RETAIL ENERGY CODE

Electricity Enquiry Service (EES) Service Definition

Contents

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Technical Specification Document

Electricity Enquiry Service (EES) Service Definition

Version: 3.1 Effective Date: 4 November 2022

Change History

Version Number	Implementation Date	Reason for Change
0.1	N/A	For consultation in December 2020
2.0	1 September 2021	Finalisation for Retail Code Consolidation
2.2	31 January 2022	R0012
3.0	18 July 2022	Switching SCR Modification R0041
3.1	4 November 2022	R0036
MHHS v0.1	N/A	MHHS required changes: Draft for industry review
MHHS v0.2	N/A	MHHS required changes: Updated post industry consultation
MHHS v0.3	N/A	Version uplifted following CCAG Approval
MHHS v0.4	N/A	Mop up version – updated to include transition text
MHHS v0.5	N/A	Issued for M6 Consistency Check consultation. No change from MHHS v0.4
MHHS v0.6	N/A	Consistency check update post consultation.
MHHS v0.7	N/A	Updated following Ofgem review. Typo corrections to paragraphs 6.11 and 9.4.
MHHS v1.0	N/A	M6 version approved by CCAG. Updated version number for SCR consultation with no further changes made from previous version.

MHHS v1.1	N/A	Updated following R0209 consultation – housekeeping improvement.
MHHS v1.2	N/A	Update for I0241 to recognise data is sent to the EES from both the SMRS and BSC Central Systems (MHHS CR039) and to reflect the different publication timescales defined in the MHHS Design.

1 Description of Service

1.1. The Electricity Enquiry Service (EES) allows EES Users to access market data where they are entitled to do so in accordance with the Data Access Matrix defined within the Data Access Schedule. Data is sourced from each Supplier Meter Registration Service (SMRS) / Electricity Retail Data Service (ERDS), BSC Central Systems and the Central Switching Service (CSS).

Commented [SJ1]: I0241 update to recognise the Annual Consumption is sent directly from BSC Central Systems

1.2. The EES Provider is not a Party under this Code. Where the EES Provider is referenced within this Code, RECCo is obliged to ensure that the services are provided in line with this Code.

1.3. The EES consists of:

(a) an online portal to view data for all electricity Metering Points;

(b) an Application Programming Interface (API) service which allows EES Users to gather information from the service in a specified manner;

(c) a prepayment transaction processing function to match Meter Serial Numbers for Prepayment Meters to the associated Metering Point and Registered Supplier; and

(d) a reporting function enabling defined data sets to be provided to individual EES Users.

1.4. The EES is a tool for viewing and accessing information sourced from Data Items already held in industry systems and does not prescribe any further validation of those Data Items. In some cases, data is derived from one or more Data Items by the EES in accordance with the rules set out in the Data Specification.

1.5. The EES Provider takes no responsibility for the accuracy of data other than ensuring that it reflects the data received, or has been derived from data received, in accordance with the Data Specification. Identified inaccuracies shall be notified to the relevant Data Master identified within the Data Specification and corrected at source via standard industry processes.

1.6. This Service Definition should be read in conjunction with:

(a) the Data Access Schedule, which defines the governance rules relating to data access via the EES;

(b) the Prepayment Arrangements Schedule, which defines the process for allocating prepayment transactions;

(c) the Green Deal Arrangements Schedule and Green Deal Central Charging Database Service Definition, which define the process for validating data relating to Green Deal Plans; and

(d) the Data Specification (including the Data Access Matrix), which defines the Data Items accessible to each category of EES User, the means by which data is made available to EES Users, and the content and format of API messages.

1.7. The EES Provider shall produce and maintain a user guide which will assist EES Users to access the service and articulates the functionality of the service to EES Users.

1.8. Unless specifically conducting a search for the Retail Energy Location Address, the address details provided via a search will be the Meter Point Location Address. EES Users shall only access the Retail Energy Location Address for the purpose of switching and can only do this by indicating that this is the purpose of their access request.

1.9. The EES Provider is one of a number of Switching Data Service Providers and is therefore captured within the scope of the overall Switching Service Management arrangements, as defined in the Switching Service Management Schedule . The scope of the Switching Service Management arrangements is limited to the primary interface between the EES Provider (or its contracted CSS Interface Provider) and the CSS Provider.

1.10. The EES Provider shall receive data via the Data Integration Platform and is therefore required to become a DIP User and comply with the DIP Rules.

2 Definition of EES Users

2.1. In this Service Definition, the term "EES User" refers to the organisation granted access to data in accordance with the Data Access Schedule; and the term ”Authorised Person” refers to the individual representative of an EES User accessing the EES on behalf of the EES User.

2.2. The EES provides access to data to EES Users, in accordance with the process specified in the Data Access Schedule. The Data Items that each Authorised Person can access, and any conditions of access relating to specific Data Items, are defined by the access afforded to the EES User on behalf of which that Authorised Person is acting. The EES User access is set out in the Data Access Matrix which forms part of the Data Specification.

2.3. In addition, the EES interfaces with the following services:

(a) ~~(a)~~ data is provided by each Supplier Meter Registration Agent (SMRA) to the EES via the Data Integration Platform;

(b) data is provided by the BSC Central Systems to the EES via the Data Integration Platform;

~~(a)~~

(~~b~~c) data is provided by the CSS Provider to the EES via CSS APIs;

(~~c~~d) Prepayment Meter Infrastructure Providers (PPMIPs) request data relating to the Registered Supplier for prepayment Meter Serial Numbers using a secure FTP interface (and responses from the EES are also provided via the same route); ~~and~~

(~~d~~e) the GDCC Provider uses the EES to validate the Registered Supplier for Green Deal Plans using the API service. The EES also provides information to the GDCC Provider where a Switch occurs in relation to a Metering Point with an associated Green Deal Plan~~.~~; and

(~~e~~f) data relating to Non-MHHS Metering Points is provided by each Electricity Retail Data Agent (ERDA) to the EES via a synchronisation on each Working Day using a secure File Transfer Protocol (FTP) interface.

2.4. For PPMIPs, the Energy Supplier shall ensure that the PPMIP provides the relevant data in accordance with this Service Definition and the Prepayment Arrangements Schedule.

3 Service Functionality

Online portal

3.1. The online portal is an interface designed to give Authorised Persons access to data. It is not to be used to support automatic extraction capability e.g. data scraping. EES Users must engage with the EES Provider where large scale data access is required.

Commented [SJ2]: I0241 Update - to reflect the sending of the annual consumption from BSC Central Systems rather than the SMRS

3.2. Online portal users can search for data relating to a specific Metering Point using one or more of the following:

(a) Meter Point Administration Number;

(b) elements of the MPL Address or REL Address;

(c) Metering Point postcode; or

(d) Meter Serial Number.

3.3. Search results are provided where the search information matches the data associated with one or more Metering Points within the EES. Where search information does not result in a match, the EES will return a message showing that no data was found.

3.4. Authorised Persons can enter multiple or partial search criteria (e.g. multiple postcodes and/or multiple Meter Serial Numbers. A maximum of 200 search results will be shown). If there are more than 200 matches, a system message will be displayed to the user.

3.5. Once a search has been performed, the online portal will display all matched Metering Points in a list, with the associated Meter Point Location Address, GSP Group, Distribution Network Operator and trading status.

3.6. The Authorised Person must confirm each time they sign into the online portal, that they will comply with the terms of use, which includes the requirement to have a legitimate reason for accessing data. A limited data set may be available based on any restrictions in the Data Access Matrix.

3.7. Once a Metering Point has been selected, data is displayed on the Metering Point page. The following information is displayed:

(a) registration data provided by each SMRA / ERDA, CSS and BSC Central Systems;

Commented [SJ3]: I0241 update - to reflect the receipt of Annual Consumption from BSC Central Systems and the receipt of registration data from the CSS.

(b) meter data including the meter history of a Metering Point - the currently appointed Metering Equipment Manager will have a view of the meter history that will begin on the date of the first installed meter at the Metering Point, through to the present day;

(c) whether the Meter Serial Number is associated with more than one Metering Point – all associated Metering Points and addresses will be listed;

(d) when the data was last updated;

(e) the Supply Number, in the format set out in the Data Specification (in addition to the individual Data Items that make up the Supply Number);

(f) icons will be visible to identify where data has been derived by the EES; and

(g) whether the Metering Point is being settled via the MHHS arrangements.

3.7A Where new Data Items have been introduced for MHHS, the EES will only display these Data Items once the Metering Point becomes an MHHS Metering Point. Where an MHHS Metering Point undergoes MHHS Reverse Migration, MHHS Data Items (excluding Annual Consumption, Annual Consumption Quality Indicator and Annual Consumption Effective from Date) will be removed and Data Items related to Non-MHHS Metering Points will be re-instated.

3.8. Where the Authorised Person clicks on the telephone icon button on the Metering Point page the following contact details relating to the Registered Supplier and associated Distribution System will be displayed:

(a) Distribution Network Operator emergency telephone number;

(b) Distribution Network Operator general telephone number;

(c) SMRS / ERDS customer support telephone number; and

(d) Electricity Supplier support telephone number.

3.9. Distribution Network Operators have the ability to create letters for Consumers in relation to Supply Number enquiries. The Authorised Person shall use the search facility and select the Metering Points that they wish to be included in the letter. Only Metering Points associated with the respective Distribution Network Operator can be selected. The Authorised Person may also choose which address should be included in the letter and can subsequently amend this. Once created, the letters will be stored to allow the Authorised Person to download as required. All letters produced will be deleted from the system seven calendar days after creation. A number of letter templates will be available to the Authorised Person, who may enter the customer name and modify the postal address. Only the Master Admin User (see Paragraph 4) will have the ability to create, delete and amend letter templates.

3.10. A Non-Domestic Consumer will be able to access data in accordance with the following:

(a) Non-Domestic Consumers shall have the ability to add Metering Points to their portfolio through an online form in the system or by bulk uploading a CSV file, provided the Metering Point is not associated with another Non-Domestic Consumer's portfolio (either in an authorised or pre-authorised state). Non-Domestic Consumers can mark Metering Points for deletion from their portfolio on the service, however they cannot bulk delete through uploading a CSV file;

(b) Non-Domestic Consumers will be able to search within their portfolio by Meter Point Administration Number, Meter Serial Number, Meter Point Location Address or postcode. The search results will only contain Metering Points that are part of that Consumer's portfolio; being the Metering Points for premises owned and/or occupied by the Non-Domestic Consumer or its Affiliates. Other than this, the search facility will work in the same way as for other EES Users with the exception that they will only be able to view Energy Supplier registration information for the period during which the Metering Point was part of their portfolio;

(c) any Metering Point that a Non-Domestic Consumer adds to their portfolio must be authorised by the Energy Supplier. If the Energy Supplier refuses authorisation, the Metering Point will become in a blocked state for that individual Non-Domestic Consumer and cannot be requested again;

(d) any change to a Non-Domestic Consumer's portfolio shall be stored, including the user ID, Meter Point Administration Number, date and time of the change and where appropriate the name of the upload file that created the entry. This data shall be stored on-line for a minimum of one year; and

(e) a Non-Domestic Consumer will have the ability to remove themselves from being an EES User, by terminating their Access Agreement.

API service

3.11. Each API service is an interface designed to give machine-to-machine access to data.

3.12. An API service user can search for data relating to a specific Metering Point via the API. The available web service methods and the Data Items returned are detailed in the EES API Technical Specification and can be used for the following:

(a) retrieval of the Registration and meter technical details for a given Meter Point

Administration Number;

(b) retrieval of the MPL Address and REL Address data matching the specified criteria (REL Address data can only be accessed for the purpose of Switching);

(c) requests for a list of error codes used by the web service;

(d) requests for the list of method limits and current usage for a particular EES User; and

(e) retrieval of relationship data for a given Meter Point Administration Number.

3.13. EES Users that are not required by Energy Licences to accede to this Code, will be required to select a usage level, with a monthly lookup limit linked to a service charge. There is no restriction on EES Users changing usage levels.

3.14. In addition to the standard API available to EES Users, there is a separate API which is used by the GDCC Provider to validate the Registered Supplier for Green Deal Plans and to notify the GDCC Provider where a Switch occurs in relation to a Metering Point with an associated Green Deal Plan.

Prepayment Transaction Processing

3.15. The EES includes a facility which allows PPMIPs to submit bulk transaction files listing Meter Serial Numbers and transaction date to the EES. The EES will process these bulk transaction files and return a response indicating the identity of the Registered Supplier and Meter Point Administration Number(s) associated with each provided Meter Serial Number at the point at which the prepayment transaction was made.

3.16. This Registered Supplier information will then be used by the PPMIP to allocate prepayment transactions in accordance with the Prepayment Arrangements Schedule.

3.17. The provisions relating to prepayment transaction processing are set out below:

(a) Electricity Prepayment Supplier Files will be uploaded by PPMIPs in the format defined in the Data Specification;

(b) each PPMIP that uses the service shall have its own directory to upload and download files using secure FTP. This connection will also be used to retrieve the resultant response files;

(c) the EES shall validate each Electricity Prepayment Supplier File to confirm it reflects the format defined in the Data Specification. If a file fails validation, a rejection file will also be provided to the PPMIP containing the reason for rejection;

(d) the EES will process each Electricity Prepayment Supplier File and seek to identify the Metering Points and Registered Supplier associated with each provided Meter Serial Number and Consumer payment date using the meter matching process detailed in Appendix 1. For the avoidance of doubt if one or more Meter Serial Numbers in the uploaded file are not found, this will not prevent the file from being processed. The response file will indicate those records that have not been matched to current data held in the EES;

(e) a single Electricity Prepayment Supplier Response File will be provided to the PPMIP in relation to each Electricity Prepayment Supplier File submitted by the PPMIP, in the format defined in the Data Specification;

(f) the Electricity Prepayment Supplier Response File will either contain details of the Meter Point Administration Number(s), Registered Supplier and its registration date and Meter Type (as defined in the Data Specification) for the Meter Serial Number at the Consumer payment date, or a code to show the Meter Serial Number was not located on the EES. Given that Meter Serial Numbers are not always unique it is possible that multiple instances could be returned by the EES;

(g) where the EES identifies instances where multiple Meter Serial Numbers exist for a single entry on the Electricity Prepayment Supplier File, the EES shall perform two further validation processes:

(i) any Meter Serial Numbers classified as Credit Meters (Meter Type N or H), will be disregarded from the set of returned records; and

(ii) if the Transaction Routing Flag is set (in accordance with Paragraph 3.23) then only that record shall be returned; and

(h) the PPMIP will be responsible for pulling the Electricity Prepayment Supplier Response Files from the EES directory. Electricity Prepayment Supplier Response Files will be stored on the EES directory for 28 days and after this time will be deleted by the EES Provider.

3.18. The EES will include a facility for transaction routing where multiple Meter Serial Number records relating to Prepayment Meters exist on the EES. This facility will allow Electricity Suppliers to apply a Transaction Routing Flag, which shall be

used to identify which Electricity Supplier is entitled to prepayment transactions relating to that Meter Serial Number. The provisions relating to transaction routing are set out below:

(a) a Transaction Routing Flag can be attributed to any Meter Serial Number in the EES where multiple records of a Meter Serial Number exist;

(b) Authorised Persons can search for Meter Serial Numbers, restricted to relevant Prepayment Meter Types (K, S or T);

(c) a separate screen within the online portal is available for Electricity Suppliers to manually apply a Transaction Routing Flag. The Electricity Supplier may log into this screen and search for the Meter Serial Number. The screen will identify whether the Meter Serial Number is valid for a Transaction Routing Flag (i.e. more than one record exists for that Meter Serial Number);

(d) the Electricity Supplier may declare "not responsible" for a period at the beginning, the end or the entire registration if the Electricity Supplier believes it has no legitimate claim for the transactions associated with that Meter Serial Number. The EES will retain the date and user details associated with the amendment of a status;

(e) a Transaction Routing Flag will occur in the EES only when all but one Electricity Supplier has determined that it is "not responsible" for a Meter Serial Number; and

(f) if new information becomes available to any Electricity Supplier involved with a Transaction Routing Flag, the Electricity Supplier may change its status at any point. This will have the effect of removing the Transaction Routing Flag until the Electricity Suppliers involved agree a solution.

4 System Access and EES User Management

4.1. Once a new EES User has been Qualified as an EES User in accordance with the Data Access Schedule and the Qualification and Maintenance Schedule, the Code Manager will inform the EES Provider who will provide access within five Working Days to the online portal and/or the API service.

Online portal

4.2. Each Authorised Person shall have an individual user account, which shall only be accessed via entry of the correct username and password. On creation of the user account with an email address, the EES shall send a link to the email address allowing

the Authorised Person to set their password. When creating an account that does not have an email address, the account creator is presented with a temporary password on screen, and is responsible for securely communicating it to the created user. An Authorised Person can only be granted access to the EES for one EES User.

4.3. The default for any EES User is for their Authorised Persons to have their own individual email address and set a password up associated to it. An EES User can decide whether to enforce the use of email addresses as usernames or not. If an EES User has elected to enforce this, verification emails will be sent to the chosen email address (username). Either way, usernames must be unique in the EES.

4.4. The EES Provider shall create for each EES User a single 'Master Admin User' (MAU). The MAU must be a named individual with an identifiable email address which will be their username.

4.5. The MAU shall have the ability to:

(a) create more Authorised Persons and grant them privileges associated with other Authorised Persons e.g. allowing them to reset passwords, enable and disable accounts and create new Authorised Persons;

(b) search for Authorised Persons;

(c) arrange the resetting of passwords, disabling, re-enabling, deleting or reinstating accounts, and controlling what functionality Authorised Persons have access to (deleted accounts will not be visible to Authorised Persons or user-run reports; however, they will continue to be recorded by the EES for audit purposes).

4.6. Where the EES User has enforced the use of email addresses as usernames, the MAU may control access by adding valid email domains. This will restrict new Authorised Persons to those only with access to email addresses within a valid email domain. An EES User can have multiple valid email domains or none.

4.7. Where the EES User has not enforced the use of emails as usernames, an Authorised Person can either have their email associated to the user account or a proxy email address can be associated with the account to facilitate account verification and password resets. Proxy email addresses must belong to a verified user account within the EES User and there is no limit to the number of Authorised Persons the proxy can be associated to.

4.8. Inactive accounts will be deleted after 90 days. If an account is deleted, Authorised Persons will be able to re-create the account using the same username (or email address). MAUs are exempt from account auto-deletion.

4.9. Each Authorised Person shall only be able to log on via one session at a time to prevent password sharing. Once logged in, the Authorised Person may open the online portal multiple times using separate tabs in their browser, as this will use the same single session.

API service

4.10. To enable users of the API service to authenticate themselves with the service, the request for all web service methods must contain a service subscription licence key provided by the EES Provider to determine:

(a) the web service methods that are available to the EES User;

(b) the request limits of the web service and web service methods for the EES User;

(c) the response limits of the web service and web service methods for the EES User; and

(d) the Data Items that are available to the EES User.

4.11. The API service can be accessed via endpoints detailed in the EES API Technical Specification.

5 User Limits

Online portal access

5.1. All Authorised Persons using the online portal shall by default, be limited to 600 Metering Point searches per day. Once this limit has been reached, access to view data will be removed for the remainder of that day. This limit is a configurable parameter per Authorised Person and can be amended by the EES Provider.

API access

5.2. All EES Users shall be limited to a certain number of requests per calendar month. The maximum number of requests that can be made for a given web service method, per calendar month, is determined by the service plan associated with the subscription licence key. A hard stop may be applied per EES User, based upon the service plan. If a hard stop is set and the maximum number of requests is exceeded, the web service will return an error code that indicates this; and the web service will not return any of the requested data.

5.3. The API service counts all requests made to each accessible web service method, per calendar month, for each EES User. Where a web service method allows multiple requests to be made through a single transaction, the web service will count each individually requested item as a separate request.

Prepayment transaction processing

5.4. Each PPMIP shall submit no more than five Electricity Prepayment Supplier Files per day, with a maximum of 500,000 transactions in total in all files submitted per day.

5.5. PPMIPs that require abnormal volumes above the 500,000 transaction limit shall contact the EES Provider directly to discuss options for processing.

6 Service Availability

Online Portal and API Service

6.1. The EES online portal, API service and PPMIP file receipt service shall be provided 24 hours a day, seven days a week, except during Scheduled Maintenance periods and unplanned outages.

6.2. The EES online portal and API service shall have 99% availability between 08:00 and 18:00 hours on Working Days over each calendar month.

6.3. Any unplanned outage of the services shall be notified by the EES Provider to:

(a) the Code Manager as soon as is practicable. Such notification shall also include an estimate for the restoration of services, with further confirmation provided when services are restored.

(b) the Switching Operator, in accordance with the Switching Service Management Schedule.

6.4. During the service outage online portal and API requests will not be fulfilled i.e. the EES User will not be able to access the online portal and specific requests will not be responded to during the outage. Any such API requests will not be counted towards a EES Users usage volume.

6.5. In the event of Scheduled Maintenance that impacts the service that the EES Provider is providing under this Code:

(a) the EES Provider shall notify the Code Manager with a minimum 10 Working Days' notice of Scheduled Maintenance. The Code Manager will notify EES Users as soon as reasonably practicable.

(b) the EES Provider shall provide notice to the Switching Operator for inclusion in the forward schedule of change, in accordance with the Switching Service Management Schedule.

CSS to EES Interface

6.6. The CSS to EES interface shall be provided 24 hours a day, seven days a week, except during Scheduled Maintenance periods and unplanned outages.

6.7. The CSS to EES interface shall have 99.75% availability over each calendar month (excluding Scheduled Maintenance).

6.8. In the event of an unplanned outage relating to the CSS to EES interface, the System shall resume operation within one hour.

6.9. Scheduled Maintenance relating to the CSS to EES interface shall not occur between 16:00 and 01:00 hours.

Data Integration Platform to EES Interface

6.10. The EES Provider shall ensure its interface with the Data Integration Platform

has 98% availability over each calendar month (excluding Scheduled Maintenance).

6.11. In the event of an unplanned outage relating to the EES interface with the DIP, the System shall resume operation within one hour.

6.12. Scheduled Maintenance relating to the EES interface with the DIP shall not occur between 16:00 and 01:00 hours.

7 User Support

Online Portal and API Service

7.1. The EES Provider shall provide a service desk to provide technical support. This service desk will manage all EES User service contacts such as reporting issues and queries.

7.2. The EES Provider shall ensure that the EES service desk is available:

Item	Requirement
Standard Operational Hours	08:00 to 18.00 on Working Days.
Out of Hours Critical Support	For supporting critical severity issues outside of standard operating hours.

7.3. Issues will be categorised as follows:

Severity	Description	Target Response Time	Target Resolution Time
Critical	The service is not usable. Primary functions do not work and there is no known workaround. Business is impacted severely. All critical severity issues must be reported by telephone.	1 hour (95%) 2 hours (100%)	4 hours (95%) 1 WD (100%)
Major	The software is still functional, but at least one primary function has been impacted and a workaround, if available, is severely time consuming.	2 hours (95%) 3 hours (100%)	1 WD (95%) 2 WDs (100%)
Minor	Inconvenience increased. Functionality not highly affected and workaround is an acceptable alternative	4 hours (95%) 8 hours (100%)	3 WDs (95%) 5 WDs (100%) or fix in next software release
Cosmetic	Intended functionality not impacted Including fonts, colours, labels, etc and involving workarounds / patches that can be held in abeyance pending a combined release.	4 hours (95%) 8 hours (100%)	Fix in next software release

CSS to EES Interface

7.4. The EES Provider shall provide second line support for the resolution of Switching Incidents in accordance with this Paragraph 7 and the Switching Service Management Schedule .

7.5. The EES Provider shall support the response and resolution times for the following Switching Incident categories.

(a) Priority 1 – for Switching Incidents causing critical impact and significant financial loss / disruption - 30 minute response with a four hour resolution time;

(b) Priority 2 – for Switching Incidents causing non-critical impact with non-significant financial loss / disruption – one hour response with a 24 hour resolution time;

(c) Priority 3 – for Switching Incidents causing adverse impact but can be reduced to moderate adverse impact – three Working Hour response with a three Working Day resolution time;

(d) Priority 4 – for Switching Incidents causing minimal impact - one Working Day response with a 10 Working Day resolution time.

8 Service Levels

8.1. The EES Provider shall respond to Market Messages relating to secured Switches from the CSS Provider at Gate Closure (from the point at which the System receives the first message to the point at which it sends the acknowledgement of receipt for the last message), and make data available via the online portal and API service within the following times:

Performance Parameter	Performance Level
Processing of data received from the CSS relating to Secured Active Switches during Gate Closure Period	
Up to and including average daily volume	mean response time of 20 minutes or less
Up to and including average daily volume	90th percentile response time of 25 minutes or less
Above average daily volume and up to and including until peak daily volume	mean response time of 35 minutes
Above average daily volume and up to and including until peak daily volume	90th percentile response time of 40 minutes

8.2. The EES Provider shall respond to Market Messages from the CSS Provider, other than within the Gate Closure period and make data available via the online portal and API service within the following times:

Performance Parameter	Performance Level
Processing of data received from the CSS outside of the Gate Closure Period	
Up to and including average hourly volume	mean response time of six seconds or less
Up to and including average hourly volume	90th percentile response time of 10 seconds or less
Above average hourly volume and up to and including until peak hourly volume	mean response time of 10 seconds or less
Above average hourly volume and up to and including until peak hourly volume	90th percentile response time of 15 seconds or less

8.3. The EES shall respond to an enquiry from an EES User (from the point at which the EES receives the request to the point the EES sends the response) as follows:

Responding to a query from an EES User	
Up to and including average hourly volume	mean response time of three seconds or less
Up to and including average hourly volume	90th percentile response time of six seconds or less
Above hourly volume and up to and including until peak hourly volume	mean response time of five seconds or less
Above hourly volume and up to and including until peak hourly volume	90th percentile response time of eight seconds or less

Commented [HT4]: I0241 update - housekeeping space added

Prepayment transaction processing

8.4. The EES shall poll the upload directory every 15 minutes and shall perform the file validation checks immediately after polling has completed, allowing almost immediate feedback of success or failure of this validation to be notified to PPMIPs.

8.5. For successfully uploaded files; results files shall be available within four hours of transmission to the EES, within the constraints of an EES working day.

Processing of data from ERDAs (for Non-MHHS Metering Points)

Commented [SJ5]: I0241 update - moved the Non MHHS paragraph from 8.6A to 8.5A to separate from the MHHS clauses in paragraphs 8.6, 8.7 and 8.8

8.5A The EES shall process data received from ERDAs in accordance with the following service levels:

(a) data shall be available via the EES by 08.00 hours on the following Working Day in relation to 100% of files if received by 23:59 the previous day; and

(b) data shall be available via the EES by 08.00 hours on the relevant Working Day in relation to 75% of files if received between 00:00 and 04:00 that day.

Processing of data ~~from SMRAs (for MHHS Metering Points)~~received via the Data Integration Platform

Commented [SJ6]: I0241 update - to recognise that this requirement relates to processing DIP messages which may not originate from the SMRS

~~8.5.~~8.6. The EES shall provide an initial synchronous response to a Market Message received ~~from an SMRA~~via the Data Integration Platform in accordance with the following service levels:

Performance Parameter	Performance Level
Up to average hourly volume	mean response time of two seconds or less
Up to average hourly volume	90th percentile response time of four seconds or less
From average hourly volume and up to peak hourly volume	mean response time of five seconds or less
From average hourly volume and up to peak hourly volume	90th percentile response time of eight seconds or less

~~**Processing of data from ERDAs (for Non-MHHS Metering Points)**~~

~~8.6A The EES shall process data received from ERDAs in accordance with the following service levels:~~

~~(a) data shall be available via the EES by 08.00 hours on the following Working Day in relation to 100% of files if received by 23:59 the previous day; and~~

~~(b) data shall be available via the EES by 08.00 hours on the relevant Working Day in relation to 75% of files if received between 00:00 and 04:00 that day.~~

~~8.6.~~8.7. The EES shall provide an asynchronous response to a Market Message received ~~from an SMRA~~via the Data Integration Platform in accordance with the following service levels:

Commented [SJ7]: I0241 update - to recognise that this requirement relates to processing DIP messages which may not originate from the SMRS

Performance Parameter	Performance Level
Up to average hourly volume	mean response time of six seconds or less
Up to average hourly volume	90th percentile response time of 12 seconds or less
From average hourly volume and up to peak hourly volume	mean response time of 10 seconds or less
From average hourly volume and up to peak hourly volume	90th percentile response time of 16 seconds or less

8.8. The EES shall ensure data received ~~from the SMRAs~~via the Data Integration Platform is made available within ~~2 hours of receipt~~the following timescales:~~.~~

Commented [HT8]: I0241 update - to recognise that this requirement relates to processing DIP messages which may not originate from the SMRS

(a) Annual Consumption data received from BSC Central Systems shall be made available within 24 hours of receipt;

(b) Supplier Agent Appointment / de-appointment data received from an SMRA shall be made available by 06:00 hrs the following day; and

(c) all other data shall be made available within 2 hours of receipt.

Management of BCDR events

~~8.7.~~8.9. Where a BCDR event is invoked, the Recovery Time Objective for the EES will be:

(a) four hours target time; and

(b) eight hours maximum time.

~~8.8.~~8.10. Where a BCDR event is invoked, the Recovery Point Objective for the EES will be 30 minutes.

9 Maximum Demand Volumes

9.1. The EES has been designed based on the requirements set out below. Where the values are breached, the service received by EES Users may not be subject to the expected service levels. Any such failure to meet the expected service levels will not constitute a breach by the EES Provider.

9.2. Where maximum demand volumes are breached within a given month the EES Provider shall report the breach incident to the REC Performance Assurance Board, 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 demand volumes.

9.3. The EES shall allow for four million searches per month and 16,000 concurrent Authorised Persons without detrimental effect to performance. This volume of concurrent users includes both EES Users and SDES Users.

Receipt of data ~~from SMRAs~~via the Data Integration Platform

Commented [HT9]: I0241 update - to recognise that this requirement relates to processing DIP messages which may not originate from the SMRS

9.4. The EES shall have the capacity to process, as a minimum, the following volumes of Market Messages ~~from the SMRAs~~received via the Data Integration Platform (excluding Supplier Agent Appointment / de-appointment Market Messages):

(a) Average daily volume of 66,000

(b) A peak daily volume of 300,000

(c) An average hourly volume of 2,750

(d) A peak hourly volume of 35,000

(e) An annual volume of 24 million

9.5. In addition, the EES shall have capacity to process a peak daily and peak hourly volume of 2.1 million Supplier Agent Appointment and de-appointment Market Messages and an annual volume of 110 million Supplier Agent Appointment and de-appointment Market Messages.

9.6. During the MHHS Migration Period, in addition to the requirements of Paragraphs 9.4 and 9.5, the EES shall be capable of processing data in accordance with the maximum daily migration volumes published in the MHHS Migration Plan, within the Service Levels set out within this Service Definition.

9.6A The EES shall have the capability to process a full extract or an incremental update from ERDAs relating to Non-MHHS Metering Points. Full extracts are sent when an ERDA sends its first ERDS Upload File to the EES or on agreement between the EES Provider and the ERDA if necessary. The file will contain all information for all Metering Points registered within that ERDS. Incremental updates are usually sent every Working Day via the ERDS Upload File and include every Metering Point registered within that ERDS, for which one or more data items have changed since the last ERDS Upload File was sent.

Receipt of data from the CSS Provider

9.7. The EES shall have the capability to process, as a minimum, Market Messages from the CSS Provider relating to the following volume of successful Switch Requests:

(a) Average daily volume of 24,534

(b) A peak daily volume of 163,328

(c) An average hourly volume of 2,030

(d) A peak hourly volume of 14,674

(e) An annual volume of 8,961,000

9.8. In addition, the EES shall be capable of processing Market Messages from the CSS Provider relating to an annual volume of 217,964 Initial Registration Requests.

9.9. In exceptional circumstances, the EES Provider shall be capable of processing Market Messages from the CSS Provider relating to 145,000 Switch Requests in addition to the average daily volume.

Receipt of Enquiries from EES Users

9.10. The EES shall be capable of processing enquiries at volumes of three times those of Switch Requests, i.e.:

(a) average daily volume 73,602;

(b) peak daily volume 489,984;

(c) average hourly volume 6,090;

(d) peak hourly volume 44,022; and

(e) annual volume 26,883,000.

Prepayment transaction processing

9.11. The EES shall not be required to deliver the results of more than 100 Electricity Prepayment Supplier Files on a daily basis.

10 Reporting

10.1. The following reports will be generated by the EES and provided to the recipient on request, or as part of a defined schedule:

Report Name	Timescale	Description
Performance Reporting	Monthly	The EES Provider shall provide data relating to the use of the service for consideration by the

		REC Performance Assurance Board.
Full Data Extract	Monthly	The EES Provider shall provide a full data extract taken on the last Working Day each month to the Code Manager.
User Detail Report	Where required	A user with the 'user reports' system function can download this report which contains information relating to all the actual searches that have been performed by the EES by Authorised Person for the time period, where a Metering Point has been selected. The user running the report shall be able to search by an individual username as well as by the whole EES User. The report shall provide details of the Electricity Supplier and address of the Metering Points viewed; and the user detail information such as the e-mail address, phone number and place of work.
User Summary Report	Where required	A user with the 'user reports' system function can download this report which contains details for each Authorised Person that has made searches within a given time period, where a Metering Point has been selected. The report shall display all the user details as in the User Detail Report, but only display totals instead of information about the specific reports.
Metering Point Limit Breach	Where required	A report will be sent to the relevant MAU where an Authorised Person reached the limit of Metering Point views on two or more days within the previous 30 days.
DNO Portfolio Report	Monthly	A report will be sent to applicable DNOs detailing the Metering Points within the relevant GSP Group area.
Non-Domestic Consumer Full Portfolio Report	Where required	The Non-Domestic Consumer shall be able to download their full portfolio into a CSV file. The data available within the report will be similar to the online view. The download will not include historic registration(s), including unsuccessful registrations, up to and including the date that the Metering Point was submitted by the Non-Domestic Consumer to be included within the

		portfolio. Any Metering Points that have been deleted from the portfolio shall not be included in this report.
Non-Domestic Consumer Portfolio Download Report	Where required	A Non-Domestic Consumer with the 'user reports' system function can download this report which returns a list of all instances of the EES User's portfolio having been downloaded, including the Authorised Person that actioned the download and the number of MPANs in the portfolio at that time.
Code Manager Non-Domestic Consumer Portfolio Download Report	Where required	The Code Manager can download this report which returns a list of all instances of a Non-Domestic Consumer's portfolio having been downloaded, including the Authorised Person that actioned the download and the number of MPANs in the portfolio at that time. This report returns data for all active Non-Domestic Consumer EES Users.
Unallocatable Prepayment Transaction Report	On request	The EES shall provide data required by the Code Manager to calculate the market share figures for the Unallocatable Transactions process as described in the Prepayment Arrangements Schedule. Calculation of these market share figures shall be based on a daily electricity Metering Point count from all GSP Groups by Meter Type which will be aggregated to form a single value for market share for each Electricity Supplier. The EES Provider shall provide separate market share figures for each prepayment technology.

11 Additional Services

11.1. In addition to the standard service defined in Paragraphs 1 to 11, the EES Provider may agree to provide additional services to EES Users, based on data received in its role as EES Provider.

11.2. Additional services may include the provision of reports and API services to individual EES Users on a bilateral basis. Reports may be made available to the Authorised Person via secure FTP or other secure method as agreed with the EES User.

11.3. The data and reports made available via such additional services must only contain EES provisioned data that is accessible by the relevant category of EES User, as defined in the Data Access Matrix.

11.4. Paragraph 11.3 does not prevent the use of data provided by the EES User, or other publicly available data, from being used as part of any such additional services.

12 System Audit

12.1. The application audits data for each MPAN that a user views (i.e. each search result that a user clicks on). The application does not audit data for searches performed by a user. For each MPAN viewed within the application, the following data is stored:

(a) user identifier

(b) search parameter (e.g. MPAN)

(c) audit type

(d) possible audit type values:

(e) MPAN details (viewing an MPAN); or

(f) NDC Portfolio Download (An NDC user downloading information relating to an MPAN in their portfolio; and

(g) audit date and time.

12.2. The system must be capable of accommodating the scrutiny of formal and informal audits by RECCo (or its agent), or any other person legally entitled to carry out such an audit.

13 Data Handling

13.1. The EES shall be capable of storing information related to all Metering Points in Great Britain.

13.2. The EES shall be capable of holding five years' worth of CSS Market Messages online.

13.3. The EES shall be capable of detecting loss and duplication of ERDS Upload Files transferred from / to it and shall have facilities for rectification. This will be through raising a query to the relevant ERDA's service helpdesk.

Receipt of ~~SMRS~~ data via the Data Integration Platform

Commented [SJ10]: I0241 update - to reflect the receipt of Annual Consumption data from BSC Central Systems rather than the SMRAs

13.4. Data is transferred via the Data Integration Platform from each SMRA and BSC Central Systems, in accordance with the timescales defined in BSCP706 'Supplier Meter Registration Service for MHHS Metering Systems' and BSCP703 'BSC Central Services for MHHS Metering Systems'. The EES shall receive data ~~from the SMRA~~ via the Data Integration Platform and provide an initial response within the timescales set out in Paragraph 8. Data received via the Data Integration Platform will be available via the online portal and API service within the timescales set out in Paragraph 8.

Receipt of ERDS data (for Non-MHHS Metering Points)

13.4A Data is transferred using secure FTP via an ERDS Upload File from each ERDA upon completion of its ERDS Total Daily Processing. The EES shall validate headers and footers included in the file but will not validate the data included in the file. In case of an error within the header or footer, the EES will communicate directly with the ERDA that sent the file.

13.5. Not used.

13.6. The EES shall validate DIP Market Messages in accordance with the DIP Rules. In the case of an error within the DIP Market Messages , the EES shall send a rejection message which includes the relevant error code.

13.7. The EES shall be able to receive a full extract from one or more SMRAs, as required. The method for sharing the full extract will be agreed bilaterally between the EES Provider and the relevant SMRAs.

13.8. When data is received from an SMRA / ERDA, the data held for the impacted Metering Point(s) will be overwritten with the data provided by the SMRA / ERDA. The

EES will not keep a history of any overwritten data.

Receipt of CSS data

13.9. The EES shall receive data from the CSS and provide an initial response within the timescales set out in Paragraph 8. Data received from CSS will be available via the online portal and API service within the timescales set out in Paragraph 8.

14 Security

14.1. Both the RESTful and SOAP endpoints of the API service are available over HTTPS only, thereby ensuring that all communication between the web service and the client is secured at the transport level.

14.2. The SSL certificate issued for this service is 2048bit SHA2 256 encrypted and as such any server communicating with the EES API must be capable of understanding this type of certificate.

14.3. Within the certificate the web service URL, suds-ws.candc-uk.com, is referenced as a "Subject Alternate Name", rather than the "Subject" of the certificate.

14.4. Penetration testing of the EES infrastructure shall be undertaken at least once in each calendar year, and a report provided to the Code Manager regarding the outcomes of this test, to include any observations or findings, and recommendations for any required remedial actions.

14.5. In the event that the EES Provider detects a potential or suspected security breach impacting switching related Systems, it shall raise a Switching Incident (in accordance with the Switching Service Management Schedule).

Appendix 1 - Meter Matching in PPMIP Allocation Process

1 Process

1.1 Where an Electricity Prepayment Supplier File is received in accordance with Paragraph 3.19, the EES will perform a matching routine ("Algorithm") where an exact match, character by character, will be sought. When an exact match is found, the EES will return the

information associated with this Meter Serial Number to the PPMIP regardless of the meter type.

1.2 In all instances, the EES will perform a series of Algorithms to try and identify the correct Meter Serial Number.

1.3 If after applying the Algorithms to the Meter Serial Number provided by a PPMIP, a match is found, the EES will return the information associated with this Meter Serial Number to the PPMIP.

Algorithms

(a) **Exact match:** The Meter Serial Number provided by the PPMIP must match exactly, character for character, with that in the EES.

(b) **Remove all Non-Alphanumeric Characters:** Algorithm 1 will remove any character that is not A-Z and 0-9 from the Meter Serial Number.

For example, all of the following will be treated as 'ABC1234'

Meter ID	Will be treated as	Note
'ABC_1234'	'ABC1234'	
' ABC1234'	'ABC1234'	
'ABC1234 '	'ABC1234'	
'AB_C1234.'	'ABC1234'	
'AB.C.1234'	'ABC1234'	

(c) **Alpha instead of Numeric used:** For Meter Serial Numbers that are intended to be 9 characters in length and conform to the following pattern:X99X99999

Where:

- X is an alpha character (A-Z)
- 9 is a numeric value (0-9)

Replace the letters with digits where it is a numeric field, replacing:

- with 0

- I with 1

- S with 5

Note: all non-alphanumeric characters will be removed for this Algorithm.

(d) **Extra Zero after Board Code:** For Meter Serial Numbers that are intended to be 9 characters in length and conform to the following patterns:

Element:	A	b	C	d
Format:	X	99	X	99999

Where:

- X is an alpha character (A-Z)

- 9 is a numeric value (0-9)

After removing all non-alphanumeric characters, for Meter Serial Numbers whose character count is greater than 9 and for which element d is greater than 5 characters in length, remove any left padding zero characters such that element d is 5 characters in length. For example

Meter ID	Will be treated as	Note
S98L012345	S98L12345	
S98L0012345	S98L12345	
S98L067890	S98L67890	
S 98-L_067890	S98L67890	
F97S1234	F97S1234	No change
F97S123456	F97S123456	No change

Note: All non-alphanumeric characters will be removed for this algorithm.

(e) **Missing zero after Board Code:** For Meter Serial Numbers that are intended to be 9 characters in length and conform to the following patterns:

a	b	c	d
X	99	X	99999

Where:

- X is an alpha character (A-Z)

- 9 is a numeric value (0-9)

After removing all non-alphanumeric characters, for Meter Serial Numbers whose character count is less than 9 and for which element d is less than 5 characters in length, add left padding zero characters such that element d is 5 characters in length. For example

Meter ID	Will be treated as	Note
S98L1234	S98L01234	
S98L12	S98L00012	
S98L0012	S98L00012	
S 98-L_6789	S98L06789	
F97S01234	F97S01234	No change
F97S123456	F97S123456	No change

Note: All non-alphanumeric characters will be removed for this Algorithm.

(f) **Missing 'B' Board Code:** Remove all Meter Serial Number non-alphanumeric characters.

Where the Meter Serial Number is 8 characters in length and the 4th character from the left is not an alpha, insert character B into character position 4, making the Meter Serial Number 9 characters in length. For example; S0612345 will be treated as S06B12345.

Following the application Algorithms above, where there has not been a unique match on Meter Serial Number and transaction date for transactions older than 6 months, the EES will look for matches by moving the transaction date by +/- 5 days.

