consumption i...	BRP's consu...	Consumption Imbalance	Daily	D-14	D-1	Hourly	Active in CET	View Messages Unsubscribe
Consumption ...	Consumption ...	Generic	Hourly	D-14	D-1	Hourly	Active in CET	View Messages Unsubscribe
MGA Imbalan...	All MGAs' imb...	MGA Imbalance	Daily	D-14	D-1	Hourly	Active in CET	View Messages Unsubscribe
REs' consump...	All BRP's resp...	Consumption	Daily	D-14	D-1	Hourly	Active in CET	View Messages Unsubscribe
Production im...	BRP's product...	Production Imbalance	Daily	D-14	D-1	Hourly	Active in CET	View Messages Unsubscribe
Activated Res...	BRP's activate...	Activated Reserves	Daily	D-14	D-1	Hourly	Active in CET	View Messages Unsubscribe
MGA imbalan...	MGA imbalan...	Generic	Daily	D-14	D-1	Hourly	Active in CET	View Messages Unsubscribe
MGA Imbalan...	MGA Imbalan...	Generic	Daily	D-14	D-1	Hourly	Active in CET	View Messages Unsubscribe
Elbas Flow Ex...	Elbas Flow Ex...	Generic	Daily	D-14	D-1	Hourly	Active in CET	View Messages Unsubscribe

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

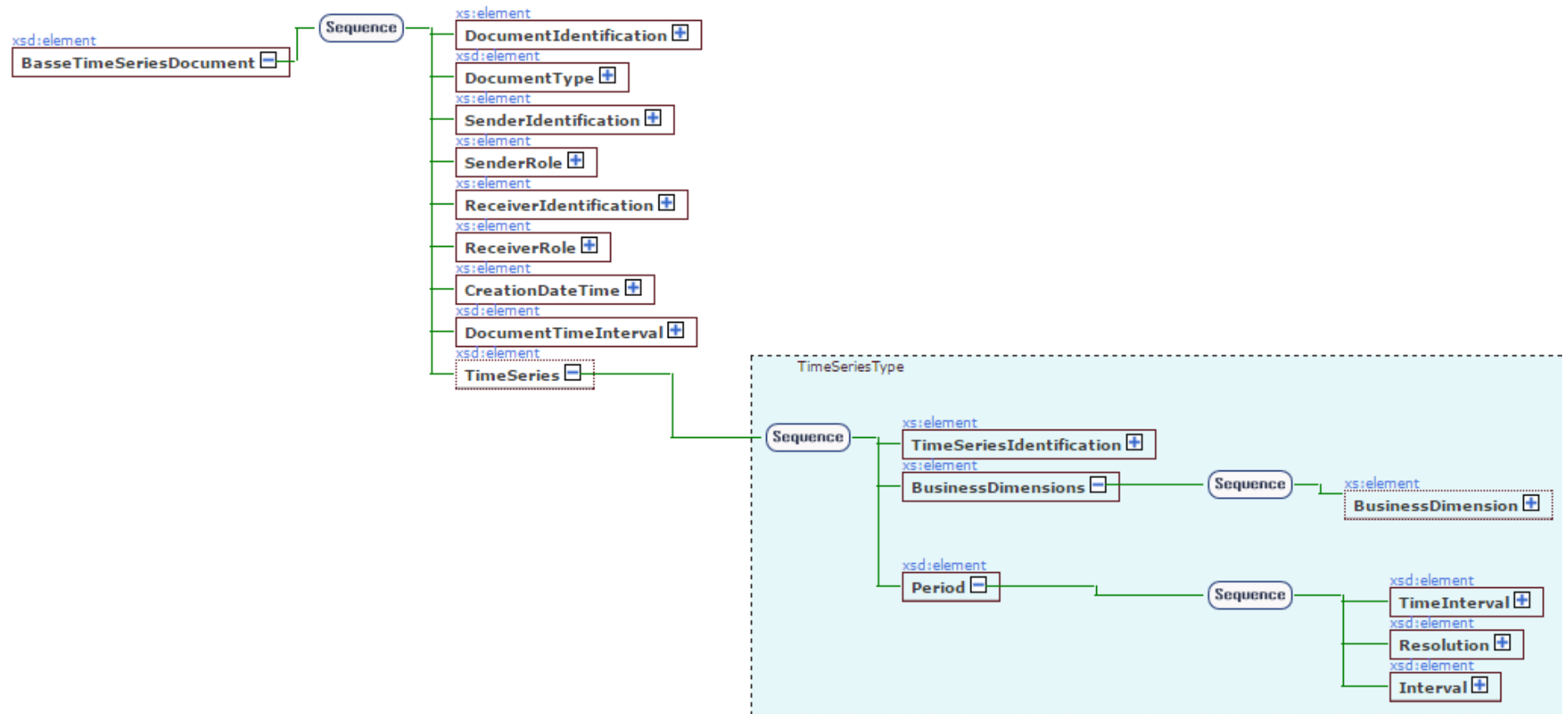
Element Attribute	Card.	Description	Max Size	XML Example
[1] Basse Time Series Document	[1]	The root of the document.		
[2] Document Identification	[1]	Unique identification of the business document.	A35	<DocumentIdentification v="9e4ceec7825544b7a7d7203aaa10a451">
[2] Document Type	[1]	<p>Type of document. 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.</p> <p>See Table 6 - Generic Data Package Document Types with mapping between data package name and document type.</p> <p><i>Note: Document Type Codes List is not part of XML Scheme Definition (XSD) to allow adding a new data package without changing the interface.</i></p>	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]	<p>Coding scheme for sender identification.</p> <p>A01 – EIC</p>	A3	
[2] Sender Role	[1]	<p>The sender role, which identifies the role of the sender within the document.</p> <p>A05 - Imbalance settlement responsible</p>	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	

		<ul style="list-style-type: none"> • A01 - EIC • A10 - GS1 • NFI - Finland National coding scheme • NSE - Sweden National coding scheme 		
[2] Receiver Role	[1]	<p>The receiver role, which identifies the role of the receiver within the document.</p> <ul style="list-style-type: none"> • A08 – Balance Responsible Party (BRP) • 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]	<p>The beginning and ending date and time of the period covered by the document containing the time series.</p> <p>The start and end date and time is expressed as YYYY-MM-DDTHH:MMZ/YYYYMM-DDTHH:MMZ. The time is expressed in UTC.</p>	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]	<p>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.</p> <p>See the list of business dimensions used by each data package in Table 6 - Generic Data Package Document Types.</p>		<BusinessDimensions>

[4] Business Dimension	[1..*]	<p>A reference of business dimension to which the data is bound. Business dimension contains name, value and coding scheme if it is used.</p> <p>See Table 4 - Business Dimension Types.</p>		<pre><BusinessDimension name="MBA" codingScheme="A01" v="TD_MBA1" /> <BusinessDimension name="BRP" codingScheme="A01" v="TD_BRP1" /></pre>
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 be expressed in UTC with the following format: YYYY-MM-DDTHH:MMZ/YYYY-MMDDTHH:MMZ.	A35	<pre><TimeInterval v="2015-01-13T00:00Z/2015-01-13T23:00Z" /></pre>
[5] Resolution	[1]	<p>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.</p> <p>PT15M for 15-minute resolution, PT60M (PT1H) for hourly resolution, P1D – Day, P7D -Week</p>	A14	<pre><Resolution v="PT60M"/></pre>
[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.		<pre><Interval></pre>

[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]	<p>A value specified for the given position. 'Name' attribute specifies type of the value (currently only quantity is supported).</p> <p>The maximum length of this information is 17 numeric characters (decimal point and sign, if used, included).</p> <p>The resolution is in MWh with max 6 decimals for value of type 'Quantity'.</p>	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: <code><BusinessDimension name="BRP" codingScheme="A01" v="BRP1" /></code>
RE	Yes	Value contains Retailer (RE) unique code with Coding Scheme attribute set (see Coding Schemes). XML element sample: <code><BusinessDimension name="RE" codingScheme="A01" v="RE1" /></code>
MGA	Yes	Value contains Metering Grid Area (MGA) unique code with Coding Scheme attribute set (see Coding Schemes). XML element sample: <code><BusinessDimension name="MGA" codingScheme="A01" v="MGA1" /></code>
MBA	Yes	Contains Market Balance Area (MBA) unique code with Coding Scheme attribute set (see Coding Schemes). <code><BusinessDimension name="MBA" codingScheme="A01" v="MBA1" /></code>
CONSUMPTION_TYPE	No	Identifies the type of the consumption together with Measurement Type. See Consumption Type Code List. XML element sample: <code><BusinessDimension name="CONSUMPTION_TYPE" v="A04" /></code>
MEASUREMENT_TYPE	No	Identifies the type of consumption together with Consumption Business Type. See Consumption Type Code List. XML element sample: <code><BusinessDimension name="MEASUREMENT_TYPE" v="E01" /></code>
PU_TYPE	No	Identifies the type of Production Unit. XML element sample: <code><BusinessDimension name="PU_TYPE" v="WIND" /></code>

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	Receipient	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
Imbalance – Preliminary Results	BRP	Preliminary Calculation	Imbalance	(SERO) Send Settlement Results - Consumption
Imbalance – Final Results	BRP	Final Calculation	Imbalance	(SERO) Send Settlement Results - Production
Imbalance – Invoiced Results	BRP	Invoicing Calculation	Imbalance	(SERO) Send Settlement Results - Consumption
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 Confirmation Final	MGCO Confirmation Report	(MGCO) Send Final Confirmation Report
Bilateral Trade Intermediate Confirmation Report	BRP	BICO Confirmation Final	BICO Confirmation Report	(BICO) Send Intermediate Confirmation Report

Bilateral Trade Final Confirmation Report	BRP	BICO Confirmation Final	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
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	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

eSett Online Service Admin Company026 (CET) | DSO11 (DSO) ▾

INPUT DATA SETTLEMENT STRUCTURES FINANCES REPORTS MESSAGES INFORMATION ADMINISTRATION

Reports > Data Packages Management

Data Packages Management

Name Frequency Subscription ☒ Both ☐ Subscribed ☐ Not Subscribed

[Filter](#) [Clear](#)

Name	Description	Format	Frequency	Period from	Period to	Granularity		
Retailer Balanc...	Retailer Balan...	Party Master Data	Daily	D	D+14	Hourly	Inactive	View Messages Subscribe
Retailer Balanc...	Retailer Balan...	Party Master Data	Daily	D	D+14	Hourly	Inactive	View Messages Subscribe
MGA Exchanges	All DSO's MGA...	MGA Exchange	Daily	D-14	D-1	Hourly	Inactive	View Messages Subscribe
Production per...	All DSO's prod...	Production	Daily	D-14	D-1	Hourly	Inactive	View Messages Subscribe
MGA Imbalanc...	All DSO's MGA...	MGA Imbalance	Daily	D-14	D-1	Hourly	Inactive	View Messages Subscribe
Metering Grid ...	All DSO's mete...	Consumption	Daily	D-2	D-1	Hourly	Inactive	View Messages Subscribe
REs' consump...	All DSO's MGA...	Consumption	Daily	D-2	D-1	Hourly	Inactive	View Messages Subscribe

Total pages: 1 (7 rows) ⏮ ⏪ 1 ⏩ ⏭

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 Data package is not distributed when there are no data reported.
Data Scope (Filter)	System selects all DSO consumptions of type Losses 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 15-minutes
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 Data package is not distributed when there are no data reported.
Data Scope (Filter)	System selects all DSO consumptions of type Losses 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 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 15-minute
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 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	
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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 15-minute
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.
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4.4.1.7 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.

4.4.1.7.1 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]	<i>Unique identification of the business document.</i>
[2] Document Type	[1]	E31 – Aggregated Metered Data from the Metered Data Aggregator
[2] Creation	[1]	<i>Document Creation Time Stamp.</i>
[2] Sender Energy Party	[1]	eSett Code and Coding Scheme
[2] Recipient Energy Party	[1]	Subscriber <ul style="list-style-type: none"> BRP Code and Coding Scheme 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..*]	<i>See Time Series Attribute Description</i>

4.4.1.7.2 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 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 E02 - Metered
[3] Business Type	[1]	A04 – for General B28 – for Large Installation B27 – for Pumped A15 – for Losses A07 – for Pumped Storage 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: <ul style="list-style-type: none"> • “21” Temporary • “56” Estimated, approved for billing 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 Exchange

Attribute	
Name	MGA Exchange
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 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 Exchange 15-minute

Attribute	
Name	MGA Exchange 15-minute
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 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.

4.4.2.3.1 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..*]	<i>See Time Series part.</i>

4.4.2.3.2 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..*]	<i>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.</i>
[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..*]	<i>The number of occurrences with incremental sequence within Observation Time Period interval.</i>
[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. <i>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).</i>
[4] Energy Quantity	[0..1]	Quality is present only if it is different from 'Metered': <ul style="list-style-type: none"> • 21 Temporary • 56 Estimated (<i>approved for billing</i>)

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 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 / 13:10 CET 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 15-minute
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 CET 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 15-minute
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 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]	<i>Unique identification of the business document.</i>
[2] Document Type	[1]	'E31' – stands for Aggregate metered data from the Metered Data Aggregator
[2] Creation	[1]	<i>Document Creation Time Stamp.</i>
[2] Sender Energy Party	[1]	eSett Code and Coding Scheme
[2] Recipient Energy Party	[1]	Subscriber <ul style="list-style-type: none"> BRP Code and Coding Scheme 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..*]	<i>See Time Series Attribute Description</i>

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]	<ul style="list-style-type: none"> • "A01" - Production
[3] Asset Type	[0..1]	"B14" Nuclear "B16" Solar "B20" Other production "Z04" Thermal "Z05" Wind <ul style="list-style-type: none"> • "Z06" Hydro
[3] Production Type	[0..1]	<ul style="list-style-type: none"> • "Z01" – Normal • "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: <ul style="list-style-type: none"> • “21” Temporary • “56” Estimated, approved for billing 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 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 Data package is not distributed when there are no data reported.
Data Scope (Filter)	All DSO's MGAs' imbalances per MGA For Datahub receiver: <ul style="list-style-type: none"> Only those DSO's MGAs are listed to which the Datahub has a connection (MGA-Datahub relation). 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 15-minute
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 / 10:00 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 15-minute
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 Data package is not distributed when there are no data reported.
Data Scope (Filter)	All DSO's MGAs' imbalances per MGA

	<p>For Datahub receiver:</p> <ul style="list-style-type: none"> Only those DSO's MGAs are listed to which the Datahub has a connection (MGA-Datahub relation). 15-minute values are limited by MGA-Datahub relation validity (Datahub cannot see MGA data which are out of MGA-Datahub relation validity).
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4.4.4.5 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.

4.4.4.5.1 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. 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 A02 – Final - used for Final/Invoicing Calculation event <i>Note: MGA Imbalance Results has Business Type B29 in Account Time Series</i>
[2] Process Type	[1]	A06 - Imbalance settlement
[2] Classification Type	[1]	A02 - Summary type
[2] Sender Identification	[1]	<i>eSett Code and Coding Scheme</i>
[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 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. YYYY-MM-DDTHH:MMZ/YYYY-MM-DDTHH:MMZ
[2] Domain	[1]	Class <i>Global Parameter</i> , attribute <i>NBS Domain</i> and <i>NBS Domain Coding Scheme</i>
[2] Account Time Series	[1..*]	<u>Settlement Results:</u> 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) <u>MGA Imbalance:</u> Per each MGA and BRP. MGA Imbalance has dimensions: MGA, DSO, RE and BRP.

4.4.4.5.2 Time Series for MGA Imbalance 15-minute

Attribute (XML Schema)	CI.	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). 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. 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..*]	<i>Not used for MGA Imbalance</i>
[3] Period	[1..*]	
[4] Time Interval	[1]	Time interval of reported values. It is subset of Accounting Period time interval from the document header. 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]	• <i>Not used for MGA Imbalance</i>

4.4.5 Production Data Packages

4.4.5.1 SDP: Production Per Production Unit (for DSO)

Attribute	
Name	Production Per Production unit
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 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 15-minute
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 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 (for BRP)*

Attribute	
Name	Production Per Production unit
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 / 13:10 CET 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 (for BRP) 15-minute*

Attribute	
Name	Production Per Production unit 15-minute

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 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 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.

4.4.5.5.1 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]	<i>Document ID Unique identification of the business document.</i>
[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: <ul style="list-style-type: none"> BRP Code and Coding Scheme 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..*]	<i>See Time Series part</i>

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

Attribute (XML schema)	CI.	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 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..*]	<i>The number of occurrences with incremental sequence within Observation Time Period interval</i>
[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”: <ul style="list-style-type: none"> • “21” Temporary • “56” Estimated, approved for billing.
[4] Quantity Missing	[0..1]	True (Used for missing quantity – quantity is null).

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

Attribute	
Name	REs' Production Data per Type and MGA 15-minute
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 Data package is not distributed when there are no data reported.
Data Scope (Filter)	System selects all DSO productions. DSO is production MEC attribute.

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

Attribute	
Name	REs' Production Data per Type and MGA 15-minute
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 Data package is not distributed when there are no data reported.
Data Scope (Filter)	System selects all BRP productions. BRP is production MEC attribute.

4.4.5.8 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.

4.4.5.8.1 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]	<i>Unique identification of the business document.</i>
[2] Document Type	[1]	'E31' – stands for Aggregate metered data from the Metered Data Aggregator
[2] Creation	[1]	<i>Document Creation Time Stamp.</i>
[2] Sender Energy Party	[1]	eSett Code and Coding Scheme
[2] Recipient Energy Party	[1]	Subscriber <ul style="list-style-type: none"> BRP Code and Coding Scheme 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..*]	<i>See Time Series Attribute Description</i>

4.4.5.8.2 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]	<ul style="list-style-type: none"> • “A01” - Production
[3] Asset Type	[0..1]	“B14” Nuclear “B16” Solar “B20” Other production “Z04” Thermal “Z05” Wind <ul style="list-style-type: none"> • “Z06” Hydro
[3] Production Type	[0..1]	<ul style="list-style-type: none"> • “Z01” – Normal • “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: <ul style="list-style-type: none"> • “21” Temporary • “56” Estimated, approved for billing 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, delivered till 07:00 CET 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 15-minute
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, delivered till 07:00 CET 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]	<i>Document ID - unique identification of the business document.</i>
[1] Document Version	[1]	<i>Document Version is Unique identification of the document. Should be fixed "1".</i>
[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. YYYY-MM-DDTHH:MM:SSZ/YYYY-MM-DDTHH:MM:SSZ
[1] Domain	[1]	Nordic Market Area ID = “10Y1001A1001A91G”
[1] Subject Party	[0..1]	<i>Not used by Basse</i>
[1] Subject Role	[0..1]	<i>Not used by Basse</i>
[1] Planned Resource Schedule Time Series	[1..*]	<i>See Time Series Attributes</i>

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..*]	<i>There can be one and more Production Plans for BRP receiver. If there no data, then the data package is not sent at all.</i>
[2] Time Series Identification	[1]	Unique Time Series Identification
[2] Business Type	[1]	Designates resource plan type. A01 Production A04 Consumption – NOT USED CURRENTLY Z52 Small scale production – NOT USED CURRENTLY
[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 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, delivered till 07:00 CET Data package is not distributed when there are no data reported.

Data Scope (Filter)	System selects all Bilateral trades under BRP's balance responsibility
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4.4.7.2 *SDP: Bilateral Trades Data Packages 15-minute*

Attribute	
Name	Bilateral Trades 15-minute
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, delivered till 07:00 CET 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 *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 PT15M – 15-minute resolution
[4] Interval	[1..*]	
[5] Pos	[1]	Relative position within the time interval.
[5] Qty	[1]	<i>Quantity of the product scheduled for the position.</i> The direction from out party (seller) to in party (buyer) is positive, while the opposite direction is negative (with minus signs)).

4.4.8 Prices Data Packages

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

Attribute	
Name	Imbalance Prices per Market Balance Area (MBA)
Receiver	BRP
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, delivered till 16:00 CET Data package is not distributed when there are no data reported.
Data Scope (Filter)	System selects 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): Z74 – Imbalance sales price Z75 – Imbalance purchase price

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

Attribute	
Name	Imbalance Prices per Market Balance Area (MBA) 15-minute
Receiver	BRP
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, delivered till 16:00 CET Data package is not distributed when there are no data reported.
Data Scope (Filter)	System selects 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): Z74 – Imbalance sales price Z75 – Imbalance purchase price

4.4.8.3 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: Z74 – Imbalance sales price 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 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]	<i>Not used by this data package</i>

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

Attribute	
Name	Imbalance Prices per Market Balance Area (MBA) 15-minute
Receiver	BSP/BRP
Description	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 Data package is not distributed when there are no data reported.

Data Scope (Filter)	<p>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):</p> <p>‘B20’ – FRR-A Up Regulation Price</p> <p>‘B21’ – FRR-A Down Regulation Price</p>
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4.4.8.5 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 or Subscriber BRP Code and Coding Scheme
[2] Receiver Role	[1]	‘A08’ – BRP (Balance Responsible Party) ‘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. 'B20' – FRR-A Up Regulation Price '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 PX Trades Data Packages

4.4.9.1 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 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).

4.4.9.2 *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 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).
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4.4.9.3 *SDP: PX Trades – Intraday Continuous 15-minute*

Attribute	
Name	PX Trades – Intraday Continuous 15-minute
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 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

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 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 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

4.4.10.1 *Document Format Attribute Usage*

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

Attribute (XML Schema)	CI.	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. “A04” – stands for System Operator area schedule.
[2] process.processType	[1..1]	Indicated the nature of the process that document addresses. “A17” – stands for Schedule day

[2] process_classificationType	[1..1]	Indicates the classification mechanism used to group a set of objects together. "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 A01=EIC 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. - The beginning and ending date and time of the period that the publication document is covering Period covered (in ISO 8601 UTC format) <period.timeInterval> <start>YYYY-MM-DDTHH:MMZ</start> <end>YYYY-MM-DDTHH:MMZ</end> </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 <u>Error! Reference source not found.</u>
[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. Value must be one of following: "A06" – stand for External trade without explicit capacity " B67 " – stands for DC flow with losses, i.e. importing end " B68 " – stands for DC flow without losses, i.e. exporting end
[3] product	[1..1]	The identification of the nature of the energy product "8716867000016" - Active Power
[3] object_aggregation	[1..1]	Identifies to what extent object is aggregated: "A01" Area
[3] in_Domain.mRID	[1..1]	The unique identification of the domain. The area where the product is being delivered. 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. 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)

		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. Contract should be one of the following options. A01 for day-ahead. A07 for Intraday Continuous 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. "A01" - Sequential Fixed Size Blocks
[3] Period	[1..*]	Repeating element
[4] timeInterval	[1..1]	The start and end time of the period. <period.timeInterval> <start>YYYY-MM-DDTHH:MMZ</start> <end>YYYY-MM-DDTHH:MMZ</end> </period.timeInterval>
[4] resolution	[1..1]	The definition of the number of units of time that compose an individual step within a period. 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]	<p>NEMO's PX Flows quantity received via PXFI data-flow as attribute Quantity, Quantity Without Loss or Quantity With Loss.</p> <p>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.</p>

4.4.10.2 SDP: PX Trades – Intraday Auction 15-minute

Attribute	
Name	PX Trades – Intraday Auction 15-minute
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)	<p>Daily basis, morning 05:40</p> <p>Data package is not distributed when there are no data reported.</p>

Data Scope (Filter)	System selects all BRP's Intraday Auction PX Market Trades. Document Process Type is 'A02' - (Intraday Auction).
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4.4.10.3 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, delivered till 07:00 CET 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).

4.4.10.4 SDP: PX Trades – Day-ahead 15-minute

Attribute	
Name	PX Trades – Day-ahead 15-minute
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, delivered till 07:00 CET 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).

4.4.10.5 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 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).

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

Attribute	
Name	PX Trades – Day ahead (NSL) 15-minute
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, morning 05:40 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).

4.4.10.7 *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 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. 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 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. The direction from out party (seller) to in party (buyer) is positive, while the opposite direction is negative (with minus signs)

4.4.11 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.

4.4.11.1 *SDP: Consumption Imbalance per BRP per MBA (Volume and Amount)*

Attribute	
Name	Consumption Imbalance per BRP per MBA (Volume and Amount)
Receiver	BRP
Description	BRP's consumption imbalance volumes (MWh) and amounts (EUR) per MBA
Format (Short Name)	Consumption 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's consumption imbalance volumes (MWh) and amounts (EUR) per MBA

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

Attribute	
Name	Production Imbalance per BRP per MBA (Volume and Amount)
Receiver	BRP
Description	BRP's production imbalance volumes (MWh) and amounts (EUR) per MBA
Format (Short Name)	Production 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's production imbalance volumes (MWh) and amounts (EUR) per MBA

4.4.11.3 *SDP: Single Imbalance per BRP per MBA (Volume and Amount)*

Attribute	
Name	Single Imbalance per BRP per MBA (Volume and Amount)
Receiver	BRP
Description	BRP's imbalance volumes (MWh) and amounts (EUR) per MBA
Format (Short Name)	Single 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's imbalance volumes (MWh) and amounts (EUR) per MBA

4.4.11.4 *SDP: Single Imbalance per BRP per MBA (Volume and Amount) 15-minute*

Attribute	
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Name	Single Imbalance per BRP per MBA (Volume and Amount) 15-minute
Receiver	BRP
Description	BRP's imbalance volumes (MWh) and amounts (EUR) per MBA in 15-minute resolution
Format (Short Name)	Single 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 BRP's imbalance volumes (MWh) and amounts (EUR) per MBA

4.4.11.5 *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

4.4.11.6 *SDP: MGA Imbalances – BRP 15-minute*

Attribute	
Name	MGA imbalances 15-minute
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 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

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

4.4.11.8 *SDP: MGA Imbalances – DSO 15-minute*

Attribute	
Name	MGA imbalances 15-minute
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
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4.4.11.9 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.

4.4.11.9.1 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]	A09 - Metered Data Aggregator for DSO subscriber 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.
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4.4.11.9.2 Time Series – Attribute Usage for MGA Imbalance

Attribute (XML Schema)	CI.	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). 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..*]	<i>Not used for MGA Imbalance</i>
[3] Period	[1..*]	
[4] Time Interval	[1]	Time interval of reported data.
[4] Resolution	[1]	PT1H – hourly resolution 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
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4.4.11.9.3 Time Series – Attribute Usage for Settlement Results

Attribute (XML Schema)	CI.	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 B14 - Production deviation for Production Imbalance Data Package 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 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 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 - <i>Imbalance Purchase</i> If Business Type = "B14" then BRP Production Imbalance - <i>Imbalance Purchase</i>

		If Business Type – ‘A17’ then BRP Imbalance – <i>Imbalance Purchase</i>
[5] Out Qty	[1]	If Business Type = ‘B15’ then BRP Consumption Imbalance - <i>Imbalance Sales</i> If Business Type = “B14” then BRP Production Imbalance - <i>Imbalance Sales</i> If Business Type – ‘A17’ then BRP Imbalance – <i>Imbalance Sales</i>
[5] Settlement Amount	[1]	If Business Type = ‘B15’ then BRP Consumption Imbalance, <i>Imbalance Amount</i> – positive value If Business Type = ‘B14’ then BRP Production Imbalance, <i>Imbalance Amount</i> –negative value If Business Type – ‘A17’ then BRP Imbalance – <i>Imbalance Amount value</i>

4.4.12 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.

4.4.12.1 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.
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 Data package is not distributed when there are no data reported.

Data Scope (Filter)	System selects all BSP's activated reserves of <u>FCR</u> sub-type. Data Scope: Reason Code = 'Z29'
Attribute Usage Specifics	Document contains following business types: <ul style="list-style-type: none"> • Process Type = 'A28' (Primary Reserve Process) • Business Type = 'A11' (Primary Control) • Reason Code = 'Z29' (FCR)

4.4.12.2 SDP: Primary Frequency Containment Reserves (FCR) 15-minute

Attribute	
Name	Primary Frequency Containment Reserves (FCR) 15-minute
Receiver	BSP
Description	All BSP'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 Data package is not distributed when there are no data reported.
Data Scope (Filter)	System selects all BSP's activated reserves of <u>FCR</u> sub-type. Data Scope: Reason Code = 'Z29'

Attribute Usage Specifics	Document contains following business types: <ul style="list-style-type: none"> • Process Type = 'A28' (Primary Reserve Process) • Business Type = 'A11' (Primary Control) • Reason Code = 'Z29' (FCR)
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4.4.12.3 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.
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 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. Data Scope: Reason Code = 'Z30'
Attribute Usage Specifics	Document contains following business types: <ul style="list-style-type: none"> • Process Type = 'A29' (Secondary Reserve Process) • Business Type = 'A12' (Secondary Control)

- Reason Code = 'Z30' (FRR-A)

4.4.12.4 SDP: Secondary Frequency Restoration Reserves (FRR) 15-minute

Attribute	
Name	Secondary Frequency Restoration Reserves (FRR) 15-minute
Receiver	BSP
Description	All BSP'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 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. Data Scope: Reason Code = 'Z30'
Attribute Usage Specifics	Document contains following business types: <ul style="list-style-type: none"> • Process Type = 'A29' (Secondary Reserve Process) • Business Type = 'A12' (Secondary Control) • Reason Code = 'Z30' (FRR-A)

4.4.12.5 SDP: Tertiary Replacement Reserves (RR)

Attribute	
Name	Tertiary Replacement Reserves (RR)
Receiver	BSP
Description	All BSP's activated reserves of type RR (Tertiary Control)
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 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')
Attribute Usage Specifics	Document contains following business types: <ul style="list-style-type: none"> • Process Type = 'A30' (Tertiary Reserve Process) • Business Type = 'A10' (Tertiary Control) • Reason Code in <ul style="list-style-type: none"> ○ 'Z31' - FRR-M, Balancing Power (for Norway the code means Ordinary regulation) ○ 'Z34' - FRR-M, Quarter regulation ○ 'Z35' - FRR-M, Special Regulation (for Norway the code means Specially regulation) ○ 'Z36' - Hour Change Regulation (for Norway the code means Move of production) ○ 'Z37' - Power Transaction

	<ul style="list-style-type: none"> ○ 'Z38' - TSO Internal Countertrades ○ 'Z39' - Day Ahead Production Adjustment (for Norway the code means Production smoothing)
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4.4.12.6 SDP: Tertiary Replacement Reserves (RR) - BSP 15-minute

Attribute	
Name	Tertiary Replacement Reserves (RR) 15-minute
Receiver	BSP
Description	<p>All BSP's activated reserves of type RR (Tertiary Control).</p> <p>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.</p> <p>The data package validity starts on BSP Go-live Date +1D.</p>
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)	<p>Daily basis, morning 04:20</p> <p>Data package is not distributed when there are no data reported.</p>
Data Scope (Filter)	<p>System selects all BSP's Tertiary activated reserves. Activated Reserves are filtered by Balancing Sub-service (Reason Code) listed below.</p> <p>Data Scope: Reason Code in ('Z31', 'Z34', 'Z35', 'Z36', 'Z37', 'Z38', 'Z39', 'Z63', 'Z89', 'Z74')</p> <p>2nd Reason Code in ('Z58', 'Z59', 'Z60', 'Z61', 'Z62')</p>
Attribute Usage Specifics	<p>Document contains following business types:</p> <ul style="list-style-type: none"> • Process Type = 'A30' (Tertiary Reserve Process)

- Business Type = 'A10' (Tertiary Control)
- Reason Code in
 - 'Z31' - FRR-M, Balancing Power (for Norway the code means Ordinary regulation)
 - 'Z34' - FRR-M, Quarter regulation
 - 'Z35' - FRR-M, Special Regulation (for Norway the code means Specially regulation)
 - 'Z36' - Hour Change Regulation (for Norway the code means Move of production)
 - 'Z37' - Power Transaction
 - 'Z38' - TSO Internal Countertrades
 - 'Z39' - Day Ahead Production Adjustment (for Norway the code means Production smoothing)
 - 'Z74' - FRR-M Disturbance
 - 'Z63' - Period shift activation
 - 'Z89' - Bidless activation (Activation without BSP bid)
- Reason Code and 2nd Reason Code combination in
 - 'Z31' 'Z58' - FRR-M, Balancing Power, Scheduled activation
 - 'Z31' 'Z59' - FRR-M, Balancing Power, Direct activation
 - 'Z31' 'Z60' - FRR-M, Balancing Power, Faster activation
 - 'Z31' 'Z61' - FRR-M, Balancing Power, Faster deactivation
 - 'Z31' 'Z62' - FRR-M, Balancing Power, Slower activation
 - 'Z35' 'Z58' - FRR-M, Special Regulation, Scheduled activation
 - 'Z35' 'Z59' - FRR-M, Special Regulation, Direct activation
 - 'Z35' 'Z60' - FRR-M, Special Regulation, Faster activation
 - 'Z35' 'Z61' - FRR-M, Special Regulation, Faster deactivation
 - 'Z35' 'Z62' - FRR-M, Special Regulation, Slower activation

4.4.12.7 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.

4.4.12.7.1 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: A28 – SDP Activated Reserves Primary A29 – SDP Activated Reserves Secondary 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. YYYY-MM-DDTHH:MM:SSZ/YYYY-MM-DDTHH:MM:SSZ
[2] Domain	[1]	Domain covered by the schedule document. Nordic Market Area ID = 10Y1001A1001A91G
[2] Reserve Allocation Result Time Series	[0..*]	<i>See Time Series Attributes</i>

4.4.12.7.2 Time Series - ERRP Planned Resource Schedule

Attribute (XML schema)	CI.	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: 'A10' – SDP Activated Reserves Tertiary 15-minute 'A11' – SDP Activated Reserves Primary 15-minute '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 'A02' Down
[3] Reason	[1]	
[4] Reason Code	[1]	'A10' Tertiary control: <ul style="list-style-type: none"> 'Z31' - FRR-M, Balancing Power 'Z34' - FRR-M, Quarter regulation 'Z35' - FRR-M, Special Regulation 'Z36' - Hour Change Regulation 'Z37' - Power Transaction 'Z38' - TSO Internal Countertrades 'Z39' - Day Ahead Production Adjustment 'Z74' - FRR-M Disturbance

		<ul style="list-style-type: none"> • 'Z63' - Period shift activation • 'Z89' - Bidless activation (Activation without BSP bid) <p>'A11' Primary control:</p> <ul style="list-style-type: none"> • 'Z29' – FCR – Normal • 'Z40' – FCR – Normal – SWE • 'Z41' – FCR - Disturbance <p>'A12' Secondary control:</p> <ul style="list-style-type: none"> • 'Z30' - FRR-A • 'Z54' – FRR-A, AOF activation • 'Z55' – FRR-A, non-AOF activation
[4] 2nd Reason Code	[0..*]	<p>'A10' Tertiary control:</p> <ul style="list-style-type: none"> • 'Z58' - Scheduled activation • "Z59' Direct activation • 'Z60' - Faster activation • 'Z61' - Faster deactivation • '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	[1]	Activated Reserves - Up/Down Amount

4.4.13 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.

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

Attribute	
Name	Primary Frequency Containment Reserves (FCR) – contracted reserves
Receiver	BSP
Description	<p>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.</p> <p>The data package validity starts on BSP Go-live Date + 1D.</p>
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)	<p>Daily basis, morning 04:20</p> <p>Data package is not distributed when there are no data reported.</p>
Data Scope (Filter)	<p>System selects all BSP's contracted reserves of <u>FCR</u> sub-type.</p> <p>Data Scope: Reason Code in ('Z29', 'Z42', 'Z43', 'Z44', 'Z45', 'Z46', 'Z47', 'Z48', 'Z49', 'Z56')</p>
Attribute Usage Specifics	<p>Document contains following business types:</p> <ul style="list-style-type: none"> • Process Type = 'A28' (Primary Reserve Process) • Business Type = 'A11' (Primary Control) • Reason Code in

	<ul style="list-style-type: none"> ○ 'Z29' - FCR ○ 'Z42' – FCR-N, D-1 ○ 'Z43' – FCR-N, D-2 ○ 'Z44' – FCR-N, D-1, correction ○ 'Z45' – FCR-N, D-2, correction ○ 'Z46' – FCR-D, D-1 ○ 'Z47' - FCR-D, D-2 ○ 'Z48' - FCR-D, D-1, correction ○ 'Z49' - FCR-D, D-2, correction ○ 'Z56' – FFR
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4.4.13.1.2 SDP: Secondary Frequency Restoration Reserves (FRR) – contracted reserves

Attribute	
Name	Secondary Frequency Restoration Reserves (FRR) – contracted reserves
Receiver	BSP
Description	<p>All BSP's activated reserves of type FRR-A (Frequency Restoration Reserve - Automatic). FRR-A is an automatic reserve, activated continuously by the frequency.</p> <p>The data package validity starts on BSP Go-live Date + 1D.</p>
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 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. Data Scope: Reason Code in = ('Z30', 'Z75')
Attribute Usage Specifics	Document contains following business types: <ul style="list-style-type: none"> • Process Type = 'A29' (Secondary Reserve Process) • Business Type = 'A12' (Secondary Control) • Reason Code in <ul style="list-style-type: none"> ○ 'Z30' – FRR-A ○ 'Z75' – FRR-A, correction

4.4.13.1.3 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) 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 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', 'Z35', 'Z76')
Attribute Usage Specifics	Document contains following business types: <ul style="list-style-type: none"> • Process Type = 'A30' (Tertiary Reserve Process) • Business Type = 'A10' (Tertiary Control) • Reason Code in <ul style="list-style-type: none"> ○ 'Z31' - FRR-M, Balancing Power (for Norway the code means Ordinary regulation) ○ 'Z35' - FRR-M, Special Regulation (for Norway the code means Specially regulation) ○ 'Z76' – FRR-M, correction ○ 'Z74' - FRR-M-D ○ 'Z93' - FRR-M-D, correction

4.4.13.1.4 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.

4.4.13.1.4.1 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: 'A28' – SDP Contracted Reserves Primary 'A29' – SDP Contracted Reserves Secondary '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. YYYY-MM-DDTHH:MM:SSZ/YYYY-MM-DDTHH:MM:SSZ
[2] Domain	[1]	Domain covered by the schedule document. Nordic Market Area ID = 10Y1001A1001A91G
[2] Reserve Allocation Result Time Series	[0..*]	<i>See Time Series Attributes</i>

4.4.13.1.4.2 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: ‘A10’ – SDP Activated Reserves Tertiary ‘A11’ – SDP Activated Reserves Primary ‘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 ‘A02’ Down ‘A03’ Up and Down
[3] Reason	[1]	
[4] Reason Code	[1]	‘A11’ Primary control:

		<ul style="list-style-type: none"> • 'Z29' - FCR • 'Z42' – FCR-N, D-1 • 'Z43' – FCR-N, D-2 • 'Z44' – FCR-N, D-1, correction • 'Z45' – FCR-N, D-2, correction • 'Z46' – FCR-D, D-1 • 'Z47' - FCR-D, D-2 • 'Z48' - FCR-D, D-1, correction • 'Z49' - FCR-D, D-2, correction • 'Z56' - FFR <p>'A12' Secondary control:</p> <ul style="list-style-type: none"> • 'Z30' (FRR-A) • 'Z75' - FRR-A, correction <p>'A10' Tertiary control:</p> <ul style="list-style-type: none"> • 'Z31' - FRR-M, Balancing Power (for Norway the code means Ordinary regulation) • 'Z35' - FRR-M, Special Regulation (for Norway the code means Specially regulation) • 'Z76' - FRR-M, correction • 'Z74' - FRR-M-D • '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

4.4.14 Party Relations (RBR) Data Packages

4.4.14.1 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 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.
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4.4.14.2 *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	N/A
Time Period From	D
Time Period To	D+14
Time Trigger (Words)	Daily basis, delivered till 07:00 CET 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.

4.4.14.3 *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..*]	<i>Repeated for each DSO's RBR</i>
[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 <i>Date and time of validity start in UTC, format "YYYY-MM-DDTHH:MMZ".</i>
[3] Validity End	[0..1]	RBR Validity End If validity end is infinite, then this element is omitted. <i>Date and time of validity end in UTC, format "YYYY-MM-DDTHH:MMZ".</i>
[3] Business Type	[1]	Retailer Balance Responsibility Imbalance Type: A01 – for Retailer Balance Responsibility for Production 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

4.4.15 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'.

4.4.15.1 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. <i>Note: BRP level MECs (maintained by TSO in Sweden) are also involved.</i>
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 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.

4.4.15.2 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. <i>Note: BRP level MECs (maintained by TSO in Sweden) are also involved.</i>
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 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.

4.4.15.3 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)	CI.	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) 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 BRP Code and Coding scheme in case of BRP level consumption (no Retailer)
[3] Subject Party Role	[1]	A12 Balance Supplier (Retailer) 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 A07 - Net production/consumption – Pumped Storage A15 - Losses

		A72 - Interruptible Consumption B27 - Pumped B28 - Large installation consumption B36 - Production Units Own Consumption (Only used in Finland)
[3] Settlement Method	[0..1]	E01 Profiled 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). 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

4.4.16 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'.

4.4.16.1 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 07:00 CET 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.

4.4.16.2 *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 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.

4.4.16.3 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)	CI.	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) 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. <i>The start date and time is expressed in UTC as YYYY-MM-DDTHH:MM:SSZ7</i>
[3] Validity End	[0..1]	Validity End of MGA Imbalance Retailer. If omitted than validity is undefined.

		<i>The end date and time is expressed in UTC as YYYY-MM-DDTHH:MM:SSZ7</i>
[3] Business Type	[1]	B29 – MGA Imbalance

4.4.17 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'.

4.4.17.1 SDP: Production Unit – Active

Attribute	
Name	Production Unit (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	N/A
Time Period From	D
Time Period To	D+14
Time Trigger (Words)	Daily Basis, delivered till 06:30 CET 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.

4.4.17.2 SDP: Production Unit - Delta

Attribute	
Name	Production Unit (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	N/A
Time Period From	D
Time Period To	D+14
Time Trigger (Words)	Daily basis, delivered till 06:30 CET 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. Starting/ending means that DSO responsibility for production unit starts/ends.

4.4.17.3 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)	CI.	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) 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. 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 If omitted, then it is considered as unlimited validity.
[3] Asset Type	[0..1]	Type of Production Unit B14 Nuclear B16 Solar

		B20 Other production Z04 Thermal Z05 Wind Z06 Hydro
[3] Production Type	[0..1]	Z01 Normal Z02 Minor Time dependent attribute.
[3] Measure Unit	[0..1]	MAW Megawatt
[3] Capacity	[0..1]	Production Unit capacity (positive decimal). Time dependent attribute.
[3] Party Details	[0..1]	Production Unit Retailer 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 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>

```

4.4.18 Production Unit – Regulation Object Data Packages

4.4.18.1 Table - SDP Production Unit – Regulation Object – All Configuration

Attribute	Description
Name	Production Unit – Regulation Object (Active)
Receiver	BRP
Description	<p>Data package is populated by Production Unit – Regulation Object relations where BRP is balance responsible for Production Unit Retailer and PU-RO relations are valid sometime within the configured time period. Data package contains relations with validities.</p> <p>Data package is available in Online Service when logged as particular BRP.</p>
Format (Short Name)	Resource Object
Document Standard	NEG Resource Object Master Data Document defined in BRS for Master Data v1r7A – 20170419

Document Recognition	Document Type: Z23 Production Unit – Regulation Object (All) Process Type: Z07 Master data
Period From	D
Period To	D+14
Time Trigger (Words)	Daily Basis, delivered till 07:00 CET Data Package is distributed only if any data found
Data Scope (Filter)	System selects all Production Unit – Regulation Object relations where BRP is balance responsible for Production Unit retailer (BRP is derived PU attribute from Retailer Balance Responsibility) and relations are valid sometime within the configured period.
Message Type	DP Production Unit – Regulation Object (Active) SDP_PURO_A

4.4.18.2 *Specific Data Package – Production Unit – Regulation Object – Delta*

Attribute	Description
Name	Production Unit – Regulation Object (Delta)
Receiver	BRP
Description	Data package is populated by Production Unit – Regulation Object relations where BRP is balance responsible for Production Unit Retailer and PU-RO relations starts or ends within the configured time period. Data package contains relations with validities. Data package is available in Online Service when logged as particular BRP.
Format (Short Name)	Resource Object
Document Standard	NEG Resource Object Master Data Document defined in BRS for Master Data v1r7A – 20170419
Document Recognition	Document Type: Z22 Production Unit – Regulation Object (Delta) Process Type: Z07 Master data
Period From	D

Period To	D+14
Time Trigger (Words)	Daily Basis, delivered till 07:00 CET Data Package is distributed only if any data found
Data Scope (Filter)	System selects all Production Unit – Regulation Object relations where BRP is balance responsible for Production Unit retailer (BRP is derived PU attribute from Retailer Balance Responsibility) and relations starts or ends within the configured period.
Message Type	DP Production Unit – Regulation Object (Delta) SDP_PURO_D

4.4.18.3 NEG Resource Object (Production Unit) Master Data Document Attribute Usage for PU-RO DP

Element Attribute	Card	Value Description and Mapping
[1] NEG Resource Object Master Data Document		
[2] Document Identification	[1]	Unique identification of the document
[2] Document Type	[1]	Z22 for PU-RO (Delta) Z23 for PU-RO (All) <i>Parameter is used for document recognition</i>
[2] Process Type	[1]	Z07 Master Data <i>Parameter is used for document recognition</i>
[2] Sender Identification	[1]	eSett Code with Coding scheme
[2] Sender Role	[1]	A05 Imbalance settlement responsible
[2] Receiver Identification	[1]	BRP's Code and Coding scheme used for authentication and authorization. Identification of the party that is the owner of the document and is responsible for its content. See Business Validations. Balance Responsible Party / Code Balance Responsible Party / Coding Scheme
[2] Receiver Role	[1]	A05 Balance Responsible Party (BRP)
[2] Creation Date Time	[1]	The date and time that the document was prepared for transmission by Basse. The date and time must be expressed in UTC in format YYYY-MM-DDTHH:MM:SSZ
[2] Resource Object Details	[1..*]	<i>Will be repeated for each combination of Production Unit – Regulation Object relations available in selected time period for selected BRP</i>
[3] Resource Object Identification	[1]	Unique ID of the Production Unit – Code and Coding Scheme: Production Unit / Code Production Unit / Coding Scheme
[3] Resource Object Name	[0..1]	Production Unit Name.
[3] Object Aggregation	[1]	A06 Resource object (used for detailed units) Z01 Generator group

[3] Validity Start	[0..*]	Business Date Time From Expressed in UTC as YYYY-MM-DDTHH:MM:SSZ (See Validities in Documents) Validity Start of Production Unit – Regulation Object relation
[3] Validity End	[0..*]	Business Date Time To Expressed in UTC as YYYY-MM-DDTHH:MM:SSZ (See Validities in Documents) Validity End of Production Unit – Regulation Object relation Not present if Validity End is Undefined
[3] Related Resource Object	[0..*]	<i>Details about Production Unit – Regulation Object relation</i> Regulation Object
[4] Resource Object Identification	[1]	Unique ID of the Regulation Object – Code and Coding Scheme: Regulation Object / Code Regulation Object / Coding Scheme
[4] Resource Object Name	[0..1]	Name of the Regulation Object: Regulation Object / Name

4.4.18.4 XML Snippet example

```

<ResourceObjectDetails>
  <ResourceObjectIdentification>
    <ResourceObjectIdentification v="PU12" codingScheme="EIC" />
    <ResourceObjectName v="Test PU12" />
  </ResourceObjectIdentification>
  <ObjectAggregation v="A06" />
  <ValidityStart v="2018-01-01T00:00:00Z" />
  <RelatedResourceObject>
    <ResourceObjectIdentification v="RO12" codingScheme="EIC" />
    <ResourceObjectName v="Test RO1" />
  </RelatedArea>
</ResourceObjectDetails>

```


4.4.19 Bilateral Trade MEC Data Packages

4.4.19.1 SDP Bilateral Trade MEC – All - Configuration

Attribute	Description
Name	Bilateral Trades – Structure (Active)
Receiver	BRP
Description	Data package is populated by structural MECs of Bilateral Trades where BRP recipient is responsible in defined period. Only structural MECs of Bilateral Trades valid sometime within the defined period are included in the Data package. 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 = Z27
Period From	D
Period To	D+14
Time Trigger (Words)	Daily Basis, delivered till 08:00 CET Data Package is distributed only if any data found
Data Scope (Filter)	System selects all structural Bilateral Trades MECs where BRP is responsible and the MECs are valid sometime within the configured time period.
Message Type	DP Bilateral Trade Structure (All) SDP_BITSTR_A

4.4.19.2 SDP Bilateral Trade MEC – Delta - Configuration

Attribute	Description
Name	Bilateral Trades – Structure (Delta)

Receiver	BRP
Description	Data package is populated by Bilateral Trades MECs that are related to BRP recipient and their validity starts or ends within the configured time period. 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 = Z26
Period From	D
Period To	D+14
Time Trigger (Words)	Daily Basis, delivered till 08:00 CET Data Package is distributed only if any data found
Data Scope (Filter)	System selects structural Bilateral Trades MECs where BRP is responsible and the MEC's validity starts or ends sometime within the configured time period.
Message Type	DP Bilateral Trade Structure (Delta) SDP_BITSTR_D

4.4.19.3 Ediel Notify Bilateral Trade Structure Document - Attribute Usage for Bilateral Trade DP

<i>BRS Attribute [XML Attribute]</i>	<i>Card i-nality</i>	<i>Code and description</i>
<i>Request Trade Structure Document</i> <i>[RequestTradeStructure_MarketDocument]</i>	[1]	
Document Identification [mRID]	[1]	Unique identification of the document

Document Type [type]	[1]	Z26 <i>Bilateral trade structure master data document containing master data changed within the Validity Time Interval - Bilateral Trades – Structure (Delta)</i> Z27 <i>Bilateral trade structure master data document containing all valid master data within the Validity Time Interval – Bilateral Trades – Structure (Active)</i>
Process Type [Process.processType]	[1]	Z07 Master data
Sender Identification [Sender_MarketParticipant.mRID]	[1]	eSett's Code with Coding scheme
Sender Role [Sender_MarketParticipant.marketRole.type]	[1]	A05 Imbalance Settlement Responsible
Receiver Identification [Receiver_MarketParticipant.mRID]	[1]	Data Package Subscriber's (BRP) Code and Coding scheme Balance Responsible Party / Code Balance Responsible Party / Coding Scheme
Receiver Role [Receiver_MarketParticipant.marketRole.type]	[1]	A08 Balance Responsible Party
Creation Date Time [createdDateTime]	[1]	Date and time for creation of the document. The date and time must be expressed in UTC in format YYYY-MM-DDTHH:MM:SSZ
Notify Trade Structure Details [NotifyTradeStructure_TimeSeries]	[1..*]	<i>Details about Bilateral Trade Structures. Repeated for each of Bilateral Trade MEC.</i>
Transaction Identification [mRID]	[1]	Unique ID of the transaction
Validity Start [validityStart_DateAndOrTime.dateTime]	[0..1]	Business Date Time From Expressed in UTC as YYYY-MM-DDTHH:MM:SSZ (See Validities in Documents) Validity Start of MEC Bilateral Trade
Validity End [validityEnd_DateAndOrTime.dateTime]	[0..1]	Business Date Time To Expressed in UTC as YYYY-MM-DDTHH:MM:SSZ (See Validities in Documents)

		Validity End of MEC Bilateral Trade Not present if Validity End is Undefined
Area [domain.mRID]	[1]	Unique ID of the Bilateral Trade's MBA – Code and Coding Scheme: Market Balance Area / Code Market Balance Area / Coding Scheme
Agreement Identification [marketAgreement.mRID]	[0..1]	The unique ID of Bilateral Trade Structure Bilateral Trade / Agreement Identification
In Party <i>[In_MarketParticipant]</i>	[2..2]	The party being the buyer in the bilateral trade Two 'In Party' elements: BRP (A08) RE (Z05)
Identification [mRid]	[1]	Party Code and Coding Scheme
Role [marketRole.type]	[1]	The role of the in party, i.e. A08 Balance Responsible Party Z05 Trader (non-balance responsible party)
Out Party <i>[Out_MarketParticipant]</i>	[2..2]	The party being the seller in the bilateral trade Two 'In Party' elements: BRP (A08) RE (Z05)
Identification [mRid]	[1]	Party Code and Coding Scheme
Role [marketRole.type]	[1]	The role of the in party, i.e. A08 Balance Responsible Party Z05 Trader (non-balance responsible party)

4.4.19.4 SDP Bilateral 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.mRID>mRID-AgreementID001a</cim:marketAgreement.mRID>
  <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>Z05</cim:marketRole.type>
  </cim:In_MarketParticipant>
  <cim:Out_MarketParticipant>
    <cim:mRID codingScheme="A01">10X1001A1001A418</cim:mRID>
    <cim:marketRole.type>A08</cim:marketRole.type>
  </cim:Out_MarketParticipant>
  <cim:Out_MarketParticipant>
    <cim:mRID codingScheme="A01">7080003823427</cim:mRID>
    <cim:marketRole.type>Z05</cim:marketRole.type>
  </cim:Out_MarketParticipant>
</cim:TimeSeries>
```

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 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) 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. 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 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) SDP_PXT_D

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

<i>BRS Attribute [XML Attribute]</i>	<i>Card i-nality</i>	<i>Code and description</i>
Notify Trade Structure Document [NotifyTradeStructure_MarketDocument]	[1]	
Document Identification [mRID]	[1]	Unique identification of the document
Document Type [type]	[1]	Z28 PX trade structure master data document containing master data changed within the Validity Time Interval Z29 PX trade structure master data document containing all valid master data within the Validity Time Interval

Process Type [Process.processType]	[1]	Z07 Master data
Sender Identification [Sender_MarketParticipant.mRID]	[1]	eSett's Code with Coding scheme
Sender Role [Sender_MarketParticipant.marketRole.type]	[1]	A05 Imbalance Settlement Responsible
Receiver Identification [Receiver_MarketParticipant.mRID]	[1]	Data Package Subscriber's (BRP as Market Operator) Code and Coding scheme Balance Responsible Party / Code Balance Responsible Party / Coding Scheme
Receiver Role [Receiver_MarketParticipant.marketRole.type]	[1]	A11 Market operator
Creation Date Time [createdDateTime]	[1]	Date and time of the document creation The date and time must be expressed in UTC in format YYYY-MM-DDTHH:MM:SSZ
<i>Notify Trade Structure Details</i> <i>[NotifyTradeStructure_TimeSeries]</i>	[1..*]	<i>Details about PX Market Trade Structures. Repeated for each of PX Market Trade MEC.</i>
Transaction Identification <i>[mRID]</i>	[1]	Unique ID of the transaction
Validity Start [validityStart_DateAndOrTime.dateTime]	[0..1]	Business Date Time From Expressed in UTC as YYYY-MM-DDTHH:MM:SSZ (See Validities in Documents) Validity Start of PX Market Trade
Validity End [validityEnd_DateAndOrTime.dateTime]	[0..1]	Business Date Time To Expressed in UTC as YYYY-MM-DDTHH:MM:SSZ (See Validities in Documents) Validity End of PX Market Trade Not present if Validity End is Undefined
Area [domain.mRID]	[1]	Unique ID of the PX Market Trade's MBA where Trade can take a place – Code and Coding Scheme: Market Balance Area / Code Market Balance Area / Coding Scheme

Contract type [marketAgreement.type]	[1]	PX Market / PX Market Type A01 Daily (Day Ahead) – Day Ahead A07 Intraday contract – Intraday
<i>In Party</i> <i>[In_MarketParticipant]</i>	[2..3]	BRP (A08) - mandatory Market Operator (A11) – mandatory RE (Z05) – optional
Identification [mRid]	[1]	Market Operator, BRP's and Retailer's Code and Coding scheme depending on the Role. PX Market / Operator / Code PX Market / Operator / Coding Scheme Balance Responsible Party / Code Balance Responsible Party / Coding Scheme Retailer / Code Retailer / Coding Scheme
Role [marketRole.type]	[1]	A08 Balance Responsible Party A11 Market operator 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>
```

4.5 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 of data packages are not part of 'Complete set of NBS Documents'.

XML samples have file name in line with the list in Table 7 - Specific Data Packages Overview.