SUMMARY POLICY ISSUE PAPER – FOR EDAG DISCUSSION

Title of Paper	**Data Architecture – Status Update**		
Issue Ref	BPD	Date: 13 July 2016	
Issue Owner / Author	Jenny Boothe / Colin Sawyer		
Discussed at User Group	11 July 2016	Discussion at EDAG Group	25 July 2016
Issued to DA		Discussion at DA	

Status Update

1. This paper has been prepared to provide a status update on our data architecture work. We are not seeking EDAG specific views on any data architecture issues at this time although comments are welcome.

2. In designing a solution architecture it is essential to understand the business processes that the solution must support and the systems and data that underpin that architecture. It is usual to start by analysing the business processes and these have formed the bulk of the work undertaken by the BPD workstream during the Blueprint Stage. As the business processes evolve and information systems start to be identified it is also important to consider the requirements for data.

Analysis

3. Accordingly we have started to consider the data that will be needed for the goal of faster and more reliable switching to be delivered. This analysis has involved:

    a. Reviewing each step in the business process maps and identifying the information that would be required to complete that step
    b. Developing a controlled vocabulary and a set of terms and definitions that describe that information
    c. For each inter-party interaction shown on the process maps, identifying the information that would be passed between the parties
    d. Considering the implications of known and potential developments within the industry, for example: smart metering, HH settlement, increasing prevalence of export metering
    e. Assessing the scope for harmonising data across the gas and electricity markets and for avoiding the use of inferred definitions (e.g. relying on a specific line loss class to infer that an MPAN is for export)
    f. Considering the findings of the Privacy Impact Assessment and the Information Risk Assessment and their implications for data management

4. The CRS system specifications will need to include precise definitions of data, clear responsibilities for data management and rules for data validation and error handling. For the Blueprint Phase we have initiated a data architecture workstream that will continue into the Detailed Level Specification Phase and possibly beyond. At this early stage the focus is on establishing logical data models which will help us to assess the viability of different solution architecture options and the boundaries between information systems. The data models comprise:

   a. A data structure diagram – identifying the main data entities and relationships between them and the lifecycles of key data entities such as registrable measurement points and metering equipment installations
   b. A logical data catalogue – identifying data elements associated with each data entity, for example the status of a meter point (tradable, suspended) or the installation date of a meter
   c. Data use cases – identifying the data elements that are used and/or updated by of the information systems identified in the solutions architecture – this will include use cases for enquiry transactions

5. The solutions architecture work has started to identify the scope of information systems such as the Switching System. It has also identified the need for a Market Intelligence Service which would provide access to information managed by the Switching System, legacy systems (e.g. UKLink or MPRS) or systems operated by industry participants. The data architecture work will provide insight into which information systems should be responsible for managing each data element and making it available via the Market Intelligence Service.

6. The programme's focus – and thus the scope of the data architecture work - is on data relating to the Switching System and the Market Intelligence Service. Data managed by suppliers and other participants is included purely to present a complete set of business processes which – while not seeking to prescribe the processes employed by a supplier – nevertheless provides a realistic illustration of the data required to support the end-to-end customer journey.

7. Development of the data use cases will proceed iteratively with the definition of solution architecture options. For example, in the solutions options involving a new, centralised switching system the data modelling will clarify which data elements would need to be maintained by the Switching System and which could continue to be managed within legacy enquiry systems.

8. A sub-group of the BPD User Group has been assembled on an ad-hoc basis to review our data architecture work. This has provided a helpful challenge to the design of the data structure diagram and to the definition of data elements. We will continue to invite User Group representatives to attend data workshops as needed and welcome the support of EDAG members in making people available from their businesses.

9. The data architecture work is being undertaken in close cooperation with colleagues in the Delivery Strategy workstream who are looking at data cleansing and migration issues. We anticipate that joint working across the programme

team will be needed to review responsibilities for the creation and maintenance of data (e.g. the creation of meter points and the maintenance of addresses) and for collecting any additional data elements that will be required for the new switching arrangements (e.g. related meter points).