

Customer Briefing Note 010

Market Transactions and Data Items

Edge Background

Edge is our flag-ship web-based software solution for retail water and waste services suppliers in the UK.

Edge has been designed and built from first principles to provide a complete “Business in a Box” for both established and new entrant Licensed Providers.

The Edge system allows seamless operations across the UK – in both the Scottish and English markets.

Edge runs on the Microsoft “Azure” cloud platform, and provides unrivalled flexibility, security and availability.

Deployment of Edge is quick and easy, whether you are a new start or the largest water company in the country.

Transactions

Transactions are used extensively in the English and Scottish markets as a means of structured communication between Licenced Providers (in our case Retail Companies) and the Market Operators (MOSL and the CMA).

Transactions can go in both directions – from the LP to the Market Operator (Outgoing) and from the Market Operator to the LP (Incoming). There are different Transaction types for Outgoing and Incoming Transactions, and the way that Edge handles each of these type is also different. See also CBN011 for more information of Edge Transaction Management.

Whilst the Scottish and English Transactions are similar, they are not the same. Scottish and English market use different sets of Transactions and related Data Items.

In simple terms a Transaction is a package of data items that fulfil a specific function.

We can consider a Transaction as analogous to an envelope that contains several forms. The forms contain data relating to certain parts of a process, for example, Meter ID, Meter Make and Meter Readings. These three data items (forms) could be put into an envelope and sent to the Market Operator.

To extend this analogy, let’s consider the transaction for a Meter Reading being sent from a Retailer to the Market Operator, probably the most common of transactions.

In Scotland this is a T005.1

The Transaction is defined in the CMA Data Transfer Catalogue (DTC) [CSD0301] as follows:

Transaction Number	T005.1	
Transaction Name	Meter Read	
From	LP	
To	CMA	
DI #	Name	FLAG
D2001	SPID	OP
D3001	Meter ID	RQ
D3008	Meter Read	RQ
D3009	Meter Read Date	RQ
D3010	Meter Read Type	RQ
D3028	S Read Reason Code	OP
D3029	S Read Remedial Work Indicator	OP
D3012	Re-Read	OP
D3020	Rollover Indicator	OP
Description	<p>A meter read submission from a LP</p> <p>D2001 SPID in this transaction is not required where the meter is a Sub-meter in a meter network and is not directly associated to a SPID. Where a meter is a main meter in a meter network it must be associated to a SPID for Settlement purposes and in such case the SPID is required in this transaction.</p> <p>If the D3010 is S, the D3028 and D3029 must be provided. If the D3028 is PLR, the D3029 must be False, otherwise the D3029 must be True.</p> <p>Where the D3001 pertains to Private Effluent or Tankered Effluent Meter Type, the D3001 SPID should be the Sewerage SPID.</p>	

Figure 1 - Scottish Transaction T005.1

Data Items

In the above example, we can see that the T005.1 Transaction contains nine different items of data, the “D Flows” as follows:

Data Item ID	Name	Optionality Flag
D2001	SPID	OP
D3001	Meter ID	RQ
D3008	Meter Read	RQ
D3009	Meter Read Date	RQ
D3010	Meter Read Type	RQ
D3028	S Read Reason Code	OP
D3029	S Read Remedial Work Indicator	OP
D3012	Re-Read	OP
D3020	Rollover Indicator	OP

Each of these Data Items is also defined in the Data Transfer Catalogue.

If we take the D2001 “SPID” data item as an example, we will see that this data item is defined in the DTC as follows:

Data Item Number:	D2001
Data Item Name:	SPID
Data Item Logical Type:	string
Member of unique serial set:	yes
Member of Valid Set:	yes
Data Group:	SPID (Core)
Correction Method:	n/a
Data Owner:	CMA
Description:	Unique identifier allocated to each Supply Point by the CMA

Data Transfer Catalogues (DTC)

We can see that the Data Transfer Catalogues (DTC) clearly define the Transactions and the associated Data Items.

Accordingly, the DTC’s should be referenced to understand the structure and content of each Transaction.

The MOSL DTC should be referenced for English transactions and the CMA DTC should be referenced for Scottish transactions

Transaction Files

The actual transaction file is created in xml format and appears as follows, again using the T005.1 as an example:

```

<Submission>
<Header xmlns="urn:bridgeall-com:cmaservice:data:v3">
  <D1005_SenderOrgId> LP </D1005_SenderOrgId>
  <D1006_RecipientOrgId>CMA</D1006_RecipientOrgId>

  <D1007_TransactionTimestamp>2018-08-01T09:14:31.429734Z</D1007_TransactionTimestamp
  >
  <D1003_FlowReference> LP 02000051245</D1003_FlowReference>
</Header>
<Messages xmlns="urn:bridgeall-com:cmaservice:data:v3">
  <T005.1_LPMeterReads>
    <T005.1_LPMeterRead MID="| LP 02000051245">
      <D2001_SPID>100377800100</D2001_SPID>
      <D3001_MeterId>06ELSTER18M521438</D3001_MeterId>
      <D3008_MeterRead>19</D3008_MeterRead>
      <D3009_MeterReadDate>2018-07-31</D3009_MeterReadDate>
      <D3010_MeterReadType>C</D3010_MeterReadType>
      <D3012_ReRead>false</D3012_ReRead>
      <D3020_Rollover_Indicator>false</D3020_Rollover_Indicator>
    </T005.1_LPMeterRead>
  </T005.1_LPMeterReads>
</Messages>
</Submission>

```

Types of Interface – LVI and HVI

Trading Parties may send and receive transactions to/from the relevant Market Operators (MOSL or CMA) using one of two types of interface:

Low-Volume Interface (LVI)

The LVI interface is web based and is available to all Trading Parties.

However, the LVI is unsuitable for Trading Parties with large data volumes to transact and those needing process automation.

It should be noted that Edge does not support the LVI.

High-Volume Interface (HVI)

The HVI interface is also available to all Trading Parties.

The HVI is suitable for transacting large data volumes with the CMA.

All transactions are available via this interface.

It should be noted that Edge only supports the HVI.

The Scottish and English HVI interfaces are slightly different in the way that they work, but they do the same job.

The Edge system provides a fully integrated HVI solution, so that when data items are changed in Edge, then a corresponding transaction is automatically sent to the relevant Market Operator. Conversely, when the Market Operator sends a Transaction, the Transaction is received by Edge and the associated data is automatically loaded to the Edge database.

Related Customer Briefing Notes (CBN's)

You may also be interested in these related CBN's

- CBN001: "Edge Overview"
- CBN002: "ADC Billing"
- CBN003: "Volumetric Adjustment"
- CBN004: "Metered Billing"
- CBN005: "Block Tariffs"
- CBN006: "Consolidated Billing"
- CBN007: "Published Tariffs"
- CBN008: "Manual and Automated Billing"
- CBN009: "Bill Output Formats"
- CBN010: "Market Transactions and Data Items"
- CBN011: "Integrated Transaction Management"
- CBN012: "Bitemporal Updates"
- CBN013: "Market Data Set"
- CBN014: "Market Pricing"
- CBN015: "SPID Transfers"
- CBN016: "CRM Module"
- CBN017: "Data Quality"
- CBN018: "Meter Reading Management"
- CBN019: "Sub Meters and Complex Metering"
- CBN020: "Meter Exchange Management"
- CBN021: "Trade Effluent"

Further Information

If you require further information on any aspect of the Edge solution, please contact us at:

Email: enquiries@cloudwater.co.uk

Phone: 01413438992