



The Potential Role of UK Link and Xoserve in Faster Switching

A guide for respondents to Ofgem's consultation
on the use of the UK Link systems as the Central
Switching Service (CSS)

Contents

<i>Foreword from Xoserve CEO, Sian Baldwin.....</i>	3
<i>Introduction to Xoserve and its role in the switching process... </i>	4
<i>Project Nexus.....</i>	4
<i>The Xoserve UK Link platform.....</i>	5
<i>Xoserve's initial assessment of the faster switching programme RP2 requirements and implementation challenges and risks</i>	6
<i>Capability to re-use Nexus programme and UK Link system to accelerate and de-risk delivery of the central switching service</i>	7
<i>Xoserve's plans during the consultation period.....</i>	8

Foreword from Xoserve CEO, Sian Baldwin

Dear colleague,

In parallel to the consultation released by Ofgem today, I wanted to provide you with some additional information about Xoserve, where we have come from and what we are transforming to become, on a journey started in earnest 12 months ago and with 12 months still to go.

Historically Xoserve was an agent of the gas transporters and in this role we have successfully supported the gas switching process for gas consumers since 2005. However, increasingly our governance structure didn't represent our diverse customer interests and to speak frankly, we developed a reputation for being unresponsive in some circumstances and this is something we are now addressing with pace, both structurally and culturally.

Considering structure first, from September 2016 through to April 2017 we underwent a far-reaching transformation of our governance. Changing the composition of our board to include members nominated by all our customers and a voting structure, which balances the votes between gas shippers (and retailers) who largely consume services and the gas transporters who carry the obligation to provide them. Many of our gas retail customers are dual fuel customers.

Culturally we have started an organisational transformation, which will largely complete over the next six months, but with programmes to support embedding new behaviour and ways of working running through to summer 2018. Our transformation will create an organisation which is recognised by all our customers as:

- Customer centric in everything we do, seeking first to understand our customers and then to be understood.
- Insight driven, using the power of data to create a personalised lens into the business processes we run on customers' behalf, improving the quality of the conversation our customer advocates have directly with our customers; and internally on our customers' behalf.
- Change capable, so that we always land complex change into the market with least risk and maximum reliability; thinking about every change we undertake through the lens of customer change and customer risk.

Against this backdrop, we launched a brand-new switching and settlement platform into the market on 1 June 2017. This platform will be recognised as UK Link, and probably perceived as a gas only platform, but the reality is that it is a powerful SAP tool with the already inbuilt ability to switch power as well as gas – and indeed to be a utility wide support tool. The launch went well, and the platform is scheduled to exit a period of Post Implementation Stabilisation (PIS) on schedule at the end of August. From this point onwards, the energy industry will have a stable and scalable platform (the UK

Link platform) at its heart. It was not an easy journey to get from concept to launch of UK Link and in addition to the platform itself, one of Xoserve's most valuable assets is the learning garnered along the way and the skills and capabilities developed, that industry now has the opportunity to re-use.

Given the significant investment that industry has already made to bring the new UK Link switching and settlement platform to fruition, coupled with increasing levels of industry confidence in the platform, processes and people supporting it, I believe that the potential to use the UK Link system to deliver the Central Switching Service ('CSS') required under the Faster Switching Programme, is something that should now be very seriously considered.

The Xoserve proposal would be further complimented by widespread re-use of people, process and infrastructure across all of industry, with customers' own teams, infrastructure and engagement processes developed to support Nexus being highly relevant to expedite delivery and substantially reduce the risk of the Faster Switching Programme. If there is one overarching learning that Xoserve has very much taken to heart from Project Nexus, it is that starting from a blank sheet of paper is hard, costly and fraught with risk and therefore my belief is that anything we can collectively do to build from the stable base we have created will benefit us all in the short and long term.

I believe that the combination of the UK Link platform, coupled with re-use of the Project Nexus pan-industry delivery processes could significantly de-risk the Faster Switching Programme. This, in turn, offers the quickest route to delivering the benefits of faster switching to the end consumer. Therefore, I am asking the industry to consider the relative benefits and risks of this proposal.

I am sure that there will be a wide range of views expressed on the consultation and our proposals. Therefore, I am keen to talk with as many of you as possible in the remaining time available to ensure that we reflect your views as we further develop these proposals. We will be offering a range of forums and opportunities to share your thoughts over the coming weeks.

Yours sincerely,

Sian Baldwin



Introduction to Xoserve and its role in the switching process

Britain's gas customers are able to choose to buy their gas from a range of gas supply companies. Although there are multiple gas suppliers, the gas that they are buying and selling is transported around the country using a single integrated network of pipes, which is owned by several different gas transportation companies.

To support customer choice in the competitive retail gas market, all premises with a gas supply must be logged on a central register; this supports information flows to gas suppliers 'gaining' and 'losing' customers when they change or 'switch' supplier.

Additionally, the gas transportation companies rely on the central register, combined with information about gas flows across the entire gas transportation network, to know which companies (the gas 'shippers') are responsible for gas entering and leaving the network; this enables the network to remain 'in balance' (between supply and demand), supports the safe operation of the network and informs the accurate charging of suppliers for their usage of the network.

In order to support these arrangements, which underpin Britain's competitive retail gas market, the central register and other databases hold a wealth of data, e.g. supply addresses, expected and actual energy consumption, supplier identity and gas flow information. This data is used to provide information to suppliers when customers switch and to allocate network usage charges to shippers.

The central register and related information flows require major integrated computer systems and highly skilled and knowledgeable people to support the reliable, efficient delivery of these critical services. These services are provided by the 'Central Data Service Provider', a key role for GB plc which is provided by Xoserve.

Xoserve was established in 2005 under the control and ownership of the gas network operators and is responsible for supply point administration (including registration), settlement and transportation billing in the gas industry. For comparison purposes, the scope of Xoserve's operations corresponds to a range of the roles fulfilled by organisations and agents in the electricity market, including some of the central BSC Agents such as the Supplier Volume Allocation Agent ('SVAA'), Electralink and the Supplier Meter Registration Agents ('SMRAs').

More recently, Xoserve's governance and ownership structure has been altered, so that it is now contracted as the Central Data Services Provider ('CDSP'), with oversight from representatives of all key participants in the gas market, many of whom are also electricity market participants as a result of being dual fuel providers.

Xoserve has been responsible for managing customer switching in gas since 2005.

In this role:

- Xoserve processed some 4.5 million gas customer switches in 2016-17
- Xoserve implemented the first round of changes to support faster switching in 2013-14, with the result that Xoserve is now able to manage all gas switches within a 15 day window; and
- The new UK Link platform is already capable of enabling the 5 day window included in the first phase of delivery set out in Ofgem's Reform Package 2 (RP2) requirements without significant changes

Project Nexus

Project Nexus was a major industry-wide programme to implement new systems to support supply point administration, transportation billing and settlement. It has also introduced changes to a number of industry processes and for the first time, introduced a single gas registration system for all GB gas supply points that incorporates supply points classed as 'Unique Sites' and those on independent gas transporter networks.

This was a significant programme of work, involving close collaboration with industry participants which comprised large scale data migration and extensive industry testing and trialling. Working closely with all industry participants and with leadership from Ofgem, with support from PwC, the new systems and processes went live on 1 June 2017. The performance and stability of the new system after go-live is exceeding expectations.

The Nexus programme has resulted in the development of effective programme delivery governance arrangements and ways of working, as well as tools and platforms that could support the development of the CSS. This includes:

- An industry-wide governance and delivery model that has enabled effective cooperation, consensus-building and transparency
- Established partnership arrangements with Xoserve's key suppliers, principally PwC, Baringa, Wipro and SAP;
- Management of effective end-to-end industry testing through the market trials platform
- Risk-based measurement and progression through life-cycle stages (e.g. market trials exit)
- Development of a reliable and effective approach to safely manage a complex 'old world' to 'new world' transition across all impacted participants; and
- Data migration processes and cutover procedures that could be extended to include electricity

The Xoserve UK Link platform

There are four principal components to the new UK Link platform:

1. SAP IS-U, which is an integrated system for supply point administration, transportation billing and settlement
2. AMT Market Flow which enables integration and communication between the SAP IS-U solution and market participants
3. A high availability, dual data centre infrastructure; and
4. Service management systems and tool sets

Each of these components can be extended and re-used for the provision of the CSS.

Xoserve has implemented Version 6 of SAP IS-U. SAP IS-U is the leading market standard solution to process large scale customer numbers in gas and electricity. SAP IS-U provides:

- A data model that has been designed to accommodate dual fuel customers; Xoserve has not utilised the electricity data fields in SAP IS-U at this point of time, but the data model can cover electricity and a single view of customer premises
- The scalability and control to support large volumes of meter point data to high levels of data quality; and
- A platform from which data can be accessed and used to develop innovative, value-add services. All leading data and analytics products have pre-built adapters to integrate with SAP. SAP itself has invested heavily in applications that allow for the data held in its systems to be accessed more readily by Xoserve, or by interconnected 3rd parties and innovators

SAP IS-U is already used by a number of energy retailers for dual fuel and has a proven dual fuel capability.

AMT Market Flow is also a market standard product and has been designed to support both gas and electricity industry data flows. It is used extensively by dual fuel energy retailers. Xoserve has integration in place with over 90 market participants, the majority of whom are dual fuel shippers / suppliers.

UK Link systems are located in a high availability data centre, with connectivity to a backup data centre for disaster recovery. The UK Link infrastructure has been tested extensively and has been sized to accommodate growth in the volume of meter reads that will accompany the smart meter roll out. At present, the UK Link infrastructure can process up to 32 million meter reads a day, versus the 450,000 average daily reads currently experienced.

The UK Link infrastructure is considered to have capacity to absorb the additional electricity meter point data to provide a CSS. In addition, SAP IS-U is designed to be scalable over time, without any significant infrastructure redesign and supported by SAP's product road map.

UK Link includes existing and proven service management tools with the capability to operate a 24/7 support function. These tools are market leading products and capable of re-use to support the CSS. They include an established scheduler, automated server and application monitoring tools, and including cyber security and threat protection.



Xoserve's initial assessment of the faster switching programme RP2 requirements and implementation challenges and risks

Drawing on an understanding of the CSS requirements and experience on Project Nexus, Xoserve see five key challenges if UK Link is to be adopted as the CSS:

- To define detailed and harmonised processes and data standards for gas and electricity and to do so in recognition of the standard data model and functionality provided by SAP IS-U to avoid risky and costly custom development
- To migrate the required electricity meter point data out of the 14 Meter Point Registration Systems ('MPRS') in place today and into UK Link
- For market participants to change their systems to accommodate the new harmonised process and data format
- To undertake extensive end-to-end market testing to validate the data flows and operation of the switching process across the impacted participants; and
- To establish and operate governance and programme management over what will be a complex programme with over 100 participants

Xoserve has already committed to work collaboratively with Gemserv to provide the MIS requirements set out in Ofgem's RP3 option enabling the industry to leverage the central service provider's capability rather than procure a new solution and adding to service delivery landscape.

With any other solution there will also be the requirement for additional and substantial work to:

- Provision and test new infrastructure capable of holding the combined electricity and gas meter point data
- Design, build, deploy and test a new functional solution to act as the CSS
- Design, build, deploy and test new integration with market participants
- Design, build, deploy and test new integration with UK Link
- Migrate and potentially transform gas meter point data out of UK Link and into the new CSS; and
- Design, configure and deploy new service management tools for the CSS

This work (and the cost / risk) could be avoided if UK Link was used as the platform for the CSS.

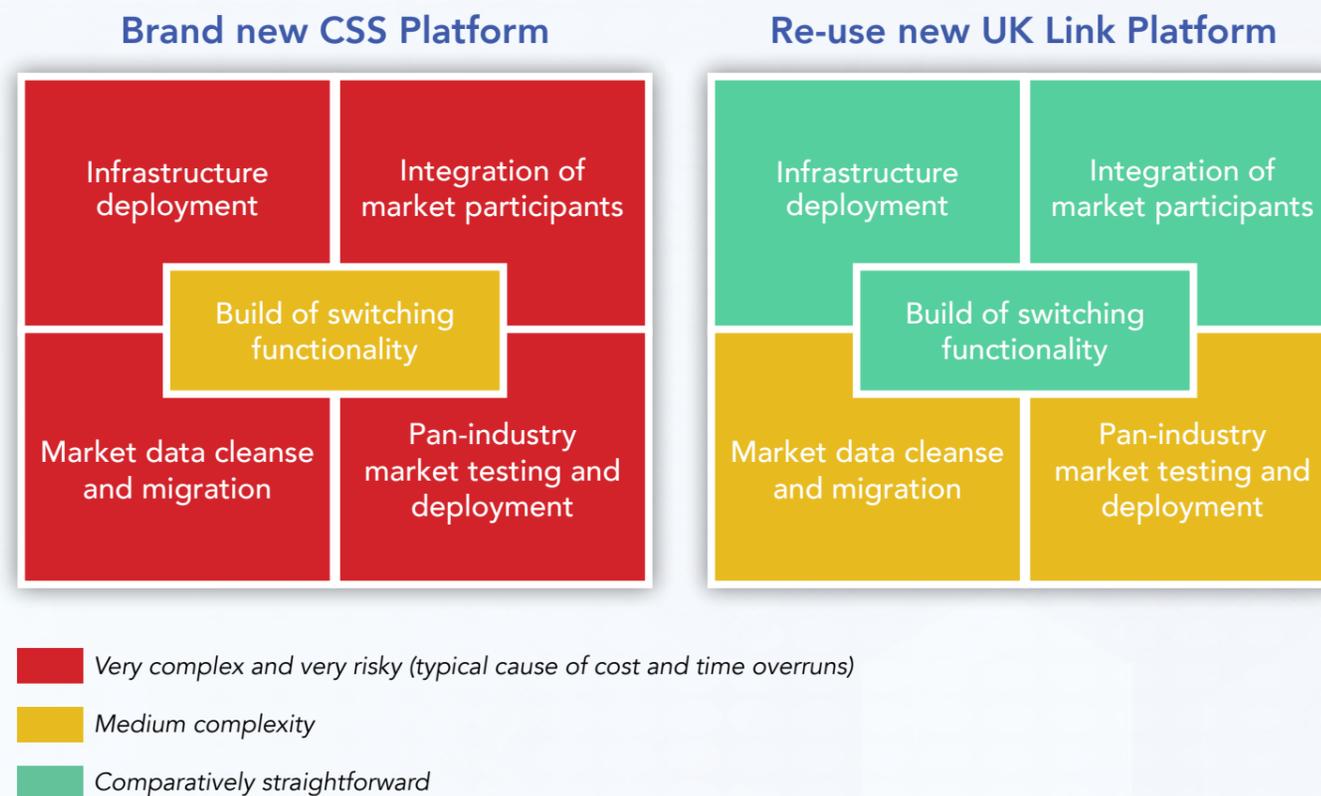
In addition, it is also likely that a new solution will require market participants to make more extensive changes to their own systems to integrate with the new CSS. A reasonable benchmark for how complex introducing a completely new CSS would be for the market, is to consider the time frames and whole market engagement involved in Nexus, even after avoidable delays have been subtracted.

It is also important to recognise the significant challenge in the design of the processes and data model associated with any new CSS. The definition of the detailed process and data model needs to be undertaken in light of the standard design and functionality of the chosen software to avoid the cost and risk of unnecessary custom development. However, in the event that a procurement is undertaken to select a solution other than UK Link, this specification will take place before a technology solution is known.

Capability to re-use Nexus programme and UK Link system to accelerate and de-risk delivery of the central switching service

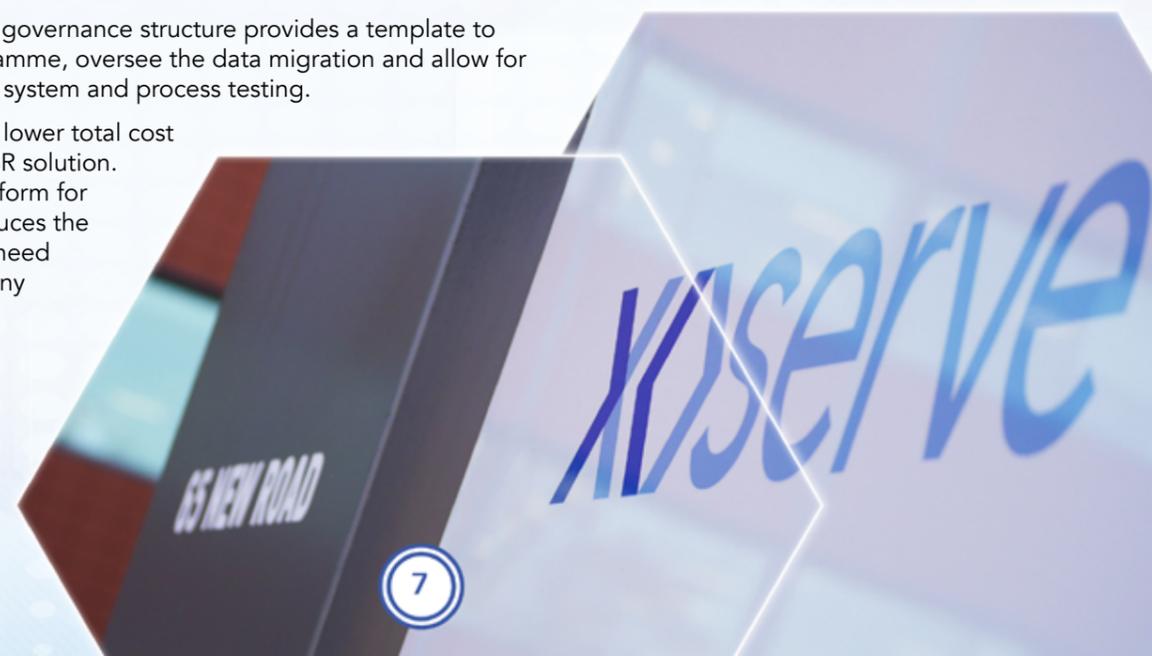
The UK Link system and Nexus programme represented a very significant investment of cost and time by all participants in the gas industry, many of whom are dual fuel operators. Therefore, Project Nexus has been a substantial whole-market investment. Ultimately this investment was funded by customers. Xoserve believe that there is a compelling case to leverage this investment to the benefit of consumers and market participants in order to simplify, de-risk and accelerate the delivery of the CSS and therefore support the fastest path to delivering the benefits to the end consumer.

Use of UK Link provides access to a proven, mature, market standard product to support a high volume of dual fuel customers. The UK Link solution avoids the cost and risk in the build of a new system, new integration, new infrastructure and new service management tools. It also halves the scale and complexity of the data migration task. This is illustrated in the schematic below.



The Nexus programme governance structure provides a template to manage the CSS programme, oversee the data migration and allow for end to end integration, system and process testing.

UK Link also provides a lower total cost of ownership for the CSR solution. It provides a single platform for future changes and reduces the number of parties that need to cooperate and test any future changes.



Xoserve's plans during the consultation period

Over the course of the consultation period, Xoserve will be supporting customers and stakeholders to understand the benefits and risks of leveraging the UK Link platform as the CSS. Xoserve will begin work to better understand the changes required to adopt UK Link as the CSS, including consideration of the overall implementation plan, drawing on our learning from Project Nexus on the importance of a timeline for end to end industry testing. During August, Xoserve will arrange one-to-one meetings with as broad a cross-section of customers and interested parties as time allows, in order to hear your initial views and discuss any concerns you may have or benefits we may have missed.

Xoserve plan to hold a number of industry engagement days in early September to jointly explore the scope of the programme to deliver CSS.

Xoserve anticipate publishing a number of position papers that respond to the questions that are received during these discussions. The position papers and FAQs will be made available on Xoserve's website.

If you have any immediate questions please contact:

box.xoserve.css@xoserve.com

The logo for Xoserve, featuring a stylized 'X' icon composed of two overlapping blue shapes, followed by the word 'oserve' in a blue, sans-serif font.