ElectraLink's New Data Flow Services

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The gas and electricity markets are complex, competitive and evolving, especially as we move into the Smart era. ElectraLink connects suppliers (electricity and gas), settlement (electricity), distribution network operators, metering services companies (electricity and gas), MAPs (electricity and gas) and wider energy market stakeholders across the UK. We have undertaken significant investment in setting up and maintaining the infrastructure assets upon which the Data Transfer Service (DTS) operates. Continual and carefully managed investment in our central industry platform has ensured that our network data services operate on highly scalable, modern technologies that meet our customers' present and future requirements.

ElectraLink is in a unique position to provide new data flow services to market participants to meet the variety of complex issues faced by the industry. These new flow based services can range from the provision of bespoke flows to meet the requirements of market participants in an evolving marketplace, to the provision of bespoke Data Transfer Catalogue (DTC) type flows in electricity industry format with our ElectraLink Flow Dictionary (EFD), or gas industry format flows similar to Review of Gas Metering Arrangements (RGMA) reporting.

For the provision of new data flows ElectraLink will work with interested industry participants to understand their specific data flow requirements to provide a tailored service. We will work to define, create and baseline additional data flows outside of the defined industry codes and agreements to include:

- New bespoke data flows that contain the requisite data in a standardised format.
- New data flows provided in industry standard formats widely used and understood by market stakeholders.

The use of a standardised format will improve the consistency of the data to and from market participants and therefore increase efficiencies and reduces errors.

With our EFD product we are able to provide DTC like flows, enabling those who may have bi-lateral or closed community requirements to exchange information securely with other market participants. Parties when they are in agreement will be able to define the flows which they require and ElectraLink is able to implement these bespoke data flows within a twenty working day timeframe.

With the advent of dual fuel and the introduction of competition in metering services via the RGMA, suppliers and agents can now make commercial decisions regarding their preferred methods of interaction. This has resulted in both economic and operational efficiencies for Gas participants through being able to send and receive gas and electricity files via a single network. Introduced by ElectraLink in 2004 our gas services now underpin the commercial gas communication requirements of four of the "Big Six" UK utility providers along with their respective Meter Asset Manager (MAM) and Meter Asset Provider (MAP) agents.

ElectraLink has introduced and is discussing further new data flow services for a number of GB Market stakeholders including

- DUoS ebilling
- Gas Notification of Old Supplier Information (NOSI)
- Smart Centric Services

DUoS ebilling

ElectraLink's Distribution Use of System (DUoS) e-billing service delivers considerable benefits to both electricity suppliers and Distribution Network Operators (DNOs), by transmitting invoices and remittance files electronically as data flows which can be fed directly into the validation systems of electricity suppliers, instead of the paper bill based method that was used in the past.

Both suppliers and DNOs were seeking economic and operational efficiencies from being able to send and receive DUoS billing and remittance files across the Data Transfer Network (DTN). ElectraLink worked in partnership with the suppliers and HM Revenue and Customs to develop the DUoS ebilling platform. Working together we developed a shared understanding of the problem to design new data flows and achieve HMRC ebilling system sign off. ElectraLink developed the system, carried out extensive testing and successfully implemented the service on time and within budget. Currently all of the large DNOs and the Big Six suppliers as well as a number of smaller suppliers are utilising the DUoS ebilling service.

Gas Notification of Old Supplier Information (NOSI)

Ofgem and the UK energy suppliers formed the Customer Transfer Programme (CTP) in response to the negative customer experience associated with changing energy supplier. The two driving principles of CTP were:

1) Identify and develop solutions to prioritise root causes of customer switching issues;
2) Fast-track the implementation of solutions as appropriate.

ElectraLink was appointed to design and deliver new data flows to provide the incoming supplier with key incumbent old supplier data information to improve the CTP process. Reliability of service, speed of deployment whilst providing value for money was seen as the pre-requisites in delivering this service.

The introduction of NOSI data flows has been a critical element in implementing the gas change of supplier process for all suppliers (including the Big Six) in improving customer experience in the change of supplier process.

Smart Centric Services

Smart Gas Meter Network issues

ElectraLink is currently discussing with industry stakeholders the provision of new data flow services for the communication of gas network issues between MAMs, Gas Transporters (GTs) and suppliers that are being discovered during the Smart Meter roll out phase.

Using standardised industry formats ElectraLink is able to improve the consistency of data sent to and from gas market participants, therefore increasing efficiencies and reducing errors.

Agent and Industry Transformation

As we enter in the Smart era ElectraLink continues to provide new data flows to underpin the communication requirements between suppliers and their respective agents. This has enabled the transfer of new file types ensuring that status updates and the provision of work enquiries are implemented.

Smart Meter System Operator (SMSO)

For the foundation stage of the Smart Meter roll out programme ElectraLink is working to enable the transmission of messages to support the requirements to communicate Smart Meter data between suppliers. On change of supply notification for foundation meters, the installing supplier will have a requirement to allow the gaining supplier to maintain the smart operation of the meters. Installing suppliers can fulfil their obligations by enabling communication for the gaining supplier to the installing supplier's head end system, which ElectraLink is able to simply provide across the DTN using existing file structures. Thus utilising existing secture and reliable communications mechanism.

ElectraLink's Solution

Electricity, gas and Green Deal market participants connect to the DTN via either a High or Low volume User "Gateway" or Remote User Gateway (RUG). ElectraLink will ensure the correct decision on which gateway market participants should utilise based on factors including service level requirements, throughput capacity and projected traffic volumes.

For those stakeholders who do not presently have a high or low volume user gateway ElectraLink will implement a DTN connection through a RUG, which has been specifically designed to support smaller volume users. The RUG is designed to support smaller volume users using their own PC via a Virtual Private Network (VPN). The RUG supports the File Transfer Protocol (FTP) application and provides a user with the ability to connect to a network drive and 'drag and drop' files.

Strengths of the ElectraLink Service

All network services benefit from the strengths of ElectraLink's DTS, which can be best summarised as follows:

- **Security:** using encryption, digital signatures and a virtual private network, ElectraLink ensures that sensitive customer information is never compromised.
- **Audit:** information about every message is recorded in a central database, which market participant can query in real time so that they have up to date information about their data.
- **Reliability:** the system is reliable by design, as proven by consistently exceeding service levels.
- **Resilience:** allows for service-wide and customer-specific disaster recovery facilities as well as being supported 24/7.
- **Tools:** a variety of different tools are provided which allow customers to manage their data.

ElectraLink Data Reporting Services

ElectraLink was created in 1998 as an independent service to provide data transfer between market participants in the retail electricity industry.

Competition and interoperability in the electricity retail market is underpinned by a number of core industry processes, e.g. change of supplier and settlement processes. The details of these processes are governed by a range of industry codes. Performing these processes is enabled by using standardised data flow messages, which are published in the Data Transfer Catalogue (DTC). In addition, a standard means of sending and receiving these messages is ensured through the provision of the DTS – a regulated network services that ensures the secure and auditable communication of data flows between users of the service.

The GB electricity Distribution Network Operators (DNOs) are obliged to ensure the provision of the DTS in accordance with their licenses (Licence Condition 37). In order to discharge their obligation, the DNOs collectively created and own ElectraLink Ltd, which is responsible for the procurement and management of the DTS overs it's Data Transfer Network (DTN).

As the energy market has evolved so have we to meet the demand for new data services. In February 2012, ElectraLink was granted the capability to develop Data Services, by intercepting, analysing and aggregating regulated market data sent over the DTN, by the users of the DTS. The DTS users who represent the main GB electricity retail market participants (i.e. suppliers, DNOs and their agents), recognised that the information could provide a great deal of value to help the industry improve its performance

With appropriate permissions these reporting services could also be extended to the Gas industry.

These data services can also be extended to data carried in new message flows to provide market participants with additional analytic and reporting information based on these new communications.

ElectraLink is in a unique position to provide industry stakeholders with the opportunity to send and receive data securely and swiftly using the Data Transfer Network (DTN) to improve operational performance. We are able to carry this out with the only established central market infrastructure platform that can transmit defined flows between suppliers and their agents for the gas and electricity industry.

To better understand how this service can help with your needs please do not hesitate to contact us on: 0207 432 3000 or sales@electralink.co.uk to arrange a meeting.