SUMMARY POLICY ISSUE PAPER – FOR EDAG DISCUSSION

Title of Paper	**Switching Programme Data Improvement Strategy**		
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Summary and questions for consideration at EDAG

1. Data quality is a significant cause of failed and delayed switches. Following an extensive programme of stakeholder engagement, we have identified that roughly 80% of switches that are delayed or fail to proceed, are due to issues with address data quality, and that approximately 15% of the remainder are caused by meter technical information meaning that a switch might not proceed, or that a customer is switched to a tariff that their meter is not equipped to handle.

2. We have proposed a number of remedies to improve data quality. These are:

- **Remedy 1:** The Central Registration Service (CRS) operator will be mandated to procure a comprehensive, externally sourced database of premises addresses, which will be used as a reference for existing address data, MPANs and MPRNs, following an initial data cleanse and migration exercise. This will improve the quality of address data across the industry.

- **Remedy 2:** Suppliers will reconcile the data they hold on meter technical information (meter time switch code and meter type) with that held by meter operators (MOPs) and meter asset managers (MAMs).

- **Remedy 3:** Distribution Network Operators (DNOs) and Gas Transporters (GTs) should identify and cleanse plot addresses contained within their meter point address data, and communicate the results of this cleansing exercise to industry-held data sources. In addition, DNOs and GTs should periodically monitor and report upon plot addresses within the data that they hold.

- **Remedy 4:** The Switching Programme should further investigate whether Smart Meter installers' site visits can be used to resolve residual data cleanse issues that cannot be resolved using the other remedies as part of this package (such as the Remedy 1).

3. A further remedy , which would have created an obligation for DNOs and GTs to refrain from issuing MPAN and MPRNs to developers until there is a scheduled fitting date for the specific meter point to which the MPAN or MPRN will be assigned, was

discussed at User Group. The intention of this remedy was to reduce the incidence of crossed meters (see below) by reducing the interval between MPAN or MPRN apportionment and supply installation. A decision was taken to conduct further work on understanding the process determining how and when MPANs and MPRNs are issued to suppliers by DNOs and GTs before proceeding with this remedy in order to avoid unintended consequences.

4. Of these remedies, only Remedy 1 is dependent on the creation of a CRS. The other remedies could be developed independently of any solution architecture. Remedy 1 will require a design specification for an address database to be included in the design of any CRS and included in the tender process. Other measures would require code modifications to proceed, although we believe that these may be implemented under Ofgem's Significant Code Review powers.

5. Our initial stakeholder engagement has indicated that there is at least a prima facie case that the benefits accrued from these measures (through a reduction in failed or delayed switches) would exceed the costs. We propose to see further evidence to support this case in the RfI.

6. We invite EDAG members to:

- comment on their expectations of the expected reduction in rates of failed or delayed customer switches as a result of these remedies (including any impacts which have not been identified by our initial stakeholder engagement);
- identify possible barriers to the operation of the successful operation of these remedies;
- provide additional cost evidence where it is available; and
- provide an initial view on whether these remedies should be adopted.

Data Issues

7. Based on our stakeholder engagement, we identified four common data problems. These are:

8. **Unreliable Premises Address data.** Address data is commonly used as proxy in order to identify the meter point when switching a customer's supply. Analysis from our stakeholder engagement shows that approximately 82% of cross-fuel switching failures, delays and erroneous transfers are related to data quality. Of these, 81% of these data issues relate to meter point-address alignment and the quality of overall address data. Extrapolating these statistics using our analysis of monthly switching data provided to Ofgem by 'Big Six' energy suppliers would suggest that on average approximately 12,000 customer switches per month at these suppliers fail due to address data quality.

9. Common themes related to address data are:

- Poor quality of flat addresses (including unusual naming conventions);
- Ambiguous addresses;

- Incomplete addresses;
- Multiple MPAN and MPRNs assigned to properties;
- Unusually named properties (including vanity addresses); and
- Inconsistencies between the address data used in gas and electricity.

10. **Poor Meter Technical Information.** Meter type and meter time switch code are key data items in ensuring that a switch can proceed. Our analysis showed that approximately 14% of failed or delayed switches were caused by poor meter technical information. Extrapolating these statistics using 'Big Six' supplier data as above indicates that approximately 2,100 customer switches per month fail or are delayed by poor quality meter technical data.

11. **Prevalence of Plot Addresses in Industry Data.** According to our stakeholder engagement, approximately 1% of traded, energised MPANs in the electricity industry data have no proper postal address and are instead represented by a 'plot address' given by a developer. In many cases such plot addresses have remained in industry data for many years, and indeed they can remain indefinitely in address data until action is taken to address them. Plot addresses can enter industry data for reasons beyond the control of suppliers or DNOs (for example a developer may want to use a property as a show home, or a local authority may be tardy in supplying postal addresses), but their prevalence of plot addresses means can cause delays in switching.

12. Our stakeholder engagement has revealed that in the case of one major network operator, 31% of MPANs with plot addresses were found to date from 2005 or earlier, and 6% date from prior to 2000. The problem is less prevalent across gas transporter (non iGT) data held by Xoserve, which shows approximately 0.1% of meters are linked to plot addresses. Extrapolating from this stakeholder engagement, we estimate that there is a population of between 200,000 to 300,000 Electricity MPANs and 20,000 Gas MPRNs which may be represented by plot addresses in industry data.

13. **Crossed Meters.** Crossed meters occur when MPAN and MPRNs are assigned to an incorrect meter point and can be very difficult to positively identify after installation. Respondents to our stakeholder engagement indicated that approximately 20% of the erroneous transfers sampled, or approximately 500 erroneous transfers per month were caused by crossed meters.

Options Analysis

Remedy 1: Address Database

14. Our stakeholder engagement has indicated that improving the quality of address data would bring the single greatest benefit to making switching faster and more reliable. A centrally-held and managed resource providing a consistent and robust link between high-quality address data and both MPANs and MPRNs would significantly reduce the volume of failed and delayed switches encountered by consumers, and create an aligned register of gas and electricity meter points.

15. Whilst similar proposals have been considered (and rejected) previously, most recently by the Address Data Working Group (ADWG), the potential creation of a new Switching System within the CRS creates an opportunity for a single resource, increasing the effectiveness of the data cleansing resource and reducing cost. Our stakeholder engagement has indicated that it may be possible to procure an address database with a single or group licence, which would allow suppliers and other market participants to match their own data with that held in the central database. This would be essential to ensuring that costs of the remedy remain proportionate when compared to those considered by the ADWG, under which all market participants would have been required to purchase a license for any address solution implemented.

16. Whilst this remedy would impose costs of procuring a database and initiating an initial and subsequent cleansing exercises upon the operator of the Switching Service, we consider that the potential benefits are significant, based on our analysis of monthly switching data provided to Ofgem by 'Big Six' energy suppliers, which suggests that on average approximately 12,000 customer switches per month at these suppliers fail due to address data quality.

Remedy 2: Improving Meter Technical Data

17. Meter operators (MOPs) and meter asset managers (MAMs) do not operate under licence from Ofgem, but in effect are agents of supplier companies. Incumbent suppliers would manage and be responsible for the process and perform any necessary reconciliation, comparing information supplied to them from MOPs and/or MAMs to industry data and being responsible for ensuring that the correct data is reflected. An effective reconciliation would require an initial cleanse of historic data (which would be significant in scale), and the creation of a requirement to regularly reconcile technical information held by meter operators to that which is accessible from ECOES and DES data. Following this, suppliers would have an ongoing requirement to maintain quality of meter technical data and ensure that mismatches were identified and corrected promptly in industry data.

18. One possible way to deliver this would be to place a requirement upon suppliers to periodically report on meter technical data, and make these reports available to an appropriate party. These reports would show changes in the number of meter points identified as having inconsistent meter data. By setting a timetable for reviewing meter type information and a requirement to produce evidence of such a review upon request of appropriate bodies, this remedy could create stronger incentives for suppliers to pursue and correct erroneous data.

19. Since Smart Meters are programmable to reflect different configurations which would require a different type of 'dumb' meter, and this information can be accessed remotely, it is less likely (but not impossible) that customers with Smart Meters would experience delays to switching due to meter technical data issues. Whilst we envisage that this proposal would bring the greatest benefit to customers with legacy ('dumb') meters, it is possible that there may be some benefit from persisting with data reconciliation for Smart Meters.

Remedy 3: Improving Plot to Postal Data

20. Based on our stakeholder engagement, we estimate that there is a significant population of MPANs and MPRNs which may be represented by plot addresses in industry data, and that these numbers may grow if no action is taken to address the issue. DNOs and GTs should identify and cleanse plot addresses contained within their meter point address data, and communicate the results of this cleansing exercise to industry-held data sources. In addition, DNOs and GTs should periodically monitor and report upon plot addresses within the data that they hold.

21. For the initial cleanse of plot data, DNOs and GTs would be mandated to make best efforts (or reasonable endeavours) to identify and resolve plot addresses held against MPANs and MPRNs respectively. If Remedy 1 is implemented and the procured address solution is capable of identifying historic plot addresses, then that remedy would achieve the aims of this solution. However, this remedy may be implemented even if a central address solution (as envisaged by Remedy 1) is not, and its implementation would not be affected by the choice of the Solution Architecture underlining the Switching Solution. Continuous monitoring of plot addresses would take the form of a periodic requirement for DNOs and GTS to identify plot addresses held within their meter point data, and would produce a report identifying the population of remaining plot addresses by age. Reports would be made available to code bodies and/or Ofgem on request.

Remedy 4: New responsibilities for smart meter installers

22. The ongoing Smart Meter rollout creates an opportunity to use installers' site visits to identify address data quality issues that required manual intervention. We propose to examine whether Smart Meter installers' site visits can be used to resolve residual data cleanse issues that are not possible to resolve using the other remedies as part of this package (such as the Remedy 1). It is our view that this remedy would complement others by facilitating cleansing of addresses that have otherwise proved too complex to match using other routes.

23. Benefits (and costs) of this activity taken in isolation would largely depend on the size of the residual population of addresses which cannot be verified with an appropriate degree of confidence by other means. Respondents to our programme of stakeholder engagement have indicated that physical verification of a premises address would take minutes. This indicates that the marginal cost of each site visit will potentially be limited, although this could still imply a significant cost if multiplied over several thousand or even several million properties.

24. Physical verification of addresses is perhaps the most reliable method of ensuring data is clean, and the Smart Metering programme presents an opportunity to use a scheduled programme of site visits to verify address data, and therefore not to incur additional cost. In particular, this presents an opportunity to clean 'problem addresses', which might otherwise sit uncleansed in industry data for some time. However, to manually check all meter points, even as part of the Smart Meter rollout, would be likely to be prohibitively costly, and therefore this remedy is dependent on the timing and success of other remedies (including Remedy 1, the proposed Central Address Solution), in addition to the timing of the Smart Meter programme. Implementation would require the majority of address data to be cleansed and a residual population of uncleansed data ('problem' addresses) can be identified before Smart Meters are installed.

Next Steps

25. We propose to further test these proposals with stakeholders in the RfI, including obtaining more detailed information on cost and benefits on how to implement these remedies. With this information, we will decide if and how these remedies should be introduced, and will work to develop a detailed proposal for the design and procurement of a single address database in the Detailed Level Specification (DLS) phase of the programme. Other remedies will be progressed by development of code modifications, possibly through the Significant Code Review.

Related Issues

26. As already noted above, there are many interdependent areas with post-implementation strategy in the context of the programme. The key areas are:

27. **Choice and design of solution architecture.** The extent of change involved in the building the switching solution will determine whether the address database remedy can be realised. A centrally resourced switching database, as proposed under solution architecture options 2 (a Switching Service) and 3 (a Switching Service and a Market Information Service (MIS)), is a pre-requisite of the establishment of a central address database.

28. **Transition strategy.** Data cleansing activity will need to be completed ahead of the 'go live; date for the CRS, regardless of which transition model is ultimately chosen.

29. The Transition Strategy may affect the timings of delivery for aspects of the CRS (considering whether this might happen as a 'Big Bang' or as part of a phased approach). This may affect how elements of the Solution Architecture are delivered.

30. **Data Migration.** Any new CRS arrangements necessitating a central switching database will require data to be migrated from existing sources into that database. Migration of much of the data into the CRS (such as MPRN and MPAN details) will not be subject to a separate cleansing exercise; cleansing of existing industry address data will in effect form part of the migration of data into a new database.

31. **Data Model.** As part of the programme, a model of data elements which could be held in a Switching System and MIS has been created. A new 'Premises Address' is being proposed as the key address variable in the central switching database, and will be both held and stewarded in the central switching database. The premises address is the address of the premises served by a meter point, whereas the primary address currently held in UKLink (Gas) and MPRS (Electricity) systems is the meter point address, which is the location of the meter measuring supply to a premises.