Chapter 3: Data Submission and Retrieval Processes



Data Submission and Retrieval Processes (1/18)

- The Balancing Market Interface (BMI) is the primary means by which participants interact with the market;
- It allows participants to submit data for:
 - VRD, VTOD, COD, and PND;
 - Separated into "Generator" VTOD and COD, and "Demand" VTOD and COD (demand in this case means Demand Side Unit, not a Supplier Unit);
 - Also allows Participants to retrieve a list of valid or cancelled Settlement Reallocation Agreements (the process to submit requests to set up or cancel Settlement Reallocation Agreements is offline and is updated in the system by the MO);
 - The term Market Participant Interface (MPI) is sometimes also used, as it is the term for the equivalent of the BMI in the SEM.
- Participants can also use the BMI to retrieve the data it has submitted and retrieve reports which are available;
- There are a number of procedures outlining how Parties interact with the BMI in TSC Agreed Procedures. This is elaborated further in detail in the Instructor Led Training materials.



Data Submission and Retrieval Processes (2/18)

- Registration Data must be submitted to the MO and assessed to ensure it meets the eligibility criteria;
- A Participant and/or its Units are registered upon receipt of a Commencement Notice, and will be eligible for trading from the start of a Trading Day which corresponds with the relevant Effective Date on that Notice;
- A unique Digital Cert is issued to the persons nominated by the Party as Users;
- The Party undergoes Communication Channel Qualification;
- Thereafter the User is permitted access to the BMI on behalf of the registered Participant and Unit.



Data Submission and Retrieval Processes (3/18)

- Once registered, Participants can update their Registration Data and that of their units via the BMI;
- Such update requests must be submitted at least 3 Working Days before the effective date and are subject to validation and approval by the MO;
- Exceptions to this include:
 - Change Registered Capacity or Maximum Generation of an AGU;
 - The Firm Access Quantity of Trading Site(s) for each Trading Day.
- Where a Participant wishes to change Registered Capacity or Maximum Generation of an AGU, they must send a Registration Pack with updated information to the MO (no fee required). The change will approved upon validation of the Registration Pack;
- Where a Participant wishes to change the Firm Access Quantity of a Trading Site, they must submit the appropriate form available from the MO website. The form is then issued to the relevant SO and validated in accordance with B.9.3 of the Code.



Data Submission and Retrieval Processes (4/18)

- A Participant may apply to change its attributes between being controllable or not, and dispatchable or not;
- They may register a Generator Unit as Non-Controllable until its Operational Readiness Confirmation is granted:
 - Upon receipt of confirmation, a Participant can apply to change their Registration Data to Controllable via the BMI.
- If the unit meets necessary Grid Code qualification requirements, they can also apply to change their Registration Data from being Non-Dispatchable to being Dispatchable;
- The application for change must be submitted at least 19 Trading Days prior to the effective date of the change (i.e. before Gate Opening for the Trading Day which is to be the effective date of the change);
- Email confirmation must follow the request no later than 1 Working Day after submission of the request by an approved Registration User;
- MO will (if approved) make the change in the system no later than 5 Working Days prior to the effective date and email the relevant Parties notifying that the change is complete.



Data Submission and Retrieval Processes (5/18)

- Some Registration Data is validated by External Organisations, in particular:
 - The SOs in respect of Grid Code compliance;
 - The MDPs in respect of meter data and retail market.
- Registration applicants should liaise with the SO and/or MDP prior to submission of a Registration Pack to facilitate the validation of Registration Data within 20 Working Days by the relevant External Organisations;
- The roles of these organisations is outlined in Agreed Procedure 1.



Data Submission and Retrieval Processes (6/18)

- Standing Offer Data (in the TSC Agreed Procedure 4 and the Technical Specification), also known as Default Data (in the TSC), is used as Gate Closure Data for GC1 to ensure valid offer data is always available for a Generator Unit;
- It is made up of both COD and VTOD items, they must be initially submitted during registration and can be updated following Communication Channel Qualification:
 - The earliest effective date for a Standing Offer Data submission is TD+19 days;
 - When a unit is being registered it must make a standard daily COD submission for each day until the day before the Standing Offer Data becomes effective to guarantee that they have data available, because the Standing Offer Data cannot be used for those days (VTOD set number 1 can be used from the Effective Date);
 - E.g. If a Unit, as part of registering, submits Standing Offer Data on 24th August, but their Effective Date for registration is 1st September, their Standing Offer Data will only be effective from 12th September, therefore they will need to make daily COD submissions for the days between 1st September and 11th September.
- This data must be kept up to date as necessary, Participants must review at least once per quarter.



Data Submission and Retrieval Processes (7/18)

- Standing Offer Data for COD has a Day Type Parameter that identifies the calendar days for which the data will apply:
 - Identifies values of SUN, MON, TUE, WED, THU, FRI, SAT, or ALL;
 - All Generators must have one SOD set with an "ALL" Day Type, and may submit multiple other SOD sets with other Day Types which would be selected as default data ahead of the "ALL" SOD set on those days;
 - Standing Offer Data with an "ALL" Day Type cannot have an expiry date, but SOD with other Day Types can have an expiry date after which the Market Operator shall not utilise the SOD set as default data.



Data Submission and Retrieval Processes (8/18)

- At a high level, the process for submitting or retrieving data, or retrieving a report, is as follows:
 - The Participant's system selects the required Data Transaction and submits it using an established connection;
 - MO's system issues a response message confirming that:
 - I. there was no error in any Element of a Data Transaction, and all of the relevant Elements of the Data Transaction are stored in the MO Market System; or
 - II. there was an error in a Data Transaction for a given Element, and the Data Transaction is rejected. The Participant will be required to submit a new Data Transaction. Note, Data Transactions included within the same message which have no errors are deemed successful and stored in the MO Market System.
 - If no response is received from the MO, a Participant may call the MO Helpdesk to establish whether it has been received.
- VRD, VTOD, COD and PND successfully submitted by a Participant to the MO will be passed to the SOs for validation and/or for use in scheduling and dispatch.



Data Submission and Retrieval Processes (9/18)

- Participants can submit and retrieve two classes of data:
 - Market Participant Registration data; and
 - Balancing Market Interface data.
- Some requirements around this include the following:
 - Only data from a single class can be used per Data Transaction, but multiple elements of that data class can be submitted in one Data Transaction;
 - Only one Settlement Reallocation Data Element can be included with an individual Data Transaction, and for submission must be via Type 1 Communication Channels;
 - Participants can request a specific Data Report or a list of all available Data Reports for a Data Report Data Transaction request;
 - Market Participant Registration data cannot be through Type 3 Communication Channels.
- See Agreed Procedure 4 Table 1 and Appendix 2 for Class and Element Mapping;
- The MO processes data it receives in order of receipt:
- Due to various levels of parallelism and pooling being implemented in this processing, sequencing cannot be guaranteed, Participants should configure their systems if a particular sequence of submission is desired.



Data Submission and Retrieval Processes (10/18)

- The MO will make daily, weekly, monthly and annual Data Reports, including settlement reports (confidential to that Participant), available via the BMI;
- Participants can submit a request for a specific Data Report through the BMI;
- Where Data Reports are updated by the MO, a message will be sent to the BMI to inform Participants that the Report is available;
- Reports can be viewed and accessed via Type 2 and Type 3 Channels;
- Reports and scheduled timelines of reports are set out in Appendix 2 "Report Listing" of Agreed Procedure 6.



Data Submission and Retrieval Processes (11/18)

- Validation checks for data submission, data retrieval and report requests include the following:
 - The submitted message is in the correct format;
 - The Sending Party is authorised to submit it;
 - The Data Transaction was submitted within timelines;
 - All required data is present for periods required.
- See Technical Specification for further information regarding the format, content and validation of Data Transactions and response messages.



Data Submission and Retrieval Processes (12/18)

- Participants can submit up to six Validation Data Sets via the BMI;
- The set designated as no. 1 is the one used as Default Data / Standing Offer Data:
 - If a different VDS is intended to be used as default VTOD on different days, an explicit Validation Data Set Number submission for those days is required, for example it is not possible to select set number 2 as the default;
 - The MO issues the sets to the SO for approval;
 - When approved, the sets are numbered and approved in the MPI.
- Participants can submit a VDS Number up to 10 minutes prior to Gate Closure 1 to identify which of the six sets to use for a Trading Day, submissions include:
 - A Trading Day; and
 - A VDS Number.
- The following slides outline the processes for submitting and updating VTOD in a Validation Data Set, and VDS Numbers for use day-to-day.



Data Submission and Retrieval Processes (13/18)





Data Submission and Retrieval Processes (14/18)





Data Submission and Retrieval Processes (15/18)



Data Submission and Retrieval Processes (16/18)

Emergency Communications.

- Participants must submit their own data. The only instances where the MO can enter data on behalf of the Participant are:
 - During the Initial Registration process; or
 - As a result of a system or communication failure.
- Detail of processes for Emergency Communications are in Agreed Procedure 7;
- There are two types of communication failure:
 - General Communication Failure (GCF) where the MO has technical issues, impacting on data submission for all Parties;
 - Limited Communication Failure (LCF) where one or more, but not all, Parties have technical issues, but the MO does not have technical issues, impacting on data submission.
- There is also a General System Failure, but this relates to the ability of the MO to carry out settlement rather than relating to the ability for participants to submit balancing market data.



Data Submission and Retrieval Processes (17/18)

Emergency Communications.

- If there is a GCF:
 - The MO will notify all impacted Parties of alternative communication methods and associated timelines for submitting the relevant Data Transaction(s);
 - The MO will notify impacted Parties of the Emergency Transaction Timeline regarding Data Transactions for Settlement. This may include an extension of the time allowed to submit data outside of the standard Gate Closures, as determined by the MO;
 - If the GCF affects the MO receiving Data Transactions from SOs, the MO will notify the SOs and request Data Transactions asap following the submission deadline;
 - The MO will update impacted parties at least daily of progress on restoring the systems, with estimates of when the system shall be restored if known.



Data Submission and Retrieval Processes (18/18)

Emergency Communications.

- If a Standard LCF occurs:
 - The Participant must inform the MO of their preferred method of communication for the duration of the LCF;
 - A Party's obligations regarding Data Transactions remain during the LCF;
 - The MO will process the Data Transactions from the alternative Communication Channel until the Participant can revert to the normal Communication Channel;
 - The Party must update the MO at least daily of progress in restoring their normal Communication Channel.
- If the LCF occurs to Offer Data for a Gate Window at least 5 minutes prior to Gate Closure:
 - The Participant must notify the MO of the LCF;
 - A Party's obligations regarding Data Transactions remain during the LCF;
 - If the LCF is valid, the Participant must submit their data in a correctly formatted file;
 - The MO will try to submit the data before Gate Closure and will notify the Party if submission to the BMI was successful or not;
 - If the Offer Data is received less than five minutes prior to the Gate Closure, the MO shall not submit it.

