Extraordinary DSG Meeting
CSS Consequential Change

24th January 2020

Agenda

- Welcome and introductions
- Overview of DES changes
- New API formats
- Xoserve Code of Connections Document
- Meter Read Update
- UNC Update
- Shared Supply Meter Points
- CSO and Supply License Exempt Sites
- Updated on ECO process Change Request
- Change of Market Sector Code Notifications
- Data Cleansing Update
- AOB

DES Change Overview

- New search field – CSS Registration ID added to existing Search screen

- New data items added to the existing screens
  - RMP Status to Search Results and Search Details screen
  - MAP ID to Meter Asset Data tab on Search Details screen

- New tab – CSS Switching Data added to existing Search Details screen

- New menu item 'REL Search' added to DES Home screen

- New screens introduced for REL Search
  - REL Search screen
  - REL Search Results screen – to display multiple result set
  - REL Details screen – to display detail of single MPRN

- Data Permissions modified for existing emergency contacts displayed on DES

New search field – Existing Search Screen

Search (Modified)

Meter Point Reference:

Confirmation Reference:

CSS Registration ID:

[Search] [Reset]

Building Number/Name:

Street:

Town:

Full Postcode:

OR

Outcode/Incode:

Meter Serial Number:

[Search] [Reset]

New data item – Existing Search Results Screen

Search Results (Modified)

Search Results for:

MPRN	LSP	Address	Postcode	SMP Status	RMP Status	MSN	Network Name	Network Short Code

New data items – Existing Search Details Screen

Search Details (Modified)

MPRN	LSP	Address	Postcode	SMP Status	RMP Status	MSN	Network Name	Network Short Code

Meter Point Information | **Meter Asset Data** | Daily Read Equipment Data | Convertor Asset Data

Manufacturer	Correction Factor
Model	Gas Act Owner
Meter Type	MAM Short Code
Year of Manufacture	MAM EFD
Fitted Date	SMSO ID
Device Status	SMS Operating Entity EFD
Number of Dials	DCC Service Flag
Units	DCC Service Flag EFD
Imperial Indicator	Installing Supplier ID
Meter Mechanism	First SMETS Installation Date
Meter Capacity	IHD Install Status
Location	MAP ID

Meter Asset History | **Meter Read History**

Meter Read Date	Meter Read Type	Meter Read	Convertor Read	Convertor Round the Clock

New Tab – Existing Search Details Screen

CSS Switching Data (New Tab on Seach Details Screen)

MPRN	LSP	Address	Postcode	SMP Status	RMP Status	MSN	Network Name	Network Short Code

Meter Point Information | Meter Asset Data | Daily Read Equipment Data | Convertor Asset Data | CSS Switching Data

Current Registration	Incoming Registration
CSS Registration ID	CSS Registration ID
Registration Status	Registration Status
Registration Status From Date	Registration Status From Date
Registration Active Date	Supply Start Date
Registration Inactive Date	Registration Inactive Date
Domestic Premises ID	Domestic Premises ID
Supplier Market Participant ID	Supplier Market Participant ID
Shipper From Date	Shipper From Date
Shipper Market Participant ID	Shipper Market Participant ID

- The Current and Incoming Registration sections will be populated with data provided by CSS.

- The Current Registration section will always display current registration details as it progressed from Active to SecuredInactive status. The details will not appear once the registration moves to Inactive status.

- The Current Registration section will only be populated with CSS Registration ID value that has been provided as part of CSS initial data migration. No new data will be populated until a switch is attempted or completed post CSS implementation.

- The Incoming Registration section will always display incoming registration details as it progresses from Pending to SecuredActive or Cancelled. Once the registration moves into Active status then the details will appear under Current Registration section.

- An incoming registration when cancelled will appear under Incoming Registration section until a new switch is attempted, which will replace the cancelled registration details becoming the new incoming registration.

New Menu Item – Existing Home Screen

Home Screen – REL Search (New Menu)

Home	SAP-ISU	Data Enquiry	User Access

Home	Search	ICC Update	Read Details	REL Search

Home

Welcome to the Data Enquiry Service

The Data Enquiry Service provides you with the ability to view supply meter point data that you and your organisation are permitted to access. By accepting the Terms and Conditions applying to your use of the service you acknowledge that you will only access the service for the purposes for which you are your orgnisation have been provisioned.

The information is sourced from UK Link   **Last Updated**   23 January 2020

This text is proposed to be deleted

New Screen – REL Search

REL Search (New)

Meter Point Reference: ⓘ [   ]

Confirmation Reference: ⓘ [   ]

CSS Registration ID: ⓘ [   ]

Building Number/Name: ⓘ [   ] [   ]

Street: [   ]

Town: [   ]

Full Postcode: ⓘ [   ]

OR

Outcode/Incode: ⓘ [   ] [   ]

Meter Serial Number: ⓘ [   ]

UPRN: ⓘ [   ]

☑ Access to REL data is provided solely for the purpose of enabling switching. Please tick here to confirm you understand you are not permitted to use the data for any other purpose

[Search]   [Reset]

- This screen can be used to search with either the MPL address or REL address and the search will be case insensitive

- The User will have to agree to REL usage limitation by placing a tick against it to enable the search to progress. However, once a tick is placed, it will stay active until the User session expires or logs out or clears it manually.

- The input fields Building Number, Building Name, Street and Town will have an ability to accept Welsh character set (in addition to English character set) and perform a search based on input Welsh characters.

- The UPRN field refers to CSS supplied UPRN. A User can input only UPRN to perform a valid search.

- The valid REL search combinations for hierarchy 2 fields is same as those of existing Search screen.

New Screen – REL Search Results

REL Search Results (New)

Search Results for:

MPRN	MPL Address	MPL Postcode	MSN

REL Address			REL Postcode

MPRN	MPL Address	MPL Postcode	MSN

REL Address			REL Postcode

- A valid REL search leading to multiple MPRNs will display the resultant record set within the REL Search Results screen.

- The REL address and REL Postcode fields will display as blank if there is no data REL data available to be displayed.

- MPL address is combination of following field –Sub Building Name, Building Name, Building Number, DPA (displayed within parenthesis), Dependent Street, Principal Street, Dependent Locality, Post Town and Town with comma as a field separator

- The REL addresses are displayed in sort order of its logical status i.e. Approved, Provisional, Delivery, Delivery Welsh, Alternative and Historic

- REL address is combination of fields – Primary Name, Secondary Name, Street1, Street2. Locality1, Locality2 and Town with comma as a field separator

- The input fields Building Number, Building Name, Street and Town will have an ability to display Welsh character set (in addition to English character set).

New Screen – REL Search Details

REL Search Details (New)

MPRN	CSS Registration ID	CSS UPRN	MPL Address	MPL Postcode

Address Source	Primary Name	Secondary Name	Street1	Street2	Locality1	Locality2	Town	Postcode	Logical Status	Language	Organisation	Address Type	Confidence Score	Classification	Latitude	Longitude

Business Requirement Document

Business Requirements Document

Ofgem Switching Programme

Data Enquiry Service Consequential
Change Requirements Overview

Author (for this version):	Xoserve
Version:	0.1
Status:	Initial Draft
Date:	17th January 2020

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XOserve

- A new Business Requirements Document for Data Enquiry Services changes has been produced.

- This is available on website:

https://www.xoserve.com/change/switching-programme/

Scope

- Xoserve will be providing the following API as part of the rollout for CSS
    - Query APIs
    - Data submission API
    - Outbound 'Callback' API
    - Callback Registration API

Query API

- Supply Point Enquiry
  - An alternate to existing file interface
    - NOM (S47, S68) / NMR (S59, S70, S75, S98, Q51)
- Supply Point Switching API
  - REL data to be added to existing API service

- Transportation Rates API
  - New interface

- REL Data Enquiry API
  - New interface for Network to access REL

- MAP ID Enquiry API
  - New interface

Settlement Data submission API

- Settlement Data API

An alternate to the new CSS BRN file interface

  – RRN provided Settlement Data API

  For submitting Settlement Data where NOM/RRN was also submitted

  - equivalent to a BRN file with a T90 Segment

  – RRN absent Settlement Data API

  For submitting Settlement Data where a NOM/RRN was not submitted

  - equivalent to a BRN file with a T91 Segment

  – BRN Cancellation API

  - equivalent to a BRN file with a T87 Segment

Outbound 'Callback' API

- Settlement Data Response API
  - BRN Accepted
    - T93
  - BRN Error Response where RRN absent
    - T94
  - BRN Error Response where RRN provided
    - T95
  - Association data
    An alternate to the new CSS ASN file interface
    - T99, S66, S70
  - TMC Response
    An alternate to the new CSS TMC file interface
    - S15, S66, S70, N90, U06 (Transfer of ownership)
    - S88, K13 (Ceased responsibility)

Query API Specification

- This section describes the structure of the 5 query API for the following:
  - Inputs
    - A description of the input parameters for an enquiry
  - Outputs
    - Details the output of an enquiry
  - Error Responses
    - Details the error responses

Query API Specification
Input Data

- Inputs:

- Header

  - " APIKey ": "string", --*

- Query parameters will be provided in the URL

  - /api/v1.0/path_to_service?[query_parameters]

    - the following example shows the URL for the Enquiry API

      /api/v1.0/supply-point-nomination-enquiry?postcode=ABC3 4ZZ&house_no=12

Query API Specification
Output Data

- Outputs: Output data in Json format will be returned

```
"mprn": [{

            "mprn": "string",

            "installation_number": "string",

            "network_name": "string",

            ...

      }][1]
```

[1] [ ] indicates that multiple records may be returned

Query API Error Response

- Outputs: Error data will be returned in Json format:

```json
{
    "fault": {
        "faultstring": "string",
        "detail": {
            "errorcode": "string"
        }
    }
}
```

Supply Point Enquiry API

- Input
- outputs
- Error Codes

Supply Point Enquiry API Inputs

- Input *query parameters*

  (at least one input query parameter must be provide)

  See Query API Specification (above)

#	Name	Type	Length	Description
1	mprn	string	50	Meter Point Reference Number (MRPN). A unique identifier for the point at which a meter is, has been or will be connected to the Gas Network.
2	address_id	string	30	Internal ID that links MPRN to address data (internal use only)
3	postcode	string	10	Post Code

- Optional address parameters where postcode provided

  See Query API Specification (above)

#	Name	Type	Length	Description
3.1	house_no	string	10	House Number
3.2	sub_building_name	string	40	Sub Building Name
3.3	Street	string	40	Street
3.4	Town	string	40	Town
3.5	County	string	3	County
3.6	Country	string	3	Country
3.7	dependent_street	string	40	Dependent Street
3.8	dependent_local	string	40	Dependent Locality

Supply Point Enquiry API Outputs

- Output

Enquiry API Output Json.txt

```
{
    "supplier": {
        "amr_indicator": "",
        "amr_sp": "",
        "csep_id": "",
        "current_supplier_name": "Sample Supply) Limited",
        "dcc_service_flag": "",
        "dcc_service_flag_efd": null,
        "first_smets_installation_date": null,
        "formula_year_offtake_quantity": "319",
        "formula_year_annual_quantity": "35488",
        "ihd_install_status": "",
        "incoming_supplier": "PES",
        "installing_supplier_id": "",
        "interruption_contract_exists": "",
        "isolation_status": "",
        ...
    }
}
```

Supply Point Enquiry API Error Codes

HTTP Code	Error Code	Fault String
400	-	-
500	steps.regexprotection.ThreatDetected	Regular expression threat is detected in the API request, please check the data entered.
401	steps.oauth.v2.FailedToResolveAPIKey	Application Key sent in API request is either empty or invalid.
500	policies.custom.config.1	Application creation process has not completed due to technical issues, please contact or raise a fault with the system administrator.
500	policies.custom.config.2	Application creation process has not completed due to technical issues, please contact or raise a fault with the system administrator.
500	policies.custom.config.3	Application creation process has not completed due to technical issues, please contact or raise a fault with the system administrator.
500	policies.ratelimit.SpikeArrestViolation	Number of API requests for [product] has exceeded the allowed spike limit of [__] per [minute].
500	policies.ratelimit.QuotaViolation	Number of API requests for [product] has exceeded the allowed quota limit of [__] per month.
400	e001	Request cannot be empty, please submit at least one unique identifier.
200	e002	Requested address has twin stream meter device. You are not authorised to view this data.

Supply Point Enquiry API Error Codes (continued)

HTTP Code	Error Code	Fault String
200	e003	Requested address has shared supply meter device. You are not authorised to view this data.
200	e004	Requested address has twin stream and shared supply meter device. You are not authorized to view this data.
200	e005	Requested address has extinct meter point status. You are not authorised to view this data.
200	e007	Requested meter reference number is not found.
200	e008	Requested meter reference number has more than one matching records; data can only be provided for unique match.
200	e009	Submitted address details has multiple records; data is only provided for unique number.
500	e010	Unexpected error occurred while processing request
200	e011	Requested address has no matching record. This may be because, there is no gas meter at this property (or) full postcode with a space is not entered (or) the entered details are incorrect.

Supply Point Switching API

- Input
- outputs
- Error Codes

Supply Point Switching API Address Search Inputs

- Input *query parameters*

See Query API Specification (above)

#	Name	Type	Length	Description
1	Postcode	string	10	Postcode
2	house_no	String	10	House Number
3	house_name	String	60	House Name

Supply Point Switching API
Switch Gas Data Inputs

- Input *query parameters*

#	Name	Type	Length	Description
1	address_id	String	30	Internal ID that links MPRN to address data (internal use only)
2	Mprn	String	50	Meter Point Reference Number (MRPN). A unique identifier for the point at which a meter is, has been or will be connected to the Gas Network.
3	Postcode	String	10	Postcode
4	house_no	String	10	House Number
5	house_name	String	60	House Name
6	flat_no	String	40	Flat Number
7	Street	String	40	Street
8	City	String	40	City

Supply Point Switching API Address Search Outputs

- Output

Address Search API Output Json.txt

```
{
    "addresses": [
        {
            "address_id": "1234567891",
            "country": "GB",
            "county": "WM",
            "delivery_point_alias": "",
            "dependent_locality": "",
            "dependent_street": "",
            "doub_dependent_locality": "",
            "house_name": "",
            "house_number": "1",
            "po_box_number": "",
            "postcode": "Z99 9ZZ",
            "street": "SAMPLE ROAD",
            "sub_building_name": "",
            "town": "SOLIHULL"
        }
    ]
}
```

Supply Point Switching API Switch Gas Data Outputs

- Output

Switch Gas Data API Output Json.txt

```json
{
    "mprn": [
        {
            "address_id": 1234567891,
            "house_name": "",
            "house_number": "5",
            "country": "GB",
            "county": "MY",
            "current_supplier_id": "ABC",
            "delivery_point_alias": "",
            "dependent_street": "",
            "dmq": "11938",
            "double_dependent_locality": "",
            "gas_transport_id": "Sample Gas Limited",
            "ldz_id": "NW",
            "meter_capacity": "2",
            "meter_mechanism_code": "CR",
            ...
        }
    ]
}
```

Supply Point Switching API
Error Codes

HTTP Code	Error Code	Fault String
400	e201	Request cannot be empty, please submit at least one unique identifier
200	e202	Requested meter reference number is not found
200	e203	Requested meter reference number has more than one matching records; data can only be provided for unique match
200	e204	Submitted address details has multiple records; data is only provided for unique number
200	e205	Unexpected error occurred while processing request
200	e206	Requested address has no matching record. This may be because, there is no gas meter at this property (or) full postcode with a space is not entered (or) the entered details are incorrect
401	steps.oauth.v2.FailedToResolveAPIKey	Application Key sent in API request is either empty or invalid.
500	policies.ratelimit.QuotaViolation	Number of API requests for [product] has exceeded the allowed quota limit of [___] per month.
500	policies.ratelimit.SpikeArrestViolation	Number of API requests for [product] has exceeded the allowed spike limit of [___] per [minute].
500	policies.custom.config.1	Application creation process has not completed due to technical issues, please contact or raise a fault with the system administrator.

Supply Point Switching API
Error Codes

HTTP Code	Error Code	Fault String
500	policies.custom.config.2	Application creation process has not completed due to technical issues, please contact or raise a fault with the system administrator.
500	policies.custom.config.3	Application creation process has not completed due to technical issues, please contact or raise a fault with the system administrator.
500	steps.regexprotection.ThreatDetected	Regular expression threat is detected in the API request, please check the data entered.

Transportation Rates API

- Input
- outputs
- Error Codes

Transportation Rates API Inputs

- Input *query parameters*

#	Name	Type	Length	Description
1	Organisation Identifier	Number	10	A reference which uniquely identifies a System User / Organisation
2	Meter Point Reference Number	Number	10	A unique identifier for the point at which a meter is, has been or will be connected to the gas network.
3	Requested DM SOQ	Number	10	The requested peak daily supply offtake quantity (SOQ) of a Supply Meter Point
4	Requested DM SHQ	Number	10	The requested peak hourly supply offtake quantity (SHQ) of a Supply Meter Point.
5	MRF Type Code	Text	1	A code identifying a valid meter reading frequency.
6	CSEP Information	Text	1	Completed when additional CSEP information is required.
7	Supply Meter Point Class	Number	1	This value denotes the requested class type for the Supply Meter Point.
8	Meter Read Batch Frequency	Text	1	The frequency at which batches of reads will be submitted
9	Seasonal LSP Indicator	Text	1	Indicates whether the Supply Meter Point is a Seasonal LSP.
10	Seasonal LSP Period Start Month	Number	2	The first month in a year that offtake is permissible at the Seasonal LSP

Transportation Rates API Inputs (cont.)

- Input *query parameters*

#	Name	Type	Length	Description
11	Seasonal LSP Period End Month	Number	2	The last month in a year that offtake is permissible at the Seasonal LSP.
12	Postcode	Text	10	Standard PAF postcodes as defined in the PAF digest.
13	LDZ Optional Rate Applicable	Text	1	Request for LDZ Optional Rate charge.
14	Specified Exit Point	Text	10	The Eligible Exit Point (SMP) requesting LDZ Optional Rate to be applied to/Removed
15	Grid Reference Entry Point	Text	9	Grid reference for calculation of distance. Where a different Grid Reference Entry Point is to be considered by the Transporter from the original Grid Reference Entry Point provided.
16	Grid Reference Exit Point	Text	9	Grid reference for calculation of distance. Where a different Grid Reference Exit Point is to be considered by the Transporter from the original Grid Reference Exit Point provided.

Transportation Rates API Outputs

- Output

Transportation Rates API Output Json.txt
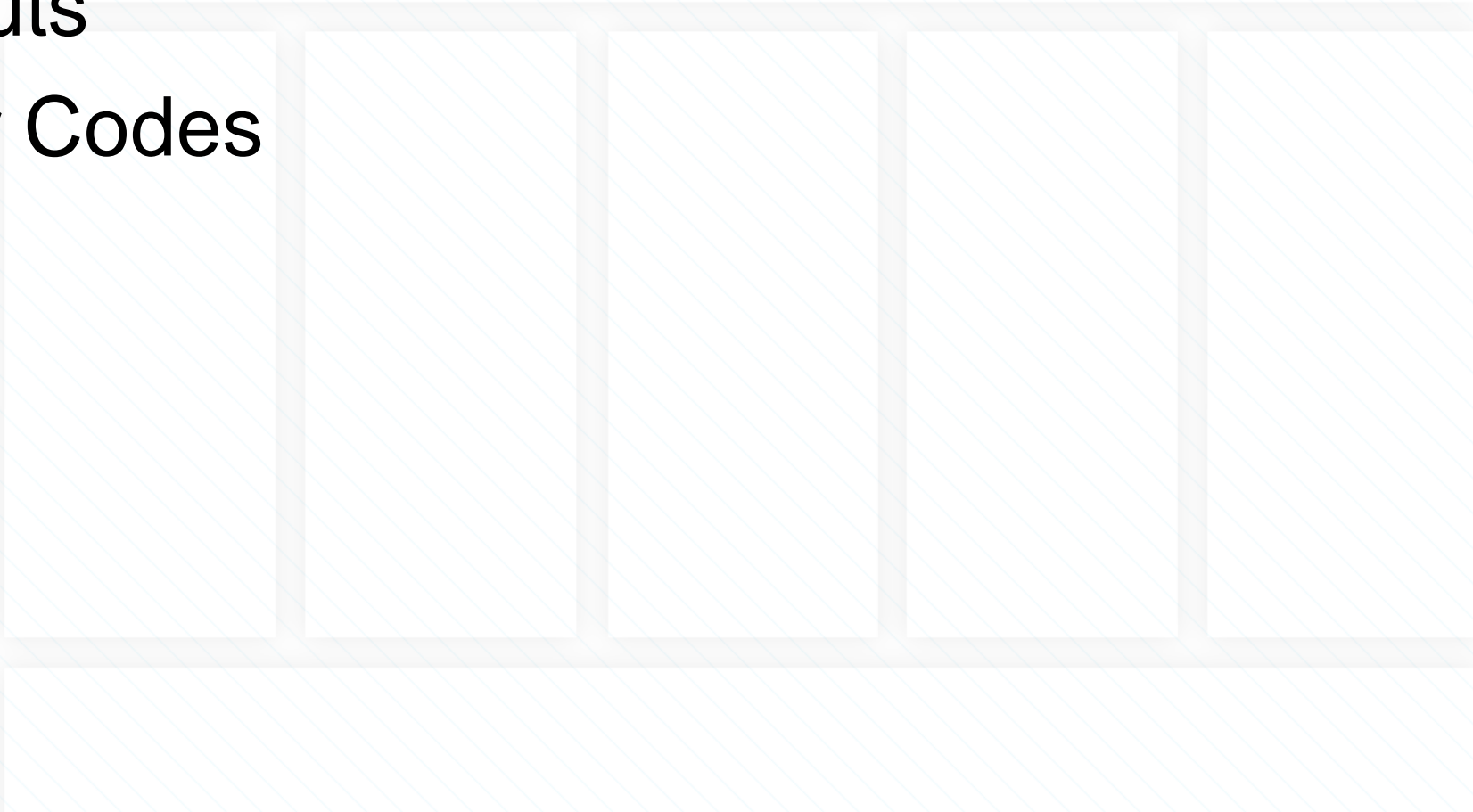
- Output Datasheet

Microsoft Excel
Worksheet

```
{
    "transportationRates": {
        "meterPointReferenceNumber": "string",
        "exitCapacityLDZECNChargeRate": "string",
        "ntsExitCommodityChargeRate": "string",
        "ldzCustomerChargeRate": "string",
        "ldzCommodityChargeRate": "string",
        "ldzCapacityChargeRate": "string",
        "igtTransportationChargeRate": "string",
        "igtTransportationChargeRateType": "string",
        "igtTransportationChargeEffectiveDate": "string"
        ...
    }
}
```

REL Data API

- Input
- outputs
- Error Codes

REL Data API
Address Search Inputs

- Input *query parameters*

#	Name	Type	Length	Description
1	Postcode	string	10	Postcode
2	house_no	String	10	House Number
3	house_name	String	60	House Name

REL Data API Outputs

- Output

REL Data Output Json.txt

- Output Datasheet

Microsoft Excel
Worksheet

```
{
    "addressData": {
        "primaryName": "string",
        "secondaryName": "string",
        "street1": "string",
        "street2": "string",
        "locality1": "string",
        "locality2": "string",
        "town": "string",
        "postcode" string",
        "logicalStatus": "string",
        "language":  "string",
        "organisation": "string",
        "addressType": "string",
        "confidenceScore": "string",
        "classification": "string",
        "latitude": "string",
        "longitude": "string"
    }
}
```

MAP Id Rate API

- Input
- outputs
- Error Codes

MAP Id API Inputs

- Input *query parameters*

#	Name		Type	Length	Description
1	Meter Point Reference Number	M	Number	10	A unique identifier for the point at which a meter is, has been or will be connected to the gas network.

MAP Id API Outputs

- Output

MAP ID API Output Json.txt

```
{
   "mprn ": {
      "msn": "string",
      "mapId" string"
   }
}
```
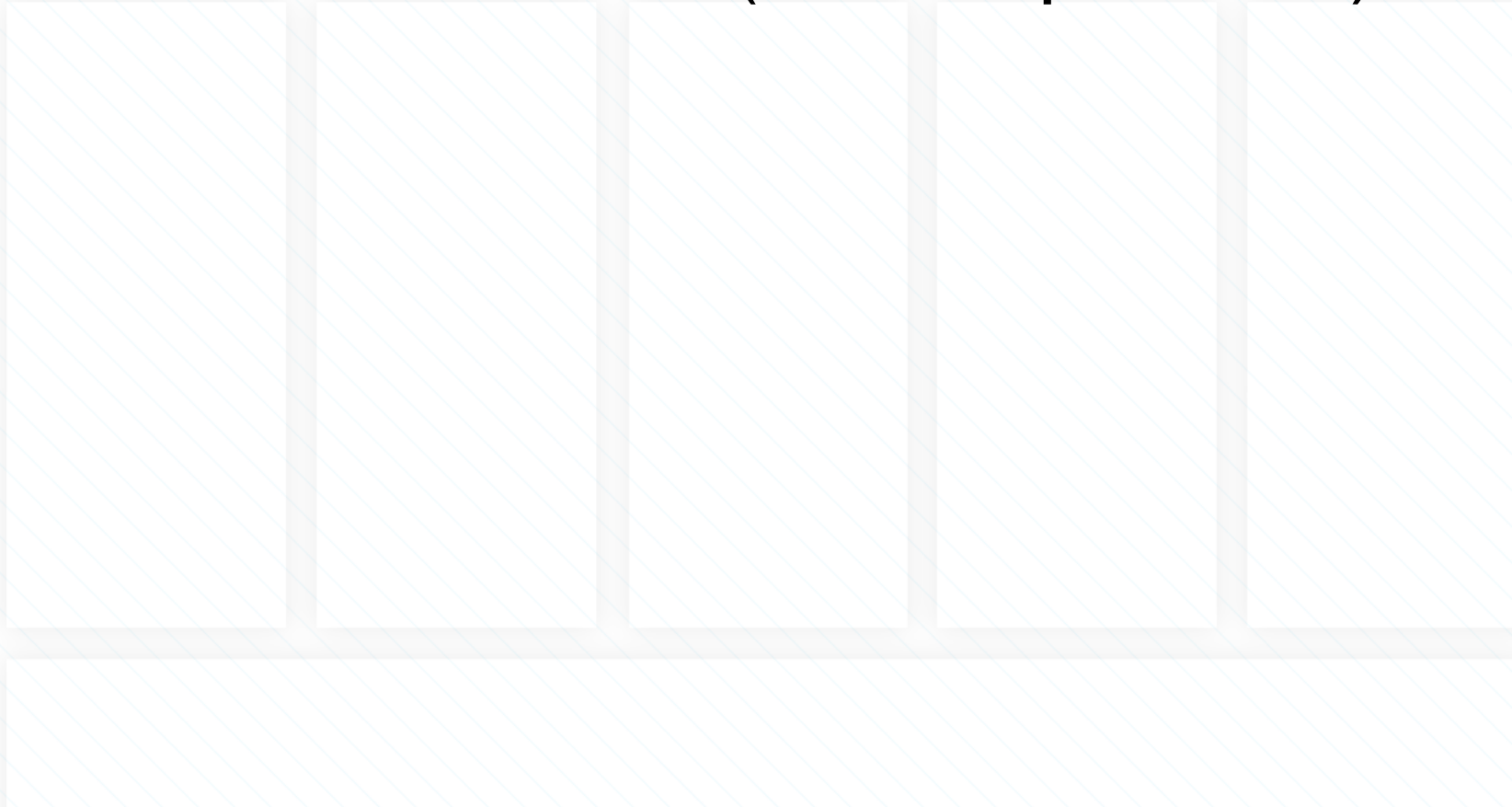
- Output Datasheet

Settlement Data Specification

- The following section describes the input format for the settlement Data API (BRN equivalent)

BRN where a NOM/RRN was not submitted

- Input Datasheet

Microsoft Excel
Worksheet

BRN without an RRN input datasheet.xlsx

BRN where NOM/RRN was also submitted

- Input Datasheet

Microsoft Excel Worksheet

BRN for an RRN input datasheet.xlsx

BRN Cancellation API

- Input Datasheet

Microsoft Excel Worksheet

BRN Cancellation input datasheet.xlsx

API Callback Specification

- All messages sent from UK Link will be in the formats detailed below.
  - Registered users should respond with 202 (Accepted) if they regard the message payload as valid.
  - For any other errors the appropriate http status code should be returned along with an "errors" property

BRR Callback

- Output Datasheet

Microsoft Excel
Worksheet

- Settlement data rejection for BRN with RRN callback datasheet.xlsx

Microsoft Excel
Worksheet

- Settlement data rejection for BRN no RRN callback datasheet.xlsx

Microsoft Excel
Worksheet

- Settlement data cancellation callback datasheet.xlsx

Microsoft Excel
Worksheet

- Settlement data response BRR callback datasheet.xlsx

- Output

Json data structure TBD

ASN Callback

- Output Datasheet

Microsoft Excel
Worksheet

Switch Association API callback datasheet.xlsx

- Output

Json data structure TBD

TMC Callback

- Output Datasheet

Microsoft Excel Worksheet

TMC callback datasheet.xlsx

- Output

Json data structure TBD
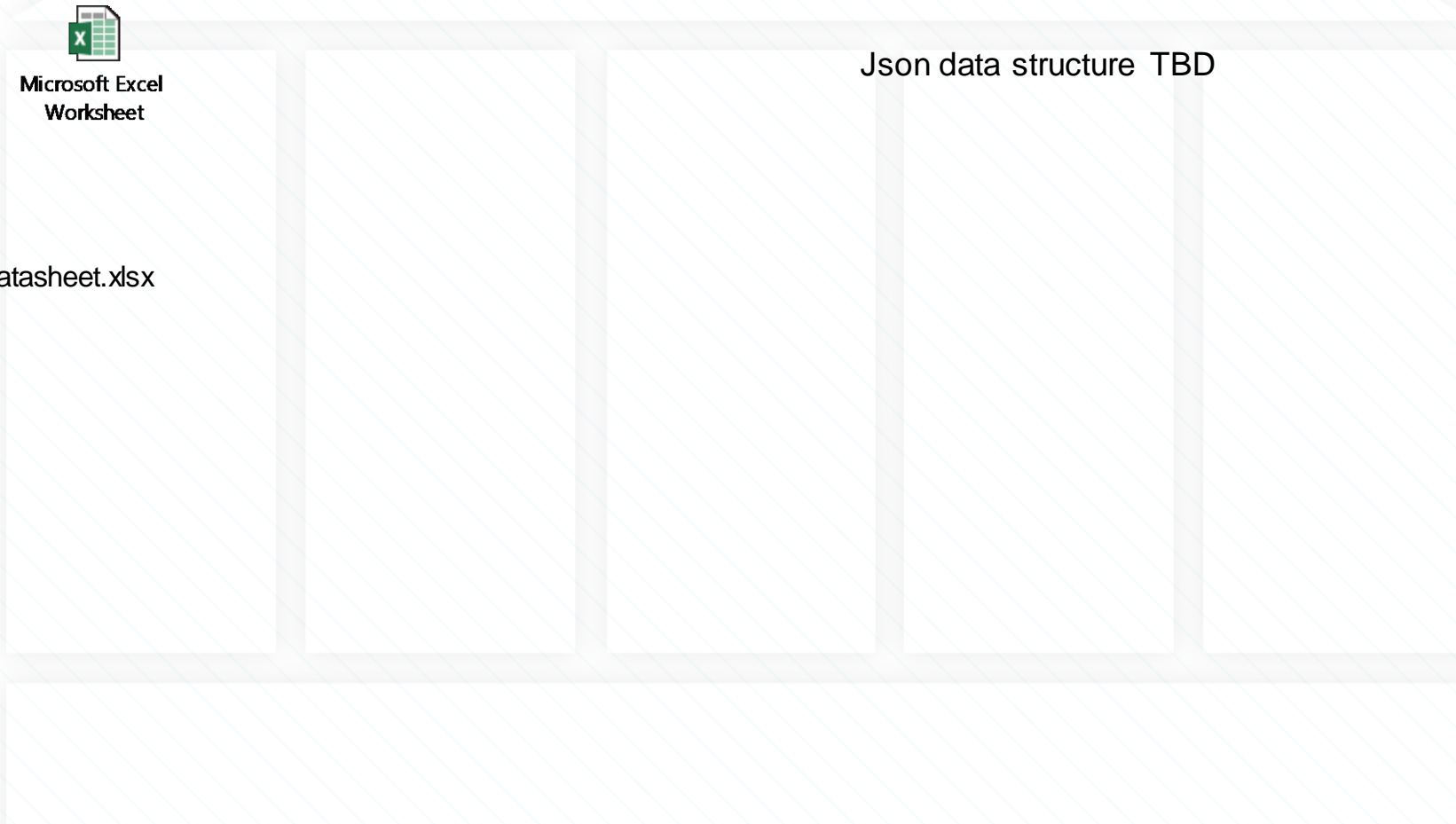
API Specifications Document

- Full details of the API specification will be defined in a single document and available through the UK Link Documents SharePoint Site along site the CSSC file formats.

API Principles

- Where a shipper has registered for the API service we do not expect shipper to submit these requests via a standard file over the IX.

- In the event that this does happen we recommend that these files are rejected and not processed due to different process timelines being followed.
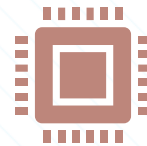
Xoserve Code of Connections Document

Xoserve APIs Code of Connections (CoCo)

Generalised CoCo covers all (Cloud based) APIs (including SwitchStream Option 3) – Drafted – In review.

Core content describes the mechanisms and controls for gaining access to and using the Xoserve Cloud APIs.

Details connection mechanisms, authentication and authorization and how to use them including examples.

Calls out need for Developer Portal to be a robust resource to enable our partners to gain the knowledge they need to utilise Xoserve published APIs and to configure and maintain access to them.

Lays out requirements on API consumers which must be met in order to use the APIs and maintain compliance with Xoserve API access standards.

UNC Update

Recommend Approached for SSMPs

- We are continuing to work on the assumption that Shared Supply Meter Points are out of scope of the new CSS switching process.

- We are recommending to Ofgem that switching will continue to be managed by Xoserve via the current process.

- Where a site is shared the meter point details will not be provided to CSS until the point that a supplier wants to register the site as a non-shared site.

- Where shippers wish to register a non-shared site as shared we will liaise with the relevant parties to remove the meter point from their system and de-active the current supplier registration.

- Once the process has been approved by Ofgem we will share the lower level process details with you.

CSO and Supplier License Exempt Sites

CSO and Supplier License Exempt Sites

- Connected System Operator (CSO) Sites
  - Switching for these sites will be managed by CSS until connected to the NTS network.

- Supplier Exempt Sites
  - We are awaiting confirmation from Ofgem on how these will be managed.

Update CR for ECO Process

ECO Process

- XRN5070 - Amendment to Isolation Flag has been raised and approved by Change Managers, as a result the proposed Switching Programme CR is no longer planned to be raised.

- This change will result in all new meter points being created with a Dormant RMP Status which will enable Suppliers to deactivate the current registration where no meter has been installed.

Market Sector Code Changes

- As part of Switching Programme CR-D007 - ABACUS Corrections and Re-alignments it has now been confirmed that CSS with providing the registered Shipper with changes to the Domestic Indicator.

- As discussed in previous our previous DSG meetings is it now proposed that we update our consequential design to no longer send the MSO file to shippers for CSS sites as this is being fully managed by CSS.