SUMMARY POLICY ISSUE PAPER – FOR EDAG DISCUSSION

Title of Paper	**Switching Programme Data Migration Strategy**		
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Summary and recommendations

1. Whether a data migration will be necessary, and the extent of that data migration, is dependent on the design of the final Solution Architecture adopted, and (if necessary) on the data elements that will form part of the Switching System and/or Management Information System (MIS) within the Central Registration System (CRS). If migration is necessary, the migration itself will take place within the Design, Build and Test (DBT) phase of the Switching Programme.

2. When certainty on the chosen Solution Architecture is achieved, a detailed plan or plans for the migration should be created. Whilst a final decision on Solution Architecture is not planned to be made until December 2017, it may be possible to begin detailed work sooner if certain assumptions are made.

3. The migration plan should detail the approach to migration and set out a detailed plan of how it will be achieved in practice. Proposed elements of both the strategic approach and detailed plan are set out later in this document.

4. Our questions for consideration at EDAG are:

- Do you agree that a detailed strategy and plan for data migration should be developed during Detailed Level Specification (DLS)?

- Do you agree that the DLS should include a data migration design phase, which if assumptions are made in regards to the Solution Architecture, could be started sooner than the current planned start date of December 2017?

- Are there any additional elements, other than those identified, which should be considered within the detailed strategy and plan to be created during the DLS phase of the project?

Background and Analysis

Migration Approaches

5. Assuming a migration is required, migration of existing data will be an exercise conducted as part of the Switching Programme. The main actors will be the Registration Agent (a role to be performed by the DCC) and Network Operators. Other actors, such as Suppliers and Supplier Agents, will also be involved to a greater or lesser extent dependent on the solution. In the gas market, the main participant will be Xoserve, and in electricity this will be the DNOs.

Migration Principles

6. Any data migration must occur in a way that allows continuity of service across the old and new switching systems. Governance arrangements in the DBT phase should be configured to ensure that. Based on this, we have identified the following principles, which must be reflected in the conduct of the migration:

- Migration should minimise cost and any detrimental impact on competition, and reflect overall transition strategy;
- Migration should maintain data quality;
- Migration should minimise risk to existing systems or processes;
- Governance arrangements in place during the DBT phase, combined with the System Integration function, should manage risks before and after migration; and
- A detailed migration plan should be drawn up once there is sufficient certainty around the solution architecture and data model.

Data Stewardship and Mastering of Data

7. The migration plan must define the party which is responsible for performing migration, particularly if stewardship of data changes pre- and post- migration.

8. Data stewards will be formally identified at the DLS phase of the project. At this point these parties will be required to participate in the development and delivery of the migration plan.

9. Data stewardship, and therefore responsibility for migration, will depend on the application or service that a particular data item is mastered within. The ability to change (create, update, or delete) data will only be possible within the master system. Where data will be mastered within the CRS (either within the Switching System, or depending upon design, the MIS), the registration agent responsible for operating the CRS may become the data steward. Other data elements contained within the CRS which continue to be mastered within the legacy systems under the new arrangements will be stewarded by the owners of those systems. An enduring integration solution will be required to ensure ongoing alignment of data.

10. Any data elements held within the Switching Service are likely to be crucial to ensuring customers are able to switch quickly and reliably, and therefore to public

confidence in the new switching arrangements and the operation of the UK retail energy market. For this reason, it is essential that migration activity is subjected to an adequate governance regime, as the impact of data migration issues will be very high.

Data Conversion

11. A majority of data elements currently identified within the data model product are based on existing data items, harmonisation has been attempted between gas and electricity datasets where possible. Some data elements may require conversion when they are migrated to any new switching arrangements, this requirement will be investigated further within the DLS phase.

Governance and Assurance

12. The migration will take place in the DBT phase of the Switching Programme. During the development of the plan, it must be decided whether the existing governance and assurance processes for the DBT phase will be adequate to ensure that the migration is completed with minimal risk. The plan should set out responsibilities and overall control for the migration process, and whether there is a role for a system integration function, or other parties operating a system integration function. These requirements should be considered within the decision making associated to the potential creation of a new retail code.

Elements of DLS Phase Migration Plan

13. A migration plan should include a number of elements assessing the specification of the migration, plus a a detailed operation plan will be developed, explaining technical aspects of data migration. These elements are detailed on pages 9 to 11 of the main document.

Related Issues

14. **Data Model**: The Data Model created for the programme will be the reference, for indicative purposes, of data elements within the scope of the RFI which shall be presented to industry. A logical data model, determined by the CRS functional requirements will be developed within the DLS phase of the Switching Programme.

15. Within the Delivery Strategy workstream, the Transition Strategy and the Data Cleanse Strategy share a close dependency to data migration. In the context of decision-making around the most effective and lowest risk transition option, data migration options also need to be considered which will enable the optimal attainment of the delivery goals.

16. **Solution Architecture**: The solution architecture options will determine the migration requirements of the programme. Of four solution architecture options presented in the RFI, the Switching database with middleware and Switching database and MIS database with middleware will require a migration. The extent and complexity of which will depend on the content of the Switching database and MIS.

17. The work undertaken, to date, within the Blueprint Phase has not been performed to a level of detail that identifies how all of the existing data items utilised by the industry will map to the data element concepts catalogued within the data model. This will need to be completed in the DLS phase, at the point that a logical data model is created.

18. The solution architecture, data model and process model products delivered by the BPD workstream collectively describe the data elements that shall be required to enable both the Switching System and the MIS and the design of the new database. Data analysis will define the scope of the data migration in terms of the existing data items that will be required to support each solution architecture option.

19. **Transition Strategy**: The Transition Strategy will determine how the new Switching arrangements are brought to market. This will determine the order and timing with which the components of the solution architecture are 'switched on'. This will have implications for how data is migrated and the timing of any migration.

20. **Data Improvement**: A strategy is under development to cleanse data which is likely to feature in the CRS. This data cleanse strategy will focus, primarily, on address data.