Summary of Scottish Address Data Matching Issues and Learnings for England
1 Executive Summary

Being the first competitive water market of its kind, Scotland has experienced a number of data pains, particularly in the area of confirming which properties should be in and out of the market. Scotland is now moving towards the use of an external reference. The reasons for this are that it helps resolve a number of key data issues including:

- Assessing ongoing eligibility for non-domestic charging;
- Services being split/merged across supply points;
- Ability for competitors to identify and switch supply points;
- Accurate charging on RV based tariffs;
- Duplicates (both existing and addition of new gaps);
- Vacancy (Void) management;
- Communication between wholesaler and retailer, including ability to accurately verify services.

England is currently following a route that, correctly executed, will prevent or reduce many of these issues by achieving high levels (99%+) of matching between Unique Property Reference Numbers (UPRNs) and supplied services/properties. High levels of matching are essential as unmatched properties cause the majority of issues with matched properties. An example of this is that of duplicate properties, where an unmatched property is a duplicate of a matched property.

Currently the English process is focussed on automated matching, which is a fundamental first step, however learnings from Scotland show that this is insufficient to generate the necessary high levels of matching. With estimated timescales for resolution in excess of two years for some companies, the process must be quickly moved forward to integrate manual matching. This is the best way to achieve the necessary levels of matching so that property data does not negatively affect market opening.

Key Points:

- The Scottish market experienced issues caused by not matching to external reference;
- High levels of matching are required to achieve key benefits;
- Automated matching is insufficient in isolation, manual follow-up required;
- Timescales to match and resolve issues are likely to exceed two years for some regions.
2 Document details

<table>
<thead>
<tr>
<th>Title</th>
<th>Summary of Scottish Address Data Matching Issues and Learnings for England</th>
</tr>
</thead>
<tbody>
<tr>
<td>Version</td>
<td>1.0</td>
</tr>
<tr>
<td>Document Type</td>
<td>Public Opinion Paper</td>
</tr>
<tr>
<td>Issue Date</td>
<td>11/08/2014</td>
</tr>
<tr>
<td>Document Owner</td>
<td>Charles Vincent</td>
</tr>
</tbody>
</table>

2.1 Questions or changes
If you have any questions about anything in this document please contact

Charles Vincent
Managing Director
Ascendancy Water Limited
Email: charles.vincent@ascendancy-water.co.uk
Tel: 07966 471 027
3 Contents
1 Executive Summary ........................................................................................................................................ 2
2 Document details ........................................................................................................................................ 3
2.1 Questions or changes ............................................................................................................................... 3
4 About Ascendancy ....................................................................................................................................... 5
5 Overview .................................................................................................................................................... 6
  5.1 Assessing ongoing eligibility for non-domestic charging...................................................................... 6
  5.2 Services being split/merged across SPIDs .............................................................................................. 7
  5.3 Ability for competitors to identify and switch SPIDs .............................................................................. 7
  5.4 Accurate charging on RV based tariffs .................................................................................................... 8
  5.5 Duplicates including customer double billing (both existing and addition of new gaps) ..................... 8
  5.6 Vacancy (Void) management .................................................................................................................. 8
  5.7 Communication between wholesaler and retailer including ability to accurately verify services ........ 9
6 Summary of Scottish issues .......................................................................................................................... 10
7 Ascendancy’s opinion on the route to an English market ........................................................................ 11
8 Timescale urgency ....................................................................................................................................... 12
4 About Ascendancy

Ascendancy is wholly independent and 100% owned by its employees, all of whom are passionate about competition. With its head office in Glasgow, plus a combination of satellite offices, field and home workers across Scotland and England, Ascendancy is able to attract the best and most experienced team available in the competitive water market.

Ascendancy Water’s consultancy division provides a range of services that are designed to deliver a Winning Advantage including:

- Data processing consultancy;
- Strategy development;
- Wholesaler management;
- Retailer management;
- Wholesaler interactions;
- Regulatory adherence;
- Market and operations code support;
- Business process design;
- Data and settlement reconciliation;
- Technical panel submissions;
- Complex customer site resolution.

The wider Ascendancy group also provides:

- **Specialist Advantage** services:
  A set of focused support services for retailers designed to ensure that they can concentrate on their core strategy, letting Ascendancy deal with making things really simple operationally.

- **Team Advantage** training:
  A program of general and role specific training to ensure that all team members from Directors and Senior Management to customer facing agents have the skills they need to deliver a winning performance for your customers and your business;

- **Edge** software:
  A suite of software solutions that ensures you have all the tools you need to enable you to beat the competition.

More detail about the Ascendancy group of companies and the services they provide can be found at [www.ascendancy-water.co.uk](http://www.ascendancy-water.co.uk)
5 Overview

The Scottish market was established as part of wider changes to the water industry in Scotland. As a result of this, and because there was no “off-the-shelf” model for the market structure, the principal focus was on creating a viable market code and operator. This in turn meant that there was less time than the regulator and market participants would have liked to prepare the data set that would be used to identify and trade properties. This led to some of the issues set out below. The learnings from this should help the English water market make best use of the time that is available.

The Scottish market has experienced a number of issues caused by poor addressing in the water market and the lack of an external reference. The history of how eligible premises were created in the market, is that property references that were deemed to be active in the Scottish Water system were issued a core Supply Point ID (SPID) for the services being billed. This meant that in most cases, SPIDs were created based on how properties were billed prior to market opening, rather than ensuring that they referred to an external reference database.

Key issues resulting include:

- Assessing ongoing eligibility for non-domestic charging;
- Services being split/merged across SPIDs;
- Ability for competitors to identify and switch SPIDs;
- Accurate charging on RV based tariffs;
- Duplicates (both existing and addition of new gaps);
- Vacancy (Void) management;
- Communication between wholesaler and retailer, including ability to accurately verify services.

Considering each of these issues in turn:

5.1 Assessing ongoing eligibility for non-domestic charging;

Without an external reference as properties cease to be, or start to be non-domestic through any method including new-build, refurbishment, switch to/from domestic, demolished, split/merge etc then there is no automatic trigger to change the market. That has meant that “dead” properties remain in the market and new properties do not reliably come into the market unless the New Connection process has been completed rigorously. This has not happened in many split property cases or where properties have switched from domestic to commercial. The consequence of this is that there are a large number of properties that should be removed from the Scottish market and a large number of missing properties (gap sites). Accordingly, it is impossible to assess the size and value of the market accurately.
5.2 Services being split/merged across SPIDs
Historically "pragmatic" solutions for individual customers have been created in Scotland to create billing entities that usually (but not always) resulted in correct charges being applied, but were not compatible with the new competitive market structures. The three that cause the most issues are:

- **Merged properties;**
  A merged property includes sites where a single customer occupies several properties, examples of this for large customers would be a large industrial site which has a large number of individually rated properties. If the customer requested a single bill, a large number of addresses may have been combined along with their meters etc so the customer gets one bill. The resulting property address often relates to a central building or billing address. When this happens it is difficult to know which properties are in fact being billed for and these properties look like gap sites. It also makes it impossible to charge correctly when some but not all of the individually rated properties are vacant.

- **Split properties;**
  Split properties often happen if a customer wants a separate bill for water and drainage. This can mean that there are duplicate addresses for the same property but with different services. This can cause issues where subsequently one of the bills has the missing services added, resulting in double charging.

- **Unconventional landlord/tenant setups.**
  The largest issue with unconventional landlord/bulk meter setups is where the landlord also occupies one of the properties. Where one would normally expect SPIDs to amount to number of UPRNs + 1 this is not the case.

5.3 Ability for competitors to identify and switch SPIDs
Billing addresses are often more accurate than supply address. This results from the need for bills to be paid. Where an address element from the supply address is missing or incorrect so long as the bill gets to the customer and is paid then there is no issue. This can happen in four key ways:

- Billing address is head office;
- Billing address has additional address info;
- Billing address is an email address;
- Customer name allows for delivery.

  **e.g.**
  
  **Actual Address:** Unit 4, Shawlands Shopping Centre, Shawlands, Glasgow, G41 4BL
  **Supply Address:** Woolworths, Shawlands Shopping Centre, Glasgow, G41 4BD
  **Customer name:** PS Holdings LTD (A made up example of a Poundshop holding company)
This means that an incoming competitor retailer will find it difficult to find the address but the current retailer will be able to bill it easily either by addressing a bill to Poundshop, Shawlands Shopping Centre, or to a head office/email. An incoming competitor engaged with Poundshop who had been supplied with a list of site addresses to switch will find it difficult to find this property in the market as the postcode is wrong and they would need to know that this property used to be a Woolworths. This can result in two outcomes for the retailer, either having to get hold of information from actual bills from customer (potentially adding cost to process) or they may conclude that this is a gap site and potentially try to register a duplicate supply point.

5.4 Accurate charging on RV based tariffs
Where RV is used for charging (in Scotland both unmeasured and surface water drainage use RV for charging) where that RV is changed due to physical change there is no trigger to have that RV changed within the Market.

5.5 Duplicates including customer double billing (both existing and addition of new gaps)
Where addresses are poor or ambiguous it makes the registration of duplicates very likely without an external reference. This has happened with metered properties but is a much larger issue for unmeasured or surface water drainage only properties. For example

Actual Address: Office 3, 7 High Street Linlithgow, EH12 9DF
Existing Market address: Office 3, High Street, Linlithgow, Eh12 9DF

Where there is no meter, it is likely that by looking at the Assessors roll a new site will be registered. An occupier will then be found and the customer will be billed twice.

5.6 Vacancy (Void) management
In an integrated wholesale / retail environment the cost of incorrectly sending out a bill to a vacant property is the cost of the bill itself if it does not get paid. In the Scottish market where that happens wholesale charges will still be paid to Scottish Water by the retailer, but retail bills will not be paid by the Customer. This means that retailers must ensure that they do not inadvertently bill vacant properties while still undertaking their responsibility to accurately charge all occupied properties. Prior to market opening in Scotland bills were often sent to “the occupier” where there was any indication of an occupier. This almost immediately stopped happening after market opening, with retailers generally looking for confirmation of occupancy before billing. With no external reference to cross reference against it is very difficult to monitor occupancy in an automated way, and any poor addresses mean that even manual tracing is difficult, particularly where there is no customer name to check against. This results in a large cost for retailers in monitoring and verifying the occupancy of properties.
5.7 Communication between wholesaler and retailer including ability to accurately verify services

A typical (simplified) request from the retailer to the wholesaler would be “please verify that meter XYZ serves SPID 12345678 address Woolworths, Shawlands Shopping Centre, Glasgow, G41 4BD (as above), customer is PS Holding LTD.” The surveyor will be given all the above information, however, based on that address they may be able to find the meter but cannot confirm that it supplies "Woolworths", and the customer name does not help. They may be able to verify it based on the X,Y coordinates they hold in GIS however that is not the question asked. Here the link to an external reference that contains X,Y coordinates or an accurate address means that they will be able to find the property they are meant to be confirming the services for. This is a particular issue in a competitive market with a separate wholesaler and the SLAs involved often mean that customer resolution takes a long time. In Scotland a meter verification is on a 20BD (business day) SLA, the response after 20BD may be that they are unable to find "Woolworths”. Even if the retailer can work out what has gone on and resubmit the request with better information it will take another 20BD to get a response. From a customer point of view this may have taken 40BD or more dependent on the retailer’s processes.

In addition disagreements can occur between retailers and wholesalers about which property is which. In Scotland, retailers have focussed on property address and customer while the wholesaler has focussed on asset information. This has been further compounded in Scotland by the retailer “owning” property address, RV and customer name and the wholesaler owning meter address. An example of this would be:

SPID A in market:

5. High Street, Glasgow G41 4BL, customer name “Bob Builder”, Meter XYZ

UARNs in Assessors:

5. High Street, Glasgow G41 4BL, customer name "Bob Builder"

7. High Street, Glasgow G41 4BL, customer name "Paul Plumber"

If a retailer attempts to register a gap site for "Paul Plumber" at 7 High Street, the wholesaler says "NO", 7 High Street is supplied by Meter XYZ i.e. 5 High Street is the gap site. The retailer has however been billing Bob Builder for a number of years on that property. The retailer wants the meter to be moved to the new gap site to correct the services, but the wholesaler wants the retailer to correct the property address and regards the retailer as having the customer in the wrong property. Everyone agrees that there should be two properties in the market but not the process to go through and neither can force the other to act.
6 Summary of Scottish issues

Fundamentally many of the originating data issues are not caused by a competitive market, however with separate wholesalers and retailers in Scotland the issues limit the ability of competitors to enter the market. Also, fixing individual issues is much more difficult as the retailer and wholesaler may be taking their individual financial positions into account and the wholesaler does not need to maintain a relationship with the customer. In addition not everyone has the same information, as the wholesaler does not have all customer information and the retailer does not have GIS information. This is a particular problem in a switch environment where issues need to be dealt with by 4 parties (wholesaler, incoming retailer, outgoing retailer & customer) rather than just 2 parties (Scottish Water & customer). Where additional customer charging is involved, and historically an “agreement” may have been reached between the customer and Scottish Water, there is no mechanism in Scotland for this to happen, as settlement calculations have no flexibility. This means retailers having to either charge customers full back-charge amounts, or take the direct loss by paying for services they will not be charging for. Where these issues are highlighted by switching and result in increased or back-charging this can provide a negative attitude to the switch process.

One additional issue is that the operational cost to retailers is high, as before any action is completed two questions that should be defined in the market need to be asked and answered:

Firstly, "Should this property be in the market?" i.e. is it a duplicate and is it non-domestic;

Secondly, "How do I ensure that everyone is talking about the same property?"

The first thing that should always be done is to establish if a property should be in the market. Creating a link to an external reference and maintaining that link is key to ensuring that this question does not need to be asked each time. This is a fact that has been accepted in the Scottish market more recently with the instigation of a project to link SPIDs to UARNs (Unique Assessors Reference Numbers).
7 Ascendancy’s opinion on the route to an English market

The route that the English market is taking, to do a full match prior to market opening is very forward thinking and likely to improve market opening for everyone. Exactly which address format to use is not particularly important as long as it is clear to all parties what the format is. Use of the UPRN, where Scotland is using the UARN also seems very sensible for two key reasons:

- England uses RV for charging much less than Scotland where all SWD is based on it;
- The ability to access property shell UPRNs will make matching landlord meters much easier than in Scotland.

The stated goals of Open Water with respect to this, of a set of 1-1 matches with each of the 5 services attached to them, will make what is in the contestable market extremely clear. Doing this before competition opens will however mean a multitude of data corrections may be required to achieve this 1-1 match. These are likely to include:

- Address changes;
- Moving customers in/out;
- Splits;
- Merges;
- Gap sites registered;
- Properties deregistered/deleted;
- Service changes.

We believe that England needs to give great focus to the route and timescale of achieving this goal. As with many data matching projects, there appears to be a focus on automated matching. Automated matching is likely to only achieve a limited success rate as fundamentally it has a tolerance, and as % match is increased, then accuracy is reduced. Experience in Scotland shows that it is important that the process is moved on, from trying to improve automated matching to how to match all properties by manual means. It is only when very high levels of matching 99%+ are achieved that many of the above issues are dealt with. This is because the properties that match well are not normally the ones that cause the above issues. Where there is a full accurate address e.g. Flat 7, 5 Main St, Glasgow, G41 4BL then everyone knows what is being talked about. The duplicate of this address 5/7 Main St, Glasgow, G41 4BB (incorrect postcode) without additional information may end up in the unmatched pile and cause a problem for itself and the other property. If this is not matched and Flat 7, 5 Main St, Glasgow, G41 4BL does not already exist in the market this process is indeed likely to result in a new duplicate property being registered. This has happened in a large scale in Scotland.
8 Timescale urgency

Key to success in matching in England will come from an early acceptance that automated matching will not fit the bill on its own and that all English water companies should start on the journey to manual matching (after initial automated matching) and the resultant work to correct the items listed above. The timescales to achieve this for many companies are likely to be a minimum of 12 - 18 months, with any organisations with batches of poor data possibly needing two years or more. This is even before much of the exceptions on splits/merges, gap registration, service changes etc are dealt with. That will mean that for many companies to achieve market opening in 2017 they need to be starting full projects this year or early next year.