Technical Specification Document

Electricity Retail Data Service (ERDS) Service Definition

Version: XX Effective Date: TBC

Domestic Suppliers	N/A
Non-Domestic Suppliers	N/A
Gas Transporters	N/A
Distribution Network Operators	Mandatory
DCC	N/A

Change History

Version Number	Implementation Date	Reason for Change
1.0	Date TBD	[To be completed with reference to any relevant CPs]

Contents Table

[To be included]

1 Description of service

1.1 The Electricity Retail Data Service (ERDS) is a Switching Data Service which enables the transfer of data via Market Messages between other Switching Data Services and Market Participants. Operated by the Electricity Retail Data Agent, the ERDS's primary purpose is to enable the exchange of Registration and RMP data between, Energy Suppliers, Distribution Network Operators (DNOs), the Supplier Meter Registration Agent (SMRA), the Smart Meter Data Service Provider (SMDSP), the Green Deal Central Charge Database Provider (GDCC), the Supplier Volume Allocation Agent (SVAA) and the Central Switching Service (CSS).[1]

1.2 The ERDA is not a party under the REC. Where the ERDA is referenced within the REC, DNOs have an obligation to ensure that the services are provided in line with this Service Definition.

1.3 The ERDA is referenced within a number of REC Schedules, specifically the Registration Services Schedule, Data Management Schedule and Address Management Schedule; this document should be read in conjunction with those documents.

1.4 The ERDA is one of a number of Switching Data Service Providers, as defined in the Interpretations Schedule and is therefore captured within the scope of the overall switching service management arrangements, as defined in the Service Management Schedule.

2 Definition of users

2.1 The ERDS interfaces with the following users:

(a) CSS Provider;

(b) DNOs;

(c) SMRA[2];

(d) SMDSP;

(e) GDCC;

(f) SVAA; and

(g) Electricity Suppliers.

2.2 Further details regarding the interaction with each of these users is included in section 3.

3 Service functionality

3.1 The key function of the ERDS is to pass Market Messages between Energy Suppliers, DNOs, the SMRA, the SMDSP, the GDCC, the SVAA and the CSS in accordance with the Registration Services Schedule, Data Management Schedule and Address Management Schedule. These Market

[1] Section 3 details all of Market Participants and the exchanges of data between each party in greater detail.
[2] The ERDS will be the Data Master for the RMP Status which will be provided to the Electricity Enquiry Service. As this data will be held within the Meter Point Registration Service alongside data mastered by the SMRS, a specific interface between the ERDS and EES has not been defined. The interface between the SMRS and the EES will include the RMP Status.

Messages will conform to the message structure defined in the Data Specification which may require the ERDS to carry out transformation activities. The transformation rules are also defined within the Data Specification.

ERDA to CSS Provider Messages

3.2 The ERDA sends Market Messages to the CSS Provider in a consistent format as described within the Data Specification. The data sent from the ERDA to the CSS Provider is summarised below:

(a) Regulatory Alliance data - identifies whether the necessary regulatory arrangements exist between an Electricity Supplier and a DNO. Where the ERDA becomes aware of a new or updated Regulatory Alliance, the ERDA shall send the CSS Provider the relevant message providing the updated Regulatory Alliance. This is specified in the Data Management Schedule.

(b) Metering Point data - Where the ERDA becomes aware of an amendment to Metering Point data, as described within the Data Management Schedule; including:

(i) A notification from a DNO[3] of a change in circumstances in respect of a Metering Point such that the RMP Status needs to be updated, and sent to the CSS Provider via the relevant Market Message in respect of that RMP;

(ii) A notification from the DNO of a change to the Energy Flow Direction of a Metering Point;

(iii) A notification from the GDCC of the creation or update of a Green Deal Plan associated to a Metering Point;

(iv) A notification from the SMDSP updating the DCC Service Indicator for a Metering Point; or

(v) A notification from an Energy Supplier of the creation or update of a Related Metering Point Association.

(c) Meter Point Location Address – Where the DNO creates or makes an amendment to the Meter Point Location (MPL) Address, the ERDA shall send the CSS Provider the relevant message providing the updated MPL Address. This is specified in the Address Management Schedule.

(d) Supplier Agent Appointment and Update of Meter Asset Provider – The ERDA will, in compliance with the Registration Services Schedule, notify the CSS Provider using the relevant Market Message:

(i) As soon as it is aware of changes to the Meter Asset Provider(s) recorded at a Metering Point within SMRS; or

(ii) Upon any change to the effective from or the effective to date of a Supplier Agent Appointment recorded at a Metering Point within SMRS.[4]

[3] The DNO and ERDA interfaces occur within the DNO's estate, therefore, they are not defined as Market Messages.

[4] SMRS and the ERDS are logical interfaces within the DNO's estate, therefore, they are not defined as Market Messages.

CSS Provider to ERDA Messages

3.3 The CSS Provider sends Market Messages to the ERDA in a consistent format as described within the Data Specification. The data sent from the CSS Provider to the ERDA is summarised below:

(a) Supplier Registration - Where the ERDA receives, in accordance with the Registration Services Schedule, a new Registration or an update to an existing Registration, that data must be made available to the SMRS within the timescales referenced in section [7.x] of this document.

SVAA to ERDA Messages

3.4 The SVAA sends Market Messages to the ERDA in a consistent format as described within the Data Specification. The data sent from the SVAA to the ERDS includes Market Participant Data utilised by the ERDA in order to manage Regulatory Alliances.

4 System access and user management

4.1 The ERDS does not require any individual user management functionality beyond the user management functionality that each DNO requires for the operation of the service, which is not defined within this document. No provisioning of access to users outside of the DNO is required.

4.2 The ERDA is classed as a CSS User and must therefore comply with the requirements within the REC Onboarding and Maintenance Schedule. No specific access is granted to the CSS by the ERDA.

4.3 Interfaces to the GDCC, Energy Suppliers and the SVAA utilise the Data Transfer Network (DTN) for the transportation of Market Messages to and from a DTN gateway within each DNO's estate. As such, a DNO is responsible for the transfer of Market Messages between its DTN gateway and the ERDA.[5]

5 Service availability

5.1 The ERDS is available between [24/7] for the receipt and acknowledgment of Market Messages from the CSS. Service availability for the receipt and acknowledgement of Market Messages from the CSS shall be [99.75%] except during scheduled maintenance periods and planned outages.

5.2 The ERDS will provide all data received prior to [xx:00hrs] from the CSS to the SMRS[6] for processing so that it is available to SMRS users the following Working Day. Data received from the CSS after [xx:00hrs] will be made available to SMRS users on the second Working Day.

5.3 [A daily back up window is expected between [XX:00hrs] and [XX:00hrs], with a weekly extended outage period between [XX:00hrs] and [XX:00hrs] on [calendar day].]

5.4 In the event of scheduled maintenance, the ERDA shall provide notice to the Switching Operator for inclusion in the forward schedule of change, in accordance with the Service Management Schedule.

[5] For the purposes of the DTN the ERDA and the SMRS are identified as the same Market Role Code within SVAA Market Domain Data.

[6] The DNO, in meeting its requirements as an ERDA will only be required to ensure that data is made available from the SMRS that it is also responsible for.

5.5 In the event of an unplanned maintenance outage e.g. to fix a priority incident, the notice and means will be specified in the Service Management Schedule.

5.6 Following any outage the Recovery Point Objective will ensure that any unprocessed transactions will be processed by [Message Type] in the priority specified in the [Service Management Schedule]. Each [Message Type] priority will be processed in the order that they were received.

5.7 The Return to Operation shall be [xx hour(s)] in the event of [single site failure].

6 User support

6.1 The ERDS does not have an externally facing service desk. Any service management incidents and contacts will be raised via the Switching Service Desk. The ERDA shall provide second line support in accordance with the Service Management Schedule.

7 Service Levels

[This section will include details of service levels against which the service has been designed. For example, this will include timescales for sending an initial response following receipt of a Market Message; and the timescales associated with any resultant processing steps, such as the update to internal systems or the onward sharing of data.

Non-functional requirements have been agreed as part of DB4 baseline, which we would expect to form the basis of the enduring service levels. Additional service levels to those set out in the NFRs may be added where this adds required certainty on the required standards of performance. We will finalise the service levels with stakeholders for inclusion in the Spring 2020 consultation. Note that any change to the NFRs included in the DB4 baseline would need to be agreed through Switching Programme governance]

8 Maximum Design Volumes

8.1 The ERDS has been designed based on the requirements set out below. Where the values are breached, the service received by the user may not be subject to the expected Service Levels. This will not constitute a breach by the ERDA.[7]

8.2 Where Maximum Design Volumes are breached within a given month the ERDA shall report the breach incident to the Code Manager within [timescale to be determined], and any impacts reported against the service. Where this becomes a frequent breach, the Code Manager may initiate a Change Proposal to increase the Maximum Design Volumes or take remedial steps to prevent recurrence of the breach.

Processing of data from the CSS Provider

8.3 The ERDS shall have the capability to process, as a minimum, CSS messages relating to the following volume of successful Switch Requests:

[7] [Note – further work is required to break these requirements down so that they can be applied to individual ERDA's]

- Average daily volume of 42,300
- A peak daily volume of 281,600
- An average hourly volume of 3,500
- A peak hourly volume of 25,300
- An annual volume of 15,450,000

8.4 In addition, the ERDS shall be capable of processing CSS messages relating to an annual volume of 375,800 Initial Registrations.

8.5 The ERDS shall have the capability to process, as a minimum, CSS messages relating to the following volume of Switch Requests which fail to complete successfully:

- Average daily volume of 6,700
- A peak daily volume of 44,800
- An average hourly volume of 600
- A peak hourly volume of 4,000
- An annual volume of 2,455,000

8.6 In addition, the ERDS shall be capable of processing CSS messages relating to an annual volume of 25,900 failed Initial Registrations with capability to process an additional 250,000 switch requests in exceptional conditions.

Processing of data from the SMRS

[This section will include any identified constraints on the volume of data provided via the SMRS]

9 Reporting

9.1 [To be updated for Spring 2020 consultation.]

10 System Audit

10.1 The ERDS need not retain specific Market Messages, however they shall maintain an audit trail of messages received and responses sent (inbound and/or outbound messages).

11 Data Handling

11.1 Other than for audit purposes, no retention of data is required by this service in normal operation.

12 Security

12.1 Security arrangements associated with the data exchange between ERDS and other Market Participants and Switching Data Service Providers are covered by the following arrangements:

(a) CSS Provider – the ERDS is classified as a CSS User and the CSS security requirements apply, as reflected in the REC Onboarding and Maintenance Schedule.

(b) DNOs – the ERDS is a service delivered by individual DNOs, therefore there is no physical interface.

(c) Supplier Meter Registration Agent (SMRA) – the SMRS is also a service delivered by individual DNOs, therefore there is no physical interface required between the ERDA and the SMRA.

(d) Supplier Volume Allocation Agent (SVAA) – the ERDS receives electricity Market Participant Data from the SVAA via a data flow transferred via the Data Transfer Network which requires the ERDS to have a DTN connection. The associated security requirements form part of the Data Transfer Service Agreement (DTSA).

(e) Smart Meter Data Service Provider (SMDSP) – the interface with the SMDSP is defined within the Smart Energy Code; therefore, the security requirements in relation to this interface reflect SEC requirements.

(f) GDCC - the interface with the GDCC utilises the DTN, with security information reflected in the DTSA as per the SVAA interface detailed above.

(g) Electricity Supplier – the interface with Electricity Suppliers utilises the DTN, with security information reflected in the DTSA as per the SVAA interface detailed above.

12.2 In the event that an ERDA detects a potential or suspected security breach it should inform the Switching Service Desk immediately.