

## POLICY ISSUES PAPER – CONTROL SHEET

Title of Paper	<b>Linking Meter Points</b>		
DA Issue Ref	i09	Date:	27 June 2016
Issue Owner (Accountable)	Barry Coughlan		
Author of Paper (Responsible)	Ali Siddiqui		
Status of Paper	1 – Initial Development and Review 2- Draft for Work Stream Leads 3 – Draft for User Group Review 4 – Draft for EDAG Review 5 – Final Recommendation for DA		
Timing	The final decision on the specific linking option will be dependent on the evidence and recommendation from the delivery strategy team’s data cleanse work, to be made by October.		
Dependencies	There is an interdependency between this paper and the data cleanse and migration in the delivery strategy workstream. There is also a link with the business process design work on data ownership.		

Circulation	Design Team / Workstream Leaders / User Group / EDAG / DA Huddle / Website
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Issue	This paper considers the merits of linking all meter points for a given premises served, and the options available to do this.		
Impacts Domestic?	Yes	Impacts Non-Dom?	Yes
Policy Objective (and reference to ToM v2)	The TOMv2 provides for the Switching Programme to consider ways “to join, harmonise and simplify the switching processes”. As part of efforts to deliver faster, more reliable switching to consumers, we suggested that we would look at whether by linking meter points both the consumer switching experience and industry processes might be improved, and how this linking might be achieved.		
Previous Positions on this/related Issues	No previous positions		
Summary of Recommendations	Our recommendation at this point is only partial. We consider that there are benefits to linking related meter points. We do not, at this point, make a recommendation about the attribute to be used to link the meter points. Work ongoing in the Delivery Strategy workstream to quantify the problem to be addressed and identify potential solutions for data cleanse should help us to determine what the best linking mechanism is.		

Internal and External Engagement	
Business Process Design	Author, Jenny Boothe
Regulatory Design	
Delivery Strategy	
Commercial Strategy	
DIAT	
Legal	
Other Ofgem Teams	
<b>Meetings at which this paper has been discussed</b>	
Workstream	
User Group	
EDAG	
Design Authority	

## POLICY ISSUES PAPER – CONTENT

### Issue

1. The issue considered by this paper is whether or not meter points relating to a given premises should be linked together in some way in the new switching arrangements.
2. Under current arrangements, if a consumer wants to switch, they typically provide their postcode and/or address to a supplier, price comparison website or through another means. The supplier or other party uses this address to interrogate industry databases to find the MPAN/MPRNs (MPxNs) associated with that address. The MPxNs, along with other data points, are then passed through the various channels of the current switching arrangements to the parties that need to process the switch.
3. In the majority of cases, using address data to uncover the MPxN is unproblematic. However, problems can arise due to differences in the addresses held for electricity and gas. If these cannot be reconciled, or incorrect records are held, this can cause delays or abandonment of the switch of one or both fuels, resulting in a poor consumer experience. Addresses are currently held in distributed systems, and are updated at different times, such that at any moment in time address data may be out of date in some systems. Manual intervention may be required on the part of the supplier to resolve the issue, adding cost and meaning processes are not as streamlined as they could be. The use of multiple source databases for addresses could, in itself, contribute to the problems experienced by some consumers when attempting to switch.
4. Additionally, it is unclear whether a similar issue exists where a premises has multiple MPANs – where two premises may have been merged into a single unit in the past, or separate meters may have been installed for the main premises and an electric vehicle charging point, for instance. In such cases, consumers can switch the MPANs independently. However, even where the address for these MPANs matches, it may be difficult for the consumer to determine which MPAN relates to which meter. This may act as a deterrent to switching, and may result in a poor consumer experience if the outcome of the switch is not what the consumer expected.
5. An objective of the Switching Programme is to harmonise and simplify electricity and gas switching processes. In line with this, we want to explore whether it is necessary or desirable to link related meter points to improve the speed and reliability of consumer switching. Secondly, assuming we do want to link related meter points, we want to explore the options for doing so, ie the attributes or data points that could be used to link.
6. Our aspiration in relation to linking meter points is to ensure that a consumer can, upon entering basic information such as address at point of switch, be confident that the MPxNs related to their premises are correct and comprehensive, and can make an informed choice as to which ones they want to switch.
7. Our focus for this paper at this point is on domestic consumers, though we welcome views as to whether non-domestic should also be considered.

## Essential Background

8. The TOM v2 states that the Switching Programme is “an opportunity to join, harmonise and simplify the switching processes”. This paper looks at whether this simplification and harmonisation can be aided by linking related meter points. This could involve linking electricity and gas meter points, and/or also linking multiple electricity or gas meters for a single premises.
9. At present, when a consumer wants to switch they will typically provide their postcode and address to a supplier, sales agent, price comparison website or to another supplier representative or third party intermediary. This address will be cross-matched with existing industry databases such as the Electricity Central Online Enquiry Service (ECOES) to draw down the relevant MPxNs and other data points for the premises.
10. This approach does not prevent the majority of switches from being processed correctly at present. However, issues can arise if there are mismatches or errors in the electricity and gas, delaying or preventing the switch of one fuel. It is also unclear whether, if there are multiple electricity meters installed at a premises the consumer will, firstly, be presented with information about each of these individually, and secondly be able to understand which meter relates to which part of their supply.
11. This paper attempts to articulate some of issues that may arise due to the lack of a single attribute linking all related meter points at a given premises to establish whether it is desirable or necessary to link them. It also outlines some of the potential attributes that could be used to link related meter points.

## Related Issues

12. As part of the Delivery Strategy workstream, we are considering what actions to take to improve the quality of industry data to improve switching reliability. A key focus for this work is the quality of address data. Incorrect address and MPxN data appears at this stage to be one of the key causes of switching failure and erroneous transfers. This paper on linking meter points is primarily interested in addressing problems arising from inconsistencies between distributed databases, whereas the work on data cleanse will be focused on correcting errors. However, we expect that their information gathering and analysis will be helpful for us as we develop further thoughts on the desirability and practicality of linking related meter points.
13. The Delivery Strategy team are currently developing a framework to capture the problems that have been identified. This will then be supplemented by a quantitative assessment to determine the scale of those problems that have been identified. Towards the end of the summer the team will start to develop options for improving the data. This quantitative assessment and solutions development will be a key input into our considerations of the attributes that should be used to link related meter points, if any.
14. Although we touch on some issues that relate to address data cleansing in this paper for context, the Delivery Strategy workstream will consider whether improvements could be

made to the currently dispersed databases that are used, including whether and how a 'single source of truth' should be identified, delivered and maintained. Here we consider only whether related meter points should be linked, and outline some of the potential options for doing so.

15. The Business Process Design workstream is currently reviewing the 'mastering' arrangements for different datasets, including address data. The objective of this work is to assign clear ownership of relevant data, and to ensure it can be quickly disseminated to other parties who rely on it. As the varying frequency with which distributed databases are updated is also a consideration within this paper, we will continue to engage with this work to ensure both are aligned.
16. Additionally, the Business Process Design workstream is considering the issue of *Related MPxNs*. This separate piece of work considers how defined categories of related MPxNs should be handled under the new switching arrangements. These are defined categories of relationship that already exist under current switching arrangements, as set out in the Master Registration Agreement, such as 'pseudo-MPANS' and export MPANS.<sup>1</sup>
17. This is distinct from the subject of this paper, as we are here considering the relationship that could or should be created between multiple meter points serving an individual premises.

## Analysis

18. At present, when a consumer wants to switch they will typically provide their postcode and address to a supplier, sales agent, price comparison website or to another supplier representative or third party intermediary. This address will be cross-matched with existing industry databases such as the Electricity Central Online Enquiry Service (ECOES) to draw down the relevant MPxNs and other data points for the premises.
19. The majority of switches can be successfully processed in this way. However, issues can arise for a number of reasons:
  - When processing a dual fuel switch, because different databases are used to obtain the relevant electricity and gas data points, inconsistencies between the databases can cause delays to one or both switches. Addresses are currently held in distributed systems, which are updated with different levels of frequency, meaning at any one time some systems may be out date. For example, the electricity address may have been updated more recently than that for gas, or vice versa. This may result in a quick switch for one fuel but not the other.
  - Inputting address may not identify all relevant meter points for a given premises. For instance, several premises may have been merged into a single unit as part of property redevelopment, or multiple meters may exist on a premises for

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<sup>1</sup> Business Process Design issue paper i34 – Related MPxNs and other meter point linkages.

different parts of its energy supply, eg main building, electric vehicle, outhouses, or separate electric heating circuits.

- Even where all meter points for a given premises can be identified by an address, it may nevertheless be difficult for the consumer to know which MPxN relates to which part of their energy supply. This could act as a deterrent to their switch due to concerns about making a mistake, or if they proceed with the switch could result in a different outcome to the one they were expecting, eg signing up to a tariff for the wrong part of their supply.

20. We expect that in most cases these issues can be resolved by suppliers and other parties, for example by utilising billing data or cross-matching their electricity and gas data to determine the correct information to use. However, this likely requires manual intervention in many cases, such as contacting the consumer or other industry participants for more information, or potentially conducting a site visit, which adds cost and time to the switching process.
21. Although current switching times mean that these issues may be resolvable without the consumer being aware there is an issue, this will not necessarily be the case under the new faster, more reliable switching arrangements. This may mean that consumers do not benefit from their choice to switch until later than if the switch had been processed effectively. Our aspiration is that consumers can enter certain basic pieces of information at the point of switch, and be confident that the MPxNs presented to them are correct and comprehensive.
22. When discussing our early thoughts on this issue with the User Group, we sought views on whether it was necessary or desirable to link related meter points. In general, the User Group suggested that it was not absolutely necessary to link related meter points. However, there was a general consensus that linking meter points may be beneficial, both to consumers and to the switching processes as a whole.
23. This was primarily seen to be of benefit in relation to the processing of dual fuel switches. If there is a single attribute that can be used to draw down the data points necessary to process a switch this should reduce the need for manual intervention, thus reducing the time and cost involved in processing a switch. It could also help to align the time taken to process the switching of both fuels.
24. Additionally, the User Group emphasised that while it might be beneficial to harmonise the switching *process* for electricity and gas, this did not necessarily mean that the data used had to be identical for both in most cases.
25. We consider that developing and implementing a strategy to cleanse industry data will, in itself, reduce the need for manual fixes to some degree. In particular, from this work, we should develop a clearer picture of the strengths and weaknesses of the different sources of address data that are currently deployed, and be able to put in place arrangements to improve the overall quality of the data both up-front and on an ongoing basis.

26. Nevertheless, from a consumer perspective we think there may be benefits to linking related meter points. Using the example of a consumer with multiple different meters installed at their premises, we consider it would be of benefit to that consumer to be able to enter their information and to have the option at that point of switching some or all of the relevant MPxNs.
27. Below, we set out some options for how this might be achieved. To note, we do not make any concrete recommendations at this point. We will continue to engage with the Delivery Strategy team as their work evolves to understand the practicalities and likely improvements that may result from implementing their data cleanse strategy, and revisit the options presented below at that point.
28. In the interim, we intend to conduct further work to explore what the consumer journey for those with multiple electricity and/or gas meters installed at their property looks like, and what linking these meter points may achieve for these consumers. We welcome the User Group's input on this issue, and also welcome their suggestions on whether there are other particular areas of analysis that we should explore further.

## Options

29. As noted above, the Delivery Strategy workstream is considering the approach that should be taken to cleansing industry data to deliver more reliable switching to consumers. As part of this work, they are considering in detail what problems currently affect the linking of address and MPxN data, and the scale of these problems. The work will then consider what actions are needed to improve the quality of data. As such, while we outline below some of the attributes that could be used to link related meter points, it will predominantly be for the Delivery Strategy to decide which of these provides the most practical solution that is likely to be of most benefit to consumers and industry.
30. Nevertheless, we have given some early consideration to some of the options we have to link related meter points:

### **Option 1 - UPRN:**

31. Under this option, the CRS would be populated with a Unique Property Reference Number (UPRN), a unique identifier for every addressable location in GB. The UPRN can act as a consistent reference number for each property, so may have benefits in dealing with changes of named address or merges/splits in existing properties. The UPRN is already partially used in the industry. Consumers would continue to be able to input their address, with the UPRN used to bridge any differences in electricity and gas addresses.

### **Option 2 - Address:**

32. Similar to current practice, under this option consumers would continue to input their address when they want to switch. This solution would rest largely on the work of the Delivery Strategy workstream. Address data quality is a key focus of this work. The aim

would be to improve, both up-front and on an ongoing basis, the accuracy of address and MPxN data. Also, depending on the outcome of data cleanse strategy work, a 'single source of the truth' may be nominated, to which all updates would be directed, so that all parties are using consistent address data.

33. In addition to the data cleanse, the Delivery Strategy will also be developing our approach to data conversion and migration, so the (currently different) electricity and gas address formats could be aligned.

### **Option 3 – Smart Meter Communications Hub:**

34. As part of the smart meter rollout, households will have a smart meter communications hub installed, which will connect all meters at a premises within a home area network. A dataflow to the CRS could be created from the Data Communications Company database containing the relevant hub information.
35. Each smart meter has a Globally Unique Identifier (GUID). The Data Communications Company (DCC) will hold a record of all meters accessible via each comms hub. This would allow DCC to determine where multiple meters that are connected to a single comms hub.

### **Option 4 – Consumer Linking:**

36. Under this option, instead of inputting address or postcode the consumer would directly input their MPAN and MPRN numbers at point of switch. In this case there would be no formal linking so no additional functionality in the CRS would be required.

### **Option 5 – Do Nothing:**

37. Under this option, current practice would continue and there would be no linking attribute in the new CRS. Electricity and gas switches would be processed separately and any differences in address or other data points between the two fuels would continue.

## **Options assessment**

38. In this part of the paper, each of the options outlined above will be weighed against benefits to consumers and benefits to industry processes and participants.

### **Option 1 – UPRN**

39. The main benefit of the UPRN is that it is a consistent and unique identifier, that stays the same throughout the address lifecycle. This can have benefits to the switching process, as unlike addresses, which can change over time through different phases of property development, the UPRN remains constant. Assuming data cleanse efforts are successful, this could provide a more stable base of accurate data on which to base the new switching processes.



40. For the consumer, their direct interactions at point of switch are unlikely to change markedly. They could continue to input their postcode and address when switching. What would change is that whichever address they provide, whether historical or current, this address should have a UPRN associated with it, off which all relevant MPxNs could be drawn down. So although the consumers inputs might change, we would expect the outputs to be more reliable.
41. The UPRN may also have benefits for industry processes. Bundling addresses and related meter points under a single unique identifier could help to reduce the errors uncovered during a switch. And in doing so this could reduce the need for manual intervention, thus reducing cost and time. Additionally, as the UPRN is already used by some parties, this would not represent a radical shift from current practice.
42. However, we would need to carefully consider the contractual arrangements for deploying the UPRN before pursuing this option. At present, many parties contract individually with Ordnance Survey for UPRN licences. For the purposes of the CRS, a single central contract may be preferable, as this may reduce overall cost and ensure that the central contractor is holds the single version of the truth, which other industry parties can utilise.

## Option 2 – Address

43. Under this option, a common address (potentially with historical addresses attached to it) for electricity and gas MPxNs would be identified, which would be held within the CRS. Wherever possible, MPxNs would be aligned with this address, so that at point of switch a consumer is presented with the full set of MPxNs at their premises.
44. This option largely relies on the success of the data cleanse strategy being developed by the Delivery Strategy workstream. If efforts to cleanse are minimal, or do not boost the quality of industry data, then this option would not result in a significantly better outcomes for consumers. Additionally, this option may not sufficiently address 'plot to postal' issues, where the property development plans and plot addresses may change before a postal address is allocated.
45. Using an improved set of addresses to link related meters would not be a marked shift from current practice, so may have benefits in minimising disruption to existing processes. A variety of address databases are used by the industry at present – consolidating these, or nominating a single holder to the truth, may be beneficial as part of up-front efforts to boost the accuracy of address and MPxN matching as well as on an enduring basis, as clear processes for rectifying errors and disseminating the correct information throughout the industry can be created.
46. Based on the information available at present, it appears that a large proportion of erroneous transfers is due to a mismatch in address in MPxN data. While this is being investigated further as part of our data cleanse work, we consider that if the 'success rate' of address and MPxN matching can be improved, then this may be an attractive option for linking related meters.

### **Option 3 – Smart Meter Communications Hub**

47. This option may be beneficial as it would allow us to leverage steps already being taken within the smart metering programme to ensure comms hubs are matched with the meters installed. Additionally, some of the information required to link related meter points within the new CRS would already be held by the DCC. While some errors may still occur during the installation process, we would expect to have a reasonably high degree of confidence in the accuracy of comms hub and meter point matching.
48. However, there is no obligation on consumers to accept a smart meter. Therefore a separate process may need to be created for non-smart metered consumers. Additionally, the timing of this solution would be dependent on the pace of the rollout. So, initially, relatively few consumers would have their MPxNs linked by the comms hub, so the full benefits of doing so may not be seen until later during the rollout.
49. Furthermore, for this solution to fully work, we may need to build on the existing steps within the smart metering programme to ensure that addresses/postcodes are accurately captured, rather than just matching of comms hubs with installed meters.

### **Option 4 - Consumer Linking**

50. Under this option there would be no formal linking of individual meters installed at a premises. This option represents a marked change in the consumer switching experience, as they would be required to source the relevant MPxNs and use these in order to switch.
51. Although this may be beneficial in removing steps from the new switching arrangements in the CRS, this complicates the consumer journey, as consumers are unlikely to be aware of their MPxNs at present. At a minimum, a widespread consumer awareness campaign would be required. Additionally, there is no obvious guarantee that accuracy would improve if consumers were to input their MPxNs manually, as errors could occur when they are, for instance, inputting this information into a price comparison website. Extra validation steps may need to be built into industry systems to reduce the likelihood of errors.
52. At this point, we do not consider this option worth pursuing any further due to the likely negative impact it could have on the consumer experience of switching.

### **Option 5 - Do Nothing**

53. As noted earlier in our earlier analysis section, there is no absolute need to link related meter points in CRS. Although the lack of a linking attribute can lead to errors, adding cost and time to the switching process in some cases, the system should still be capable of processing the majority of switches.
54. We consider that the attractiveness of this option will be dependent on the steps taken to cleanse industry data, particularly address and MPxN data. The data cleanse strategy we are developing may recommend the consolidation and alignment of certain key data

items, which may mean in practice that this 'do nothing' option is similar to 'Option 2 – Address' option above. We will consider this further as the findings of the data cleanse work emerge.

## Recommendations

55. We do not make any concrete recommendations at this point. We continue to agree with the views aired at previous User Groups – namely that linking related meter points, while not absolutely necessary, may help to simplify the switching process and make it easier to automate the rectification of certain errors, reducing the need for manual intervention.
56. We have outlined some of the options for how this linking could be carried out, and mapped out some high level pros and cons associated with each of these. We will continue to closely engage with the data cleanse work that is ongoing in the Delivery Strategy workstream, and the separate Business Process Design work on data modelling, before revisiting this issue towards the end of the September 2016.
57. However, at this point, we welcome any observations the User Group has on the content of this paper, and invite suggestions on:
  - a. Any further areas we should consider investigating, to help inform the options assessment.
  - b. Additional options that we have not included here that we should consider.
  - c. Initial reactions on the attractiveness or otherwise of any of the options that have been set out.