CoS Options Analysis – Data quality and governance

1. High level objective

1.01 Our high level objective is for the core industry data that supports the change of supplier process to be accurate. This can help facilitate fast, accurate and cost effective transfers. To this end there should be effective arrangements that support updating and maintaining this core industry data

1.02 This paper seeks to stimulate a discussion around the tools that should be used to address the broad issue of data quality. The focus of this paper is therefore on the governance arrangements rather than considering how to fix specific data items. In particular, we would like to explore whether the roll-out of smart meters and the potential to centralise registration provide an opportunity to resolve any current concerns on data quality.

2. Description of the issue

2.01 Access to the accurate data required to transfer a customer to a new supplier is crucial to the CoS process. Discussions with market participants, including at COSEG, suggest that data quality is a cause of concern in the efficient functioning of the CoS process. In particular, we understand that customers are impacted by poor quality in respect of address data, meter technical data and CoS meter readings.

2.02 To help understand the impact of data quality on the transfer process we have set out below our understanding of how data problems with address and meter technical data can effect the functioning of the CoS process. We have also set out the current arrangements in place to maintain their accuracy. We have not included CoS meter readings in this analysis given the expected impact of smart metering on accuracy.

2.2 Address data

2.03 The central record of address data in the electricity market is held on the Meter Point Administration System (MPAS). For the gas market, the central record of address data is held on the Sites and Meters database.

2.04 MPAS is a register of technical and other data necessary to facilitate the supply by any electricity supplier to all premises connected to the electricity distribution network. The Distribution Network Operator (DNO) is responsible for establishing and maintaining the MPAS for their geographical area.

2.05 The DNO licence conditions require that MPAS stores, among other details, a unique and accurate address.[1] Further information on the precise data that is required to be held on the MPAS, along with the party responsible for the provision and maintenance of each data item, is set out in schedule 2 to the Master Registration Service Agreement (MRA), the agreement which governs the process established between electricity suppliers and distributions companies. A copy of this schedule is set out in Appendix 1.

2.06 The schedule confirms that the Metering Point Address and Metering Point Postcode are required to be held on the MPAS and that the Distribution Business is responsible for the provision and maintenance of this data.

[1] Standard conditions of the Electricity Distribution Licence, SLC 18.

2.07 In the gas market, address data is held on the Sites and Meters Database. This is a central database which is operated by Xoserve. The provision and maintenance of this data falls on both the gas transporters and shippers. We understand that all standing data (mainly linked to site location) is the responsibility of the gas transporters and all site specific data (e.g. AQ, SOQ, meter reads, meter assets, market sector flag etc) is the responsibility of the shippers to maintain. Appendix 2 sets out the data held on the Sites and Meters Database most relevant to the CoS process.

2.08 Xoserve undertake validation against all data provided by the shipper but this validation cannot always detect anomalies that fall within accepted parameters. Xoserve have also informed us that shippers can submit address amendment queries if they detect anomalies in the standing address data.

2.09 If centrally held address data is inaccurate this can impact the CoS process with delays in the customer getting their supplier transferred or a consumer being switched to another supplier without having given their consent (erroneous transfers).

2.3 Meter technical data

2.10 Meter technical data is required to understand the characteristics of the meter and interpret the readings from the meter. It includes data which can be divided into 2 categories; (i) configuration details and (ii) device details.

2.11 In the electricity market, Meter Operators (MOPs) are currently responsible for meter technical data. The rules around the MOPs responsibilities are set out in a subsidiary document to the Balancing and Settlement Code (BSCP514[2]). The Code requires the old MOP to send the meter technical data to the new MOP and the new MOP then passes this on to the Data Collector (DC) who needs it for processing the CoS reading. Note however that changes are being developed by Elexon that will see Suppliers taking over the responsibility for the configuration meter technical details of smart meters.[3]

2.12 In the gas market, meter technical data is held on the Sites and Meters database. we understand that the maintenance of this data is the responsibility of the shipper or Meter Asset Manager (MAM).[4]

2.13 If this meter technical data is not accurate, then the meter read may be interpreted incorrectly or may take more time to interpret. This can lead to incorrect consumer bill and settlement charges as well as delays in processing CoS meter reads and in getting consumption data into settlement.

3. Description of reform options

3.01 The smart meter roll-out will require visits to every domestic and small business premises. This creates an opportunity to review and improve address data quality. Smart meters are also able to remotely provide meter technical data. Our reform proposals on centralised registration systems, with electricity and gas data being held and managed in one place, could also provide an opportunity to review and amend address data discrepancies between the two markets.

3.02 Despite the above changes, we would like to explore whether there are any further measures which will be required to improve the quality of data that supports the change of supplier process.

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[2] http://www.elexon.co.uk/wp-content/uploads/2013/01/bscp514_v25.0.pdf

[3] CP1388: http://www.elexon.co.uk/meeting/cp1388-education-session/

[4] Schedule 2B paragraph 12 of the Gas Act places requirements on parties connecting and disconnecting meters. http://www.legislation.gov.uk/ukpga/1986/44/schedule/2B. Any person fitting a meter must notify the supplier if they know who it is or the gas transporter if they do not. The notification must be in the prescribed form which is set out in a separate Statutory Instrument http://www.legislation.gov.uk/uksi/1996/450/made. If the notice is provided to the supplier then SLC17.5 and SLC17.6 applies and the supplier must pass this information on to the relevant shipper. SLC 11.4 of the shipper licence requires the shipper, if requested by the supplier, to pass this notice to the relevant gas transporter.

3.1.2 Option 1: Industry self governance

3.03 Under this option, it would be the role of industry to have in place effective measures to maintain accurate data. This could include modifications to industry codes to clarify roles and responsibilities, specific measures to improve quality and having in place an effective performance assurance framework.

3.04 We note that the measures noted above are currently employed to varying degrees in the gas and electricity markets but problems still remain. This may in part result from poor incentives to update central records. For example, where a supplier has cleaned its address data portfolio it may not have incentives to pass on these improvements to central services thus minimising the cost for other parties who may otherwise inherit poor quality data as part of the CoS process.

3.05 In the gas industry, issues are also likely to result from the lack of an effective performance assurance framework. We note that a modification to the UNC has been raised to seek to address this issue.

3.2 Option 2a: New obligations on central service provider/s

3.06 Distribution companies or central service providers (e.g., the DCC) could have stronger obligations to actively manage the quality of data that supports the CoS process (e.g., through defined metrics on expectations).

3.3 Option 2b: New obligations on other market participants

3.07 Market participants (suppliers, shippers and metering providers) could be required to ensure the on-going accuracy of the quality of centrally held data for premises in their portfolios (e.g., through defined metrics on expectations).

3.4 Option 3a: Incentives on central service providers

3.08 Providers of central systems (e.g., the DCC) could have financial incentives to maintain and/or improve data quality and deliver minimum standards.

3.5 Option 3b: Incentives on other market participants

3.09 The cost implications of updating data do not incentive participants to ensure central services are updated when issues are identified. Accordingly, it may be appropriate to have a financial incentive for market participants to provide amendments on data to central services.

3.6 Option 4: Establish new body to improve data quality

3.10 A new body could be established to be responsible for improving data quality. This could either be an industry group (e.g., under an industry code) or an independent body (e.g., one example could be to extend the scope of Theft Risk Assessment Service “TRAS”).

Appendix 1: Data items held on MPAS[5]

MPAD	Data item	Responsibility for provision and maintenance
1	Distribution business Id	Distribution Business
2	Unique reference	Distribution Business
3	Check Digit	Distribution Business
4	Profile Class Id	Supplier
4A	Effective from Settlement Date (MSPC)	Supplier
5	Meter Timeswitch Code	Supplier
5A	Meter Timeswitch Code Effective from Date	Supplier
6	Line Loss Factor Class Id	Distribution Business
6A	Effective from Settlement Date (MSLLFC)	Distribution Business
7	Change of Tenancy Indicator	Supplier
8	Supplier Id	Supplier
9	Metering Point Address	Distribution Business
9A	Metering Point Postcode	Distribution Business
10	Effective from Settlement Date {REGI}	Supplier
11	Meter Operator Id	Supplier
11A	Meter Operator Type	Supplier
11B	Effective from Date (MOA)	Supplier
12	Data Collector Id	Supplier
12A	Data Collector Type	Supplier
12B	Effective from Date (DCA)	Supplier
13	Data Aggregator Id	Supplier
13A	Data Aggregation Type	Supplier
13B	Effective from Settlement Date (DAA)	Supplier
14	Energisation Status	Supplier
14A	Effective from Settlement Date (MSES)	Supplier
15	GSP Group Id	Distribution Business
15A	Effective from Settlement Date (MSGG)	Distribution Business
16	Measurement Class Id	Supplier
16A	Effective from Settlement Date (MSMC)	Supplier
17	Standard Settlement Configuration Id	Supplier
17A	Effective from Settlement Date (SCON)	Supplier
18	1998 Trading Arrangement Indicator	Distribution Business
19	ERS Metering System Id (if relevant)	Distribution Business
20	Disconnection Date	Distribution Business
21	GD MPAN EFD	Supplier
22	GD MPAN ETD	Supplier

[5] Source: Master Registration Agreement, Schedule 2.

Appendix 2: Data held on Sites and Meters database[6]

Attribute Name	Attribute Definition
Confirmation Reference Number	A reference number associated to an acceptable confirmation request from a Shipper
Customer Organisation Id	A unique identifier, which identifies a third party with which xoserve interacts, this could be a Shipper, Asset Manager, Supplier etc
Supply Point Id	A Unique internal reference associated to a valid group of one or more Meter Points which conform to the aggregation rules
Confirmation Effective Date	The date from which a confirmation reference number is effective from.
Confirmation Withdrawal Received Date	The date on which the request to relinquish responsibility for a currently active supply point is received from the incumbent (outgoing) shipper.
Confirmation End Date	The date at which a confirmation ends.
Shipper Customer Name	The name of the customer with which the Shipper deals in relation to a Supply Point/Meter Point. This is not always the consumer.
Premise Customer Name	The name of the customer which the shipper considers to be the end consumer at the Premise.
Market Sector Code	A code (I, D or Null) defined by the confirming shipper that identifies a sites usage ie Domestic (D) or Industrial and Commercial (I), Null values are defaulted as Domestic
Confirmation Created Date	Date and Time on which Confirmation Reference Number is created.
Change Of Tenancy Indicator	This attribute (the value for which comes from the "Incoming Confirmation") indicates whether the Confirmation request is on account of a Change of Tenancy or not.
Meter Point Reference Number	Unique (operational-system-specific) reference number identifying the logical point on the network to which the Meter is connected. This number will not change even if the Meter is replaced
Gas Nomination Type Code	(GNT) A code representing the Meter Points frequency of metering based on a daily (DM) or non-daily (NDM) category description. The code is defined by the confirming shipper.
Meter Read Frequency Code	A code identifying the meter reading frequency of a meter. I.e.; D - Daily, W - Weekly, M - Monthly, Q - Quarterly, 6 - Six Monthly, A – Annually
Meter Read Agency Code	A code representing the reading agency which is responsible for the reads for the Meter
Meter Point Effective Date	The date on which a meter point becomes subject to competition. After the completion of the DC3 roll out this attribute is populated for new meter points with the date that the meter point is created. This is done via the Interim Site Works and Quotations Systems.
Meter Correction Factor	The Correction Factor applied to the consumption registered at that meter. The consumption is corrected by this factor to take account of temperature and atmospheric conditions at a Meter Point.
Meter Point Link Code	A code enabling the relationship between meters (the way in which they are linked together) at given locations to be described. For example: P = Primary meter, S = Sub meter, C = Check meter, D = Dummy meter F = Free standing meter. Historically known as 'Meter_Link_Code' in source systems.
Meter Point Status Code	Holds the status of Meter Point. Valid status codes can be PL - Planned (Used by siteworks when meter point is first raised, no meter) LI - Live (Capable of passing gas) CU - Cut Off (Meter may still be fitted) CL - Clamped (Meter may still be fitted) SP - Spin Cap Fitted (Meter may still be fitted) DE - Dead (No Gas, No Meter) EX - Extinct (No Gas, No Meter, Duplicate) Historically the following values also exist CA - Capped FA - Faulty IN - Inactive RE - Removed OT - Other MM - Meter Missing RT - Removed for Test UN – Unknown
Primary Meter Point Reference Number	The primary Meter Point Reference within a Prime and Sub Meter configuration

[6] Source: Xoserve

Meter Point Location Code	A code representing the location of a meter. Values 00 - Unknown 01 - Cellar 02 - Under Stairs 03 - Hall 04 - Kitchen 05 - Bathroom 06 - Garage 07 - Canteen 08 - Cloakroom 09 - Cupboard 10 - Domestic Science 11 - Front Door 12 - Hall Cupboard 13 - Kitchen cupboard 14 - Kitchen under sink 15 - Landing 16 - Office 17 - Office Cupboard 18 - Outside WC 19 - Pantry 20 - Porch 21 - Public Bar 22 - Rear of Shop 23 - Saloon Bar 24 - Shed 25 - Shop Front 26 - Shop Window 27 - Staff Room 28 - Store Room 29 - Toilet 30 - Under Counter 31 - Waiting Room 32 - Meterbox 99 – Outside
Building Number	The number of a building (eg. '62', '37a').
Building Name	The name of a building (eg. 'Quarry House').
Sub Building Name	A sub name for the Building Name
Outcode	Used before the Incode to direct the mail to a sorting office. The outcode consists of the AREA (This is indicated by the first letter(s) in the Outcode, for example NR. There are 124 Postcode Areas in the UK.) and DISTRICT (This is a sub region of a Postcode Area represented by the numbers in the Outcode.). The combination of the Outcode and Incode makes up the Postcode
Incode	This is used after the Outcode to sort the mail into a postal delivery. The Incode consists of the Sector (Represented by the first digit of the Incode) and Unit The combination of the Outcode and Incode makes up the Postcode
Dependent Street	The name of a road or street which is used to further define the delivery point for mail in the 'main' road name or street name, for example a shopping arcade off a high street.
Principal Street	The main street that serves as a principal thoroughfare
Double Dependent Locality	A business park, industrial estate or hamlet which is smaller than a Dependent Locality, sometimes included in an address.
Dependent Locality	A small town or village name sometimes included in an address when the Delivery Point is outside the boundary of the main Post Town that serves it.
Post Town	The post town in which the street lies in
County	The County in which the street lies