

SEM Agreed Procedure

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DOCUMENT HISTORY

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RELATED DOCUMENTS

DOCUMENT TITLE	VERSION	DATE	BY
Trading and Settlement Code	V1.3		Regulatory Authorities
Agreed Procedure 1 “Participant and Unit Registration and Deregistration”	2.0		
Agreed Procedure 5 “Data Storage and IT Security”	2.2a	23/03/2007	Regulatory Authorities
Agreed Procedure 7 “Emergency Communications”	2.3	10/04/2007	Regulatory Authorities

1. INTRODUCTION

1.1. BACKGROUND AND PURPOSE

This Agreed Procedure sets out the process both for Participants and for the Market Operator (MO) for the submission and issue of Data Transactions. It also describes the defaulting rules for the submission of Offer Data as referred throughout the Trading and Settlement Code.

To achieve this, the following topics will be dealt with:

- Communication Channels supporting the Data Transactions
- Rules supporting the Data Transactions
- Submission and issue processes

1.2. SCOPE OF AGREED PROCEDURE

This Agreed Procedure is a definition of procedural steps to be followed by the Market Operator and Participants. It forms an annexe to, and is governed by the Code. This document is a statement of process and procedure. Parties' rights and obligations are set out in the Code. The scope of this Agreed Procedure is set out in Appendix L of the Code.

This Agreed Procedure is not intended as a technical user guide.

The following topics are out of scope of this agreed procedure:

- Authentication, non-repudiation of any data surrounding the communication of any Data Transaction over a Type 2 Channel or Type 3 Channel (refer to Agreed Procedure 5 “Data Storage and IT Security” for further information).
- Interconnector Administrator Data Transactions.

1.3. DEFINITIONS

Save as expressly defined, words and expressions defined in the Code shall have the same meanings when used in this Agreed Procedure.

References to particular sections relate internally to this Agreed Procedure unless specifically noted.

1.4. COMPLIANCE WITH AGREED PROCEDURE

Compliance with this Agreed Procedure is required under the terms set out in paragraph 1.7 of the Code.

2. DESCRIPTIVE OVERVIEW

The Data Transactions in the scope of this Agreed Procedure are those submitted by the Participants to the Market Operator and the messages the Market Operator (MO) submits in response.

2.1. COMMUNICATION CHANNELS

The Market Operator will allow communication with the Participants via three distinct Communication Channel types:

- Type 1 Channel;
- Type 2 Channel;
- Type 3 Channel

Each Participant must designate and qualify for at least one of either Type 2 Channel or Type 3 Channel as described in the Agreed Procedure 3 – Communication Channel Qualification.

The Data Transactions in scope of this Agreed Procedure are those that are sent via Type 2 Channel or Type 3 Channel as permitted under the Code.

Type 1 Channel communications are not covered in this Agreed Procedure.

2.1.1. Type 1 Channel

Manual communication consists of paper-based communications that are mailed, hand-delivered, or faxed to or by the Market Operator.

2.1.2. Type 2 Channel

Assisted (human to computer) communication consists of an interface provided by the Market Operator for an end-user to interact with. The current implementation consists of a set of web forms that the end-user can interact with, along with a web form to facilitate interaction via XML request/response files for certain Data Transactions.

2.1.3. Type 3 Channel

Automated (computer to computer) communication is currently implemented via Web Services.

2.2. PARTICIPANT DATA TRANSACTIONS

The Participant can perform the following:

- Data submission;
- Data query;
- Report query.

The classes of Data Transaction covered under this Agreed Procedure and their constituent elements are:

Class	Element	Available Transactions
MPR	Application Data	Data submission or data query
	Contacts Data	Data submission or data query
	Users Data	Data submission or data query

Class	Element	Available Transactions
	Bank Data	Data submission or data query
	Unit (Resource) Data	Data submission or data query
MI	Generator Offer Data	Data submission or data query
	Load Bid Data (for Demand Side Unit)	Data submission or data query
	Interconnector Offer Data	Data submission or data query
	Settlement Reallocation Data	Data submission or data query
	MI Reports	Report query
STL	Settlement Statements	Report query
	Participant Information Report	Report query
	Settlement Reallocation	Report query
	Invoicing Data	Report query

Further information on the data that makes up each of these elements can be found in this Agreed Procedure, Appendix 2 – Business Data Contained In Each Element.

Subject to the restrictions below, where the Participant is submitting Data Transactions via a Type 3 Channel it is possible to include multiple elements in the same Data Transaction. However each of these Data Transactions can only contain elements of the same Data Transaction class. Additional restrictions are outlined below.

A Data Transaction (or message) can contain one or many elements and/or one or many occurrence of these elements provided that:

- Elements all belong to the same class, e.g. Application Data is not included with Generator Offer Data in the same Data Transaction.
- Within each individual message, elements must occur in a defined order.
 - MPR Elements when submitted together, should be in the following sequence:
 - 1- Application Data
 - 2- Contacts Data
 - 3- Users Data
 - 4- Bank Data
 - 5- Unit (Resource) Data
 - MI Elements submitted together, should be in the following sequence:
 - 1- Generator Offer Data
 - 2- Load Bid Data (for Demand Side Units)
 - 3- Interconnector Offer Data
 - 4- Settlement Reallocation Data

In addition:

- An Accepted Settlement Reallocation Transaction will have effect in addition to any other Settlement Reallocation Transaction that has been Accepted in respect of the same Participants and Trading Period
- Only one Settlement Reallocation Data element is allowed per Data Transaction. For the avoidance of doubt, and subject to the provisions of the Code relating to Settlement Reallocations Agreements, a Participant is capable of submitting more than one Settlement Reallocation per Trading Period. A Participant is also permitted to submit Settlement Reallocations between their own Supplier Units and Generator Units.

- In the case of Settlement Report Data Transactions it is possible to request a report (Settlement Statements, Invoices, etc.) or a list of all available reports (a directory listing)
- The Code requires Participants to submit and keep under review Default Data for all Generator Units. The application of Default Data is described in the sections below.
- When submitting Data Transactions containing MI elements, (with the exception of MI Report requests), the Participant can include an External ID.
- When submitting a data query, the Participant cannot include an External Id.
- The Market Operator shall include an External Id in the response message to a data query where the External Id has been stored as part of an Accepted Data Transaction.

The Market Systems will perform high level validations to ensure:

- The message is correctly formatted;
- The Participant is authorised to submit the Data Transaction;
- The Data Transaction is submitted within the required timeframes;
- That all required data is present;

Further details on the rules governing the format and makeup of market messages are available in the Interface Documentation Set.

The processing windows during which Data Transactions can be submitted are outlined in the table below:

Transactions	Market Window		Comments
	Start Time	End Time	
Submit Trading Day Data	06:00 AM on TD-29(GC-28)	10:00 AM on TD-1	The data submission window opens at 06:00 AM 28 days before Gate Closure (GC), and closes on Trading Day (TD) - 1 at 10:00 AM
Query Data submitted	as available	23:59 PM on TD+7	Data may be Queried according to the Submit timeline, with this functionality being available for an additional 7 days after the Trading Day (TD)
Submit Settlement Reallocation	06:00 AM on TD-29 (GC-28)	10:00 AM on Invoice Day - 1	The Settlement Re-allocation data submission window opens as above and closes one day before the issue of the invoice on which the reallocation is to be included (Billing Period/Capacity Period plus 4 working days)
Submit Standing Data	N/A	N/A	The submission of standing data window is always open – albeit only to be used for Market Submission Windows to be opened in the future

Table 1: Market Interface – Market Windows

The table below describes the timelines associated with different Data Transactions and their elements.

Certain MPR Class data submissions require more time than others for Market Operator approval. The timeline below gives an indication of approval times expected to be required by the Market Operator.

For **MPI** Class data submissions and for data queries and report queries no Market Operator approval is required.

Data Transaction	Class	Element of Data Transaction	Timeline
Data submission			
	MPR	Unit (Resource) Data	<p>Can be submitted anytime before Gate Closure with effective date the next Trading Day with the following exceptions:</p> <p>Approval time of at least 1 Working Day from date of submission Qualified Communication Channel</p> <p>Effective date at least 1 Working Day from date of submission Unit Under Test End Date</p> <p>Effective Date at least 5 Working Days from date of submission Unit Under Test Start Date</p> <p>Effective date at least 28 days from date of submission Priority Dispatch flag</p> <p>Approval time up to 28 days from date of submission Resource Type, Resource Name, IM Resource Name, Connection Point, Connection Type, Connection Agreement, Fuel Type, Netting Generator Flag, Physical Location ID, Identification of Unit location on grid, Name of station or site, Identification of the Station, Station Address line 1, Station Address line 2, Registered Firm Capacity, Non-Firm Access Quantity, Old Resource Flag, Old Resource Name, Old Participant Name, Jurisdiction, Trading Site Name, Data Exchange Test, EB Licence number, Electricity Commission Licence Effective Date, Electricity Commission Licence Expiration Date, Default Data Submission.</p> <p>Performed initially during Participant Registration using Type 1 Channel, subsequent updates via Type 2 or Type 3 Channel</p>
	MPR	Application Data	<p>Can be submitted anytime before Gate Closure with approval time of up to 2 Working Days from date of submission.</p> <p>Performed initially during Participant Registration using Type 1 Channel, subsequent updates via Type 2 or Type 3 Channel.</p>

Data Transaction	Class	Element of Data Transaction	Timeline
	MPR	Contacts Data	Can be submitted anytime before Gate Closure with approval time of up to 2 Working Days from date of submission. Performed initially during Participant Registration using Type 1 Channel, subsequent updates via Type 2 or Type3 Channel..
	MPR	Users Data	Can be submitted anytime before Gate Closure with approval time of up to 2 Working Days from date of submission Performed initially during Participant Registration using Type 1 Channel, subsequent updates via Type 2 or Type 3 Channel.
	MPR	Bank Data	Can be submitted anytime before Gate Closure with approval time of up to 2 Working Days from date of submission. This assumes that Participant has agreed all of this data with their bank prior to submission to the Market Operator. Performed initially during Participant Registration using Type 1 Channel, subsequent updates via Type 2 or Type 3 Channel.
	MI	Generator Offer Data	Anytime before Gate Closure Performed initially during Unit Registration to register the Standing Offer Data using Type 1 Channel, subsequent updates via Type 2 or Type3 Channel Refer to section 2.4 of this document related to default rules
	MI	Load Bid Data (for Demand Side Unit)	Anytime before Gate Closure Performed initially during Unit Registration to register the Standing Offer Data using Type 1 Channel, subsequent updates via Type 2 or Type3 Channel Refer to section 2.4 of this document related to default rules
	MI	Interconnector Offer Data	Anytime before Gate Closure Performed initially during Unit Registration to register the Standing Offer Data using Type 1 Channel, subsequent updates via Type 2 or Type3 Channel Refer to section 2.4 of this document related to default rules
	MI	Settlement Reallocation Data	Up to 1 Working Day before Invoice date. There is no registration data related to Settlement Reallocation
Data query			
	MPR	Application Data	Anytime, data returned is that which is valid for the relevant date queried
	MPR	Contacts Data	Anytime, data returned is that which is valid for the relevant date queried
	MPR	Users Data	Anytime, data returned is that which is valid for the relevant date queried
	MPR	Bank Data	Anytime, data returned is that which is valid for the relevant date queried
	MPR	Unit (Resource) Data	Anytime, data returned is that which is valid for the relevant date queried
	MI	Generator Offer Data	Anytime but limited to 1 months worth of data in the past

Data Transaction	Class	Element of Data Transaction	Timeline
	MI	Load Bid Data (for Demand Side Unit)	Anytime but limited to 1 months worth of data in the past
	MI	Interconnector Offer Data	Anytime but limited to 1 months worth of data in the past
	MI	Settlement Reallocation Data	Anytime but limited to limited to 2 years worth of data in the past
Report query			
	STL	Settlement Reports	Anytime, but limited to 1 month in the past for daily and weekly reports and limited to 2 years in the past for monthly and annual reports
	MI	All reports (except Settlement Reports)	Anytime, but limited to 1 month in the past for daily and weekly reports and limited to 2 years in the past for monthly and annual reports

Table 2 - Data Submission Timelines

2.3. RESPONSE MESSAGES FROM THE MO

For all Type 3 Channel communications and for all Type 2 Channel communications that involve uploading an xml file to the MO, the sender will receive a response message from the Market Operator's Isolated Market System as per the table below.

For Type 2 Channel interactions via Web Forms, the responses will be displayed on the screen.

Class	Request	Request Response –Valid	Response – Invalid
MI (not MI Reports)	Submit	Original Data , Processing Statistics and Messages	
MI (not MI Reports)	Query	Original Data , Processing Statistics and Messages	
MPR	Submit	Original Data , Processing Statistics and Messages	
MPR	Query	Original Data and Messages	
MI Report	List Reports	Original Data and Messages	
MI Report	Report	Report	Original Data and Messages
STL	List Reports	File List	Empty List
STL	Report	File	<ul style="list-style-type: none"> • Requested File not found • Invalid Filename • XML request not well formed • There was an error processing the request • Invalid request type

The response message, which includes the Confirmation Notice for the Data Transaction and the Validation Notice/Rejection Notice for each element within the Data Transaction, will be automatically submitted by the Market Operator when a Data Transaction occurs. If the expected response is not received within an acceptable timeframe the Participant should check their internet connection and systems. If this does not reveal an issue the Participant should contact the Help Desk.

Agreed Procedure 7 “Emergency Communications” details emergency communications and the required notification processes.

2.4. DEFAULT RULES RELATED TO OFFER DATA SUBMISSION

2.4.1. Introduction

As an introduction to the terminology used below, Technical Offer Data (**TOD**) and Commercial Offer Data (**COD**) are categories of Offer Data as set out in the Code.

Default rules for TOD and COD are applied, unless otherwise specified in the Code, in order to ensure that a valid TOD or COD will be available at Gate Closure.

The rules the Participant must follow, and the MO will apply to ensure valid Offer Data are available, are supported by rules around the submission and validation timelines of Offer Data. These rules are described in the following sections.

Definitions of Offer Data types:

- **Registration Default TOD:** refers to TOD (submitted using the Unit (Resource) Data element¹) which must be submitted by Participants during Unit Registration to apply from the first Trading Day of participation. Any future updates to this Registration Default TOD, must be provided by the Participants and approved by the Market Operator. Because there is always active approved Registration Default Data, this meets the Default Data requirements in the Code.
- **Standing Offer Data:** refers to TOD and COD (submitted using the appropriate² elements) which must be submitted by Participants during Unit Registration to apply from the first Trading Day of participation. For any future updates to this Standing Offer Data, Participants must submit Standing Offer Data prior to the opening of the Market Submission Window.
- **Trading Offer Data:** refers to the daily submission of COD and TOD from Participants which can occur within the Market Submission Window (i.e. from 28 Trading Days before Gate Closure to Gate Closure) and will be applicable for the Trading Day specified in the Data Transaction.

As Standing Offer Data will be converted to Trading Offer Data at Market Submission Window opening, submissions of Trading Offer Data will always be an update to Offer Data.

For the avoidance of doubt, all COD inclusive of Default Data will be submitted via the Standing Offer Data and Trading Offer Data channels. There will be two subsets of TOD submitted, some via the Registration Default TOD message and some via the Standing Offer Data and Trading Offer Data channels. Details of which interface TOD are submitted is provided in Appendix B of this Agreed Procedure.

The high level validations mentioned in section 2.2 apply to Offer Data at the point of submission.

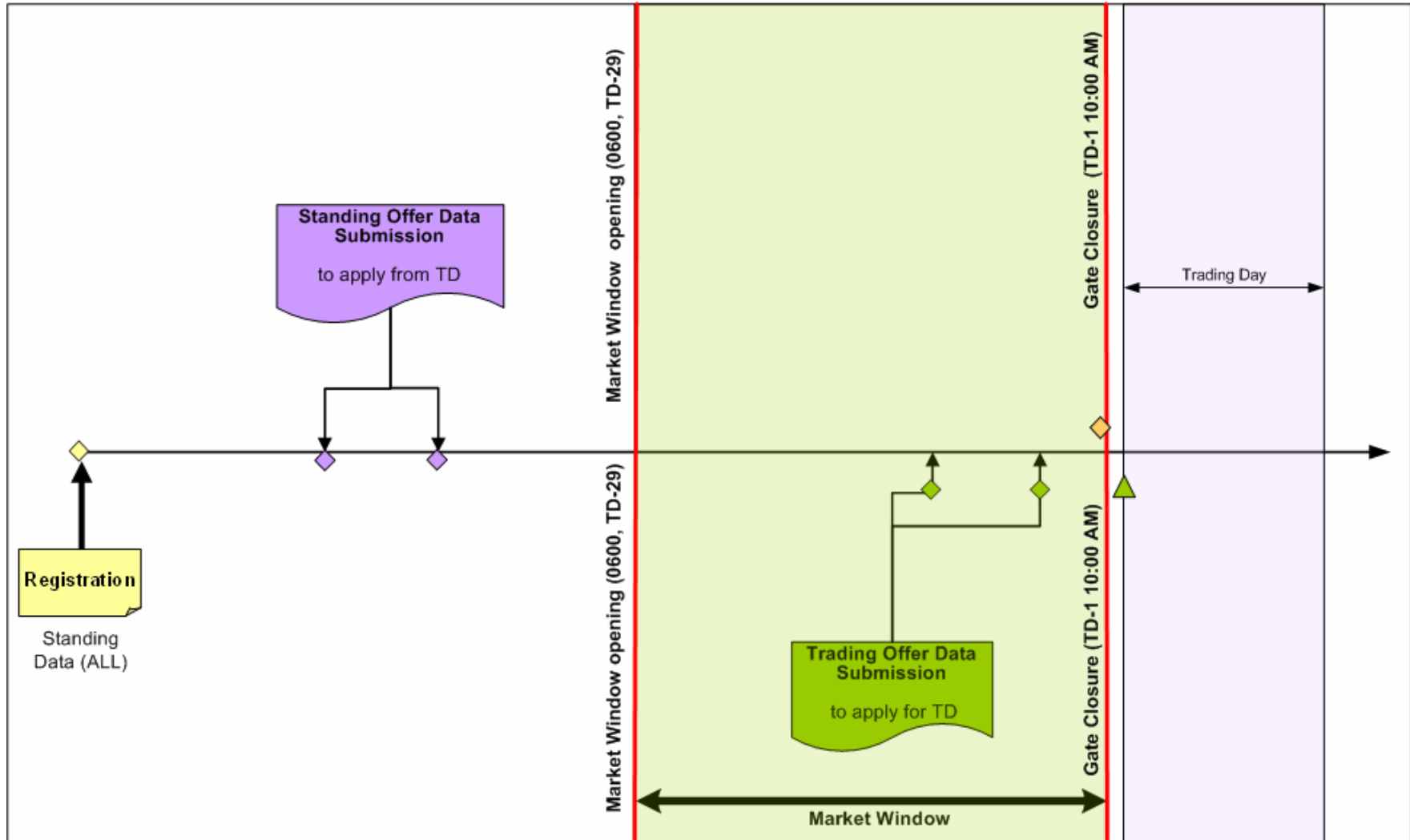
The submission timeline rules applying to the different types of Offer Data are described in the following sections and are summarised in the Default Rules Diagram below.

The following sections outline how the Default Data for Commercial Offer Data and Technical Offer Data, as defined in the Code, is supported in the Market Operator's Isolated Market System through a combination of functionality called Registration Default TOD, Standing Offer Data and Trading Offer Data.

¹ Refer to section 2.2

² 'Generator Offer Data', 'Load Bid Data', 'Interconnector Offer Data'

2.4.2. Default Rules Diagram



2.4.3. Registration Default TOD

Registration Default TOD refers to business data, in the Unit (Resource) Data element (as detailed in Appendix 2 – Business Data Contained In Each Element). It is not anticipated that Registration Default TOD will change on a regular basis and is considered similar to static data.

Submissions at Unit Registration

Registration Default TOD must be submitted during Unit Registration. Once approved by the Market Operator, this data will apply from the first Trading Day of participation and will continue to be effective indefinitely, or until updates are submitted and approved.

Submissions of Updates Prior to Gate Closure

Registration Default TOD can be updated at anytime by submitting new Registration Default TOD, and once approved will be applicable from an ‘Effective From’ date specified in the Data Transaction. The ‘Effective From’ must comply with Table 2 - Data Submission Timelines.

At Gate Closure the approved Registration Default TOD is utilised for the next appropriate Trading Day.

2.4.4. Standing Offer Data

Standing Offer Data refers to Offer Data in the Generator Offer Data, Load Bid Data, Interconnector Offer Data elements (as detailed in the Appendix 2 – Business Data Contained In Each Element). Standing Offer Data is comprised of COD and TOD items.

Standing Offer Data represents the Default Data for those items submitted in this Data Transaction.

- Standing Offer Data can be created at any time
- It is automatically used to create Trading Offer Data immediately after the opening of the appropriate market submission window (28 days in advance of Gate Closure)
- As part of Unit Registration, one set of data is manually submitted and is entered by the Market Operator onto the system with a parameter of “ALL” (valid for all days). There is no expiry for this, as Default Data (see below) is always required on the system
- After Communication Channel Qualification – i.e. once access to the system is granted – Participants may update the Standing Offer Data (type “ALL”)
- Participants may also submit Standing Offer Data for specific day types (SUN, MON, ..., SAT). These may optionally have an expiration date
- If an expiration date is used, the Standing Offer Data will be used daily and automatically cancelled after the expiration date
- If no expiration date is given, the Standing Offer Data will be used indefinitely, or until the Participant supersedes the specific day type data
- The latest Standing Offer Data available is used at Gate Closure where no valid Trading Offer Data has been submitted.
- The use of Standing Offer Data, ensures that there is always valid Offer Data available for a Unit
- The effective date must be greater than the date for which the specific day type Standing Offer Data will be processed by Standing Offer Data Conversion. The earliest effective date for a Standing Offer Data submission is Current Day + 29 days, based on a Market Submission Window of 28 days.

- At Market Submission Window opening, if for a given Trading Day there is Standing Offer Data for both a specific day type and "ALL", the system will only use the specific day type.
- There are some circumstances whereby it is possible that Data Conversion – changing Standing Offer Data to Trading Offer Data at Market Submission Window opening – could fail. In this case the Market Operator will contact the Market Participant to add Trading Offer Data and update Standing Offer Data if appropriate. Although there are 28 days before this data will be used, it is expected that the situation should be resolved within 5 Working Days

2.4.5. Trading Offer Data

Trading Offer Data refers to any Offer Data in the Generator Offer Data, Load Bid Data, Interconnector Offer Data (as detailed in the Appendix 2 – Business Data Contained In Each Element). Trading Offer Data applies for the Optimisation Time Horizon for a given Trading Day only.

Trading Offer Data comprises of COD and TOD items.

- The use of Trading Offer Data, pre-populated by Standing Offer Data, ensures that there is always valid Offer Data available for a Unit
- The latest Trading Offer Data available is used at Gate Closure
- Trading Offer Data submissions will be validated and processed upon receipt, and the Participant will be informed of the results of validation and processing
- The communication mechanism during data submission is synchronous.
- Participants have the ability to revise Trading Offer Data as many times as necessary within the appropriate Market Submission Window.

Data Transactions within Market Submission Window Opening

Trading Offer Data can be submitted at anytime within the Market Submission Window and will be applicable for the Trading Day specified in the Data Transaction.

At Gate Closure the latest Accepted Trading Offer Data will be used for the Trading Day.

2.4.6. Timings of Submissions

Transactions received by the Market Operator's Isolated Market System are generally processed on a first come first served basis. However, to facilitate throughput, various levels of parallelism and pooling are implemented which could result in certain scenarios under which this sequencing cannot be guaranteed. Also, as a Transaction may be serviced by either of the Web Interface systems, at either Market Operator site, sequencing may also be affected

- The solution architecture for SEM is cognisant of the fact that there are multiple users on multiple channels that may be submitting updates to the same data
- As such, any specific requirement around sequencing which a Participant identifies will need to have appropriate business and system processes implemented by the Participant to match the implementation required by them
- For example, a Market Participant who chooses to only use the Type 3 Channel from a single user with a single login could configure their application such that each transaction is submitted in sequence and a subsequent transaction is not submitted until a response has been received
- Other implementations may need to recognise that not all submissions may need to be sequenced, e.g. Market Interfaces vs. Registration, but that there may be submission by multiple users on multiple channels

2.4.7. Submission of Standing and Trading Offer Data

For the avoidance of doubt, Standing Offer Data and /or Trading Offer Data must be submitted by Participants using their designated Communication Channel (Type 2 Channel or Type 3 Channel). Outside of initial registration (process in Agreed Procedure 1 “Participant and Unit Registration and Deregistration”) or emergency communications (process in Agreed Procedure 7 “Emergency Communication”), the Market Operator will not enter such Offer Data on a Participant’s behalf. If a Participant fails to submit Offer Data for a particular Trading Day then that Participant’s Default Offer Data will be used.

3. PROCEDURE DEFINITION

3.1. PROCESS FOR DATA SUBMISSION, QUERY AND REPORT REQUEST

- The Participant's system, subject to the associated access rules, establishes a connection with the Market Operator's Isolated Market System.
- The Participant's system selects their required Data Transaction and submits it using the established connection.
- The Participant's system then receives a response message from the MO over the established connection.
- If the response message indicates that there is no error in any element of a Data Transaction, that Data Transaction and all the elements specific to that Data Transaction have been stored in the Market Operator's Isolated Market System.
- If the response message indicates that there is an error in a Data Transaction for a given element, this particular Data Transaction is rejected. The Participant will have to build a new Data Transaction and submit it as described in the previous steps. The other Data Transactions included in the same communication which have no errors are successfully stored in the system.

For Type 3 Channel, the connection uses Web Services.

For Type 2 Channel the connection uses Web Forms. The Web Forms may be used to upload previously built Data Transactions (excluding report requests) or the data can be entered directly into specific Web Forms.

4. APPENDIX 1 – DEFINITIONS AND ABBREVIATIONS

4.1. DEFINITIONS

Application Data	
Autonomous Generator Unit	As defined in the Code
Bank Data	Means data relating to banking details first submitted at Party registration
Billing Period	As defined in the Code
Capacity Period	As defined in the Code
Code	As defined in the Code
Commercial Offer Data	As defined in the Code
Communication Channel	As defined in the Code
Connection Agreement	As defined in the Code
Contacts Data	Means data relating to Party contact for certain functions as submitted by the Party
Credited Participant	As defined in the Code
Data Transaction	As defined in the Code
Debited Participant	As defined in the Code
Default Data	As defined in the Code
Demand	As defined in the Code
Demand Side Unit	As defined in the Code
Digital Certificate	As defined in Agreed Procedure 1 "Participant Registration and Unit Registration and Deregistration"
Element	<p>An element is a set of business data. The 12 elements in scope are listed below:</p> <ul style="list-style-type: none"> • Application Data – MPR • Contacts Data – MPR • Users Data – MPR • Bank Data – MPR • Unit (Resource) Data – MPR • Generator Offer Data – MI • Load Bid Data (for Demand Side Unit) – MI • Interconnector Offer Data – MI • Settlement Reallocation Data – MI • Reports (except settlement Reports) – MI • Settlement Reports – STL
Energy Limit	As defined in the Code
Energy Limited Generator Unit	As defined in the Code
External ID	For submission of Data Transactions, the schema will allow the Participant to provide an optional Data Transaction ID, called External ID
Framework Agreement	As defined in the Code
Gate Closure	As defined in the Code
Generator	As defined in the Code
Generator Unit	As defined in the Code
Help Desk	As defined in Agreed Procedure 11 "Market System Operation, Testing, Upgrading and Support"
Interconnector Administrator	As defined in the Code

Invoice Due Date	As defined in the Code
Isolated Market System	As defined in the Code
Load Bid Data	Unit bid data provided by a Participant
Market Interface	Data Transactions that cover market related data submitted by Participants
Market Operator	As defined in the Code
Market Participant Registration	Data Transactions that cover additional Technical Offer Data not included in the Market Interface class
Market Submission Window	The period in which Trading Offer Data can be submitted by Participants. The window is open at 06:00 29 days prior to Trading Day and is closed at Gate Closure for that Trading Day
Market Timeline	A period of time at which certain actions are taken or recorded that begins when at Unit Registration and ends at Trading Day
Market Web Interface	The mechanism through which Participants can send and receive Data Transactions through Type 2 Channel communication
Market Website	As defined in the Code
Offer Data	As defined in the Code
Participant Registration	As defined in the Code
Party	As defined in the Code
Predictable Price Maker Generator Unit	As defined in the Code
Predictable Price Taker Generator Unit	As defined in the Code
Price Taker Generator Unit	As defined in the Code
Regulatory Authorities	As defined in the Code
Generic Settlement Class	As defined in the Code
Settlement Reallocation	As defined in the Code
Settlement Reallocation Data	Means the data that is submitted by Participants to the Market Operator providing details of the Settlement Reallocation Agreement
Settlement Report	Means reports arising from Settlement
Standing Offer Data	Is as defined in section 2.4.4
Standing Offer Data Conversion	Means the process of converting Standing Offer Data to Trading Offer Data at the opening of the Market Submission Window
Supplier	As defined in the Code
Technical Offer Data	As defined in the Code
Trading Offer Data	Is as defined in section 2.4.4
Trading Day	As defined in the Code
Trading Period	As defined in the Code
Trading Site	As defined in the Code
Trading Site Data	Means data relating to a Trading Site
Type 1 Channel	As defined in the Code
Type 2 Channel	As defined in the Code
Type 3 Channel	As defined in the Code
Unit	As defined in the Code
Unit (Resource) Data	Means data relating to a Unit
Unit Registration	As defined in the Code
User	Means a person who interfaces with a system
Users Data	Means data relating to Participant User that has access to elements of the system
Variable Price Maker Generator Unit	As defined in the Code
Variable Price Taker Generator Unit	As defined in the Code

Web Form	Means a web page on the MPI which allows the Participant to enter data and submit the data to the Market Operator.
Web Services	Means the automated communication consisting of an XML-based programmatic interface
Working Day	As defined in the Code

4.2. ABBREVIATIONS

APTG	Autonomous Generator Unit
COD	Commercial Offer Data
GC	Gate Closure
MO	Market Operator
MPR	Market Participant Registration
PPMG	Predictable Price Maker Generator Unit
PPTG	Predictable Price Taker Generator Unit
SEM	Single Electricity Market
SO	System Operators
TD	Trading Day
TOD	Technical Offer Data
VPMG	Variable Price Maker Generator Unit
VPTG	Variable Price Taker Generator Unit

5. APPENDIX 2 – BUSINESS DATA CONTAINED IN EACH ELEMENT

This appendix describes the business data contained in each category of data. Any additional information needed to build the message is described in the Interface Documentation Set.

APPLICATION DATA

APPLICATION DATA		
Screen Name	Comment	Mandatory / Optional
Name	Corporate name of the Participant.	Mandatory
Short Name or Participant Name	Participant Short Name – will be used as the Participant Name in all Data Transactions	Mandatory
President Name	Person authorised to sign Framework Agreement	Mandatory
Effective Date	Effective Date (from) for the Participant	Mandatory
Expiry Date	Expiry Date (to) for the Participant	Optional
Address 1	Party Address	Mandatory
Address 2	Party Address (following)	Optional
City	Party City	Mandatory
County	Party County	Mandatory
Postal Code	Party Postal Code	Mandatory
Billing Address 1	Address to which all invoices for the Participant will be sent.	Optional
Billing Address 2	Address to which all invoices for the Participant will be sent.	Optional
Billing City	City to which all invoices for the Participant will be sent.	Optional
Billing County	County to which all invoices for the Participant will be sent.	Optional
Billing Code Postal	Postal code to which all invoices for the Participant will be sent.	Optional
Country	Party Country	Mandatory
Phone	Party Phone	Mandatory
Fax	Party Fax	Mandatory
email	Party Email	Mandatory
URL	Party URL	Optional
Represent Party	Name of the Party that is represented by the registering Participant.	Optional
VAT Jurisdiction	ROI or NI.	Mandatory
VAT number	VAT number	Mandatory
VAT Status	VAT Exempt (1) or Non-Exempt (0), for each jurisdiction	Mandatory
Notification Comment	Used by the Market Operator and Participant to exchange notes with respect to that registration data.	Optional
Was Participant flag	Was Previously a Participant? {'Y'/'N'}	Optional
Old Market Participant Name	Old Business Associate ID (in the previous)	Optional
Old Market Participant Name Registration Date	Old Registration Date.	Optional
Account Manager	Name of MO personnel who will manage the Participant's account.	Mandatory
Market Participant Signatures of Agreement	Tracking of Participant signatures on Framework Agreement to Trading and settlement Code, Transmission Use of System Agreement (TUoS)	Mandatory
Amount of Initial Credit Cover	Amount of initial credit cover required at registration.	Optional
Credit cover Type	Type of Credit cover, whether Cash or Letter of Credit.	Mandatory
Data Exchange Test	Will be P (Pass) or F (Fail), depending on whether Market Operator data exchange testing is successful.	Optional but do not use
Potential Interconnection User	Yes or No	Optional
Participant Class	Type of Participant	Mandatory
External ID	Optional text field that can be used to track submissions by Market Participants	Optional

CONTACTS DATA

CONTACTS DATA		
Screen Name	Comment	Mandatory / Optional
Name	Contact name for settlement related business or Primary contact for market scheduling related business or Contact name for financial business functions, including credit cover or Contact name for other functional areas.	Mandatory
Address 1	Contact address 1	Mandatory
Address 2	Contact address 2	Optional
City	Contact City	Mandatory
County	Contact County	Mandatory
Postal Code	Contact Postal Code	Mandatory
Country	Contact Country	Mandatory
Phone	Contact Phone number	Mandatory
Fax	Contact Fax number	Mandatory
email	Contact Email	Mandatory
mobile	Mobile Phone Number	Mandatory
Pager	Contact Pager Number	Mandatory
URL	Contact URL	Optional
Notification Comment	Used by the operator and Participant to exchange notes with respect to that registration data.	Optional
Effective Date	Contact Effective Date	Mandatory
Expiry Date	Contact Expiry Date	Optional
Position	Contact Person Position	Mandatory
Contact Type	Type of Transaction Contact	Mandatory
Comments	Comments on contact	Optional
External ID	Optional text field that can be used to track submissions by Market Participants	Optional

USERS DATA

USERS DATA		
Screen Name	Comment	Mandatory / Optional
Login	Unique User Login ID	Mandatory
Name	Name of user within organisation (multiple users may be entered)	Mandatory
Address 1	User Address 1	Mandatory
Address 2	User Address 2	Optional
City	User City	Mandatory
County	User County	Mandatory
Postal Code	User Postal Code	Mandatory
Country	User Country	Mandatory
Phone	User Phone Number	Mandatory
Fax	User Fax Number	Mandatory
email	User Email ID	Mandatory
mobile	User Mobile Phone ID	Mandatory
Pager	User Pager ID	Mandatory
URL	User URL	Optional
Notification Comment	Used by the operator and Participant to exchange notes with respect to that registration data.	Optional
Effective date	User Effective Date	Mandatory
Expiry date	User Expiration Date	Optional
Position	User Person Position	Mandatory

USERS DATA		
Screen Name	Comment	Mandatory / Optional
User type	Selection of pre-defined roles with corresponding market system access information by functional area, including read-write, read-only, and administrative access, as required.	Mandatory
Data Exchange Test	Will be P (Pass) or F (Fail), depending on whether Market Operator data exchange testing is successful.	Optional but do not use
Comments	Comments	Optional
External ID	Optional text field that can be used to track submissions by Market Participants.	Optional

BANK DATA

BANK DATA		
Screen / T&SC Name	Comment	Mandatory / Optional
Bank Name	Name of the bank for the Market Participant	Mandatory
Bank Number	Bank number for the Market Participant.	Mandatory
Bank Account Name	Bank account name for the Market Participant.	Mandatory
Account Number	Bank account number for the Market Participant.	Mandatory
Bank Account Description	Bank account description for the Market Participant.	Mandatory
Bank Branch Type	Bank branch type for the Market Participant.	Mandatory
Bank Branch Name	Bank branch name for the Market Participant	Mandatory
Bank Branch Number of Sort Code	Bank branch number for the Market Participant.	Mandatory
Bank Branch Description	Bank branch description for the Market Participant.	Optional
Bank Branch Address line 1	Address field for the bank branch.	Optional
Bank Branch Address line 2	Further address field for the bank branch.	Optional
Bank Branch City	City in which the branch is located.	Optional
Bank Branch County	County in which the branch is located.	Optional
Bank Branch Postal Code	Postal code for the bank branch.	Optional
Bank Branch Country	Country in which the branch is located.	Optional
Bank Branch Phone	Phone number of the bank branch	Optional
Bank Branch Fax	Fax number of the bank branch	Optional
SWIFT BIC	Swift BIC code	Mandatory
IBAN	International Bank Account Number	Mandatory
Bank Account Currency jurisdiction	Bank Account Currency jurisdiction - should be ROI or NI. The Market Operator approval process will ensure that all jurisdiction references (AD-22, BD-20, GP-123 and LP-24) are the same.	Optional
Notification Comment	Used by the operator and Participant to exchanges notes with respect to that registration data	Optional
External ID	Optional text field that can be used to track submissions by Market Participants.	Mandatory
Effective Start Date	Effective date for the bank details for the Market Participant.	Optional
Expiration Date	Expiry date for the bank details for the Market Participant.	Optional

UNIT (RESOURCE) DATA

Generator parameters

UNIT (RESOURCE) DATA - Generator parameters		
Screen Name	Comment	Mandatory / Optional
Resource Type	Indicates the type of resource for which data is being submitted - for example this will indicate if a resource is predictable or variable and whether it is a price taker or price maker. Permitted values include: PRED_PR_MAKER_GEN, PRED_PR_TAKER_GEN, VAR_PR_MAKER_GEN, VAR_PR_TAKER_GEN, AUTO_PR_TAKER_GEN.	Mandatory
Resource Name	The name of the resource in question (e.g. the name of the Generator Unit, Supplier Unit, Demand Side Unit, Interconnector Unit or Interconnector for which data is being submitted).	Mandatory
IM Resource Name	Reference ID to the unit's injection point to the transmission system referenced in the Connection Agreement	Optional
Connection Point	Identifier of the Unit connection point (provided by the Transmission System Operators).	Optional
Connection Type	Will be "TRNS" if transmission system connected and "DIST" if distribution system connected.	Optional
Connection Agreement	Reference ID to the unit's and/or Participant's connection agreement.	Optional
Effective Date	Proposed date and time when Participant will become eligible to participate in the market.	Mandatory
Expiry Date	Expiry Date	Optional
Fuel type	May be Oil (OIL), Gas (GAS), Coal (COAL), Multiple Fuel (MULTI), Wind (WIND), Hydro (HYDRO), Biomass (BIO), Combined Heat and Power (CHP), Pumped Storage (PUMP) Demand Side Unit (DEM)	Mandatory
Minimum Stable Generation	Registered Minimum Stable Generation level in MW.	Mandatory
Minimum Time Sync Cold	This is not utilised in the systems. This can be left as NULL in the Data Transaction	Mandatory, but not used by the SEM systems
Minimum Time Sync Warm	The duration in hours off load that indicates the standby status change of the unit from Warm to Cold.	Mandatory
Minimum Time Sync Hot	The duration in hours off load that indicates the standby status change of the unit from Hot to Warm.	Mandatory
Minimum Output	Minimum Output of Generator Unit. The lowest value to which a unit can be scheduled.	Mandatory
Maximum Generation	Maximum Generation level, in MW.	Mandatory
Maximum Ramp Up Rate for Demand Side Unit	Maximum Ramp Up Rate for Demand Side Units.	Mandatory
Maximum Ramp Down Rate for Demand Side Units	Maximum Ramp Down Rate for Demand Side Units.	Mandatory
Number of Hours elapsed for Cold Sync time.	This is not utilised in the systems. This can be left as NULL in the Data Transaction	Mandatory, but not used by the SEM systems
Number of Hours elapsed for Warm Sync time.	This is not utilised in the systems. This can be left as NULL in the Data Transaction	Mandatory, but not used by the SEM systems
Number of Hours elapsed for Hot Sync time.	This is not utilised in the systems. This can be left as NULL in the Data Transaction	Mandatory, but not used by the SEM systems
Pumped Storage flag	May be Y, N or NULL - it will only be Y if the Unit is a pumped storage unit.	Mandatory
Energy Limit Flag	May be Y, N or NULL - it will only be Y if the Unit is a pumped storage unit.	Mandatory

UNIT (RESOURCE) DATA - Generator parameters		
Screen Name	Comment	Mandatory / Optional
Netting Generator Flag	Only applicable to PPMG, PPTG, VPMG, VPTG, APTG. It is a Y/N/Null field. Null for supplier, demand and interconnector.	Mandatory
Short Term Maximisation Capacity above MAXGEN	Capacity above MAXGEN that can be sustained for a finite period of time (MW).	Mandatory
Short Term Maximisation time	The duration in hours representing the length of time that Short-Term Maximisation can be sustained.	Mandatory
Minimum On-time	The minimum time that must elapse from the time a Generator Unit Starts-Up before it can be Shut-Down	Mandatory
Maximum On-time	The maximum time that must elapse from the time a Generator Unit Starts-Up before it can be Shut-Down	Mandatory
Minimum Off-time	The minimum time that a Generator Unit must remain producing no Active Power or Reactive Power commencing at the time when it stops producing Active Power or Reactive Power.	Mandatory
Start Forbidden Range 1	MW level where restricted loading range (1) starts. Unit must move through this range as quickly as possible	Mandatory
End Forbidden Range 1	MW level where restricted loading range (1) ends. Unit must move through this range as quickly as possible.	Mandatory
Start Forbidden Range 2	MW level where restricted loading range (2) starts. Unit must move through this range as quickly as possible.	Mandatory
End Forbidden Range 2	MW level where restricted loading range (2) ends. Unit must move through this range as quickly as possible.	Mandatory
Fixed Unit Load	Fixed linear factor used to calculate net output from a Generator Unit. Fixed Unit Load (FUL) ≥ 0	Mandatory
Unit Load Scalar	Scalar quantity which approximates physical losses associated with a Generator Unit Transformer. Unit Load Scalar (ULS). $0 < \text{ULS} \leq 1$.	Mandatory
Start-up Time Cold	Notification/Start-up times in hours for a unit considered to be in a cold state.	Mandatory
Start-up Time warm	Notification/Start-up times in hours for a unit considered to be in a warm state.	Mandatory
Start-up Time Hot	Notification/Start-up times in hours for a unit considered to be in a hot state.	Mandatory
Block load Flag	Will be "Yes" or "No", depending on whether the Unit has block loading characteristics.	Mandatory
Block Load Cold	Block Load in MW when the unit is in a cold state.	Mandatory
Block Load Warm	Block Load in MW when the unit is in a warm state.	Mandatory
Block Load Hot	Block Load in MW when the unit is in a hot state.	Mandatory
Loading Rate Cold 1	Loading Up Rate in MW/min when a Unit is in a cold state that applies until LOADING_UP_BREAK_PT_COLD_1.	Mandatory
Loading Rate Cold 2	Loading Up Rate in MW/min when a Unit is in a cold state that applies from LOADING_UP_BREAK_PT_COLD_1 to LOADING_UP_BREAK_PT_COLD_2.	Mandatory
Loading Rate Cold 3	Loading Up Rate in MW/min when a Unit is in a cold state that applies above LOADING_UP_BREAK_PT_COLD_2.	Mandatory
Loading Rate Warm 1	Loading Up Rate in MW/min when a Unit is in a warm state that applies until LOADING_UP_BREAK_PT_WARM_1	Mandatory
Loading Rate Warm 2	Loading Up Rate in MW/min when a Unit is in a warm state that applies from LOADING_UP_BREAK_PT_WARM_1 to LOADING_UP_BREAK_PT_WARM_2	Mandatory
Loading Rate Warm 3	Loading Up Rate in MW/min when a Unit is in a warm state that applies above LOADING_UP_BREAK_PT_WARM_2	Mandatory
Loading Rate Hot 1	Loading Up Rate in MW/min when a Unit is in a hot state that applies until LOADING_UP_BREAK_PT_HOT_1.	Mandatory
Loading Rate Hot 2	Loading Up Rate in MW/min when a Unit is in a hot state that applies from LOADING_UP_BREAK_PT_HOT_1 to LOADING_UP_BREAK_PT_HOT_2.	Mandatory

UNIT (RESOURCE) DATA - Generator parameters		
Screen Name	Comment	Mandatory / Optional
Loading Rate Hot 3	Loading Up Rate in MW/min when a Unit is in a hot state that applies above LOADING_UP_BREAK_PT_HOT_2.	Mandatory
Loading Up Breakpoint Cold 1	MW level from which the cold loading up rate will change from Loading Rate 1 to Loading Rate 2.	Mandatory
Loading Up Breakpoint Cold 2	MW level from which the cold loading up rate will change from Loading Rate 2 to Loading Rate 3.	Mandatory
Loading Up Breakpoint Warm 1	MW level from which the warm loading up rate will change from Loading Rate 1 to Loading Rate 2.	Mandatory
Loading Up Breakpoint Warm 2	MW level from which the warm loading up rate will change from Loading Rate 2 to Loading Rate 3.	Mandatory
Loading Up Breakpoint Hot 1	MW level from which the hot loading up rate will change from Loading Rate 1 to Loading Rate 2.	Mandatory
Loading Up Breakpoint Hot 2	MW level from which the hot loading up rate will change from Loading Rate 2 to Loading Rate 3.	Mandatory
Soak Time Hot 1	Time below Minimum Stable Generation for which a Unit remains at a constant MW level whilst in a hot state before continuing to increase or decrease output.	Mandatory
Soak Time Hot 2	Time below Minimum Stable Generation for which a Unit remains at a constant MW level whilst in a hot state before continuing to increase or decrease output.	Mandatory
Soak Time Warm 1	Time below Minimum Stable Generation for which a Unit remains at a constant MW level whilst in a warm state before continuing to increase or decrease output.	Mandatory
Soak Time Warm 2	Time below Minimum Stable Generation for which a Unit remains at a constant MW level whilst in a warm state before continuing to increase or decrease output.	Mandatory
Soak Time Cold 1	Time below Minimum Stable Generation for which a Unit remains at a constant MW level whilst in a cold state before continuing to increase or decrease output.	Mandatory
Soak Time Cold 2	Time below Minimum Stable Generation for which a Unit remains at a constant MW level whilst in a cold state before continuing to increase or decrease output.	Mandatory
Trigger Point Hot 1	MW level at which TRIGGER_PT_HOT_1 should be observed before output can further increase or decrease.	Mandatory
Trigger Point Hot 2	MW level at which TRIGGER_PT_HOT_2 should be observed before output can further increase or decrease.	Mandatory
Trigger Point Warm 1	MW level at which TRIGGER_PT_WARM_1 should be observed before output can further increase or decrease.	Mandatory
Trigger Point Warm 2	MW level at which TRIGGER_PT_WARM_2 should be observed before output can further increase or decrease.	Mandatory
Trigger Point Cold 1	MW level at which TRIGGER_PT_COLD_1 should be observed before output can further increase or decrease.	Mandatory
Trigger Point Cold 2	MW level at which TRIGGER_PT_COLD_2 should be observed before output can further increase or decrease.	Mandatory
Start-up End Point	This is not utilised in the systems. This can be left as NULL in the Data Transaction	Mandatory
Ramp Up Rate 1	Ramp Up Rate in MW/min that applies until RAMP_UP_BREAK_PT_1.	Mandatory
Ramp Up Rate 2	Ramp Up Rate in MW/min that applies from RAMP_UP_BREAK_PT_1 until RAMP_UP_BREAK_PT_2.	Mandatory
Ramp Up Rate 3	Ramp Up Rate in MW/min that applies from RAMP_UP_BREAK_PT_2 until RAMP_UP_BREAK_PT_3.	Mandatory
Ramp Up Rate 4	Ramp Up Rate in MW/min that applies from RAMP_UP_BREAK_PT_3 until RAMP_UP_BREAK_PT_4.	Mandatory
Ramp Up Rate 5	Ramp Up Rate in MW/min that applies from RAMP_UP_BREAK_PT_5.	Mandatory

UNIT (RESOURCE) DATA - Generator parameters		
Screen Name	Comment	Mandatory / Optional
Ramp Up Breakpoint 1	MW level from which the ramp rate will change from Ramp Rate 1 to Ramp Rate 2.	Mandatory
Ramp Up Breakpoint 2	MW level from which the ramp rate will change from Ramp Rate 2 to Ramp Rate 3.	Mandatory
Ramp Up Breakpoint 3	MW level from which the ramp rate will change from Ramp Rate 3 to Ramp Rate 4.	Mandatory
Ramp Up Breakpoint 4	MW level from which the ramp rate will change to Ramp Rate 5.	Mandatory
Ramp Down Rate 1	Ramp Down Rate in MW/min that applies until RAMP_DOWN_BREAK_PT_1.	Mandatory
Ramp Down Rate 2	Ramp Down Rate in MW/min that applies from RAMP_DOWN_BREAK_PT_1 until RAMP_DOWN_BREAK_PT_2.	Mandatory
Ramp Down Rate 3	Ramp Down Rate in MW/min that applies from RAMP_DOWN_BREAK_PT_2 until RAMP_DOWN_BREAK_PT_3.	Mandatory
Ramp Down Rate 4	Ramp Down Rate in MW/min that applies from RAMP_DOWN_BREAK_PT_3 until RAMP_DOWN_BREAK_PT_4.	Mandatory
Ramp Down Rate 5	Ramp Up Rate in MW/min that applies from RAMP_UP_BREAK_PT_5.	Mandatory
Ramp Down Breakpoint 1	MW level from which the ramp rate will change from Ramp Rate 1 to Ramp Rate 2.	Mandatory
Ramp Down Breakpoint 2	MW level from which the ramp rate will change from Ramp Rate 2 to Ramp Rate 3.	Mandatory
Ramp Down Breakpoint 3	MW level from which the ramp rate will change from Ramp Rate 3 to Ramp Rate 4.	Mandatory
Ramp Down Breakpoint 4	MW level from which the ramp rate will change to Ramp Down Rate 5.	Mandatory
Deloading Rate 1	Deloading Rate in MW/min that applies for a Unit below Minimum Stable Generation until DELOAD_BREAK_PT.	Mandatory
Deloading Rate 2	Deloading Rate in MW/min that applies for a Unit below Minimum Stable Generation beyond DELOAD_BREAK_PT.	Mandatory
Deload Break Point	MW level from which the deloading rate will change from DELOADING_RATE_1 to DELOADING_RATE_2.	Mandatory
Dwell Time 1	Time above Minimum Stable Generation for which a Unit remains at a constant MW level before continuing to increase or decrease output.	Mandatory
Dwell Time 2	Time above Minimum Stable Generation for which a Unit remains at a constant MW level before continuing to increase or decrease output.	Mandatory
Dwell Time 3	Time above Minimum Stable Generation for which a Unit remains at a constant MW level before continuing to increase or decrease output.	Mandatory
Dwell Time Trigger Point 1	MW level at which DWELL_TIMES_1 should be observed before output can further increase or decrease.	Mandatory
Dwell Time Trigger Point 2	MW level at which DWELL_TIMES_2 should be observed before output can further increase or decrease.	Mandatory
Dwell Time Trigger Point 3	MW level at which DWELL_TIMES_3 should be observed before output can further increase or decrease.	Mandatory
Droop	In relation to the operation of the governor of a Generator Unit, the percentage drop in System Frequency which would cause the Generator Unit under free governor action to change its output from zero to Full Load. (in %)	Mandatory
Number of Starts	Number of Starts available before maintenance of the unit when < 30 starts. Note: this value will be provided by Participants as part of their technical offer data. There will be no requirement to consider it in the optimization runs.	Mandatory

UNIT (RESOURCE) DATA - Generator parameters		
Screen Name	Comment	Mandatory / Optional
Number of Run Hours	Number of run hours available for a unit before maintenance when < 200 hours. Note: this value will be provided by Participants as part of their technical offer data. There will be no requirement to consider it in the optimization runs.	Mandatory
Minimum Reservoir Capacity	For Pumped Storage. Minimum possible capacity for the reservoir (MWh). Reservoir levels must be the same for submissions from all Units Sharing the Reservoir. The value for the first unit by alphabetical order of the unit's name will be selected if the reservoir capacities differ.	Mandatory
Maximum Reservoir Capacity	For Pumped Storage, reservoir levels must be the same for submissions from all Units Sharing the Reservoir. The value for the first unit by alphabetical order of the unit's name will be selected if the reservoir capacities differ.	Mandatory
Pumping Load Capacity	For Pumped Storage, the load consumed by unit during pumping phase (MW).	Mandatory
Pumped Storage Cycle Efficiency	(PSCEuh) The ratio between the gross electrical energy consumed to pump a given quantity of water from the lower reservoir to the upper reservoir and the net electrical energy sent out through the release of that quantity of water from the upper reservoir	Mandatory
Modes of Operation	This is not utilised in the systems. This can be left as NULL in the Data Transaction	Mandatory
Physical Location ID.	Name of unit location on the transmission system.	Mandatory
Identification of Unit location on grid.	Unique identifier of unit location. Multiple Unit IDs can exist for each Physical Location (e.g. Supplier Unit and Generator Unit).	Mandatory
Name of station or site where unit is located (multiple units per station).	Name of station or site where unit is located (there can be multiple units per station).	Mandatory
Identification of the Station	Station ID defined by the Transmission System Operators.	Optional
Station address line 1	Station Address line 1.	Optional
Station address line 2	Station Address line 2.	Optional
Registered Firm Capacity	Total deep connected capacity designation for the unit.	Mandatory
Non-Firm Access Quantity	Non-firm capacity for a unit in MW, i.e. part of a Generator Unit's Availability that does not have Firm Access.	Mandatory
Target Reservoir Level Percentage	Target Reservoir Level Percentage, applied to the Target Reservoir Level to calculate the target for the end of the Optimisation Horizon. The Regulatory Authorities reserve the right to set this value.	Mandatory
Commission Test Certificate	Acceptance of commission test for data and generation communication requirements.	Optional
Old Resource Flag	To indicate if this is an old resource whose ownership is being changed/ or is being re-registered.	Optional
Old Resource Name	In case of a previously registered resource, this is to provide its previous registered resource identification.	Optional
Old Participant Name	Participant ID of the previous Participant (if applicable). Can be left NULL if not relevant.	Optional
Priority Dispatch flag	Indication of a Unit's priority in the physical market schedule if in a tie to serve marginal demand. Will be Y or N and will be set in conjunction with the Transmission System Operator(s).	Mandatory
Unit under test start date	Date when the Unit is proposed to be under test. This will be approved by the Market Operator in conjunction with the Transmission System Operator(s).	Optional
Unit under test end date	Date when the Unit is proposed to complete its test. This will be approved by the Market Operator in conjunction with the Transmission System Operator(s).	Optional
Qualified Communication Channel	Indicator of the communication channels the unit has been qualified to utilise.	Optional

UNIT (RESOURCE) DATA - Generator parameters		
Screen Name	Comment	Mandatory / Optional
Jurisdiction	Jurisdiction for the resource - will be "ROI" or "NI".	Optional
Notification Comment	Used by the Market Operator and Participant to exchange notes with respect to that registration data.	Optional
Trading Site Name	Name of the Trading Site to which the Generator Unit is associated.	Optional
Data Exchange Test	Will be P (Pass) or F (Fail), depending on whether Market Operator data exchange testing is successful.	Optional but do not use
EB Licence number	Regulatory licence id number for the Participant based on type of unit owned (e.g. Wind Generation, Demand-side, etc.).	Optional
Electricity Commission License Effective Date	Electricity Commission License Effective Date.	Optional
Electricity Commission License Expiration Date	Electricity Commission License Expiration Date.	Optional
External ID	Optional External ID text field that can be used to track submissions by Participants. This can be non-unique and cannot be queried.	Optional
Target Reservoir Level MWH	Minimum Reservoir Level required at the end of the Trading Day.	Mandatory
Default Data Submission	This is a flag set by the Market Operator, and indicates whether Default Data has been submitted by the Market Participant for a Unit.	Optional

Load Parameters

UNIT (RESOURCE) DATA - Load parameters		
Screen Name	Comment	Mandatory / Optional
Resource Type	Demand Side Unit (DU) or Supplier Unit (SU)	Mandatory
Resource Name	The name of the resource in question (e.g. the name of the Generator Unit, Supplier Unit, Demand Side Unit, Interconnector Unit or Interconnector for which data is being submitted).	Mandatory
IM Resource Name	Reference ID to the unit's injection point to the transmission system referenced in the Connection Agreement	Optional
Connection Point	Identifier of the Unit (provided by the system operators).	Optional
Connection Type	Transmission or Distribution Connected.	Optional
Connection Agreement	Reference ID to the unit's and/or Participant's connection agreement.	Optional
Effective Date	Effective Date for Load Data Submission	Mandatory
Expiry Date	Expiry Date for Load Data Submission	Optional
Max Ramp Up	Rate of load increase. Rate of decreasing demand (MW/min).	Optional
Max Ramp Down	Rate of load reduction. Rate of increasing demand (MW/min).	Optional
Dispatchable capacity	MWs available for curtailment.	Optional
Non Dispatchable capacity	Portion of total demand not available for curtailment.	Optional
Minimum Down Time	Minimum amount of time the demand-side unit can be curtailed.(in Hours)	Optional
Maximum Down Time	Maximum amount of time the demand-side unit can be curtailed.(in Hours)	Optional
Trading Site Supplier Flag	Trading Site Supplier Flag (Y/N)	Optional
Unit under test start date	When applicable	Optional
Unit under test end date	When applicable	Optional
Old Resource Flag	To Indicate if this is an old resource whose ownership is being changed / or is being re-registered	Optional
Old Resource Name	In case of a previously registered resource, this is to provide its previous registered resource identification.	Optional

UNIT (RESOURCE) DATA - Load parameters		
Screen Name	Comment	Mandatory / Optional
Old Participant Name	In case of a previously registered resource, this is to provide its previous registered Participant identification.	Optional
Qualified Communication Channel	Indicator of the communication channels the unit has been qualified to utilize.	Optional
Jurisdiction	ROI or NI.	Optional
Notification Comment	Used by the operator and Participant to exchange notes with respect to that registration data.	Optional
Data Exchange Test	Will be P (Pass) or F (Fail), depending on whether Market Operator data exchange testing is successful.	Optional
EB Licence number	Regulatory licence id number for the Participant based on type of unit owned (e.g. Wind Generation, Demand-side, etc.).	Optional
Effective Date of EB Licence	Proposed date and time when Participant will become eligible to participate in the market.	Optional
Expiry Date of EB Licence	Expiry Date of EB Licence	Optional
Station ID	Station ID created by the system operators.	Optional
Station Address line 1	Address of Station for informational purposes.	Optional
Station Address line 2	Address of Station for informational purposes. (following)	Optional
External ID	Optional text field that can be used to track submissions by Market Participants	Optional
Fuel Type	Type of Fuel	Optional
Default Data Submission	This is a flag set by the Market Operator, and indicates whether Default Data has been submitted by the Market Participant for a Unit.	Optional

GENERATOR OFFER DATA

GENERATOR OFFER DATA		
Name	Comment	Mandatory / Optional
APPLICATION_TYPE	Must be "DAM"	Mandatory
TRADING_DATE	Market Window for normal bid is not open for trading_date {0} and application_type {1} An error occurred when fetching data from the cm_market table for trading_date {0}	Mandatory
PARTICIPANT_NAME	Invalid combination of participant_name {0} and user_name {1} for trading_date {2} The user_name {0} for participant_name {1} does not have system access privileges to participate in Market Trading for trading_date {2}	Mandatory
USER_NAME	Invalid combination of participant_name {0} and user_name {1} for trading_date {2} The user_name {0} for participant_name {1} does not have system access privileges to participate in Market Trading for trading_date {2}	Mandatory
MODE	Must be NORMAL	Mandatory
STANDING_FLAG	Market Window for standing bid is not open for trading_date {0} and application_type {1}. The standing_flag must set to true when Standing Element is present. In multiple Standing Data Submissions, type "ALL" conflicts with other.	Mandatory
VERSION_NO	Only one {0} element is allowed per submission	Mandatory
RESOURCE_NAME	The resource name {0} is invalid	Mandatory
RESOURCE_TYPE	Invalid facility_type {0} given for facility_name {1}, it must be PRED_PR_MAKER_GEN, PRED_PR_TAKER_GEN, VAR_PR_MAKER_GEN, or VAR_PR_TAKER_GEN. The submitted resource_type value {0} does not match the value {2} registered for the resource {1}	Mandatory
EXPIRY_DATE	The expiry_date {0} must be in the future. The expiry_date {0} must be greater than or equal to trading_date {1}.	Optional

GENERATOR OFFER DATA		
Name	Comment	Mandatory / Optional
DAY_TYPE	Submitted Standing Data with type {0} conflicts with existing Standing Data with type {1} for trading_date {2}	Optional
EXTERNAL_ID	Optional text field that can be used to track submissions by Market Participants. This can be non-unique and cannot be queried (although will be returned in responses if successful).	Optional
START_HR	The start_hr of {0} must be less than or equal to the end_hr of {1} in {2} element. Could not submit hour {0} and interval {1} in {2} element for {3} {4}. The following Hours and Intervals did not match between the {0} element and the {1} element: {2}. Missing hour {0} and interval {1} in {2} element, submission must cover the entire Trading Day. The hours and intervals are overlapping for {0} in following {1}. The energy_limit_detail element must be present when energy_limit_flag is set to Y. The energy_limit_detail element can not be submitted when energy_limit_flag is set to N. The nomination_profile element must be present when resource_type is "PRED_PR_TAKER_GEN", "VAR_PR_TAKER_GEN" or unit under test. The decremental_price element must be present when resource_type is PRED_PR_TAKER_GEN, VAR_PR_TAKER_GEN or unit under test.	Mandatory
END_HR	The start_hr of {0} must be less than or equal to the end_hr of {1} in {2} element. Could not submit hour {0} and interval {1} in {2} element for {3} {4}. The following Hours and Intervals did not match between the {0} element and the {1} element: {2}. Missing hour {0} and interval {1} in {2} element, submission must cover the entire Trading Day. The hours and intervals are overlapping for {0} in following {1}. The energy_limit_detail element must be present when energy_limit_flag is set to Y. The energy_limit_detail element can not be submitted when energy_limit_flag is set to N. The nomination_profile element must be present when resource_type is "PRED_PR_TAKER_GEN", "VAR_PR_TAKER_GEN" or unit under test. The decremental_price element must be present when resource_type is PRED_PR_TAKER_GEN, VAR_PR_TAKER_GEN or unit under test.	Mandatory
START_INT	The start_int of {0} must be less than or equal to the end_int of {1} in {2} element. Missing hour {0} and interval {1} in {2} element, submission must cover the entire Trading Day. The hours and intervals are overlapping for {0} in following {1}. The following Hours and Intervals did not match between the {0} element and the {1} element: {2}. The energy_limit_detail element must be present when energy_limit_flag is set to Y. The energy_limit_detail element can not be submitted when energy_limit_flag is set to N. The nomination_profile element must be present when resource_type is "PRED_PR_TAKER_GEN", "VAR_PR_TAKER_GEN" or unit under test. The decremental_price element must be present when resource_type is PRED_PR_TAKER_GEN, VAR_PR_TAKER_GEN or unit under test.	Mandatory
END_INT	The start_int of {0} must be less than or equal to the end_int of {1} in {2} element. Missing hour {0} and interval {1} in {2} element, submission must cover the entire Trading Day. The hours and intervals are overlapping for {0} in following {1}. The following Hours and Intervals did not match between the {0} element and the {1} element: {2}. The energy_limit_detail element must be present when energy_limit_flag is set to Y. The energy_limit_detail element can not be submitted when energy_limit_flag is set to N. The nomination_profile element must be present when resource_type is "PRED_PR_TAKER_GEN", "VAR_PR_TAKER_GEN" or unit under test. The decremental_price element must be present when resource_type is PRED_PR_TAKER_GEN, VAR_PR_TAKER_GEN or unit under test.	Mandatory
MAXIMUM_MW	The {0} value of {1} must be greater than 0 from start_hr {2}, start_int {3} to end_hr {4}, end_int {5}. The maximum_mw value of {0} must be greater than or equal to the minimum_mw value of {1} from start_hr {2}, start_int {3} to end_hr {4}, end_int {5}	Mandatory
MINIMUM_MW	The {0} value of {1} must be greater than 0 from start_hr {2}, start_int {3} to end_hr {4}, end_int {5}. The maximum_mw value of {0} must be greater than or equal to the minimum_mw value of {1} from start_hr {2}, start_int {3} to end_hr {4}, end_int {5}	Mandatory
MINIMUM_OUTPUT_MW	The {0} value of {1} MWh must be less than or equal to 0 MWh	Mandatory
TARGET_RESERVOIR_LEV EL_MWH	The pump_storage_detail element must be present when pump_storage_flag is set to Y. The pump_storage_detail element can not be submitted when pump_storage_flag is set to N	Mandatory

GENERATOR OFFER DATA		
Name	Comment	Mandatory / Optional
TARGET_RESERVOIR_LEVEL_PERCENT	The pump_storage_detail element must be present when pump_storage_flag is set to Y	Optional
PRIOR_DAY_END_RESERVOIR_LEVEL_MWH	The pump_storage_detail element must be present when pump_storage_flag is set to Y. The pump_storage_detail element can not be submitted when pump_storage_flag is set to N	Optional
OPERATIONAL_RESERVOIR_CAPACITY_LIMIT_MWH	The operational_reservoir_capacity_limit_mwh value of {0} must not exceed the Maximum Reservoir storage capacity value of {1}. The operational_reservoir_capacity_limit_mwh value of {0} must not fall below the Minimum Reservoir storage capacity value of {1}. The pump_storage_detail element must be present when pump_storage_flag is set to Y. The pump_storage_detail element can not be submitted when pump_storage_flag is set to Y.	Optional
SPIN_GENERATION_COST	Cost of running in spinning mode. Used only operationally.	Optional
SPIN_PUMP_COST	Cost of running in pumping mode. Used only operationally.	Optional
MINIMUM_GENERATION_COST	Cost of running at minimum generation level. Used only operationally.	Optional
LIMIT_MWH	The energy_limit_detail element must be present when energy_limit_flag is set to Y. The energy_limit_detail element can not be submitted when energy_limit_flag is set to N.	Mandatory
LIMIT_FACTOR	The energy_limit_detail element must be present when energy_limit_flag is set to Y. The energy_limit_detail element can not be submitted when energy_limit_flag is set to N.	Mandatory
ENERGY_LIMIT_PERIOD_FLAG	The energy_limit_detail element must be present when energy_limit_flag is set to Y. The energy_limit_detail element can not be submitted when energy_limit_flag is set to N.	Mandatory
PQ_CURVE_PRICE	The Prices in the PQ Curve are not monotonically increasing between points {0} and {1}. The price value of {0} in the pq_curve element must not exceed the Market Price Cap value of {1} {{2}} . The price value of {0} in the pq_curve element must be not lower than the Market Price Floor value of {1} {{2}}. The price_maker_detail element must be present when resource_type is "PRED_PR_MAKER_GEN" or "VAR_PR_MAKER_GEN" or Under Test is true. The pq_curve element can not be submitted in price_taker_detail element when resource type is {0}	Mandatory
PQ_CURVE_QUANTITY	The MW Quantities in the PQ Curve are not monotonically increasing between points {0} and {1}. The price_maker_detail element must be present when resource_type is "PRED_PR_MAKER_GEN" or "VAR_PR_MAKER_GEN" or Under Test is true. The pq_curve element can not be submitted in price_taker_detail element when resource type is {0}	Mandatory
STARTUP_COST_HOT	Start-up costs for cold, warm or hot states. At least one and up to three values provided. The {0} value of {1} MWh must be greater than or equal to 0 MWh. The {0} start-up costs must be greater than or equal to {1} start-up costs. The price_maker_detail element must be present when resource_type is "PRED_PR_MAKER_GEN" or "VAR_PR_MAKER_GEN" or Under Test is true. The pq_curve element can not be submitted in price_taker_detail element when resource type is {0}.	Optional
STARTUP_COST_WARM	Start-up costs for cold, warm or hot states. At least one and up to three values provided. The {0} value of {1} MWh must be greater than or equal to 0 MWh. The {0} start-up costs must be greater than or equal to {1} start-up costs. The price_maker_detail element must be present when resource_type is "PRED_PR_MAKER_GEN" or "VAR_PR_MAKER_GEN" or Under Test is true. The pq_curve element can not be submitted in price_taker_detail element when resource type is {0}	Optional
STARTUP_COST_COLD	Start-up costs for cold, warm or hot states. At least one and up to three values provided. The {0} value of {1} MWh must be greater than or equal to 0 MWh. The {0} start-up costs must be greater than or equal to {1} start-up costs. The price_maker_detail element must be present when resource_type is "PRED_PR_MAKER_GEN" or "VAR_PR_MAKER_GEN" or Under Test is true. The pq_curve element can not be submitted in price_taker_detail element when resource type is {0}	Mandatory

GENERATOR OFFER DATA		
Name	Comment	Mandatory / Optional
NO_LOAD_COST	The {0} value of {1} MWh must be greater than or equal to 0 MWh. The no_load_cost element must be presented in price_taker_detail element when resource type is PRED_PR_TAKER_GEN or PRED_PR_MAKER_GEN with unit under test. The no_load_cost element can not be submitted in price_taker_detail element when resource type is {0}.	Mandatory
NOMINATION_PROFILE_VA LUE	The nomination_profile element must be present when resource_type is "PRED_PR_TAKER_GEN" , "VAR_PR_TAKER_GEN" or unit under test	Mandatory
DECREMENTAL_PRICE_VA LUE	The {0} value of {1} must be equal to 0 from start_hr {2}, start_int {3} to end_hr {4}, end_int {5}. The decremental_price element must be present when resource_type is PRED_PR_TAKER_GEN, VAR_PR_TAKER_GEN or unit under test.	Mandatory

LOAD BID DATA

LOAD BID DATA		
Name	Comment	Mandatory / Optional
APPLICATION_TYPE	Must be "DAM"	Mandatory
TRADING_DATE	Market Window for normal bid is not open for trading_date {0} and application_type {1} An error occurred when fetching data from the cm_market table for trading_date {0}	Mandatory
PARTICIPANT_NAME	Invalid combination of participant_name {0} and user_name {1} for trading_date {2} The user_name {0} for participant_name {1} does not have system access privileges to participate in Market Trading for trading_date {2}	Mandatory
USER_NAME	Invalid combination of participant_name {0} and user_name {1} for trading_date {2} The user_name {0} for participant_name {1} does not have system access privileges to participate in Market Trading for trading_date {2}	Mandatory
MODE	Must be NORMAL	Mandatory
STANDING_FLAG	The standing_flag must set to true when Standing Element is present. In multiple Standing Data Submissions, type "ALL" conflicts with other.	Mandatory
VERSION_NO	Only one {0} element is allowed per submission	Mandatory
RESOURCE_NAME	The resource name {0} is invalid	Mandatory
RESOURCE_TYPE	Invalid facility_type {0} given for facility_name {1}, it must be PR_MAKER_DEMAND_UNIT. The submitted resource_type value {0} does not match the value {2} registered for the resource {1}	Mandatory
EXPIRY_DATE	The expiry_date {0} must be in the future. The expiry_date {0} must be greater than or equal to trading_date {1}	Optional
DAY_TYPE	Submitted Standing Data with type {0} conflicts with existing Standing Data with type {1} for trading_date {2}	Optional
EXTERNAL_ID		Optional
START_HR	The start_hr of {0} must be less than or equal to the end_hr of {1} in {2} element. Could not submit hour {0} and interval {1} in {2} element for {3} {4}. The following Hours and Intervals did not match between the {0} element and the {1} element: {2}. Missing hour {0} and interval {1} in {2} element, submission must cover the entire Trading Day. The hours and intervals are overlapping for {0} in following {1}	Mandatory

LOAD BID DATA		
Name	Comment	Mandatory / Optional
END_HR	The start_hr of {0} must be less than or equal to the end_hr of {1} in {2} element. Could not submit hour {0} and interval {1} in {2} element for {3} {4}. The following Hours and Intervals did not match between the {0} element and the {1} element: {2}. Missing hour {0} and interval {1} in {2} element, submission must cover the entire Trading Day. The hours and intervals are overlapping for {0} in following {1}	Mandatory
START_INT	The start_int of {0} must be less than or equal to the end_int of {1} in {2} element. Missing hour {0} and interval {1} in {2} element, submission must cover the entire Trading Day. The hours and intervals are overlapping for {0} in following {1}. The following Hours and Intervals did not match between the {0} element and the {1} element: {2}	Mandatory
END_INT	The start_int of {0} must be less than or equal to the end_int of {1} in {2} element. Missing hour {0} and interval {1} in {2} element, submission must cover the entire Trading Day. The hours and intervals are overlapping for {0} in following {1}. The following Hours and Intervals did not match between the {0} element and the {1} element: {2}	Mandatory
MAXIMUM_MW	The {0} value of {1} MWh must be greater than or equal to 0 MWh from start_hr {2}, start_int {3} to end_hr {4}, end_int {5}. The maximum_mw value of {0} must be greater than or equal to the minimum_mw value of {1} from start_hr {2}, start_int {3} to end_hr {4}, end_int {5}	Mandatory
MINIMUM_MW	The {0} value of {1} MWh must be greater than or equal to 0 MWh from start_hr {2}, start_int {3} to end_hr {4}, end_int {5}. The maximum_mw value of {0} must be greater than or equal to the minimum_mw value of {1} from start_hr {2}, start_int {3} to end_hr {4}, end_int {5}	Mandatory
MINIMUM_OUTPUT_MW	The {0} value of {1} MWh must be less than or equal to 0 MWh from start_hr {2}, start_int {3} to end_hr {4}, end_int {5}	Mandatory
PQ_CURVE_PRICE	The Prices in the PQ Curve are not monotonically increasing between points {0} and {1}. The price value of {0} in the pq_curve element must not exceed the Market Price Cap value of {1} ({2}). The price value of {0} in the pq_curve element must be not lower than the Market Price Floor value of {1} ({2})	Mandatory
PQ_CURVE_QUANTITY	The MW Quantities in the PQ Curve are not monotonically increasing between points {0} and {1}. The quantity value of {0} must not exceed the maximum_import_capacity_mw value of {1} for hour {2} and interval {3}. The quantity value of {0} must not exceed the maximum_export_capacity_mw value of {1} for hour {2} and interval {3}	Mandatory
SHUTDOWN_COST		Mandatory
START_HR	The start_hr of {0} must be less than or equal to the end_hr of {1} in {2} element. Could not submit hour {0} and interval {1} in {2} element for {3} {4}. The following Hours and Intervals did not match between the {0} element and the {1} element: {2}. Missing hour {0} and interval {1} in {2} element, submission must cover the entire Trading Day. The hours and intervals are overlapping for {0} in following {1}	Mandatory

LOAD BID DATA		
Name	Comment	Mandatory / Optional
END_HR	The start_hr of {0} must be less than or equal to the end_hr of {1} in {2} element. Could not submit hour {0} and interval {1} in {2} element for {3} {4}. The following Hours and Intervals did not match between the {0} element and the {1} element: {2}. Missing hour {0} and interval {1} in {2} element, submission must cover the entire Trading Day. The hours and intervals are overlapping for {0} in following {1}	Mandatory
START_INT	The start_int of {0} must be less than or equal to the end_int of {1} in {2} element. Missing hour {0} and interval {1} in {2} element, submission must cover the entire Trading Day. The hours and intervals are overlapping for {0} in following {1}. The following Hours and Intervals did not match between the {0} element and the {1} element: {2}	Mandatory
END_INT	The start_int of {0} must be less than or equal to the end_int of {1} in {2} element. Missing hour {0} and interval {1} in {2} element, submission must cover the entire Trading Day. The hours and intervals are overlapping for {0} in following {1}. The following Hours and Intervals did not match between the {0} element and the {1} element: {2}	Mandatory
NOMINATION_PROFILE_VALUE		Mandatory
DECREMENTAL_PRICE_START_HR	The start_hr of {0} must be less than or equal to the end_hr of {1} in {2} element. Could not submit hour {0} and interval {1} in {2} element for {3} {4}	Mandatory
DECREMENTAL_PRICE_START_INT	The start_int of {0} must be less than or equal to the end_int of {1} in {2} element	Mandatory
DECREMENTAL_PRICE_END_HR	The start_hr of {0} must be less than or equal to the end_hr of {1} in {2} element. Could not submit hour {0} and interval {1} in {2} element for {3} {4}	Mandatory
DECREMENTAL_PRICE_END_INT	The start_int of {0} must be less than or equal to the end_int of {1} in {2} element	Mandatory
DECREMENTAL_PRICE_VALUE	The {0} value of {1} must be equal to 0 from start_hr {2}, start_int {3} to end_hr {4}, end_int {5}	Mandatory

INTERCONNECTOR OFFER DATA

INTERCONNECTOR OFFER DATA		
Name	Comment	Mandatory / Optional
APPLICATION_TYPE	Must be "DAM"	Mandatory
TRADING_DATE	Market Window for normal bid is not open for trading_date {0} and application_type {1} An error occurred when fetching data from the cm_market table for trading_date {0}	Mandatory
PARTICIPANT_NAME	Invalid combination of participant_name {0} and user_name {1} for trading_date {2} The user_name {0} for participant_name {1} does not have system access privileges to participate in Market Trading for trading_date {2}	Mandatory
USER_NAME	Invalid combination of participant_name {0} and user_name {1} for trading_date {2} The user_name {0} for participant_name {1} does not have system access privileges to participate in Market Trading for trading_date {2}	Mandatory
MODE	Must be NORMAL	Mandatory

INTERCONNECTOR OFFER DATA		
Name	Comment	Mandatory / Optional
STANDING_FLAG	Could not {0} a standing bid for settlement reallocation The Standing Element could not be presented in settlement reallocation {0}. Only one {0} element is allowed per submission	Mandatory
VERSION_NO	Only one {0} element is allowed per submission	Mandatory
RESOURCE_NAME	The resource name {0} is invalid	Mandatory
RESOURCE_TYPE	Invalid facility_type {0} given for facility_name {1}, it must be INTERCONNECTOR. The submitted resource_type value {0} does not match the value {2} registered for the resource {1}	Mandatory
EXPIRY_DATE	The expiry_date {0} must be in the future. The expiry_date {0} must be greater than or equal to trading_date {1}	Optional
DAY_TYPE	Submitted Standing Data with type {0} conflicts with existing Standing Data with type {1} for trading_date {2}	Optional
EXTERNAL_ID	Optional text field that can be used to track submissions by Market Participants. This can be non-unique and cannot be queried (although will be returned in responses if successful).	Optional
START_HR	The start_hr of {0} must be less than or equal to the end_hr of {1} in {2} element. Could not submit hour {0} and interval {1} in {2} element for {3} {4}. The following Hours and Intervals did not match between the {0} element and the {1} element: {2}. Missing hour {0} and interval {1} in {2} element, submission must cover the entire Trading Day. The hours and intervals are overlapping for {0} in following {1}	Mandatory
END_HR	The start_hr of {0} must be less than or equal to the end_hr of {1} in {2} element. Could not submit hour {0} and interval {1} in {2} element for {3} {4}. The following Hours and Intervals did not match between the {0} element and the {1} element: {2}. Missing hour {0} and interval {1} in {2} element, submission must cover the entire Trading Day. The hours and intervals are overlapping for {0} in following {1}	Mandatory
START_INT	The start_int of {0} must be less than or equal to the end_int of {1} in {2} element. Missing hour {0} and interval {1} in {2} element, submission must cover the entire Trading Day. The hours and intervals are overlapping for {0} in following {1}. The following Hours and Intervals did not match between the {0} element and the {1} element: {2}	Mandatory
END_INT	The start_int of {0} must be less than or equal to the end_int of {1} in {2} element. Missing hour {0} and interval {1} in {2} element, submission must cover the entire Trading Day. The hours and intervals are overlapping for {0} in following {1}. The following Hours and Intervals did not match between the {0} element and the {1} element: {2}	Mandatory
MAXIMUM_IMPORT_CAPACITY_MW	The maximum_import value of {0} must not exceed the Maximum Interconnector Import Capacity value of {1}	Mandatory
MAXIMUM_EXPORT_CAPACITY_MW	The maximum_export value of {0} must not exceed the Maximum Interconnector Export Capacity value of {1}	Mandatory
PQ_CURVE_PRICE	The Prices in the PQ Curve are not monotonically increasing between points {0} and {1}. The price value of {0} in the pq_curve element must not exceed the Market Price Cap value of {1} ({2}). The price value of {0} in the pq_curve element must be not lower than the Market Price Floor value of {1} ({2})	Mandatory
PQ_CURVE_QUANTITY	The MW Quantities in the PQ Curve are not monotonically increasing between points {0} and {1}. The quantity value of {0} must not exceed the maximum_import_capacity_mw value of {1} for hour {2} and interval {3}. The quantity value of {0} must not exceed the maximum_export_capacity_mw value of {1} for hour {2} and interval {3}	Mandatory

SETTLEMENT REALLOCATION DATA

Settlement Reallocation Data		
Name	Comment	Mandatory / Optional
APPLICATION_TYPE	Must be "DAM"	Mandatory

Settlement Reallocation Data		
Name	Comment	Mandatory / Optional
TRADING_DATE	Market Window for normal bid is not open for trading_date {0} and application_type {1} An error occurred when fetching data from the cm_market table for trading_date {0}	Mandatory
PARTICIPANT_NAME	Invalid combination of participant_name {0} and user_name {1} for trading_date {2} The user_name {0} for participant_name {1} does not have system access privileges to participate in Market Trading for trading_date {2}	Mandatory
USER_NAME	Invalid combination of participant_name {0} and user_name {1} for trading_date {2} The user_name {0} for participant_name {1} does not have system access privileges to participate in Market Trading for trading_date {2}	Mandatory
MODE	Must be NORMAL	Mandatory
STANDING_FLAG	Could not {0} a standing bid for settlement reallocation The Standing Element could not be presented in settlement reallocation {0}. Only one {0} element is allowed per submission	Mandatory
VERSION_NO	Only one {0} element is allowed per submission	Mandatory
CREDITED_PARTICIPANT_NAME	Invalid participant_name {0} in sem_settlement_reallocation element Only one {0} element is allowed per submission	Mandatory
REALLOCATION_TYPE	Only one {0} element is allowed per submission	Mandatory
EXTERNAL_ID	Only one {0} element is allowed per submission	Optional
START_HR	The start_hr of {0} must be equal to the end_hr of {1} in {2} element. Could not submit hour {0} and interval {1} in {2} element for {3} {4}. Only one {0} element is allowed per submission	Mandatory
END_HR	The start_hr of {0} must be equal to the end_hr of {1} in {2} element. Could not submit hour {0} and interval {1} in {2} element for {3} {4}. Only one {0} element is allowed per submission	Mandatory
START_INT	The start_int of {0} must be equal to the end_int of {1} in {2} element. Only one {0} element is allowed per submission	Mandatory
END_INT	The start_int of {0} must be equal to the end_int of {1} in {2} element. Only one {0} element is allowed per submission	Mandatory
AGREEMENT_NAME	Only one {0} element is allowed per submission	Mandatory
MONETARY_VALUE	The {0} value of {1} must be greater than 0 from start_hr {2}, start_int {3} to end_hr {4}, end_int {5}	Mandatory