EUC Numeric Code – Field Extension

Further details for EUKLC – 23rd November 2011

Information Requested:

Details of the other options identified during the analysis of this change and the justification for selecting the option to extend this field to a max length of 10

Background

The End User Category (EUC) code is a unique 4 digit sequence number defined in UK Link. The EUC is the mechanism which allows Xoserve to differentiate gas consumption profiles and weather sensitivity between NDM consumers based on their location (LDZ), consumption levels (AQ) and consumption patterns (Winter Annual Ratio (WAR)). As an example, for the End User Category 'WS:E1109B' UK Link holds the EUC numeric code as 9998. New EUCs are loaded into UK Link around mid to late August each year in preparation for the AQ review process. Under current arrangements there are nearly 600 new EUC created.

Options Investigated & Summary of Pros & Cons

1. Extend the length of the field

Maintain the current data type and increase the field from a length of 4 to a length of 10 (this being the precedent set for lengthening numeric field length to give a shelf life that would comfortably accommodate the current growth and any changes that may occur to the way these are generated that would increase the burn rate). This option would also allow Shippers and Network Operator Organisations to implement an incremental change of field length to 5 or 6 digits, as a short term solution, as the numeric field would not be padded with additional characters. This would be sufficient to accept the EUC codes when they exceed 4 digits and start to generate 5 digit codes.

Advantages

- More straightforward to make the necessary changes to UKL and associated systems (over changing the field type)
- Likely that not all Shippers would have restrictions/validation that would reject a longer number, in these cases there is no impact to the external users
- A purely techincal solution – no changes to functionality are required and therefore the testing and operational team involvement for UAT is greatly reduced
- Enables incremental implementation by Users if 5 or 6 character length EUC codes are currently acceptable.

Disadvantages / Limitations

- Shipper who has any length of field validation or has the database configured for a field length of 4 would need to amend their systems
- File format updates would be required

2. Change the field from Number to Alphanumeric – eg 9998, 9999, A000, A001… This would utilise the same field length of 4 but change the data type.

Advantages

- Screens and reports would need less alteration because the existing visible field length would remain unchanged.

Disadvantages / Limitations

- More complex to change the field type than the data length as, amongst other reasons, our functional code blocks would accept the longer number but would need to be amended to accept the alphanumeric type.
- Shipper and Network organisations are more likely to need to amend their systems
- File format updates would be required
- Xoserve have initiated analysis and design upon Option 1. This option would require rework.
- Impacts to database structures throughout Xoserve and User systems

3. Re-use early numbers from the Sequence, hence as the 9999 limit was reached and exceeded the next number given would be 0001

Advantages.

- No technical modifications required to our databases.
- No file format changes
- Whilst analysis is complex the actual implementation might be more straight forward

Disadvantages / Limitations

- Extensive data archiving would be required on an ongoing basis.
- A great deal of analysis would be required across Xoserve and Shipper / Network Operator organisations to agree and implement an archiving approach that supports all processes. Risk that impacts are not identified with Xoserve / User systems leading to significant impacts and fix scenarios.
- Coordinated archiving of data across UKL and all other internal systems has proven to be very difficult and prone to unexpected results.
- Xoserve have initiated analysis and design upon Option 1. This option would require rework.
- There is still potential for changes to Shipper / Network validation code to allow a number that had already existed to be used again.

<u>Outcome</u>

In light of the costs, benefits and ongoing risks associated with each of the options it was decided to pursue Option 1 – field lengthening.