SEMOpx Data Publication Guide

ISSUE 7.3

Table of Contents

Table of Tables

Document History

Version	Date	Author	Comment
1.0	05 May 2017	I-SEM Programme	Initial Release of I-SEM Data Publication Guide. Cross-Reference: Level 2 Milestone # 231
1.1	14 October 2017	I-SEM Programme	Incremental release of I-SEM Data Publication Guide.
1.2	01 December 2017	I-SEM Programme	Incremental release of I-SEM Data Publication Guide Cross-Reference: Level 2 Milestone # 7k
1.3	09 February 2018	I-SEM Programme	Incremental release of I-SEM Data Publication Guide Cross-Reference: Level 2 Milestone # 234a
2.0	28 March 2018	I-SEM Programme	Incremental release of I-SEM Data Publication Guide Cross-Reference: Level 2 Milestone # 234b
3.0	05 October 2018	SEMOpx	Updated contents and branding for SEMOpx Minor edit to report descriptions for auction time horizons.
4.0	27 November 2019	SEMOpx	Added Auction & Continuous REMIT file specification ETS V.3.3.2 Release impacted Market Results & Bid File specification.
5.0	20 January 2020	SEMOpx	Added IDC_Statistics file name change active since 28th November 2019
6.0	05 Februrary 2020	SEMOpx	Changes to EA-007 following M7 6.8 Release *expected* 11th February 2020 Replacing the screenshot for report structure for EA-008 with tabular format – no change to report.
7.0	18 May 2021	CPIO	Added Interconnector Data section 5.2.3, 6.2.10 – 6.2.12 Based on modification SPX_02_20, changed section 6.2.4 EA-004: Bid/Ask Curves, to an aggregate curve rather than individual curves for each jurisdiction
7.1	13 August 2021	SEMOpx	Corrected report IDs to align with API implementation. EA-010, EA-011, EA-012, EA-022, EA-023 and EA-024 Corrected typo in report name EA-015 in section 6.1.6..
7.2	25th October 2021	SEMOpx	Update to website navigation based on SEMOpx website enhancements and update to EA-021: REMIT reporting publication frequency and file publication method.
7.3	22nd November 2022	SEMOpx	Update from complex orders to Scalable Complex orders

Distribution List

Name
General Public

1 DISCLAIMER AND CONTENT INFORMATION

This document has been prepared to provide the general public with information about publicly available data from SEMO PX. The following disclaimers relate to the content of this document and any use by SEMOpx Members or the general public of the information provided therein.

1. SEMOpx accepts no responsibility for decisions made or actions taken by Participants as a result of the information presented in this document or associated documents. Furthermore, SEMOpx does not indemnify any commercial or organisational decisions made by Members in relation to the information herein.

2. The information provided in this document is based on documentation and information provided by the technology systems vendors and service providers whose systems and services are used in the operations of SEMOpx .

3. Further changes to the data or access mechanisms presented in this document may change as a result of ongoing work to update the public website and/or changes to the market design through the market modifications process. As such, SEMOpx may be issuing updated versions of this document and any associated documents to reflect those changes.

2 INTRODUCTION AND BACKGROUND

2.1 SCOPE OF THIS DOCUMENT

The SEMOpx Data Publication Guide provides details of the information published for and available to the general public by:

- SEMOpx, as a Nominated Electricity Market Operator (NEMO), as required to discharge its associated obligations in relation to Day Ahead Market and Intra-Day Market, as set out in the SEMOpx Rules.

2.2 STRUCTURE OF THE SEMOPX DATA PUBLICATION GUIDE

2.2.1 DATA PUBLICATION GUIDE SECTIONS OVERVIEW

The following table describes the sections within this Data Publication guide. It details the availability of the information within this issue and what additional information is to be provided in future issues.

Section #	Section Name	Content included in this Issue
1	**Disclaimer and Content Information** *Important information in relation to interpretation of the content presented in the SEMOpx Data Publication Guide.*	**Issue 3** includes complete information on this topic.
2	**Introduction and Background** *Sets out the scope of the SEMOpx Data Publication Guide and describes the structure of the document.*	**Issue 3** includes complete information on this topic.
3	**Data Publication Types** *Provides a definition of the data publication report types and how they are organised on the SEMOpx website.*	**Issue 3** includes complete information on this topic. .
4	**Data Publication Report Formats and Access Mechanisms** *Provides a definition of the data publication report types and the mechanisms by which information will be access via the SEMOpx website.*	**Issue 3** includes complete information on this topic. .
5	**Ex-Ante Market Publications** *Provides a list of the data publications associated with 1) market development and 2) a list of data publications relating to market data (relating to trading in the Day Ahead Market and/or Intra-Day Market).*	**Issue 3** includes complete information on this topic.

Section #	Section Name	Content included in this Issue
App A	**Ex-Ante Market Publication Details** *Provides the details for each data publication associated with the Ex-Ante (SEMOpx) Market. This includes the report name, data types, report format, and the access mechanisms available for the report. Furthermore, where applicable, a sample report file or extract is provided.*	**Issue 3** includes complete information on this topic.

Table 1: Structure of the SEMOpx Data Publication Guide

2.2.2 AVAILABILITY OF INFORMATION IN THE DATA PUBLICATION GUIDE

This Data Publication Guide is a living document and is subject to change as SEMOpx evolves. If there is information not yet available for publication, but known to the SEMOpx, it will be highlighted in this document using the format shown below.

Note: *If information planned for inclusion in the Data Publication Guide is not yet available for a given issue, it will be noted throughout the document, highlighted by this coloured frame.*

3 DATA PUBLICATION TYPES

This section describes the types of data publications available to the general public and how those data publication types are organised and classified within the SEMOpx website. Different data publications types will be available for SEMOpx.

3.1.1 AN OVERVIEW OF DATA PUBLICATION TYPES

Data Publication Type	Definition
Market Data	Data publications related to the input data and parameters used by the various markets for operations and the data resulting from the markets' operations
Market Development	Data publications related to the process by which the market rules (and associated obligations) are agreed, modified and reported on via the Exchange Committee, along with the processes by which Disputes are handled and Regulatory Authority decisions published..
Market Methodologies and Processes	Data publications that specify methodologies used in the calculation or formation of market data, and operational processes used by the market operators.

Table 2: An Overview of Data Publication Types

4 DATA PUBLICATION REPORT FORMATS, DELIVERY TYPES, AND ACCESS MECHANISMS

This section describes the different formats in which the data publications will be delivered and how the general public may access the data publications on the SEMOpx website.

4.1 DATA PUBLICATION FORMATS

A variety of formats will be used to deliver data to the general public. The table below offers the list of applicable data publication types.

Format Code	Name	Description
CSV	Comma Separated Values	A CSV file stores tabular data (numbers and text) in plain text. Each line of the file is a data record. Each record consists of one or more fields, separated by commas. Some files may use semi-colon characters to separate values and commas to represent a decimal. When applicable, this will be noted.
XML	Extensible Markup Language	Extensible Markup Language (XML) is a markup language that defines a set of rules for encoding documents in a format that is both human-readable and machine-readable.[1] An XML file stores related data within a given hierarchy, described (marked up) by elements. The structure of the XML file is defined and validated by an XML schema (*.xsd).
PDF	Portable Document Format	The Portable Document Format (commonly referred to as PDF) is a file format used to present documents in a manner independent of application software, hardware, and operating systems. [2]
DOC	Microsoft Word Document	A document formatted for viewing in Microsoft Word. If the file extension is *.docx, this notates the file is compatible with the Office Open XML international standard for Office documents.
XLS	Microsoft Excel Document	A document formatted for viewing in Microsoft Excel.

Table 3: Data Publication Formats

[1] XML 1.0 Specification. World Wide Web Consortium. Retrieved 22 August 2010.
[2] Adobe Systems Incorporated, PDF Reference, 6th Editions, version 1.23, Nov 2006, p33

4.2 DATA PUBLICATION DELIVERY TYPES

The delivery type for a data publication characterizes the nature of how the data are stored and presented by the SEMOpx website and how the general public may retrieve them.

1. **Static data publication delivery** type is for those publications that are created by the particular market system or market process and uploaded to the SEMOpx website for retrieval individually by the general public. These publications can be delivered in a variety of formats.

4.3 DATA PUBLICATION ACCESS MECHANISMS

A variety of access mechanisms will be provided to the general public for acquiring the various data publications via the SEMOpx website. Currently, the following methods are planned.

Method	Details
Type 2 (browser-based) retrieval	*For **static data publication delivery**, this mechanism provides the general public with a webpage, or series of web pages, that list the available data publication for download, with a hyperlink for downloading the given report.*
Type 3 (API-based) retrieval	*For **static data publication delivery**, this mechanism provides the general public with an API (application programmatic interface) for retrieving a list of data publications, and the data publications themselves.*

Table 4: Data Publication Access Mechanisms

4.3.1 TYPE 2 ACCESS MECHANISM

A description of Type 2 access for market publications and data on the SEMOpx website is shown below.

Conventions Used in this Section

Convention	Description
"SEMOpx Home Page"	The starting location/page when navigating to http://semopx.com
The ">" separator	Indicates a progression from one page to another via a hyperlink. E.g. SEMOpx Home Page > Market Data > Static Reports describes the linking from the SEMOpx Home Page to the SEMOpx Static Reports page.
Any reference made in "quotes"	Refers to a specific section of a webpage. E.g. "Market Messages" is a section of the SEMOpx Home Page.

Table 5: Conventions

For the SEMOpx Website:

Publication Type	Location
Market Date: Reports - Static Reports - REMIT Reports	SEMOpx Home Page > Market Data > Reports > Static Reports > REMIT Reports
Market Development - Rules - Modifications	SEMOpx Home Page > Rules & Monitoring > Market Rules > Modifications
Market Monitoring	SEMOpx Home Page > Rules & Monitoring > Market Moniroting
Market Messages	SEMOpx Homepage > Market Messages (footer)

Table 6: Navigation to SEMOpx Sections

An example of SEMOpx > Market Data > Reports is shown below.

Figure 1: Example of Website Navigation for SEMOpx > Market Data > Reports

4.3.2 TYPE 3 ACCESS MECHANISM

Type 3 access for static reports from the SEMO and SEMOpx websites is via a public API. Details of this API are found in Appendix B: SEMOpx Public Website API Specification.

5 EX-ANTE MARKET (SEMOPX) PUBLICATIONS

The data publications that will be available via the SEMOpx website can be organised into two groupings: market development and market data. The definition for those groupings, and a list of the known data publications for the Ex Ante Market (SEMOpx), are shown below.

- **Market Development** – the process by which the SEMOpx rules (and associated obligations) are agreed, modified and reported, along with the processes by which Disputes are handled and Regulatory Authority decisions published.

- **Market Data** – data and information published in relation to Ex-Ante market registration, auction conduct and results, continuous intra-day trading results, and DAM/IDM settlement.

5.1 EX-ANTE MARKET DEVELOPMENT

ID	Document	Category	Format
EA-022	SEMOpx Rules (including SEMOpx Operating Procedures)	*Market Development*	Doc / PDF
EA-023	Schedule and dates of Modification Panel meetings	*Market Development*	Doc / PDF
EA-024	Modification Proposal	*Market Development*	Doc / PDF
EA-013	Public consultation on Modification Proposal	*Market Development*	Doc / PDF
EA-014	Responses to Public Consultation on Modification Proposal	*Market Development*	Doc / PDF
EA-015	Further information on Modification Proposal	*Market Development*	Doc / PDF
EA-016	Final Recommendation Report	*Market Development*	Doc / PDF
EA-017	Regulatory Authority decision on Final Modification Recommendation	*Market Development*	Doc / PDF
EA-018	Members and Chairperson of the Modification Committee	*Market Development*	Doc / PDF
EA-019	Terms of Reference for Market Operator Audit	*Market Development*	Doc / PDF
EA-020	Audit Report	*Market Development*	Doc / PDF

Table 7: Ex-Ante Market Development

5.2 MARKET DATA

5.2.1 AUCTION RESULTS

ID	Document	Category	Format
EA-001	ETS Market Results	*Market Data*	CSV
EA-002	ETS Bid File	*Market Data*	CSV
EA-003	Report will not be available for the initial I-SEM Go Live, as Block Orders are not an available product type for SEMOpx.	*Market Data*	XML
EA-004	Bid/Ask Curves	*Market Data*	XML
EA-006	Exchange Transparency	*Market Data*	XML

Table 8: Auction Results

5.2.2 CONTINUOUS TRADING RESULTS

ID	Document	Category	Format
EA-007	Intraday Market Results Trade	*Market Data*	XML
EA-008	Intraday Market Results Order	*Market Data*	XML
EA-009	Intraday Market Results Statistics	*Market Data*	CSV

Table 9: Continuous Trading Results

5.2.3 REMIT FILES

ID	Document	Category	Format
EA-021	REMIT Files	*Market Data*	XML

Table 10: REMIT Files

5.2.4 INTERCONNECTOR DATA

ID	Document	Category	Format
EA-010	Interconnector Capacities NTC	*Interconnector Data*	XML
EA-011	Interconnector Capacities ATC	*Interconnector Data*	XML
EA-012	Interconnector Flows	*Interconnector Data*	XML

Table 11: Interconnector Data

6 APPENDIX A: EX-ANTE (SEMOPX) MARKET PUBLICATION DETAILS

6.1 (SEMOPX) MARKET DEVELOPMENT

6.1.1 EA-022: SEMOPX RULES (INCLUDING OPERATING PROCEDURES)

This report contains the SEMOpx Rules, including Operating Procedures.

I-SEM Report Reference:	*EA-022*
Audience:	*General Public*
Frequency:	Periodically as required
Report Format:	*Word/PDF*

6.1.2 EA-023: SCHEDULE AND DATES OF MODIFICATION PANEL MEETINGS

This report contains the planned schedule and dates of the Modification Panel meetings.

I-SEM Report Reference:	*EA-023*
Audience:	*General Public*
Frequency:	Periodically as required
Report Format:	*Word/PDF*

6.1.3 EA-024: MODIFICATION PROPOSAL

This report contains the details of a submitted Modification Proposal which has been accepted for consideration by the Modification Panel Committee.

I-SEM Report Reference:	*EA-024*
Audience:	*General Public*
Frequency:	Periodically as required
Report Format:	*Word/PDF*

6.1.4 EA-013: PUBLIC CONSULTATION ON MODIFICATION PROPOSAL

This report contains the request from the Modification Committee Secretariat for the public's views on a particular Modification Proposal.

I-SEM Report Reference:	*EA-013*
Audience:	*General Public*
Frequency:	Periodically as required
Report Format:	*Word/PDF*

6.1.5 EA-014: RESPONSES TO PUBLIC CONSULTATION ON MODIFICATION PROPOSAL

This report contains the collated responses to the Consultation paper issued by the Modification Committee Secretariat for the public's views on a particular Modification Proposal.

I-SEM Report Reference:	*EA-014*
Audience:	*General Public*
Frequency:	Periodically as required
Report Format:	*Word/PDF*

6.1.6 EA-015: FURTHER INFORMATION ON MODIFICATION PROPOSAL

This report contains any further relevant information received by the Modifications Committee in relation to a particular Modification Proposal.

I-SEM Report Reference:	*EA-015*
Audience:	*General Public*
Frequency:	Periodically as required
Report Format:	*Word/PDF*

6.1.7 EA-016: FINAL RECOMMENDATION REPORT

This report contains the Final Recommendation Report of the Modifications Committee on a particular Modification Proposal.

I-SEM Report Reference:	*EA-016*
Audience:	*General Public*
Frequency:	Periodically as required
Report Format:	*Word/PDF*

6.1.8 EA-017: REGULATORY AUTHORITY DECISION ON FINAL MODIFICATION RECOMMENDATION

This report contains the Regulatory Authority decision on the Final Modification Recommendation of a Particular Modification Proposal.

I-SEM Report Reference:	*EA-017*
Audience:	*General Public*
Frequency:	Periodically as required
Report Format:	*Word/PDF*

6.1.9 EA-018: MEMBERS AND CHAIRPERSON OF THE MODIFICATION COMMITTEE

This report contains the names of the members and chairperson of the Modification Committee.

I-SEM Report Reference:	*EA-018*
Audience:	*General Public*
Frequency:	Periodically as required
Report Format:	*Word/PDF*

6.1.10 EA-019: TERMS OF REFERENCE FOR MARKET OPERATOR AUDIT

This report contains the terms of reference by which the nominated Market Operator Auditor conducts an audit of the Rules, its operation and implementation and the operations, trading arrangements, procedures and processes under the Rules.

I-SEM Report Reference:	*EA-019*
Audience:	*General Public*
Frequency:	Periodically as required
Report Format:	*Word/PDF*

6.1.11 EA-020: AUDIT REPORT

This report contains the Market Operator Auditor's findings in the audit of the Rules, its operation and implementation and the operations, trading arrangements, procedures and processes under the Rules.

I-SEM Report Reference:	*EA-020*
Audience:	*General Public*
Frequency:	Periodically as required
Report Format:	*Word/PDF*

6.2 (SEMOPX) MARKET DATA

6.2.1 EA-001: ETS MARKET RESULTS

These reports contain the results from the Day-Ahead and Intraday Auction run by SEMOpx. These reports include all market-wide and SEMOpx Member specific results.

6.2.1.1 ETS MARKET RESULTS FILES

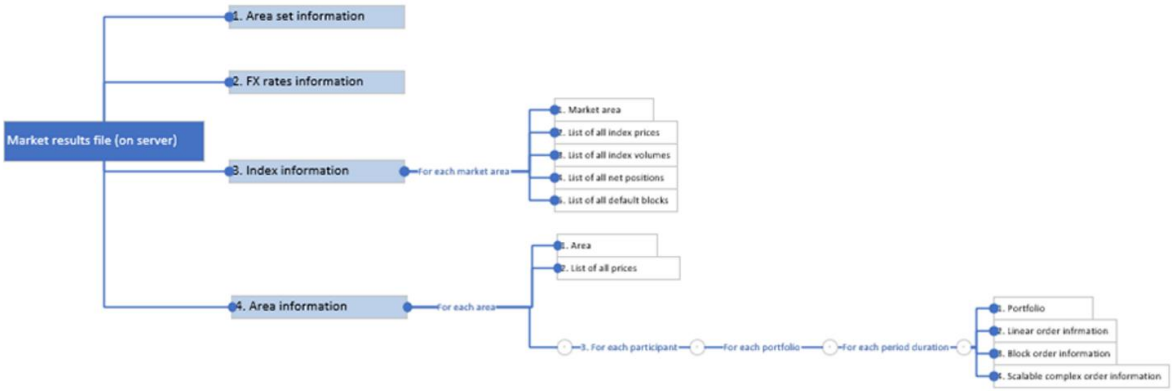
The ETS Market Results are delivered in four files, one for each of the auctions. They are:

Auction	Filemask
Day-Ahead Auction Results	MarketResult_SEM-DA_PWR-MRC-D+1_<AUCTION DATE as YYYYMMDDHHMMSS>_<REPORT_PULICATION_DATE as YYYYMMDDHHMMSS>.csv
Intraday 1 Auction Results	MarketResult_SEM-IDA1_PWR-SEM-GB-D+1_<AUCTION DATE as YYYYMMDDHHMMSS>_<REPORT_PULICATION_DATE as YYYYMMDDHHMMSS>.csv
Intraday 2 Auction Results	MarketResult_SEM-IDA2_PWR-SEM-GB-D_<AUCTION DATE as YYYYMMDDHHMMSS>_<REPORT_PULICATION_DATE as YYYYMMDDHHMMSS>.csv
Intraday 3 Auction Results	MarketResult_SEM-IDA3_PWR-SEM-D_<AUCTION DATE as YYYYMMDDHHMMSS>_<REPORT_PULICATION_DATE as YYYYMMDDHHMMSS>.csv

I-SEM Report Reference:	*EA-001*
Data Source	*SEMOpx (ETS)*
Periodicity:	*Daily*
Audience:	*General Public*
Resolution:	*Day-Ahead: Hourly* *Intraday: Half-hourly*
Time Span:	*Per each auction specification*
Frequency:	*Daily, at D+1 relative to the trading day.*
Report Format:	*CSV* ***Note**: the data in this report are semi-colon (;) separated, with commas (,) used as decimals.*

6.2.1.1.1 ETS MARKET RESULTS FILE STRUCTURE

The structure of the ETA Market Results files is described in the diagram below.



6.2.1.2 ETS MARKET RESULTS FILE: AREA SET SECTION

Area Set Information: Line 1 (Area set name)

Col. #	Type	Description
1	Char(8)	"Area set"
2	Char(40)	Area set name

Area Set Information: Line 2 (Auction name)

Col. #	Type	Description
1	Char(12)	"Auction name"
2	Char(30)	Name of the auction (e.g. SEMO DAM Auction, SEMO IDA 1 Auction...).

Area Set Information: Line 3 (Auction date/time)

Col. #	Type	Description
1	Char(17)	"Auction Date Time"
2	DateTime	Auction date time in UTC: YYYY-MM-DDThh:mm:ssZ

6.2.1.3 ETS MARKET RESULTS FILE: FX RATE SECTION

FX Rate Information: Line 1 (FX Rate Header)

Col. #	Type	Description
1	Char(8)	"FX Rates"

FX Rate Information: Line 2 (FX Rate Details - only received FX Rates are reported)

Col. #	Type	Description
1	Char(3)	Value of Currency From: "EUR"
2	Char(3)	Value of Currency To: "GBP"
3	Number(16,8)	Value of currency rate. For EirGrid, the supplied FX rate will have a maximum of 4dp

6.2.1.4 ETS MARKET RESULTS FILE: INDEX SECTION

The following section (Index Information) is repeated for NI and ROI

Index Information: Line 1 (Market Area Name)

Col. #	Type	Description
1	Char(11)	"Market Area"
2	Char(40)	"Market Area Name": "NI-DA", "NI-IDA1", "NI-IDA2", "NI-IDA3", "ROI-DA", "ROI-IDA1", "ROI-IDA2", "ROI-IDA3"

Index Information: Line 2 (Index Prices)

Col. #	Type	Description
1	Char(12)	"Index prices"
2	Number(3)	Period duration in minute: "15", "30", "60"
3	Char(3)	Currency: "EUR", "GBP"

Index Information: Line 3 (Delivery Dates/Times for Auction Time Horizon)

Col. #	Type	Description
1 -> n	Date Time	Period date time delivery start in UTC: YYYY-MM-DDThh:mm:ssZ The day-ahead auction has 24 columns. In the case of a short-day or long-day with seasonal time changes, the number of columns is 23 and 25, respectively. The intraday 1 auction has 48 columns. In the case of a short-day or long-day with seasonal time changes, the number of columns is 46 and 50, respectively. The intraday 2 auction has 24 columns. The time horizon of the auction is unaffected by the seasonal time change. The intraday 3 auction has 12 columns. The time horizon of the auction is unaffected by the seasonal time change. Due to clock change, the number of columns may be variable (e.g. in case of 60min day ahead auction for DST 23, the number of columns is 23; but in case of auction from 16:00 to 23:00, then the number of columns is not variable)

Index Information: Line 4 (Index Price)

Col. #	Type	Description
1 -> n	Date Time	Value of Index Price in defined currency The day-ahead auction has 24 columns. In the case of a short-day or long-day with seasonal time changes, the number of columns is 23 and 25, respectively. The intraday 1 auction has 48 columns. In the case of a short-day or long-day with seasonal time changes, the number of columns is 46 and 50, respectively. The intraday 2 auction has 24 columns. The time horizon of the auction is unaffected by the seasonal time change. The intraday 3 auction has 12 columns. The time horizon of the auction is unaffected by the seasonal time change. Due to clock change, the number of columns may be variable (e.g. in case of 60min day ahead auction for DST 23, the number of columns is 23)

Index Information: Line 5 (Index Volume Definition)

Col. #	Type	Description
1	Char(13)	"Index volumes"
2	Number(3)	Period duration in minutes: "15", "30", "60"

Index Information: Line 6 (Delivery Dates/Times for Auction Time Horizon)

Col. #	Type	Description
1 -> n	Date Time	Period date time delivery start in UTC: YYYY-MM-DDThh:mm:ssZ The day-ahead auction has 24 columns. In the case of a short-day or long-day with seasonal time changes, the number of columns is 23 and 25, respectively. The intraday 1 auction has 48 columns. In the case of a short-day or long-day with seasonal time changes, the number of columns is 46 and 50, respectively. The intraday 2 auction has 24 columns. The time horizon of the auction is unaffected by the seasonal time change. The intraday 3 auction has 12 columns. The time horizon of the auction is unaffected by the seasonal time change. Due to clock change, the number of columns may be variable (e.g. in case of 60min day ahead auction for DST 23, the the number of columns is 23)

Index Information: Line 7 (Index Volume)

Col. #	Type	Description
1 -> n	Number (10,4)	Value of Index volume The day-ahead auction has 24 columns. In the case of a short-day or long-day with seasonal time changes, the number of columns is 23 and 25, respectively. The intraday 1 auction has 48 columns. In the case of a short-day or long-day with seasonal time changes, the number of columns is 46 and 50, respectively. The intraday 2 auction has 24 columns. The time horizon of the auction is unaffected by the seasonal time change. The intraday 3 auction has 12 columns. The time horizon of the auction is unaffected by the seasonal time change. Due to clock change, the number of columns may be variable (e.g. in case of 60min day ahead auction for DST 23, the number of columns is 23)

Index Information: Line 8 (Net Position Definition)

Col. #	Type	Description
1	Char(12)	"Net position"
2	Number(3)	Period duration in minutes: "15", "30", "60"

Index Information: Line 9 (Delivery Dates/Times for Auction Time Horizon)

Col. #	Type	Description
1 -> n	Date Time	Period date time delivery start in UTC: YYYY-MM-DDThh:mm:ssZ The day-ahead auction has 24 columns. In the case of a short-day or long-day with seasonal time changes, the number of columns is 23 and 25, respectively.

Col. #	Type	Description
		The intraday 1 auction has 48 columns. In the case of a short-day or long-day with seasonal time changes, the number of columns is 46 and 50, respectively. The intraday 2 auction has 24 columns. The time horizon of the auction is unaffected by the seasonal time change. The intraday 3 auction has 12 columns. The time horizon of the auction is unaffected by the seasonal time change. Due to clock change, the number of columns may be variable (e.g. in case of 60min day ahead auction for DST 23, the number of columns is 23)

Index Information: Line 10 (Net Position Volume)

Col. #	Type	Description
1 -> n	Number (10,4)	Value of net position volume The day-ahead auction has 24 columns. In the case of a short-day or long-day with seasonal time changes, the number of columns is 23 and 25, respectively. The intraday 1 auction has 48 columns. In the case of a short-day or long-day with seasonal time changes, the number of columns is 46 and 50, respectively. The intraday 2 auction has 24 columns. The time horizon of the auction is unaffected by the seasonal time change. The intraday 3 auction has 12 columns. The time horizon of the auction is unaffected by the seasonal time change. Due to clock change, the number of columns may be variable (e.g. in case of 60min day ahead auction for DST 23, the number of columns is 23)

Index Information: Line 11 (Block Header - EUR)

Col. #	Type	Description
1	Char(14)	"Default blocks"
2	Number(3)	Period duration in minutes: "15", "30", "60"
3	Char(3)	Currency: "EUR", "GBP"

Block Information: Line 12 (Block Names - EUR)

Col. #	Type	Description
1	Char(10)	"Default Block Name"
2	Char(40)	List of block names
…	…	*Subsequent default block names for block order submission defined for the market area*

The table below lists the pre-defined blocks.

Periods	Product name	Contract Name	Contract Name Day+1
1-48	SEMOpx_Baseload	SEMOpx_Baseload	SEMOpx_TBaseload
1-16	SEMOpx_4_Hour_Power	SEMOpx_23-07	SEMOpx_T23-07
17-32	SEMOpx_4_Hour_Power	SEMOpx_07-15	SEMOpx_T07-15
33-48	SEMOpx_4_Hour_Power	SEMOpx_15-23	SEMOpx_T15-23
1-8	SEMOpx_4_Hour_Power	SEMOpx_23-03	SEMOpx_T23-03
9-16	SEMOpx_4_Hour_Power	SEMOpx_03-07	SEMOpx_T03-07
17-24	SEMOpx_4_Hour_Power	SEMOpx_07-11	SEMOpx_T07-11
25-32	SEMOpx_4_Hour_Power	SEMOpx_11-15	SEMOpx_T11-15
33-40	SEMOpx_4_Hour_Power	SEMOpx_15-19	SEMOpx_T15-19
41-48	SEMOpx_4_Hour_Power	SEMOpx_19-23	SEMOpx_T19-23
1-4	SEMOpx_2_Hour_Power	SEMOpx_23-01	SEMOpx_T23-01
5-8	SEMOpx_2_Hour_Power	SEMOpx_01-03	SEMOpx_T01-03
9-12	SEMOpx_2_Hour_Power	SEMOpx_03-05	SEMOpx_T03-05
13-16	SEMOpx_2_Hour_Power	SEMOpx_05-07	SEMOpx_T05-07
17-20	SEMOpx_2_Hour_Power	SEMOpx_07-09	SEMOpx_T07-09
21-4	SEMOpx_2_Hour_Power	SEMOpx_09-11	SEMOpx_T09-11
25-28	SEMOpx_2_Hour_Power	SEMOpx_11-13	SEMOpx_T11-13
29-32	SEMOpx_2_Hour_Power	SEMOpx_13-15	SEMOpx_T13-15
33-36	SEMOpx_2_Hour_Power	SEMOpx_15-17	SEMOpx_T15-17
37-40	SEMOpx_2_Hour_Power	SEMOpx_17-19	SEMOpx_T17-19
41-44	SEMOpx_2_Hour_Power	SEMOpx_19-21	SEMOpx_T19-21
45-48	SEMOpx_2_Hour_Power	SEMOpx_21-23	SEMOpx_T21-23

Figure 2: Pre-Defined Blocks in the ETS Market Results File

Index Information: Line 13 (Block Prices)

Col. #	Type	Description
1	Chart(11)	"Block price"
2 -> n	Number(15,5)	Average price for all ***n*** blocks in the period, in designated currency Where ***n*** is the number of pre-defined blocks

Index Information: Line 14 (Block Volume)

Col. #	Type	Description
1	Chart(12)	"Block volume"
2 -> n	Number(10,4)	Sum of the volumes for all ***n*** blocks in the period Where ***n*** is the number of pre-defined blocks
…	…	*Subsequent average volumes*

6.2.1.5 AREA INFORMATION

Area Information: Line 1 (Area Identifier)

Col. #	Type	Description
1	Char(4)	"Area"
2	Char(40)	Area name

Area Information: Line 2 (Area Price Header)

Col. #	Type	Description
1	Char(6)	"Prices"
2	Number(3)	Period duration in minutes: "15," "30", "60"
3	Char(43	Currency: "EUR", "GBP"

Area Information: Line 3 (Area Time Horizon)

Col. #	Type	Description
1 -> n	Date Time	Period date time delivery start in UTC: YYYY-MM-DDThh:mm:ssZ The day-ahead auction has 24 columns. In the case of a short-day or long-day with seasonal time changes, the number of columns is 23 and 25, respectively. The intraday 1 auction has 48 columns. In the case of a short-day or long-day with seasonal time changes, the number of columns is 46 and 50, respectively. The intraday 2 auction has 24 columns. The time horizon of the auction is unaffected by the seasonal time change. The intraday 3 auction has 12 columns. The time horizon of the auction is unaffected by the seasonal time change. Due to clock change, the number of columns may be variable (e.g. in case of 60min day ahead auction for DST 23, the number of columns is 23)

Area Information: Line 4 (Area Prices)

Col. #	Type	Description
1 -> n	Number(15,5)	Value of price in defined currency The day-ahead auction has 24 columns. In the case of a short-day or long-day with seasonal time changes, the number of columns is 23 and 25, respectively. The intraday 1 auction has 48 columns. In the case of a short-day or long-day with seasonal time changes, the number of columns is 46 and 50, respectively. The intraday 2 auction has 24 columns. The time horizon of the auction is unaffected by the seasonal time change. The intraday 3 auction has 12 columns. The time horizon of the auction is unaffected by the seasonal time change. Due to clock change, the number of columns may be variable (e.g. in case of 60min day ahead auction for DST 23, the number of columns is 23)

Index Information: Line 5 (Area Net Position Definition)

Col. #	Type	Description
1	Char(12)	“Net position”
2	Number(3)	Period duration in minutes: “15”, “30”, “60”

Index Information: Line 6 (Delivery Dates/Times for Auction Time Horizon)

Col. #	Type	Description
1 -> n	Date Time	Period date time delivery start in UTC: YYYY-MM-DDThh:mm:ssZ The day-ahead auction has 24 columns. In the case of a short-day or long-day with seasonal time changes, the number of columns is 23 and 25, respectively. The intraday 1 auction has 48 columns. In the case of a short-day or long-day with seasonal time changes, the number of columns is 46 and 50, respectively. The intraday 2 auction has 24 columns. The time horizon of the auction is unaffected by the seasonal time change. The intraday 3 auction has 12 columns. The time horizon of the auction is unaffected by the seasonal time change. Due to clock change, the number of columns may be variable (e.g. in case of 60min day ahead auction for DST 23, the number of columns is 23)

Area Information: Line 7 (Area Net Position Volume)

Col. #	Type	Description
1 ->n	Number (10,4)	Value of Net position at area level (NEMO trading level) The day-ahead auction has 24 columns. In the case of a short-day or long-day with seasonal time changes, the number of columns is 23 and 25, respectively. The intraday 1 auction has 48 columns. In the case of a short-day or long-day with seasonal time changes, the number of columns is 46 and 50, respectively. The intraday 2 auction has 24 columns. The time horizon of the auction is unaffected by the seasonal time change. The intraday 3 auction has 12 columns. The time horizon of the auction is unaffected by the seasonal time change. Due to clock change, the number of columns may be variable (e.g. in case of 60min day ahead auction for DST 23, the number of columns is 23)

The following sections (Linear Order, Scalable Complex Order) will be repeated for every SEMOpx Member portfolio that has cleared data in the respective auction. Scalable Complex Orders are only applicable to the SEMOpx Day-Ahead auction results.

Area Information, Participant-Level Detail: Line 1 (Member-Specific Header)

Col. #	Type	Description
1	Char(9)	"Portfolio"
2	Char(10)	Participant short name
3	Char(32)	Portfolio name
4	Number(3)	Period duration in minute: "15" ,"30", "60"
5	Char(3)	Settlement currency of the (portfolio, area) combination: "EUR" or "GBP"

Area Information, Participant-Level Detail, Linear Order Results: Line 1 (Linear Order Results Header)

Col. #	Type	Description
1	Char(10)	"Linear order"
2	Char(10)	Value of Trader Name

Area Information, Participant -Level Detail, Linear Order Results: Line 2 (Linear Order Results Time Horizon)

Col. #	Type	Description
1 -> n	Date Time	Period date time delivery start in UTC: YYYY-MM-DDThh:mm:ssZ The day-ahead auction has 24 columns. In the case of a short-day or long-day with seasonal time changes, the number of columns is 23 and 25, respectively. The intraday 1 auction has 48 columns. In the case of a short-day or long-day with seasonal time changes, the number of columns is 46 and 50, respectively. The intraday 2 auction has 24 columns. The time horizon of the auction is unaffected by the seasonal time change. The intraday 3 auction has 12 columns. The time horizon of the auction is unaffected by the seasonal time change. Due to clock change, the number of columns may be variable (e.g. in case of 60min day ahead auction for DST 23, the number of columns is 23)

Area Information, Member-Level Detail, Linear Order Results: Line 3 (Linear Order Results Detail)

Col. #	Type	Description
1 -> n	Number(15,5)	Value of executed quantity for the linear order The day-ahead auction has 24 columns. In the case of a short-day or long-day with seasonal time changes, the number of columns is 23 and 25, respectively. The intraday 1 auction has 48 columns. In the case of a short-day or long-day with seasonal time changes, the number of columns is 46 and 50, respectively. The intraday 2 auction has 24 columns. The time horizon of the auction is unaffected by the seasonal time change. The intraday 3 auction has 12 columns. The time horizon of the auction is unaffected by the seasonal time change.

Col. #	Type	Description
		Due to clock change, the number of columns may be variable (e.g. in case of 60min day ahead auction for DST 23, the number of columns is 23)

Area Information, Member-Level Detail, Linear Order Results: Line 4 (Linear Order OrderPeriodIDs)

Col. #	Type	Description
1 -> n	Number(25,0)	Value of orderPeriodIDs for the linear order The day-ahead auction has 24 columns. In the case of a short-day or long-day with seasonal time changes, the number of columns is 23 and 25, respectively. The intraday 1 auction has 48 columns. In the case of a short-day or long-day with seasonal time changes, the number of columns is 46 and 50, respectively. The intraday 2 auction has 24 columns. The time horizon of the auction is unaffected by the seasonal time change. The intraday 3 auction has 12 columns. The time horizon of the auction is unaffected by the seasonal time change. Due to clock change, the number of columns may be variable (e.g. in case of 60min day ahead auction for DST 23, the number of columns is 23)

Area Information, Member-Level Detail, Block Order Results: Line 1 (Block Order Results Header)

Col. #	Type	Description
1	Char(11)	“Block Order”
2	Char	Block order id
3	Char(20)	Value of TraderName

Area Information, Member-Level Detail, Block Order Results: Line 2 (Block Order Results Time Horizon)

Col. #	Type	Description
1 -> n	Date Time	Period date time delivery start in UTC: YYYY-MM-DDThh:mm:ssZ The day-ahead auction has 24 columns. In the case of a short-day or long-day with seasonal time changes, the number of columns is 23 and 25, respectively. The intraday 1 auction has 48 columns. In the case of a short-day or long-day with seasonal time changes, the number of columns is 46 and 50, respectively. The intraday 2 auction has 24 columns. The time horizon of the auction is unaffected by the seasonal time change. The intraday 3 auction has 12 columns. The time horizon of the auction is unaffected by the seasonal time change. Due to clock change, the number of columns may be variable (e.g. in case of 60min day ahead auction for DST 23, the number of columns is 23)

Area Information, Member-Level Detail, Block Order Results: Line 3 (Block Order Results Time Horizon)

Col. #	Type	Description
1 -> n	Number (15,5)	Period date time delivery start in UTC: YYYY-MM-DDThh:mm:ssZ The day-ahead auction has 24 columns. In the case of a short-day or long-day with seasonal time changes, the number of columns is 23 and 25, respectively. The intraday 1 auction has 48 columns. In the case of a short-day or long-day with seasonal time changes, the number of columns is 46 and 50, respectively. The intraday 2 auction has 24 columns. The time horizon of the auction is unaffected by the seasonal time change. The intraday 3 auction has 12 columns. The time horizon of the auction is unaffected by the seasonal time change. Due to clock change, the number of columns may be variable (e.g. in case of 60min day ahead auction for DST 23, the number of columns is 23)

Area Information, Member-Level Detail, Block Order Results: Line 4 (Block Order Results Time Horizon)

Col. #	Type	Description
1 -> n	Number (25,0)	Period date time delivery start in UTC: YYYY-MM-DDThh:mm:ssZ The day-ahead auction has 24 columns. In the case of a short-day or long-day with seasonal time changes, the number of columns is 23 and 25, respectively. The intraday 1 auction has 48 columns. In the case of a short-day or long-day with seasonal time changes, the number of columns is 46 and 50, respectively.

Col. #	Type	Description
		The intraday 2 auction has 24 columns. The time horizon of the auction is unaffected by the seasonal time change. The intraday 3 auction has 12 columns. The time horizon of the auction is unaffected by the seasonal time change. Due to clock change, the number of columns may be variable (e.g. in case of 60min day ahead auction for DST 23, the number of columns is 23)

Area Information, Member-Level Detail, Scalable Complex Order Results: Line 1 (Scalable Complex Order Results Header)

Col. #	Type	Description
1	Char(11)	"Block Order"
2	Char	Block order id
3	Char(20)	Value of TraderName

Area Information, Member-Level Detail, Scalable Complex Order Results: Line 2 (Scalable Complex Order Results Header)

Col. #	Type	Description
1	String	"Scalable Complex Order"
2	Char(20)	Value of Trader Name

Area Information, Member-Level Detail, Scalable Complex Order Results: Line 2 (Scalable Complex Order Results Time Horizon)

Col. #	Type	Description
1 -> n	Date Time	Period date time delivery start in UTC: YYYY-MM-DDThh:mm:ssZ The day-ahead auction has 24 columns. In the case of a short-day or long-day with seasonal time changes, the number of columns is 23 and 25, respectively. The intraday 1 auction has 48 columns. In the case of a short-day or long-day with seasonal time changes, the number of columns is 46 and 50, respectively. The intraday 2 auction has 24 columns. The time horizon of the auction is unaffected by the seasonal time change. The intraday 3 auction has 12 columns. The time horizon of the auction is unaffected by the seasonal time change. Due to clock change, the number of columns may be variable (e.g. in case of 60min day ahead auction for DST 23, the number of columns is 23)

Area Information, Member-Level Detail, Scalable Complex Order Results: Line 3 (Scalable Complex Order Results Detail)

Col. #	Type	Description
1 -> n	Number(15,5)	Value of executed quantity for the scalable complex order The day-ahead auction has 24 columns. In the case of a short-day or long-day with seasonal time changes, the number of columns is 23 and 25, respectively. The intraday 1 auction has 48 columns. In the case of a short-day or long-day with seasonal time changes, the number of columns is 46 and 50, respectively. The intraday 2 auction has 24 columns. The time horizon of the auction is unaffected by the seasonal time change. The intraday 3 auction has 12 columns. The time horizon of the auction is unaffected by the seasonal time change. Due to clock change, the number of columns may be variable (e.g. in case of 60min day ahead auction for DST 23, the number of columns is 23)

Area Information, Member-Level Detail, Scalable Complex Order Results: Line 4 (Scalable Complex Order OrderPeriodIDs)

Col. #	Type	Description
1 -> n	Number(25,0)	Value of the orderPeriodIDs for the scalable complex order The day-ahead auction has 24 columns. In the case of a short-day or long-day with seasonal time changes, the number of columns is 23 and 25, respectively.

Col. #	Type	Description
		The intraday 1 auction has 48 columns. In the case of a short-day or long-day with seasonal time changes, the number of columns is 46 and 50, respectively. The intraday 2 auction has 24 columns. The time horizon of the auction is unaffected by the seasonal time change. The intraday 3 auction has 12 columns. The time horizon of the auction is unaffected by the seasonal time change. Due to clock change, the number of columns may be variable (e.g. in case of 60min day ahead auction for DST 23, the number of columns is 23)

6.2.2 EA-002: ETS BID FILE

This file contains all the orders submitted during the auction (whether they were executed or not – this is indicated) for a given Area Set and Auction Day. (Deactivated orders are also included in the file).

6.2.2.1 ETS BID FILES

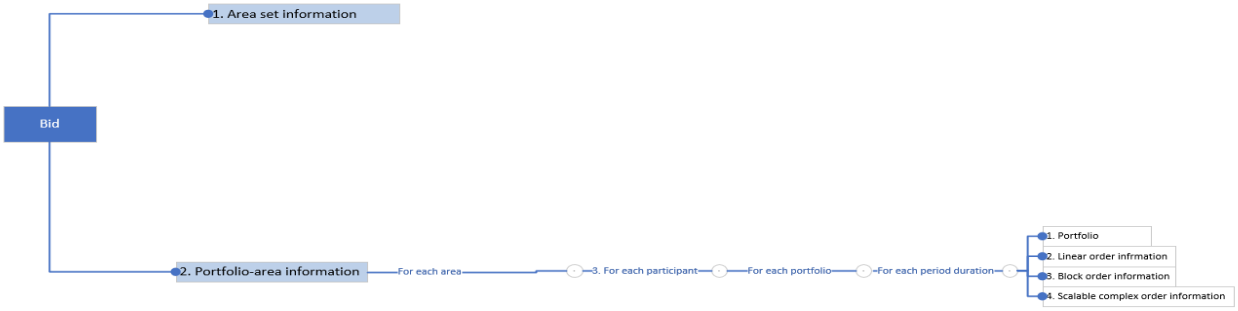
The ETS Bid data are delivered in four files, one for each of the auctions. They are:

Auction	Filemask
Day-Ahead Auction Results	BidFile_SEM-DA_PWR-MRC-D+1_<AUCTION DATE as YYYYMMDDHHMMSS>_<REPORT_PULICATION_DATE as YYYYMMDDHHMMSS>.csv
Intraday 1 Auction Results	BidFile_SEM-IDA1_PWR-SEM-GB-D+1_<AUCTION DATE as YYYYMMDDHHMMSS>_<REPORT_PULICATION_DATE as YYYYMMDDHHMMSS>.csv
Intraday 2 Auction Results	BidFile_SEM-IDA2_PWR-SEM-GB-D_<AUCTION DATE as YYYYMMDDHHMMSS>_<REPORT_PULICATION_DATE as YYYYMMDDHHMMSS>.csv
Intraday 3 Auction Results	BidFile_SEM-IDA3_PWR-SEM-D_<AUCTION DATE as YYYYMMDDHHMMSS>_<REPORT_PULICATION_DATE as YYYYMMDDHHMMSS>.csv

I-SEM Report Reference:	*EA-002*
Data Source	*SEMOpx (ETS)*
Periodicity:	*Daily*
Audience:	*General Public*
Resolution:	*Day-Ahead: Hourly* *Intraday: Half-hourly*
Time Span:	*Per each auction specification*
Frequency:	*Daily, at D+1 relative to the trading day.*
Report Format:	*CSV* ***Note**: the data in this report are semi-colon (;) separated, with commas (,) used as decimals.*

6.2.2.1.1 ETS BID FILE STRUCTURE

The structure of the ETA Bid files is described in the diagram below.



6.2.2.2 ETS BID FILE: AREA SET SECTION

Area Set Information: Line 1 (Area set name)

Col. #	Type	Description
1	String	"Area set"
2	String	Area set name.

Area Set Information: Line 2 (Auction name)

Col. #	Type	Description
1	Char(12)	"Auction name"
2	Char(30)	Name of the auction (e.g. SEMO DAM Auction, SEMO IDA 1 Auction...).

Area Set Information: Line 3 (Auction date/time)

Col. #	Type	Description
1	Char(17)	"Auction Date Time"
2	DateTime	Auction Date Time in UTC: YYYY-MM-DDThh:mm:ssZ

6.2.2.3 ETS BID FILE: PORTFOLIO-AREA SECTION

Portfolio - Area Information: Line 1 (Portfolio – Area – Period Duration)

Col. #	Type	Description
1	Char(2)	"PO" (for Portfolio)
2	Char(10)	Participant of the Portfolio >> Short Name
3	Char(32)	Portfolio name
4	Char(40)	Area name
5	Number(3)	Period duration in minutes: "15", "30", "60"
6	Char(3)	Settlement currency of the (portfolio, area) combination ("EUR, "GBP")
7	Char(2)	Portfolio type: normal (N), physical delivery month (PM) or physical delivery week (PW)

6.2.2.3.1 LINE TO DESCRIBE SUBMITTED LINEAR ORDER

For each linear order that has been submitted and accepted in the central module, following lines are indicated:

Line 1

Col. #	Type	Description
1	Char(2)	"SL" (for submission linear order)
2	Number(25,0)	Order ID
3	Char(20)	User ID
4	Char(10)	Participant of the User Short Name (can be different from participant of the Portfolio)
5	Date Time	Submission date time in UTC: YYYY-MM-DDThh:mm:ssZ

Line 2

Col. #	Type	Description
1	Char(2)	"PR" (for price)
2	Char(6)	"Period"
3	Char(6)	"OrderPeriodID"
4	Char(6)	"Active"
5	Char(9)	"Execution"
6	Number(15,5)	First price of the linear order If price tick has been modified after the order submission, the original price as submitted by the user is still displayed
..	..	..
	Number(15,5)	Last price of the linear order If price tick has been modified after the order submission, the original price as submitted by the user is still displayed

Line 3

Col. #	Type	Description
1	Char(2)	"VL" (for volume)
2	DateTime	Period date time in UTC: YYYY-MM-DDThh:mm:ssZ
3	Number(25,0)	Order Period ID
4	Char(1)	"Y" if the order is active and "N" if the order is not active If an order with physical delivery is not confirmed at the moment of the 'curve calculation' trigger which is used for this bid file generation, then "N" must be indicated If an order has been submitted after the 'curve calculation' trigger which is used for this bid file generation, then 'N' must be indicated. If a newer version for the order has been accepted by the server, then the older version has status 'N' The order status must be indicated (Either 'Y' or 'N') even if the bid file is generated before the first curve calculation from the auction session monitoring screen After any curve calculation, the orders statuses are frozen until the next curve calculation
5	Number(10,4)	Value of the executed quantity. If the order is inactive, the volume will always be zero.
6	Number(10,4)	Value of the submitted quantity for the first price of the interpolated order (as submitted by the user, in settlement currency) If no quantity is defined for the price, then no value If volume tick has been modified after the order submission, the original volume as submitted by the user is still displayed
..	..	..
	Number(10,4)	Value of the submitted quantity for the last price of the interpolated order If no quantity is defined for the price, then no value If volume tick has been modified after the order submission, the original volume as submitted by the user is still displayed

6.2.2.3.2 LINE TO DESCRIBE SUBMITTED BLOCK ORDER

For each block order that has been submitted and accepted in the central module, following lines are indicated (in particular the several versions of a block order are reported):

Line 1

Col. #	*Type*	*Description*
1	Char(2)	"SB" (for submission block order)
2	Char(20)	User id
3	Char(10)	Participant of User >> shortname
4	DateTime	Submission date time in GMT: YYYY-MM-DDThh:mm:ssZ

Line 2

Col. #	Type	Description
1	Char(2)	"BI" (for block information)
2	Char(7)	"BlockID"
3	Char(6)	"Active"
4	Char(9)	"Execution"
5	Char(3)	"MAR"
6	Char(3)	"AAR"

7	Char(9)	"BlockCode"
8	Char(12)	"BlockCodePRM"
9	Char(5)	"Price"
10 → n	DateTime	Period date time delivery start in GMT: YYYY-MM-DDThh:mm:ssZ for each period of the block order Due to clock change, the number of columns may be variable (e.g. in case of 60min day ahead auction for DST 23, the number of columns is 23)
n+1 → p	DateTime	Period date time delivery start in GMT: YYYY-MM-DDThh:mm:ssZ for each period of the block order Due to clock change, the number of columns may be variable (e.g. in case of 60min day ahead auction for DST 23, the number of columns is 23)

Line 3 → Xth line (number of lines depends on the number of block orders contained in the submission)

Col. #	Type	Description
1	Char(2)	"BL" (for block)
2	Number(25,0)	Reference number of the block order; it is the OrderID as described in the 148 – ETS - Trade and Trader ID document
3	Char(2)	"Y" if the order is active and "N" if the order is not active If an order has been submitted after the 'curve calculation' trigger which is used for this bid file generation, then 'N' must be indicated. If a newer version for the order has been accepted by the server, then the older version has status 'N' The order status must be indicated (Either 'Y' or 'N') even if the bid file is generated before the first curve calculation from the auction session monitoring screen After any curve calculation, the orders statuses are frozen until the next curve calculation
4	Number(10,4)	Value of execution volume If the block order is not active, then execution volume is necessarily 0 If the block order is active and has not been executed, then execution volume is 0 If the block order has been executed, then execution volume is the sum of the executed volumes, e.g. if a 3MW block which lasts 3 hours has been executed, then displayed executed volume is 3*3=9
5	Number(3,2)	Value of minimum acceptance ratio (default: 1)
6	Number(6,5)	Value of Actual Acceptance Ratio (default: 0 rejected / 1 accepted) For AAR, reported value is R_AAR (i.e. resized AAR) truncated to 5 decimal places
7	Char(3)	According to block type's, the code is different: • C01 for normal block • C02 for Linked block • C04 for Exclusive block • C88 for Loop block
8	Char(?)	The "BlockCodePRM" column will contain parameters for linked,exclusive, loop and flexible blocks depending on the BlockCode of each Block entered: • "BlockCode" = C01 : The "BlockCodePRM" field corresponding to this BlockCode will be empty (N/A) • "BlockCode" = C02 : The "BlockCodePRM" field corresponding to this BlockCode will be : o A number "Block ID": If this Block has one parent. This field contains the Block ID number of its parent o Several numbers "Block ID": If this Block has several parents. This field contains the Block ID number of all its parent, separated by the "_" character between each Block ID number • "BlockCode" = C04: The "BlockCodePRM" field corresponding to this BlockCode will be an "Exclusive Group" ID generated by ETS server. It will be unique and the same for all contents blocks in this group • "BlockCode" = C88: The "BlockCodePRM" field corresponding to this BlockCode will be a "Loop Family" ID generated by ETS server. It will be unique and the same for all contents blocks in this group
9	Number(15,5)	Price of the block order as submitted by the user, in settlement currency
10 → n	Number(10,4)	Value of submitted quantity for first period, second period, etc., If block order is not defined for a period, then no value is given Due to clock change, the number of columns may be variable (e.g. in case of 60min day ahead auction for DST 23, the number of columns is 23) If a block order is cancelled, then the new version of the order has "0" values for all the defined periods (with defined values, the others are left empty)
n+1 → p	Number(25,0)	Value of OrderPeriodID

		If block order is not defined for a period, then no value is given Due to clock change, the number of columns may be variable (e.g. in case of 60min day ahead auction for DST 23, the number of columns is 23)

6.2.2.3.3 LINE TO DESCRIBE SUBMITTED SCALABLE COMPLEX ORDER

For each scalable complex order that has been submitted and accepted in the central module, following lines are indicated (in particular the several versions of a scalable complex order are reported):

Line 1

Col. #	Type	Description
1	Char	"SC" (for submission scalable complex order)
2	Number(15,0)	Value of Order ID
3	Char	Value of User ID
4	String	Member ID of the user
5	Date Time	Submission date time in UTC: YYYY-MM-DDThh:mm:ssZ
6	Char(10)	"Fixed Term"
7	Number(18,11)	Value of Fixed Term
8	Char(17)	"Increase Gradient"
9	Number(11,5)	Value of Increase Gradient
10	Char(17)	"Decrease Gradient"
11	Number(11,5)	Value of Decrease Gradient
12	Char(22)	"Scheduled Stop Periods"
13	Number(2)	Value of Scheduled Stop Periods
14	Char(22)	"Paradoxically Rejected"
15	Number(1)	Value of Paradoxically Rejected (1 – paradoxically rejected, 0 – not paradoxically rejected)
16	Char(10)	"Activation"
17	Number(1)	Value of activation (0 - Rejected,1 - Accepted)

Line 2

Col. #	Type	Description
1	Char(2)	"PR" (for price)
2	Char(6)	"Period"
3	Char	"OrderPeriodID"
4	Char(6)	"Active"
5	Char(9)	"Execution"
6	Char(3)	"MAV"
7	Number(15,5)	First price of the scalable complex order If price tick has been modified after the order submission, the original price as submitted by the user is still displayed
..	..	..
	Number(15,5)	Last price of the scalable complex order If price tick has been modified after the order submission, the original price as submitted by the user is still displayed

Line 3

Col. #	Type	Description
1	Char(2)	"VL" (for volume)
2	Date Time	Period date time in UTC: YYYY-MM-DDThh:mm:ssZ
3	Number(25,0)	Value of Order Period ID
4	Char(1)	"Y" if the order is active and "N" if the order is not active If an order has been submitted after the 'curve calculation' trigger which is used for this bid file generation, then 'N' must be indicated. If a newer version for the order has been accepted by the server, then the older version has status 'N'. The order status must be indicated (Either 'Y' or 'N') even if the bid file is generated before the first curve calculation from the auction session monitoring screen. After any curve calculation, the orders statuses are frozen until the next curve calculation
5	Number(10,4)	Value of the executed quantity. Even if the scalable complex order is not with 'activated' status, it may have executed quantity (due to the Scheduled Stop Condition).
6	Char(3)	Value of the Minimum Acceptance Volume (MAV)
7	Number(10,4)	Value of the submitted quantity for the first price of the order

Col. #	Type	Description
		If no quantity is defined for the price, then no value If volume tick has been modified after the order submission, the original volume as submitted by the user is still displayed
..	..	..
	Number(10,4)	Value of the submitted quantity for the last price of the order If no quantity is defined for the price, then no value If volume tick has been modified after the order submission, the original volume as submitted by the user is still displayed.

6.3 TRADE REPORT

6.3.1 CONSTRUCTION RULES

The trade report content depends on the type of user (MO, TRADER, NON MARKET PARTICIPANT) and the access rights.

MO user	Trade report can contain only information of area set for which MO user has read or read/write access rights.
TRADER user	Market area details can be accessed only by TRADER user who has read or read write rights for a (portfolio, area) combination of an area which belongs to the same exchange as the considered auction session. Trade report can only contain order/trade information of (portfolio, area) combinations for which the TRADER user has read or read write rights.
NON MARKET PARTICIPANT user	Market area details can be accessed only for the market areas configured for the Non Market Participant; no access to member information, i.e. <TradeArea> tag is omitted.

6.3.2 FILE NAME/FORMAT

6.3.2.1 XML EXPORT SINGLE

If 'XML Export Single' is selected in Market Results screen:

Name	<auction date time>_TradeReport_<Shortname participant>_<area set>_<auction name>
Format	XML ZIP file containing generated XML Member report Encoding for the xml file = <?xml version="1.0" encoding="UTF-8"?>

6.3.2.2 XML EXPORT ALL

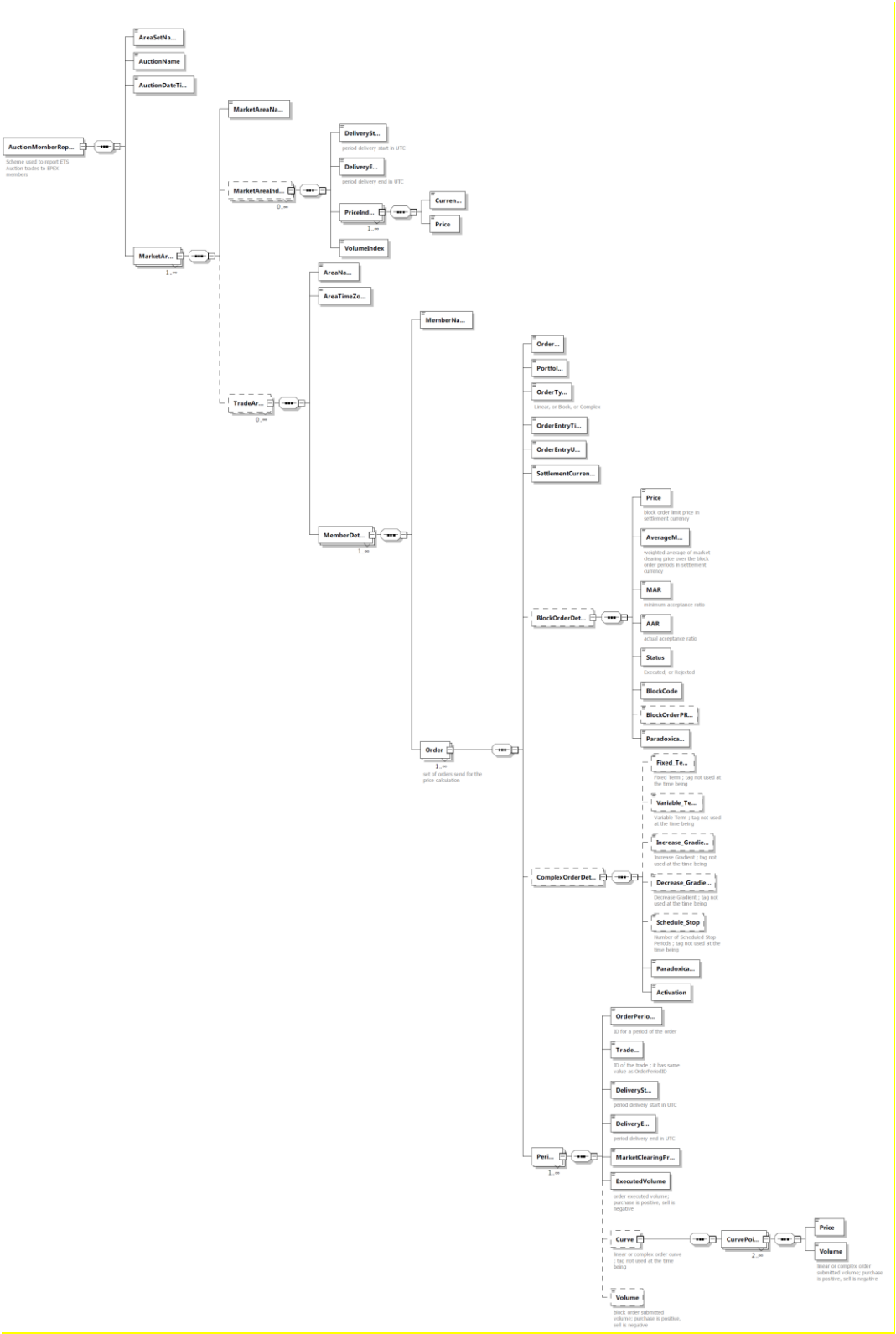
If 'XML Export All' is selected in Market Results screen:

Name	<auction date time>_TradeReport_<Shortname exchange>_<area set>_<auction name>
Format	XML ZIP file containing generated XML Member report Encoding for the xml file = <?xml version="1.0" encoding="UTF-8"?>

With:

<Auction date time>: auction date time (format: YYYYMMDDhhmmss) in GMT
<Shortname>: Shortname of the market participant in case of 'XML Export Single';
Shortname of the exchange linked to the area set in case of 'XML Export All'
<area set>: name of the area set
<auction name>: name of the auction

6.3.3 OVERVIEW



6.3.4 FILE CONTENT

Element	Data Type	Card.	Content
AreaSetName	String	[1..1]	Name of the area set
AuctionName	String	[1..1]	Auction name
AuctionDateTime	DateTime	[1..1]	Auction date time in the "YYYY-MM-DDTHH24:MI:SSZ" format
MarketArea	Group	[1..n]	List of market areas of the area set
+MarketAreaName	String	[1..1]	Market area name
+MarketAreaIndex	Group	[0..n]	
++DeliveryStart	DateTime	[1..1]	Delivery start of the period in the "YYYY-MM-DDTHH24:MI:SSZ" format
++DeliveryEnd	DateTime	[1..1]	Delivery end of the period in the "YYYY-MM-DDTHH24:MI:SSZ" format
++PriceIndex	Group	[1..n]	Price index is indicated for all settlement, trade limit and auction currencies available at the level of the area set
+++Currency	String	[1..1]	Currency name
+++Price	Decimal	[1..1]	Price index value The value is reported with the number of decimal places of the price tick plus one extra decimal place
++VolumeIndex	Decimal	[1..1]	Quantity index The value is reported with the number of decimal places of the volume tick
+TradeArea	Group	[0..n]	If the member(s) do not have any active order for the considered auction session, then this tag will not appear (omitted) In case of Non Market Participant user this tag will not appear (omitted) The group will be processed in descending area name order[3]
++AreaName	String	[1..1]	Area name
++AreaTimeZone	String	[1..1]	Time zone of the area
++MemberDetail	Group	[1..n]	The group will be processed in descending participant shortname order[4]
+++MemberName	String	[1..1]	Participant shortname to whom the portfolios belong
+++Order	Group	[1..n]	First linear orders, then scalable complex orders, then block orders[5] The group will be processed in ascending order ID, with order ID as defined in §2.3 Only active orders for the considered auction sessionare reported[6]
++++OrderID	Integer	[1..1]	Order ID as defined in §2.3

[3] However since it is xml format, the outcome may be different
[4] However since it is xml format, the outcome may be different
[5] However since it is xml format, the outcome may be different
[6] E.g. cancelled linear orders or orders from excluded members are not reported

Element	Data Type	Card.	Content
++++Portfolio	String	[1..1]	Portfolio name
++++OrderType	String	[1..1]	Type of the order; either “Linear” or “Scalable Complex” or “Block”
++++OrderEntryTime	DateTime	[1..1]	Order entry time in “YYYY-MM-DDTHH24:MI:SSZ” format
++++OrderEntryUser	String	[1..1]	Trader ID as defined in §2.1
++++SettlementCurrency	String	[0..1]	Settlement currency
++++BlockOrderDetails	Group	[0..n]	This tag will appear only if OrderType is “Block”
+++++Price	Decimal	[1..1]	Block price limit in settlement currency
+++++AverageMCP	Decimal	[1..1]	Weighted average MCP over the periods of the considered block, in the settlement currency The value is reported with the number of decimal places of the price tick plus one extra decimal place
+++++MAR	Decimal	[1..1]	Value of minimum acceptance ratio
+++++AAR	Decimal	[1..1]	Value of actual acceptance ratio
+++++Status	String	[1..1]	Execution status: “Executed” or “Rejected”
+++++BlockCode	String	[1..1]	C01 for normal block, C02 for linked block, C04 for exclusive block, C88 for loop block
+++++BlockCodePRM	String	[0..1]	If “BlockOrderType” = C01 : the tag is omitted If “BlockOrderType” = C02 : The “BlockCodePRM” field corresponding to this BlockOrderType will be : - A number “OrderID”: If this Block has one parent. This field contains the OrderID of its parent - Several numbers “OrderID”: If this Block has several parents. This field contains the OrderID of all its parent, separated by the “_” character between each OrderID If “BlockOrderType” = C04: The “BlockCodePRM” field corresponding to this BlockCode will be an “Exclusive Group” ID generated by ETS server. It will be unique and the same for all contents blocks in this group If “BlockOrderType” = C88: The “BlockCodePRM” field corresponding to this BlockCode will be an “Loop family” ID generated by ETS server. It will be unique and the same for all contents blocks in this group
+++++Paradoxically	String	[1..1]	“No” or “PRB” or “PAB with child”
++++ScalableComplexOrderDetails	Group	[0..n]	This tag will appear only if OrderType is “Scalable Complex”
+++++Fixed_Term	Decimal	[0..1]	Not used yet
+++++Increase_Gradient	Decimal	[0..1]	Not used yet
+++++Decrease_Gradient	Decimal	[0..1]	Not used yet

Element	Data Type	Card.	Content
+++++Schedule_Stop	Integer	[0..1]	Not used yet
+++++Paradoxically	Integer	[1..1]	Value of Paradoxically Rejected (1 – paradoxically rejected / 0 – not paradoxically rejected)
+++++Activation	Integer	[1..1]	Value of Activation (1 – Accepted / 0 – Rejected)
++++Period	Group	[1..n]	The group is processed in ascending Delivery Start
+++++OrderPeriodID	Integer	[1..1]	ID for a period of the order (see §2.2 and §2.4)
+++++TradeID	Integer	[1..1]	ID of the trade ; same value as OrderPeriodID
+++++DeliveryStart	DateTime	[1..1]	Delivery Start in the "YYYY-MM-DDTHH24:MI:SSZ" format
+++++DeliveryEnd	DateTime	[1..1]	Delivery End in the "YYYY-MM-DDTHH24:MI:SSZ" format
+++++MarketClearingPrice	Decimal	[1..1]	Market clearing price in settlement currency The value is reported with the number of decimal places of the price tick plus one extra decimal place
+++++ExecutedVolume	Decimal	[1..1]	Executed volume The value is reported with the number of decimal places of the volume tick
+++++MAV	Decimal	[1..1]	Not used yet
+++++Curve	Group	[0..1]	Not used yet
++++++CurvePoint	Group	[2..n]	Not used yet
+++++++Price	Decimal	[1..1]	Not used yet Submitted price in settlement currency
+++++++Volume	Decimal	[1..1]	Not used yet Submitted volume
+++++Volume	Decimal	[0..1]	Block order submitted volume This tag will appear only if OrderType is "Block"

Remark: at the time being some order information is not included in the report to avoid creation of a too large report. These tags are optional in the XSD. In case members ask for more information, this information will be filled by ETS. These tags are identified with "Not used yet" content description.

6.4 API

The following methods are impacted by the replacement:

6.4.1 CANCELSCALABLE COMPLEX ORDER

6.4.1.1 UPDATE SUMMARY

- The method is renamed CancelScalableComplexOrder

6.4.2 ENTER SCALABLE COMPLEX ORDER

6.4.2.1 UPDATE SUMMARY

- Inputs:
  - The <variable_Term> tag is removed

- The <minimum_Acceptance_Volume> tag is added under the <Curve> group. It is mandatory.

6.4.3 RETRIEVE SCALABLE COMPLEX ORDERS

6.4.3.1 UPDATE SUMMARY

- Output:
  - The <variable_Term> tag is removed
  - The <minimum_Acceptance_Volume> tag is added under the <Curve> group. It is mandatory.

6.4.4 RETRIEVETRADESREPORTFOR

6.4.4.1 UPDATE SUMMARY

The report contained in the response of the API RetrieveTradesReportFor method is updated to match the XSD change.

6.4.5 EA-003: BLOCK BID ORDER FILE

This report is not yet available for SEMOpx.

6.4.6 EA-004: BID/ASK CURVES

This file contains the calculated data points of the bid/ask curves, containing aggregated NI and ROI data.

6.4.6.1 ETS BID/ASK CURVE FILES

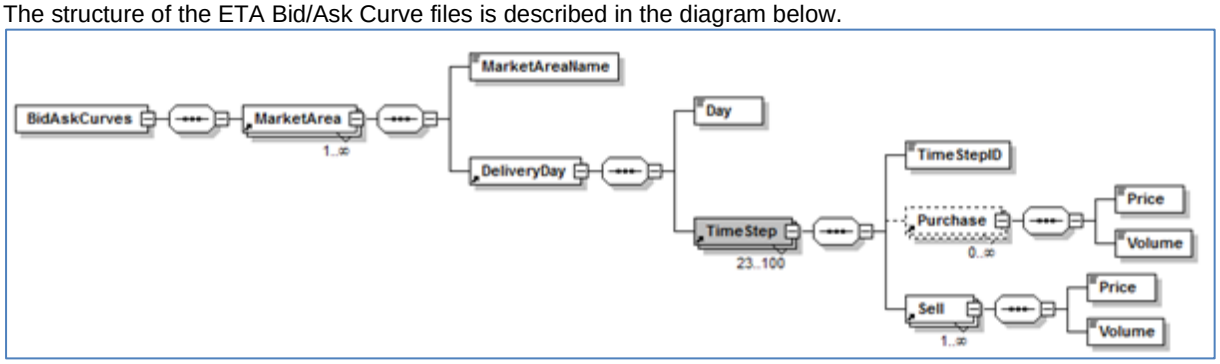
The ETA Bid data are delivered in four files, one for each of the auctions, by area. They are:

Auction	Filemask
Day-Ahead Auction Bid/Ask Curves, SEM	BidAskCurves_SEM-DA_<AUCTION DATE as YYYYMMDDHHMMSS>_<REPORT_PULICATION_DATE as YYYYMMDDHHMMSS>.xml
Intraday 1 Auction Bid/Ask Curves, SEM	BidAskCurves_SEM-IDA1_<AUCTION DATE as YYYYMMDDHHMMSS>_<REPORT_PULICATION_DATE as YYYYMMDDHHMMSS>.xml
Intraday 2 Auction Bid/Ask Curves, SEM	BidAskCurves_SEM-IDA2_<AUCTION DATE as YYYYMMDDHHMMSS>_<REPORT_PULICATION_DATE as YYYYMMDDHHMMSS>.xml
Intraday 3 Auction Bid/Ask Curves, SEM	BidAskCurves_SEM-IDA3_<AUCTION DATE as YYYYMMDDHHMMSS>_<REPORT_PULICATION_DATE as YYYYMMDDHHMMSS>.xml

I-SEM Report Reference:	*EA-004*
Data Source	*SEMOpx (ETS)*
Periodicity:	*Daily*
Audience:	*General Public*
Resolution:	*Day-Ahead: Hourly* *Intraday: Half-hourly*
Time Span:	*Per each auction specification*
Frequency:	*Daily and within two hours of auction publicaton.*
Report Format:	*XML*

6.4.6.1.1 ETS BID/ASK CURVE FILE STRUCTURE

The structure of the ETA Bid/Ask Curve files is described in the diagram below.



6.4.6.2 ETS BID/ASK CURVE FILE

Market Area Sub Element

Field	Data type	Elements	Description
MarketAreaName	String	1	MarketArea
DeliveryDay	DeliveryDay	1	

DeliveryDay Sub Element

Field	Data type	Elements	Description
Day	Date	1	dd/mm/yyyy
TimeStep	TimeStep	1 - n	Time step curve data for all time steps of the day

TimeStep Sub Element

Field	Data type	Elements	Description
TimeStepID	String	1	Time step: 01- 24 On DST start date the third hour is removed: 01, 02, 04, 05, … , 24 On DST end date the third hour is replicated and the letter 'B' is used to differentiate it: 01,02, 03, 03B, 04, 05, …, 24
Purchase	Bid	0 – n	Price/Quantity pairs for purchased quantity at a given price level
Sell	Bid	0 – n	Price/Quantity pairs for sold quantity at a given price level

Bid Sub Element

Field	Data type	Elements	Description
Price	Price	1	Buy/sell price Value has the precision of the area price + 2 additional decimal places e.g. for price tick 0.1 €/MWh there will be three decimal places of precision
Quantity	Quantity	1	Purchased/sold quantity Value has the precision of the area volume + 1 additional decimal place e.g. for volume tick 0.1 MW there will be two decimal places of precision

6.4.7 EA-006: EXCHANGE TRANSPERANCY

This file contains summary data about the ETS market activity.

6.4.7.1 EXCHANGE TRANSPARENCY FILE

I-SEM Report Reference:	*EA-006*
Data Source	*SEMOpx*
Periodicity:	*Daily*
Filename:	*Exchange Transparency_[Market Area]_[Delivery date]_[Creation date]*
Audience:	*General Public*

Resolution:	*Delivery Date*
Time Span:	*Delivery Date*
Frequency:	*Daily, at D+1 relative to the trading day.*
Report Format:	*XML*

6.4.7.1.1 EXCHANGE TRANSPARENCY FILE STRUCTURE

The structure of the Exchange Transparency file is described in the diagram below.

```
<?xml version='1.0' encoding='ISO-8859-1'?>
<ExchangeTransparency>
    <DeliveryDay>16/10/2013</DeliveryDay>
    <MarketAreaName>ROI-DA</MarketAreaName>
    <ActiveParticipants>2</ActiveParticipants>
    <NbBuyers>1</NbBuyers>
    <NbSellers>1</NbSellers>
    <NbNetBuyers>1</NbNetBuyers>
    <NbNetSellers>1</NbNetSellers>
    <MarketShare>0.5</MarketShare>
</ExchangeTransparency>
```

6.4.7.2 EXCHANGE TRANSPARENCY FILE DETAIL

File detail

Element Name	Type	Cardinality	Description
DeliveryDay	string	[1..1]	Delivery day for the products in the auction (format: DD/MM/YYYY)
MarketAreaName	string	[1..1]	Market area name.
ActiveParticipants	string	[1..1]	Total number of Participants that have submitted an order for products in the Market Area for the auction.
NbBuyers	integer	[1..1]	Total number of Active Participants that have submitted a buy order in the Market Area for the auction.
NbSellers	integer	[1..1]	Total number of Active Participants that have submitted a Sell order in the Market Area for the auction.
NbNetBuyers	integer	[1..1]	Total number of Active Participants that have submitted and executed a Buy order in the Market Area for the auction.
NbNetSellers	integer	[1..1]	Total number of Active Participants that have submitted and executed a Sell order in the Market Area for the auction.

6.4.8 EA-007: INTRADAY MARKET RESULTS TRADE

This report contains an inventory of all of the orders placed or modified by each member during the trading day. The report shows all unmodified, modified, reversed, cancelled and matched trades including on-exchange prearranged trades (OPT), private and confidential trades (PNC) and approved OTC trades whenever these are supported by the exchange. In case cross-product matching or trade decomposition has been configured and such a trade was matched, only the trades resulting from the trade decomposition will appear in the report.

For a report user belonging to a Regular member, this report contains the trade data just for this member.

For a market operations report user, this report is an aggregation of trade data of all members.

For a report user belonging to a Broker member, the report contains the trades and actions performed on these trades by the broker on behalf of other members. If the broker was also trading on his own behalf, the actions performed by its own member will be included in the report as well.

6.4.8.1 INTRADAY MARKET RESULTS TRADE FILE

I-SEM Report Reference:	*EA-007*
Data Source	*SEMOpx (M7)*

Periodicity:	*Daily*
Audience:	*General Public*
Filename:	*IDC_TradeFile_[Delivery Date]__[Creation Date].xml*
Time Span:	*Trade Date*
Frequency:	*Daily, at D+1 relative to the trading day.*
Report Format:	*XML*

6.4.8.2 INTRADAY MARKET RESULTS TRADE FILE STRUCTURE

Each **<tc810Grp>** contains all trades for a member/contract combination. Inside this group tag, the trades are organised by traders into different **<tc810Grp1>.** Inside this structure, the trades themselves are listed in the last hierarchy level, each in a separate **<tc810Rec>.**

In general, all trades, identified by their "tranIdNo", are only present once. The only exception are recalled trades, which can be identified by the value "R" in the field **<tranTypCod>** and cancelled trades which can be identified by the value "C" in the field **<tranTypCod>.**

6.4.8.3 INTRADAY MARKET RESULTS TRADE FILE DETAIL

XML Tag	m / o	no.	Type	Condition the optional tag is present if..
tc810	m	1	Structure	
rptHdr	m	1	Structure	
exchNam	m	1	Data	
envText	m	1	Data	
rptCod	m	1	Data	
rptNam	m	1	Data	
rptPrntEffDat	m	1	Data	
rptPrntRunDat	m	1	Data	
tc810Grp	o	0..n	Structure	at least one trade was matched, trade cancelled, or trade recall was granted on <rptPrntEffDat>
tc810KeyGrp	m	1..n	Structure	
membExcIdCod	m	1	Data	
membClgIdCod	m	1	Data	
stlIdAct	m	1	Data	
stlIdLoc	m	1	Data	
instTitl	m	1	Structure	
isinCod	m	1	Data	
cntcUnt	m	1	Data	
product	m	1	Data	
currTypCod	m	1	Data	
tc810Grp1	m	1	Structure	
tc810KeyGrp1	m	1	Structure	
partIdCod	m	1	Data	
tc810Rec	m	1..n	Structure	
mktArea	m	1	Data	
tso	m	1	Data	
balGrp	m	1	Data	
clgHseCode	o	0..1	Data	a clearing house code was specified as part of the respective order
clgAcctId	o	0..1	Data	a clearing account ID was specified as part of the respective order
tranTim	m	1	Data	
tranIdNo	m	1	Data	
tranIdSfxNo	m	1	Data	

				tranTypCod	m	1	Data	
				typOrig	m	1	Data	
				aggressorIndicator	m	1	Data	
				ordrNo	m	1	Data	
				acctTypCodGrp	m	1	Data	
				ordrBuyCod	m	1	Data	
				openCloseInd	o	0..1	Data	the respective order was submitted with a valid value in the “Open Close Indicator” field
				tradMtchQty	m	1	Data	
				tradMtchPrc	m	1	Data	
				tradPhase	m	1	Data	
				stlDate	m	1	Data	
				feeAmt	m	1	Data	
				membCtpyIdCod	m	1	Data	
				text	o	0..1	Data	the text field is not empty
				membExcIdCodOboMs	o	0..1	Data	the trade was cancelled or a trade recall was granted by an admin user
				partIdCodOboMs	o	0..1	Data	the trade was cancelled or a trade recall was granted by an admin user
				brokerMembIdCod	o	0..1	Data	the trade was modified by a broker user on behalf of another user
				brokerUserIdCod	o	0..1	Data	the action was modified by a broker user on behalf of another user
				selfTrade	o	0..1	Data	
			sumPartTotBuyOrdr		m	1	Data	
			sumPartTotSellOrdr		m	1	Data	
		sumMembTotBuyOrdr			m	1	Data	
		sumMembTotSellOrdr			m	1	Data	

Figure 1: Intraday Market Trade Results File Detail

6.4.9 EA-008: INTRADAY MARKET RESULTS ORDER

The report contains a list of all active orders, which have been created or modified for each member during the trading day.

For a report user belonging to a Regular member, this report is arranged by traders and contracts, and lists all measures taken for the maintenance of orders during the trading day.

6.4.9.1 INTRADAY MARKET RESULTS ORDER FILE

I-SEM Report Reference:	*EA-008*
Data Source	*SEMOpx (ETS)*
Periodicity:	*Daily*
Audience:	*General Public*
Filename:	*IDC_OrderFile_[Delivery Date]_[Creation Date].xml*
Time Span:	*Trade Day*
Frequency:	*Daily, at D+1 relative to the trading day.*
Report Format:	*XML*

6.4.9.2 INTRADAY MARKET RESULTS ORDER FILE STRUCTURE

For each member, a **<tc540Grp>** contains all orders that have been modified by its users. Inside this group tag, the orders are sorted by combinations of the user's code and contract that each order was entered for. Each of these combinations is defined by a **<tc540Grp1>.** Finally, inside each of these group tags, the orders are contained inside the **<tc540Rec>,** while each maintenance action performed on an order is listed in an individual record. All **<tc540Rec>** inside a **<tc540Grp1>** appear in chronological order (earliest first).

The report does not necessarily contain the complete lifecycle of an order, as it lists only the maintenance actions for one trading day, which is displayed in the tag **<rptPrntEffDat>.**

In the report for the market operations, a member will appear if and only if at least one of its users performed an order maintenance action (or the action was performed on behalf) during the last (full) trading day. In this regard, the status in which the (trading) member or its user is at the time of the report generation is irrelevant.

6.4.9.3 INTRADAY MARKET RESULTS ORDER FILE DETAIL

XML Tag	m/o	no.	Type	Condition the optional tag is present (if)..
tc540	m	1	Structure	
rptHdr	m	1	Structure	
exchNam	m	1	Data	
envText	m	1	Data	
rptCod	m	1	Data	
rptNam	m	1	Data	
rptPrntEffDat	m	1	Data	
rptPrntRunDat	m	1	Data	
tc540Grp	o	0..n	Structure	an order was modified on <rptPrntEffDat>
tc540KeyGrp	m	1	Structure	
membExcIdCod	m	1	Data	
tc540Grp1	m	1..n	Structure	
tc540KeyGrp1	m	1	Structure	
partIdCod	m	1	Data	
instTitl	m	1	Structure	
isinCod	m	1	Data	
currTypCod	m	1	Data	
product	m	1	Data	
tc540Rec	m	1..n	Structure	

				tranTim	m	1	Data	
				mktArea	m	1	Data	
				tso	m	1	Data	
				balGrp	m	1	Data	
				clgHse	o	0..n	Structure	a clearing house was specified as part of the order
				clgHseCode	m	1	Data	
				clgAcct	m	1..n	Structure	
				clgAcctId	m	1	Data	
				entTim	m	1	Data	
				actnCod	m	1	Data	the "actnCod" of the order is either “M” (full match) or ”P” (partial match).
				aggressorIndicator	o	0..1	Data	
				revisionNo	m	1	Data	
				listID	o	0..1	Data	the order is a part of a basket
				listExecInst	o	0..1	Data	the order is a part of a basket
				ordrNo	m	1	Data	
				ordrInitialNo	m	1	Data	
				ordrParentNo	o	0..1	Data	the order was modified which led to a new order with a new order number
				ordrBuyCod	m	1	Data	
				openCloseInd	o	0..1	Data	the order was submitted with a valid value in the “Open Close Indicator” field
				acctTypCodGrp	m	1	Data	
				ordrQty	m	1	Data	
				peakSizeQty	o	0..1	Data	<ordrTypCod> is “**I”** (iceberg order)
				totalRemQty	o	0..1	Data	<ordrTypCod> is “**I”** (iceberg order)
				stopPrc	o	0..1	Data	<ordrTypCod> is “**S”** (stop limit order)
				ppd	o	0..1	Data	<ordrTypCod> is “**I”** (iceberg order)
				ordrTypCod	m	1	Data	
				quote	o	0..1	Data	the order is a quote
				ordrExePrc	m	1	Data	
				tradMtchPrc	o	0..1	Data	<actnCod> is either: “M” (full match) or ”P” (partial match)
				ordrResCod	o	0..1	Data	<ordrResCod> is either: “A” (AON), “F” (FOK) or “I” (IOC)
				ordrValCode	m	1	Data	
				applicationId	o	0..1	Data	always, except for orders submitted or maintained before the migration to M7 6.0.
				applicationVer	o	0..1	Data	the application version was provided in the API.
				valDat	o	0..1	Data	<ordrValCode> is “GTD“
				text	o	0..1	Data	the text field is not empty
				membExcIdCodOboMs	o	0..1	Data	the maintenance step was performed by a user on behalf of the order owner
				partIdCodOboMs	o	0..1	Data	the maintenance step was performed by a user on behalf of the order owner
				prioChange	o	0..1	Data	the order has been added or deleted as a result of an order modification which lead to a priority change of the order.

Figure 2: Intraday Market Results Order File Detail

6.4.10 EA-009: INTRADAY MARKET RESULTS STATISTICS

This report contains market-wide statistics for the volumes and prices of orders matched within the Intraday Continuous market.

6.4.10.1 INTRADAY MARKET RESULTS STATISTICS FILE

I-SEM Report Reference:	*EA-009*
Data Source	*SEMOpx (ETS)*
Periodicity:	*Daily*
Audience:	*General Public*
Filename:	*IDC_Statistic_[Creation date] (Creation Date in format YYYYMMDDhhmiss in UTC) (up to 27th November 2019)* *IDC_Statistics_[Creation date] (Creation Date in format YYYYMMDDhhmiss in UTC) (from 28th November 2019)*
Time Span:	*Trade Date*
Frequency:	*Daily, at D+1 relative to the trading day.*
Report Format:	*CSV* ***Note**: the data in this report are semi-colon (;) separated, with commas (,) used as decimals*

6.4.10.2 INTRADAY MARKET RESULTS STATISTICS FILE DETAIL

Statistics Report Comment: Line 1

Col. #	Type	Description
1	Char(1)	"#"
2	DateTime	File generated DateTime (format: DD/MM/YYYY HH:MM;SS Z) in UTC
3	String	"Trade Values – SEMO Intraday Trading – ireland"

Statistics Report Header: Line 2

Col. #	Type	Description
1	String	"Delivery day"
2	String	"Delivery Start "
3	String	"Volume Buy (MW)"
4	String	"Volume Sell (MW)"
5	String	"Low Price (EUR/MWh)"
6	String	"High Price (EUR/MWh)"
7	String	"Last Price (EUR/MWh) "
8	String	"Time Stamp of Last Price"
9	String	"Weighted Average Price"

Statistics Report Detail: Lines 3 -> Nth (Should be 97 for two days of 30 minute instruments and one line for blocks)

Col. #	Type	Description
1	String	The Delivery day being reported (format: DD/MM/YYYY) in UTC
2	String	For 30 minute instruments: Instrument delivery start date/time in UTC: DD/MM/YYYY HH:MM:SSZ For Blocks: "Blocks (MWh)"
3	String	For 30 minute instruments: The total Volume (in MW) for Buy order for the instrument (total of volume on delivery areas ROI and NI) For Blocks: The total Volume (in MWh) for Buy order for all the pre-defined blocks (total of volume on delivery areas ROI and NI)
4	String	For 30 minute instruments: The total Volume (in MW) for Sell order for the instrument (total of volume on delivery areas ROI and NI) For Blocks: The total Volume (in MWh) for Sell order for all the pre-defined blocks (total of volume on delivery areas ROI and NI)
5	String	For 30 minute instruments: The Lowest traded Price (EUR/MWh) achieved for that instrument (delivery area ROI or NI) For Blocks: empty
6	String	For 30 minute instruments: The Highest traded Price (EUR/MWh) achieved for the instrument (delivery area ROI or NI) For Blocks: empty

Col. #	Type	Description
7	String	For 30 minute instruments: The traded Last Price (EUR/MWh) for the instrument (delivery area ROI or NI) For Blocks: empty
8	String	For 30 minute instruments: Time Stamp of Last Price (format: DD/MM/YYYY HH:MM:SSZ) in UTC (delivery area ROI or NI) For Blocks: empty
9	String	For 30 minute instruments: The Weighted Average Price for the instrument. Average price weighted by the volume, calculated as trades occur on a real time basis. Volumes are summed over the two Delivery Area and Price are considered over the two delivery areas. Format: Decimal given to 6 decimal places - E.g.: 38,676996 Averages are calculated - Per instrument The following trades are considered - Market local trades on single product (instrument) Calculation method If there is at least one trade on the related instrument, the average is equal to the weighted average price. o Sum (Price*Volume) for trades done on the related instrument divided by Sum (Volume) for trades done on the related instrument. For Blocks: empty

6.4.11 EA-021: REMIT FILES

These reports contain the SEMOpx REMIT data reported to ACER for members that have opted in to the REMIT reporting service.

The REMIT file content should be considered alongside the ACER Transaction Report User Manual (TRUM) available from the document library on the ACER website, for field descriptions for standard contracts refer to TRUM “Annex 1 – Data fields included in the Implementing Acts” Table 1.

6.4.11.1 REMIT FILES

Two REMIT files per member that has opted in to REMIT reporting are delivered per day; one for Auctions and one for Continuous. These files are submitted directly to ACER on a daily basis, and published on the SEMOpx website on a daily basis, for reporting date D+1.

These reports can be located directly on the SEMOpx website, under Market Data>Reports>Remit Reports.

File	Filemask
Auctions REMIT File	[Trading Date as YYYYMMDD]_[Generation date/time file as YYYYMMDDHHMMSS]_[RRM code]_[Member EPEX Shortname]_AU.xml
Continuous REMIT File	[Trading Date as YYYYMMDD]_[Generation date/time file as YYYYMMDDHHMMSS]_[RRM code]_[Member EPEX Shortname]_CO.xml

I-SEM Report Reference:	*EA-021*
Data Source	*SEMOpx (Auctions – ETS) (Continuous - M7)*
Periodicity:	*Daily*
Audience:	*General Public*
Resolution:	*Auctions:* *Continuous*
Time Span:	*Per market per Trading Date, auctions & continuous*
Frequency:	*Daily, at D+1 relative to the delivery day* *Files are published on a daily basis e.g. published each day, containing the previous days REMIT reporting information*
Report Format:	*XML*

6.4.11.1.1 AUCTIONS REMIT FILES

The structure of the Auctions REMIT file is described below.

There are four blocks :
. Reporting entity ID
. Contract list
. Order list
. Trade list.

To have a readable section, a table is proposed for each block :

REPORTING ENTITY ID :
This block gives the ACER code of the Registered Reporting Mechanism (RRM) concerned : here the SEMOpx'

Field	Data type	TRUM Field	Description
reportingEntityID/ace	String	6, 7	

CONTRACT LIST :

This block gives the list of the different contracts on which the member has traded

Field	Data type	TRUM Field	Description
contractId	String	21	
contractName	String	22	
contractType	String	23	
cnergyCommodity	String	24	
settlementMethod	String	26	
OrganisedMarketPlaceIdentifier/ace	String	27	
lastTradingDatetime	Date/Time – ISO8601	29	YYYY-MM-DDTHH:MM:SSZ
deliveryPointOrZone	String	48	
deliveryStartDate	Date – ISO8601	49	YYYY-MM-DD
deliveryEndDate	Date – ISO8601	50	YYYY-MM-DD
duration	String	51	
loadType	String	52	
deliveryProfile/loadDeliveryStartTime	Time – ISO8601	54	HH:MM
deliveryProfile/loadDeliveryEndTime	Time – ISO8601	54	HH:MM

ORDER LIST :

This block gives the list of the orders the member has submitted on the market

Field	Data type	TRUM Field	Description
RecordSeqNumber	Integer	-	Sequence number added incrementally
IdOfMarketParticipant/ace	String	1 & 2	
TraderID/traderIdForOrganisedMarket	String	3	
tradingCapacity	String	10	
buySellIndicator	String	11	
OrderId/uniqueOrderIdentifier	String	13	New OrderPeriodID generated by ETS
orderType	String	14	YYYY-MM-DDTHH:MM:SSZ
orderStatus	String	16	
(order)duration/duration	String	20	“Order” is not included in field name within file
ContractInfo/contractId	String	21	
OrganisedMarketPlaceIdentifier/ace	String	27	
transactionTime	Date/Time – ISO8601	30	YYYY-MM-DDTHH:MM:SSSZ
PriceIntervalQuantityDetails/intervalStartTime	Time – ISO8601	54	HH:MM
PriceIntervalQuantityDetails/intervalEndTime	Time – ISO8601	54	HH:MM
PriceIntervalQuantityDetails/quantity	Number	55	
PriceIntervalQuantityDetails/unit	String	56	
PriceIntervalQuantityDetails/PriceTimeInterval Quantity/value	Number	57	
PriceIntervalQuantityDetails/PriceTimeInterval Quantity/currency	String	57	
actionType	String	58	

TRADE LIST :

This block gives the list of the trades executed for the member

Field	Data type	TRUM Field	Description
RecordSeqNumber	Integer	-	
IdOfMarketParticipant/ace	String	1 & 2	
TraderID/traderIdForOrganisedMarket	String	3	
tradingCapacity	String	10	
buySellIndicator	String	11	
ContractInfo/contractId	String	21	
OrganisedMarketPlaceIdentifier/ace	String	27	
transactionTime	Date/Time – ISO8601	30	YYYY-MM-DDTHH:MM:SSSZ
uniqueTransactionIdentifier	String	31	New tradeID generated by ETS (equivalent to the OrderPeriodID if a trade is created)
linkedOrderId	String	33	New OrderPeriodID generated by ETS
PriceDetails/price	Number	35	
PriceDetails/priceCurrency	String	37	
NotionalAmountDetails/notionalAmount	Number	38	
NotionalAmountDetails/notionalCurrency	String	39	
Quantity/value	Number	40	
Quantity/unit	String	42	
TotalNotionalContractQuantity/Value	Number	41	
TotalNotionalContractQuantity/Unit	String	42	
cctionType	String	58	

6.4.11.1.2 CONTINUOUS REMIT FILE STRUCTURE

The structure of the Continuous REMIT file is described below.

There are four blocks :
. Reporting entity ID
. Contract list
. Order list
. Trade list.

To have a readable section, a table is proposed for each block :

REPORTING ENTITY ID :

This block gives the ACER code of the Registered Reporting Mechanism (RRM) concerned : here the SEMOpx'

Field	Data type	TRUM Field	Description
ReportingEntityID/ace	String	5, 6, 7	

CONTRACT LIST :

This block gives the list of the different contracts on which the member has traded

Field	Data type	TRUM Field	Description
contractId	String	21	
contractName	String	22	
contractType	String	23	
cnergyCommodity	String	24	
settlementMethod	String	26	
OrganisedMarketPlaceIdentifier/ace	String	27	
lastTradingDatetime	Date/Time – ISO8601	29	YYYY-MM-DDTHH:MM:SSZ
deliveryPointOrZone	String	48	
deliveryStartDate	Date – ISO8601	49	YYYY-MM-DD
deliveryEndDate	Date – ISO8601	50	YYYY-MM-DD
duration	String	51	
loadType	String	52	
DeliveryProfile/loadDeliveryStartTime	Time – ISO8601	54	HH:MM
DeliveryProfile/loadDeliveryEndTime	Time – ISO8601	54	HH:MM

ORDER LIST :

This block gives the list of the orders the member has submitted on the market

Field	Data type	TRUM Field	Description
RecordSeqNumber	Integer	-	Sequence number added incrementally
IdOfMarketParticipant/ace	String	1 & 2	
traderID/traderIdForOrganisedMarket	String	3 & 5	
tradingCapacity	String	10	
buySellIndicator	String	11	
OrderId/uniqueOrderIdentifier	String	13	
orderType	String	14	YYYY-MM-DDTHH:MM:SSZ
orderCondition	String	15	When not used, not visible
orderStatus	String	16	
undisclosedVolume/value	Number	19	
undisclosedVolume/unit	String		
OrderDuration	String	20	
ContractInfo/contractId	String	21	
OrganisedMarketPlaceIdentifier/ace	String	27	
transactionTime	Date/Time – ISO8601	30	YYYY-MM-DDTHH:MM:SSSZ
OrderReport/linkedOrderId	String	33	
PriceDetails/price	Number	35	
PriceDetails/priceCurrency	String	37	
Quantity/value	Number	40	
Quantity/unit	String	42	
actionType	String	58	

TRADE LIST :

This block gives the list of the trades executed for the member

Field	Data type	TRUM Field	Description
RecordSeqNumber	Integer	-	
IdOfMarketParticipant/ace	String	1 & 2	
TraderID/traderIdForOrganisedMarket	String	3 & 5	
tradingCapacity	String	10	
buySellIndicator	String	11	
ContractInfo/contractId	String	21	
OrganisedMarketPlaceIdentifier/ace	String	27	
transactionTime	Date/Time – ISO8601	30	YYYY-MM-DDTHH:MM:SSSZ
uniqueTranssactionIdentifier	String	13	
linkedOrderId	String	33	
PriceDetails/price	Number	35	
PriceDetails/priceCurrency	String	37	
NotionalAmountDetails/notionalAmount	Number	38	
NotionalAmountDetails/notionalCurrency	String	39	
Quantity/value	Number	40	
Quantity/unit	String	42	
TotalNotionalContractQuantity/value	Number	41	
TotalNotionalContractQuantity/unit	String	42	
actionType	String	58	

6.4.12 EA-010: INTERCONNECTOR CAPACITIES NTC

This report details the maximum transfer capacity that can be scheduled across the Moyle and EWIC interconnectors within the auctions.

6.4.12.1 INTERCONNECTOR CAPACITIES NTC FILE

A separate report shall be created for each coupled auction. The capacity shall remain the same across all auctions for a given trading day; unless there has been a revision to the interconnector capacity. This report shall be published before Order Book Closure; and republished in line with any Cross Zonal Capacity changes.

File	Filemask
Interconnector Capacities NTC	<Auction Name>InterconnectorCapacitiesNTC_<yyyymmdd>.xml

I-SEM Report Reference: *EA-010*

Data Source *ICMP*

Periodicity: *Daily*

Audience: *General Public*

Resolution: *Day-Ahead: Half-hourly*[7]
Intraday Market 1: Half-hourly
Intraday Market 2: Half-hourly

Time Span: *Per each auction specification*

Frequency: *Daily, per publication table below for each auction:*

Auction	First Publication Time	Final Publication Time
DAM[3]	NA	NA
IDM1	D relative to the trading day, By 16:00	Prior to Order Book Closure; in event of change to Cross Zonal Capacity.
IDM2	D relative to the trading day, By 07:00	Prior to Order Book Closure; in event of change to Cross Zonal Capacity.

Report Format: *XML*

Field	Description
CapacityDocument	one file for all interconnectors, one file per each auction
DocumentIdentification	The same as the Naming Convention <Auction Name>InterconnectorCapacitiesNTC_<yyyymmdd> Example : IDA1InterconnectorCapacitiesNTC_20210201
DocumentVersion	Senders unique version beginning with 1 (incremented with each transmission of the same document)
CreationDateTime	The date and time that the document was prepared for transmission by the application of the sender. The date and time must be expressed in UTC as YYYY-MM-DDTHH:MM:SSZ
ApplicableTimeInterval	YYYY-MM-DDTHH:MM:SSZ/YYYY-MM-DDTHH:MM:SSZ
CapacityTimeSeries	
TimeSeriesIdentification	Senders unique version beginning with 1 (incremented with each Capacity Time Series)
Interconnector	Allowed values: EWIC, MOYLE

[7] DAM is currently a Local Auction; no NTC File will be available for this auction.

Field	Description
InterconnectorDirection	Allowed values: GB-IE, IE-GB, GB-NI, NI-GB
Period	
TimeInterval	Period covered (in ISO 8601 UTC format) YYYY-MM-DDTHH:MMZ/YYYY-MM-DDTHH:MMZ This shall be included in the ApplicableTimeInterval
Resolution	PT30M
Interval	46 (short day) / 48 / 50 (long day)
StartTime	Start time of the interval, format hh24:mm
NTC	Final NTC Values Integer

6.4.13 EA-011: INTERCONNECTOR CAPACITIES ATC

This reports details the available capacity that can be scheduled across the Moyle and EWIC interconnectors in a given auction; representing the Cross Zonal Capacity. For the first auction of a trading day this value will be equal to the Net Transfer Capacity (NTC); however for subsequent auctions the available transfer capacity shall equal the NTC less the already allocated capacity from previous auctions.

A separate report shall be created for each coupled auction. This report shall be published before Order Book Closure; and republished in line with any Cross Zonal Capacity changes.

6.4.13.1 INTERCONNECTOR CAPACITIES ATC FILE

File	Filemask
Interconnector Capacities ATC	<Auction Name>InterconnectorCapacitiesATC_<yyyymmdd>.xml

I-SEM Report Reference: *EA-011*

Data Source *ICMP*

Periodicity: *Daily*

Audience: *General Public*

Resolution:
Day-Ahead: Hourly[8]
Intraday Market 1: Half-hourly
Intraday Market 2: Half-hourly

Time Span: *Per each auction specification*

Frequency:

Daily, per publication below for each auction:

Auction	First Publication Time	Final Publication Time
DAM[4]	NA	NA
IDM1	D relative to the trading day, By 16:00	Prior to Order Book Closure; in event of change to Cross Zonal Capacity.
IDM2	D relative to the trading day, By 07:00	Prior to Order Book Closure; in event of change to Cross Zonal Capacity.

Report Format: *XML*

[8] DAM is currently a Local Auction; no ATC File will be available for this auction.

Field	Description
CapacityDocument	one file for all interconnectors, one file per each auction
DocumentIdentification	The same as the Naming Convention <Auction Name>InterconnectorCapacitiesATC_<yyyymmdd> Example : IDA1InterconnectorCapacitiesATC_20210201
DocumentVersion	Senders unique version beginning with 1 (incremented with each transmission of the same document)
CreationDateTime	The date and time that the document was prepared for transmission by the application of the sender. The date and time must be expressed in UTC as YYYY-MM-DDTHH:MM:SSZ
ApplicableTimeInterval	YYYY-MM-DDTHH:MM:SSZ/YYYY-MM-DDTHH:MM:SSZ
CapacityTimeSeries	
TimeSeriesIdentification	Senders unique version beginning with 1 (incremented with each Capacity Time Series)
AuctionIdentification	Format <Auction_Type>-<Trade_date(YYYYMMDD)> Example: IDA1-20210201
Interconnector	String: EWIC, MOYLE
InterconnectorDirection	String: GB-IE, IE-GB, GB-NI, NI-GB
Period	
TimeInterval	Period covered (in ISO 8601 UTC format) YYYY-MM-DDTHH:MMZ/YYYY-MM-DDTHH:MMZ This shall be included in the ApplicableTimeInterval
Resolution	DAM: PT60M IDA1+IDA2:PT30M
Interval	DAM: 23 (short day) / 24 / 25 (long day) IDA1: 46 (short day) / 48 / 50 (long day) IDA2: 24
StartTime	Start time of the interval, format hh24:mm
ATC	ATC Values Integer

6.4.14 EA-012: INTERCONNECTOR FLOWS

This report contains the scheduled interconnector flows for both Moyle and EWIC, in a given auction. The report details the individual scheduled flow for that auction ('Scheduled' flow); as well as the total scheduled flow ('TotalScheduled' flow). The total scheduled flow comprises the sum of :

- scheduled flow for the most recently completed auction; and
- scheduled flow for all preceding auctions for a given trading day.

A separate report shall be published for each coupled auction; and shall be published on generation of the final auction results.

6.4.14.1 INTERCONNECTOR FLOWS FILE

File	Filemask
Interconnector Capacities ATC	<Auction Name>InterconnectorFlows_<yyyymmdd>

I-SEM Report Reference: *EA-012*
Data Source *ICMP*
Periodicity: *Daily*
Audience: *General Public*

Resolution:	*Day-Ahead: Hourly*[9] *Intraday Market 1: Half-hourly* *Intraday Market 2: Half-hourly*
Time Span:	*Per each auction specification*
Frequency:	*Daily, immediately after Final Publication of Market Results on D relative to the trading day, every auction*
Report Format:	*XML*

Field	Description
CapacityDocument	one file for all interconnectors, one file per each auction
DocumentIdentification	The same as the Naming Convention <Auction Name>InterconnectorFlows_<yyyymmdd> Example : IDA1InterconnectorFlows__20210201
DocumentVersion	Senders unique version beginning with 1 (incremented with each transmission of the same document)
CreationDateTime	The date and time that the document was prepared for transmission by the application of the sender. The date and time must be expressed in UTC as YYYY-MM-DDTHH:MM:SSZ
CapacityTimeInterval	Period covered (in ISO 8601 UTC format) YYYY-MM-DDTHH:MMZ/YYYY-MM-DDTHH:MMZ
CapacityTimeSeries	
TimeSeriesIdentification	Senders unique version beginning with 1 (incremented with each Capacity Time Series within the document)
AuctionIdentification	Format <Auction_Type>-<Trade_date(YYYYMMDD)> Example: IDA1-20210201
Interconnector	String: EWIC, MOYLE
InterconnectorDirection	String: GB-IE, IE-GB, GB-NI, NI-GB
Period	
TimeInterval	Period covered (in ISO 8601 UTC format) YYYY-MM-DDTHH:MMZ/YYYY-MM-DDTHH:MMZ This shall be included in the Capacity Time Interval
Resolution	PT60M for DAM, PT30M for IDA1 and IDA2
Interval	DAM: 23 (short day) / 24 / 25 (long day) IDA1: 46 (short day) / 48 / 50 (long day) IDA2: 24
StartTime	Start time of the interval, format hh24:mm
Scheduled	The scheduled flow volumefor a given Trading Day, Auction, Interconnect-or, Direction and Position Number, 1dp, positive
TotalScheduled	The sum of the scheduled flow volume for the current auction and any preceeding auction a given Trading Day, Auction, Interconnector, Direction and Position. Number, 1dp, positive

[9] DAM is currently a Local Auction; no Interconnector Flow File will be available for this auction.

7 APPENDIX B: SEMOPX WEBSITE API SPECIFICATION

https://www.semopx.com/documents/general-publications/SEMOpx-Website-Report-API.pdf