

PwC Project Nexus Positioning Paper  
*Analysis of the risks to Project  
Nexus go-live on 1 October 2016  
and consideration of the  
alternative implementation  
scenarios*

***Project Nexus***

***Confidential***

*02 June 2016*

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# *Analysis of the risks to Nexus go-live on 1 October 2016*

## *1. Executive Summary*

- This document is **the PwC Project Nexus Positioning Paper**, which analyses the risks to Project Nexus go-live on 1 October 2016, sets out PwC's current view on the viability of this date and considers the alternative implementation scenarios. This analysis and our conclusions are based upon our Deep Dive Review into the Xoserve central system solution, our assurance and bilateral interactions with participants, our experience of managing large scale cross-industry transition programmes and our experience of implementing/reviewing SAP IS-U (a key component of Xoserve's solution platform).
- The PwC analysis and recommendation is against the stated intention of **a fit-for-purpose gas settlement solution that supports industry requirements, is stable and sustainable and enables a positive consumer experience**. Against this intention, our key finding is that 1 October 2016 go-live is highly unlikely to be achieved, with a four month delay the most likely outcome based on the known programme issues and residual risks.
- Following careful consideration of the relative merits of the viable alternative implementation approaches, we recommend that **Project Nexus continues with a programmed delay ('Scenario C')**:

*Continue with the current approach for Market Trials and Performance Testing but, adopt a delayed target implementation date now in order to reflect experience to-date in Market Trials, introduce contingency, add a dedicated regression test period and reduce levels of parallel activity in the current implementation approach. **Target go-live date between 1 February – 1 April 2017.***

- In making this recommendation, we draw participant attention to (1) the principle that the scope of the functional solution will remain unchanged; (2) that **all efforts should be made to complete Market Trials by 31 July 2016**; and (3) that Xoserve should continue to press on with performance testing, data migration and transition planning. We believe it is in the best interests of the industry and consumers that confidence in the end-to-end solution is gained through the completion of rigorous Market Trials at the earliest possible date.

## 2. *The purpose of this positioning paper*

This document is one of a set of three documents that have been issued in support of Ofgem's 2 June 2016 consultation to consider alternative options for a successful implementation of Project Nexus. The three documents are:

### 1. **PwC Project Nexus Positioning Paper**

Analysis of the risks to Project Nexus go-live on 1 October 2016 and consideration of the alternative implementation scenarios. This has been informed by the PwC Deep Dive Review into Xoserve's delivery of the central solution.

### 2. **Project Nexus Planning Scenarios**

Alternative planning scenarios for Project Nexus. The aim of the scenarios is to present an analysis of the different delivery approaches in order to facilitate a decision on the most appropriate timeline that balances the desire of all parties for an early delivery against the risk to consumers and the market.

### 3. **Project Nexus Go/No Go (GONG) Criteria and Assessment**

Describes the Go/No Go (GONG) framework and assessment approach that will be used to support the decision to proceed with go-live on an agreed date and to commence with the associated cutover plans.

As the Nexus programme moves into the critical phase of concluding Market Trials and preparing for transition, with four months before go-live, there are a range of challenges being experienced by Market Participants and Xoserve that place a 1 October 2016 go-live date, at considerable risk. Whilst there is a desire by all parties for as early an implementation as possible, this situation demands that there is open, transparent dialogue around the contingency and alternative scenarios to deliver the programme as soon as possible.

We acknowledge that Market Participants are facing a congested period of change over the next 12 to 18 months and need a clear direction on whether the Nexus programme is likely to deliver as planned on 1 October 2016 and, if not, on what date. We also support the requirement of Market Participants to play a key part in the consultation and decision-making process around any alternative plan for implementation.

The purpose of this positioning paper is, therefore, to:

- Set out PwC's current position regarding the viability of a 1 October 2016 go-live date, against the Project Nexus Success Factors outlined in Ofgem's letter of 2 June 2016, which are a further development of industry discussions and the initial GONG framework. Our position is based on a combination of our cumulative programme knowledge, our Deep Dive Review into the Xoserve central system solution, our assurance and bilateral interactions with participants, our experience of managing large scale cross-industry transition programmes and our experience of implementing/reviewing SAP IS-U (a key component of Xoserve's solution platform);
- Set out four high-level planning scenarios (including 3 alternatives to the current go-live scenario) that we believe should be considered by the industry, together with our recommendation on the planning scenario that best meets Ofgem's stated success objectives of **a fit-for-purpose gas settlement solution that supports industry requirements, is stable and sustainable and enables a positive consumer experience**; and
- Clearly summarise our recommended way forward for the industry programme.

It is important to note that the current Project Nexus solution scope should remain the same. We have agreed with Ofgem, therefore, that this positioning paper and the consideration of existing and alternative implementation scenarios should not be taken as an opportunity to consider a reduction (or expansion) in the substantive scope of the solution/programme.

In addition to confirmation of the Project Nexus scope, **we also draw participant attention to the urgent need to continue Market Trials over the coming weeks**. We believe it is critical that existing momentum is maintained as the programme objectives are best supported by progressing Market Trials and

exiting this phase as early as is practically possible. We also remind participants that the solution in the Market Trials environment is materially complete (including Unique Sites) and we expect participants to:

- Fully support the individuals and teams within their organisations that are conducting Market Trials, with appropriate sponsor and senior management oversight as appropriate;
- Continue to focus on completing core and Unique Sites Market Trials by 31 July 2016, accepting that this may not include the completion of regression testing on a stable code set; and
- Provide the requested information to PwC in order that we, together with Ofgem can continue to monitor progress and the level of participant engagement in Market Trials. This will include the information that will be used to judge participant readiness to exit Market Trials and progress to later phases in the industry plan; and
- Continue to engage proactively and constructively during the defect management process and the daily Market Trials calls to highlight key blocking defects to Xoserve so that these can be prioritised for progression.

As the participant-facing solution is largely complete in the Market Trials environment, our assumption is that participants are able to progress their trial activity and, where this is not possible, to clearly articulate the reasons for this. In recent days, the progress data from both participants and Xoserve is showing that some participants are now making progress, whereas others showing no improvement in pace. The reasons for this are varied, but participants should be prepared for closer examination of their Market Trials progress so that key issues are fully understood, together with the identification of any further actions that may be required.

In addition, Xoserve should continue to press ahead with their performance testing, data migration and transition planning as all these activities contribute to lowering overall delivery risk.

#### *The basis and experience on which PwC has founded this analysis*

Our point of view is based on the following industry, programmes and systems knowledge, expertise and experience:

- PwC has been involved in Project Nexus since April 2015, focusing first on evaluating market participant readiness against the original go-live date of 1 October 2015. Following the decision to delay go-live to 1 October 2016, we expanded our role to coordinate reporting against the industry plan and the information presented to the Project Nexus Steering Group ('PNSG');
- Our role was expanded to provide the end-to-end industry Programme Management Office ('PMO') and industry work stream coordination from April 2016. At this point, Xoserve were also brought into the scope of our programme assurance work; and
- Outside of Project Nexus, the PwC team has significant experience of reviewing, providing project assurance or remediation advice to four of the six largest energy suppliers and two water companies who have deployed SAP IS-U as well as drawn upon our team's wider experience of both delivering and assuring major cross-industry transformation programmes in the energy and utilities sector.

Our experience suggests, that the Project Nexus centralised solution provided by Xoserve will constitute the largest implementation of SAP IS-U globally, to date by volumes with very few implementations of equivalent scale and complexity which could be used to gain confidence in successful navigation of Project Nexus risks.

### 3. The current status of the Nexus programme

The programme has been at 'red' status since January 2016 and has been following a plan to address and work around delays, issues and risks that have materialised. With four months remaining, however, there is no clear plan or step change identified across Xoserve and the Market Participants to bring the programme back to meeting the Ofgem defined Nexus Success Factors as outlined in their letter of 2 June 2016.

In order to be successful, the plan requires no more delays, no material defects, swifter resolution of defects, completion of Xoserve UAT to the revised timeline (this is now largely complete), bulk data loading and Performance Testing free from material issues, a significant uplift in Market Trials progress and on time delivery of the final tranche of functionality at the end of June. Essentially, this means that the programme must now see a positive resolution of every critical risk in order deliver a quality solution on schedule.

For the reasons set out below, **we believe that a successful implementation on 1 October 2016 is highly unlikely to meet Ofgem's Project Nexus Success Factors.** Given this, it is prudent to consider alternative dates and plans at this time.

- The **late delivery of RGMA and other functionality into the** Market Trials environment did not align with the assumptions of the original Market Trials plan and approach. The Market Trials approach, designed by the Market Trials Working Group ('MTWG', made up of Market Participants, Xoserve and PwC) was predicated on a materially complete Xoserve solution being available at the start of Market Trials, with full completion of Xoserve's UAT in advance of this. The reality of an incremental delivery of functionality to Market Trials has had the impact of compressing market trial activity, with the trial of core functionality, defect resolution, the trial of new Unique Sites functionality and regression testing now having to occur at the same time. This is a high risk strategy for a single party systems implementation but in a multi-party environment the risks are magnified. Our view, and that of the MTWG, is that regression testing should be executed against a stable code set and this is not possible under the current schedule;
- Against this **compressed timeline**, Market Participants are proceeding with the execution of the mandatory test scenarios that support the operation of critical and consumer facing market processes. They are **not, however, making the required progress** which is placing the exit from Market Trials at risk. The issues that have contributed to this position have included the **'blocking' defects that have halted, and in some cases, continue to halt the efficient execution of end-to-end test scenarios, the complex coordination of testing across participants for certain scenarios such as Change of Ownership ('CoO'), issues with file confirmations and the downtime experienced from the recent priority 1 incident regarding incorrect data being included in some data files** (this is highlighted as the issue occurred shortly after the release of full RGMA functionality and, in our view, caused a loss of momentum at a time when participants, ideally, would have been pressing ahead with confidence). The aggregation of the challenges and issues above is making multi-party testing more complex than first envisaged by the Market Trials approach. Because of these issues we believe that, despite significant efforts from some Market Participants to flex their approach to trials, the required exit from market trial activity by 30th June 2016 will not be achieved, with the exit extended window of Market Trials testing (principally for retesting and defects) to 31 July 2016, also at risk. This concurs with Xoserve's view that their phased delivery of functionality has introduced a six week delay into the Market Trials timeline;
- In addition to the challenges experienced across Market Trials, PwC have completed their independent **Deep Dive Review** of the Xoserve solution design, build and delivery. Whilst concluding that **the solution is likely to be capable of meeting industry requirements**, this review identified a range of more significant risks where there is high likelihood that one or more of these will materialise (we highlight that the majority of these risks were already known within the Xoserve programme). More importantly, the time when the Xoserve programme could confirm that these identified risks will not impact go-live, is potentially too late to allow Market Participants to effectively re-plan, de-couple and resource their activities. Further details of the Deep Dive key findings are set out in **Section 3**;
- The **high risk nature of the cutover and single major release go-live strategy** require a consequently very high level of confidence. There is, however, a misalignment across the market around the breadth and depth of activity that is required during transition. The Transition Planning Group ('TPG') has

agreed a transition approach and is developing a detailed cutover plan (due 24 June 2016) against this approach. There is, however, a commonly held view by many participants, with which we agree, that the cutover plan, while providing a solid basis for moving forward, does not clearly set out in sufficient detail, all the activities required by each participant and how these interrelate. We are receiving consistent feedback that participants have low confidence that the transition approach will be fully effective in offering the high levels of confidence and control over this critical period. Given the increased risk to the market from an early 'point of no return' on the 24 September 2016, together with a 'fix forward' strategy, this misalignment between the agreed TPG approach and wider participants must be explored and addressed. The complexity of the transition allows little or no time to achieve the effective closure of this gap in the remaining time available;

- Whilst Xoserve have used the additional time, gained from the previous go-live delay, to develop a standardised and robust SAP data migration approach, there **are no clearly articulated criteria defined around data quality** and how good this needs to be in order for go-live. Whilst participants and Xoserve have worked collaboratively to date to address some known data quality issues and develop mitigating 'transformation rules' where resolution has not been forthcoming, there is no over-arching framework that clearly articulates risk areas, target criteria and the current level of data cleanse or transformation that has been achieved. This is a key concern as SAP typically requires an enhanced level of data quality and validation for smooth operation. Given the compressed time line, the lack of contingency in Xoserve's data load plan and the complexity faced by participants, there is little or no time remaining to resolve this gap and address any resultant actions needed to safeguard go-live;
- **Market Trials are being conducted on an old data set** and, as agreed between Xoserve and participants impacted, Unique Sites testing will be using dummy portfolio data. Since this data was loaded, Xoserve have made substantial progress on the data transformation rules that mitigate areas where cleanse activity has not been forthcoming from participants. The current schedule, however, allows no time for participants to test using data that has been loaded and transformed using the new rules. This creates a risk that issues will emerge in live operations that were not identified during Market Trials; and
- Xoserve's Performance Testing, including Gas Day testing, is scheduled to conclude just a few weeks before the 1 October 2016 go-live date. In the event of similar performance issues to those that have been experienced in a number of utility companies that have implemented SAP IS-U, there is limited time, if any, to remediate performance issues that could become 'show stoppers'. In addition, there is a high dependency between successful Performance Testing and transition planning in detail. This is of particular concern given that Xoserve's SAP IS-U implementation is the largest global implementation by the number of meter points migrated.

During the Ofgem consultation process (set out in their letter of 2 June), it is anticipated that the Market Participants' views on these key risks will be explored.

## 4. Independent Deep Dive into Xoserve's design, build and delivery of a centralised solution

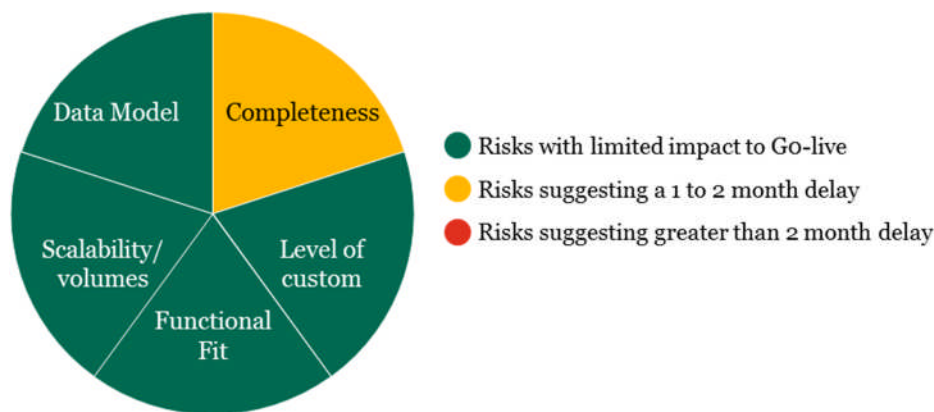
### Deep dive approach and conclusions

Post implementation, the Xoserve SAP IS-U and integrated AMT Sybex Market flow systems will be the critical components in the end-to-end industry processes as they are the 'hub' registration and gas volume allocation systems that drive both end-consumer registration and gas settlement, including distribution and transmission charging. Effective Xoserve systems and processes are a pre-requisite for consumers to switch gas suppliers. In executing the Deep Dive into the Xoserve system solution, evidence of Xoserve's build, test and delivery progress was examined against three key questions:

- Is the solution fit for purpose?
- Is the solution sustainable without significant impact on consumers, the industry and Xoserve?
- Is the solution likely to enable a go-live of 1 October 2016?

#### 1.1 Is the solution fit for purpose?

We concluded that **the design of the Xoserve system solution is fit for purpose, although this has to be proven by testing**, and there is an outstanding exercise to demonstrate that all requirements have been tested. Furthermore, the programme **is planning the right activities to prove the build is robust (and reflects the design) but, is unlikely to do so within the current timescale**. The design follows SAP standard solutions for 80% of the functionality and, in general, where it differs it is because of requirements unique to Xoserve.



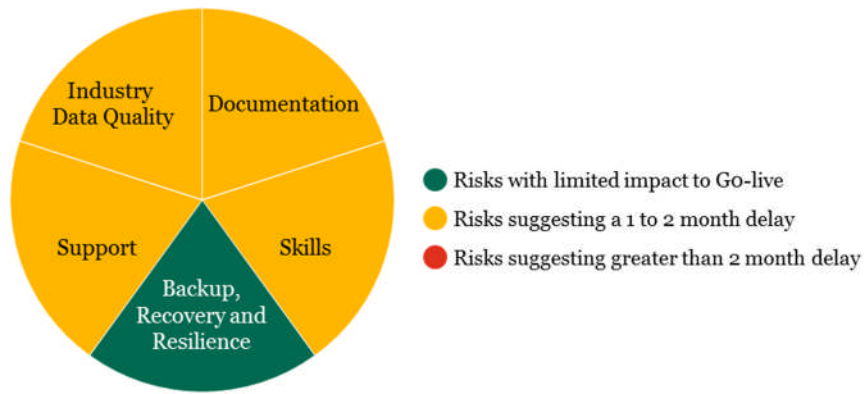
**Figure 1:** The scope coverage and assessment against 'Is the solution fit for purpose?'

#### 1.2 Is the solution sustainable without significant impact on the industry, Xoserve and consumers?

**The programme is planning the right activities to prove the build is robust and sustainable.**

We concluded that **sustainability is dependent on scarce resources to complete design documentation and traceability**. These risks are planned to be addressed and there are further actions to address industry data quality with some defects to resolve. Although **there is work to do**, the activities above should be possible within the 1 October 2016 timetable but, need to recognise that **operational sustainability** requires reporting (for example, portfolio reports) which are yet to be delivered.





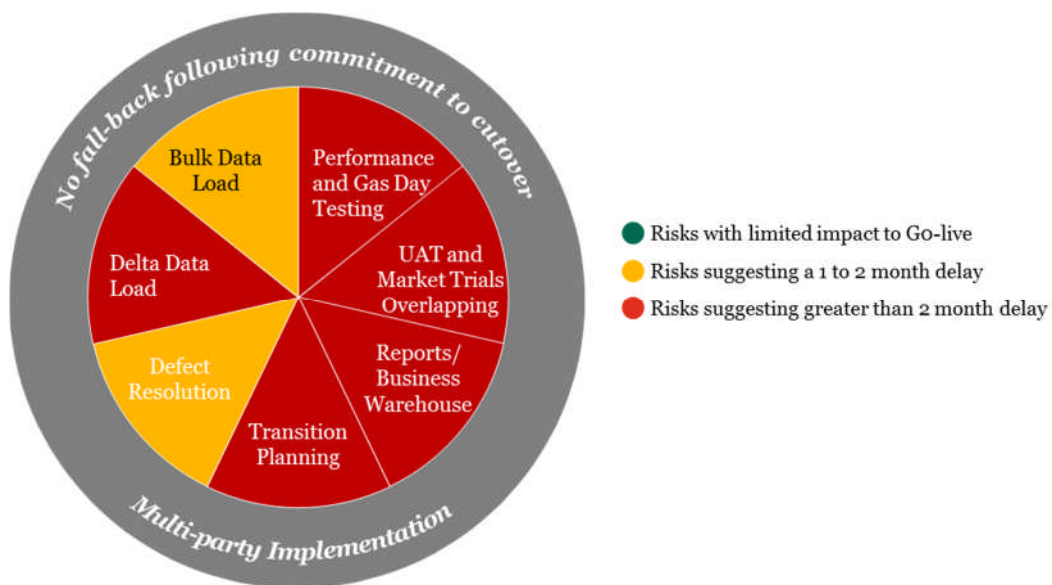
**Figure 2:** The scope coverage and assessment against ‘Is the solution sustainable without significant impact on consumers, the industry and Xoserve?’

### 1.3 Is the solution likely to enable a 1 October 2016 go-live?

**There are a number of issues which result in significant risk to a 1 October 2016 go-live date.** Xoserve recognise these risks and, in some areas, have planned mitigation. Any one of these risks, however, if they were to materialise, could have an impact on the current go-live date and the **chances of none of these risks materialising is low.** Several of these risks have a very high probability of materialising based on our experience of SAP IS-U implementations, consequently, the risk to a 1 October 2016 go-live, is high.

The time period when these risks could materialise (early June to mid-August 2016), is late in the project lifecycle, and this presents three key challenges:

- The ability of Xoserve to remediate within the remaining time period;
- The ability of Market Participants to flex their plans at short notice, in particular given other industry change programmes; and
- Confidence that these risks have been avoided cannot be provided by Xoserve until the **end of August 2016.**



**Figure 3:** The scope coverage and assessment against ‘Is the solution likely to enable a go-live of 1 October 2016?’

The Deep Dive identified a range of residual risks, the majority of which were already known by Xoserve. In **Figure 4** below, we identify those that we believe the potential to impact the programme delivery timeline. Our modelling of the likelihood of these risks crystallising show that there is less than a 1% chance of no further delay in the Xoserve delivery plan and that the most likely delay, taking into account the likelihood, impact, and dependencies between the risks, is a delay of four months. In our risk assessment, we have considered that this is the largest SAP IS-U implementation (globally) by numbers of records, although it does not have some of the complexities of retail customer engagement.

Deep Dive risk area	Likelihood of risk materialising	If risk arises when would impact be obvious?	When project confident risk averted?	Likely impact (months)
1. There is no agreed design solution for the transmission of large invoice files to shippers (We understand that a solution has been recently approved by UK Link Committee).	20%	Early June	End June	1
2. Performance Testing needs to be concluded to demonstrate that customisation has been built effectively.	50%	Early July	End July	1
3. Gas Day Testing – The ability to run batch tasks in a practical overnight window has not been demonstrated with suitable transaction volumes.	50%	Mid-August	End August	1
4. Market Trials data has been subjected to a different set of data transformation rules to the latest rule set which could result in new data defects emerging in go-live.	10%	Early July	End July	2
5. Although fixes have been identified for the majority of data defects, bulk testing is required to demonstrate whether these will fully resolve the data issues.	50%	Early June	End August	2
6. The solution is not sufficiently mature to allow overlapping test phases and additional test cycles are likely to be required.	50%	Early June	End July	3
7. The level of defects remaining from UAT and being raised in Unique Sites is not consistent with a solution ready for final preparation to go-live.	50%	Early June	End June	1
8. There is limited time to test the process for migrating changes to data after bulk migration, 'Delta (Data) Load' is currently in Unit Test but is required by 1st July.	50%	Early June	Mid July	2

9. There is a risk that insufficient time has been allowed for Implementation Dress Rehearsals (IDRs) for Xoserve to demonstrate that they can reliably migrate UK Link to SAP.	50%	Early June	End July	2
10. Design documentation has not been updated for changes to the solution arising from build or defect management, which may make the solution difficult to maintain.	30%	Mid-June	Mid-August	2
11. Late delivery of SAP-BW (Business Warehouse), including portfolio reports for the industry may undermine the level of control provided by Nexus.	50%	End June	End July	2

**Figure 4:** The key residual risks in the Xoserve solution delivery that we believe could impact the delivery timeline.

For a **single major release strategy within a single organisation** it may be practical to continue until one of these risks materialised. In this project, however, **a higher degree of certainty and a lower degree of risk** is required because:

- In a **multi-party implementation**, all organisations must co-ordinate their activities to achieve a successful outcome at the same time; and
- Once cutover has started it cannot be reversed and a fix forward strategy is the only option.

The Deep Dive concluded that **a delay should be considered by Ofgem**, in order to **provide sufficient confidence** and for Market Participants to plan/meet their part of the Nexus requirements.

### **Xoserve's comments:**

#### **Nexus Delivery Strategy**

Xoserve have continued to drive to deliver the Nexus requirements at the earliest possible opportunity, whilst ensuring that an appropriate level of quality is maintained to protect consumers and Market Participants. This is in line with the prevailing time-bound Nexus delivery strategy and Ofgem UNC Modification (548).

Xoserve agrees that the Nexus Programme continues to carry a number of risks and that the Xoserve current UK Link programme status of 'Red' indicates a level of risk in achieving the October 2016 implementation date. We agree with many of the risks highlighted within the Deep Dive Report by PwC, which are aligned to those previously reported by Xoserve and Baringa via PNSG. The Programme is, however, also seeing increased confidence from the significant focus on these risks, and as a result of progress made on key areas such as RGMA, Unique Sites, Data and Performance test. We remain concerned about the divergence of progress being made across Market Participants and the potential impact this could have on achieving Market Trials exit and readiness for service operation.

Xoserve agrees with many but not all of the conclusions identified in the PwC deep dive and would assess the probability / impact for some of the risks differently, particularly as the impact point or timelines associated with some of the risks do not directly relate to planned Programme milestones. Xoserve continues to promote that full participation in Market Trials is a critical step in proving the overall solution / industry readiness; that there is a need for a structured criteria based (GONG) decision making process and that contingency planning is required to manage issues arising from such a complex multi-party programme.

#### **Change Congestion and parallelism**

The timing of a move to re-plan or activation of contingency option at this stage in a programme needs to be informed by the overall risk balance of programme momentum, quality of solution and retaining industry commitment and drive to ensure achievement of the earliest possible delivery. Any decision should also consider the change horizon as an extended delay will impact on other programmes in flight or due to start and the industry resource availability for regulatory driven

### **Xoserve's comments:**

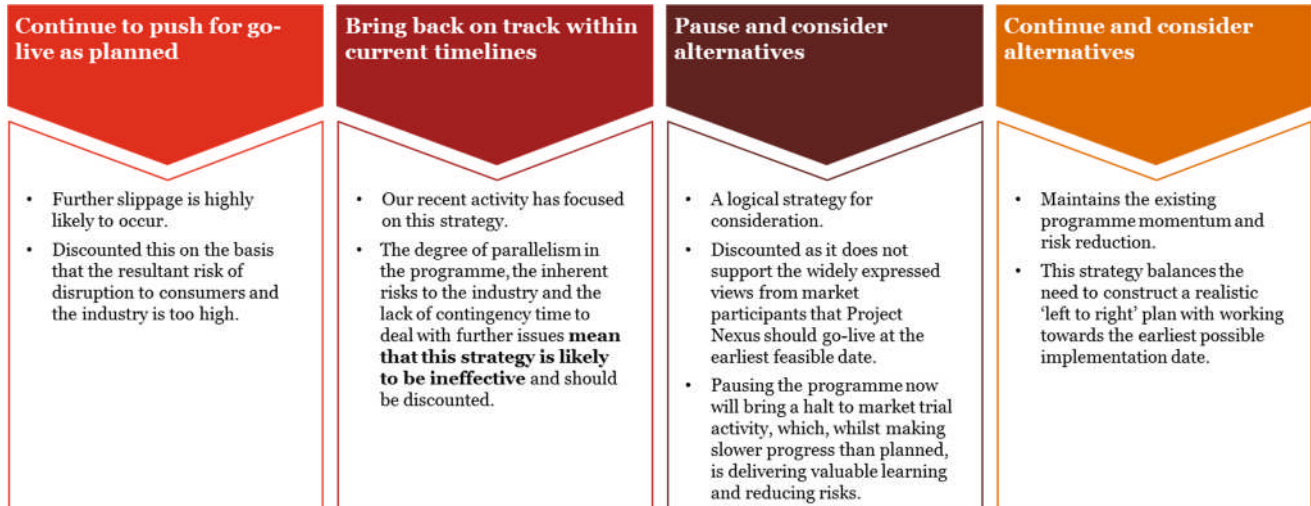
initiatives such as Funding, Governance and Ownership (FGO), Competition and Markets Authority (CMA) recommendations and Centralised Registration Service (Ofgem's Switching Programme). The current priority/phasing of these may also benefit from a review to ease the resource contention given both Nexus and Smart programmes are nearing delivery.

The work undertaken on risks by PwC within the Deep Dive Report and summarized in this consultation, provides an opportunity to drive greater certainty into the delivery of this Programme. However, this opportunity could be missed if decisions are taken too far in advance of risk maturity points (when there is clear momentum in the programme) or before programme wide risks (participant readiness) are fully understood. Xoserve believe that the timing of any re-plan / contingency enactment is critical to minimising any programme delay for all participants, with a view that the earlier any delay scenario is enacted, the longer the potential delay to the Programme will be given the greater degree of re-planning and uncertainty. There is also a balance to be struck at this late stage in a programme in introducing Success Factors that whilst not changing the functional scope of the programme, do potentially drive additional activities on multiple parties leading to a complex and time consuming re-planning of programme activities and a risk of greater parallelism. This is an important factor and indeed PwC point out that parallelism is a key risk in arriving at the assessment that October 2016 is highly unlikely to be achieved.

Xoserve welcomes the role Ofgem have taken on in recent months and believe the additional focus has improved the programme momentum, we also support the establishment of clear Success Factors for major programmes such as Nexus to provide all parties with a clear focus on delivering sustainable and fit for purpose solutions that protect market operation and consumers and inform delivery planning.

## 5. Outline the rationale for a ‘Continue and Consider Alternatives’ approach

Given the conclusion made prior regarding the current status, we believe that the industry programme has four possible courses of action it could take at this point, as follows:



**Figure 5:** The possible courses of action for addressing a ‘red’ programme that is at a late stage in its plan.

Given the current status, we currently see **continue and consider alternatives** as being the only viable approach for the project. Our current objective is to maintain the current programme momentum, continue to build confidence in the end-to-end solution and ensure that an appropriately constructed and realistic industry programme plan, founded on what is currently known, is developed in parallel.

In arriving at this way forward, we have assumed that the business case for Project Nexus is sound and that the scope should neither be increased or decreased, thereby confirming the programme should continue.

Whilst this planning activity continues and expands to include greater engagement with the industry, we believe that it is vital that the current and short-term planned industry programme activity continues, with focus on the following specific areas:

- Xoserve delivery of the remaining areas of functionality at the end of June;
- Performance test of the Xoserve solution – again, completion of this key activity will build industry confidence that the Xoserve solution will cope with the required processing volumes and timelines; and
- The data migration and cleansing activity that is ongoing at Xoserve and Market Participants.

Whilst we are signalling consideration of alternative Project Nexus go-live dates alongside the current date, we draw participant attention to the milestones that are set out in the current plan and **we are minded to retain Market Trials exit at 31 July 2016**, until the approach to incorporating regression testing and any required changes to the market plan are confirmed. Under all scenarios, participants need to continue with market trial activity in the short to medium term as this continues to de-risk the end-to-end programme.

As reiterated throughout this paper, we believe that **it is in the best interest of consumers and the industry that efforts continue to validate, through rigorous Market Trials, that industry processes function effectively across participants and are supported by the new and adapted systems**. Achieving this objective will eliminate significant risks to consumers and participants and allow room for greater focus on readiness, transition and post go-live support arrangements. Again, we draw participant attention to the fact that the industry-facing solution and functionality is largely complete in the Market Trials environment.

## 6. Outline of risks, cost implications and features of current and alternative scenarios for go-live

Under the 'continue and consider alternatives' approach, we have developed three alternative scenarios for the delivery of Project Nexus. For completeness, these are presented alongside a fourth 'continue' scenario, which represents a continuation of the current approach.

The scenarios are therefore as follows:

**A. Continue:** Continue to drive for a 1 October 2016 go-live as per the current published implementation plan and continue to accept a high level of delivery risk. Should any of the key risks identified by the programme and through the PwC Deep Dive Review materialise or the industry fail to meet the agreed exit criteria for Market Trials, the go-live date is likely to slip, potentially at short notice. **Target go-live date 1 October 2016.**

**B. Continue with checkpoint:** Continue to drive for a 1 October 2016 go-live, as per current published implementation plan with a defined checkpoint against the GONG framework in early August to review ongoing viability of the target go-live date. The checkpoint decision will identify whether to continue to drive for a 1 October go-live or invoke two months of contingency. **Target go-live date 1 October - 1 December 2016.**

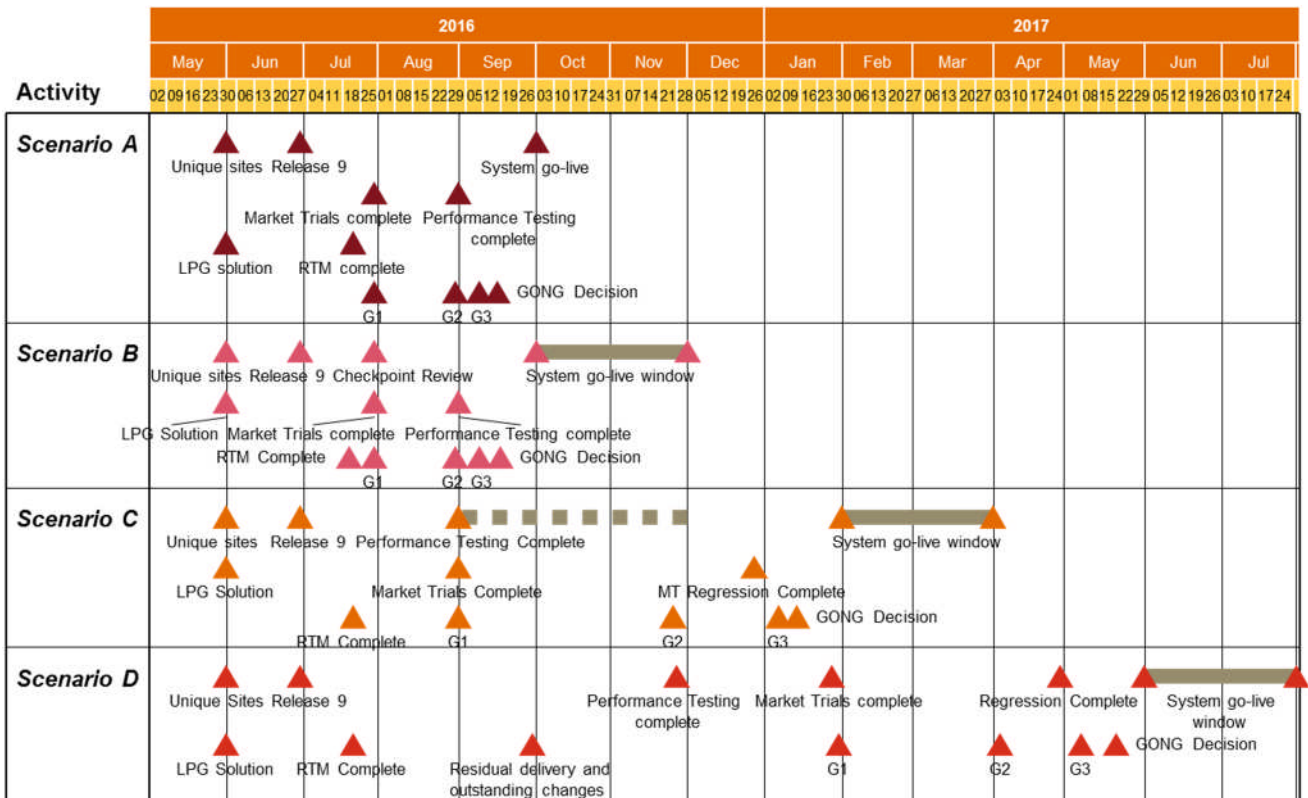
**C. Continue with programmed delay:** Continue with the current approach for Market Trials and Xoserve Performance Testing, but adopt a delayed target implementation date now in order to reflect experience to date in Market Trials, introduce contingency, add a dedicated regression test period and reduce levels of parallel activity in the current implementation approach. **Target go-live date 1 February - 1 April 2017.**

**D. Revised approach with programmed delay:** Continue with the current approach for Market Trials to drive out defects, revise the implementation approach to include an additional, redesigned and structured Market Trials phase, add contingency and reduce levels of parallel activity in the current implementation plan. **Target go-live date June to August 2017.**

All four scenarios assume that the currently scoped Project Nexus functionality is successfully delivered into the Market Trials environment by 30 June 2016. The GONG criteria set out in the **Project Nexus Go/No-Go ('GONG') Criteria Framework and Manual**, issued alongside this paper, will ultimately be used to determine final go-live readiness.

For each of the four scenarios, a high-level timeline has been developed to illustrate the key activities, milestones and dependencies that are required across the primary work streams to support go-live, namely data migration and cleanse, Performance Testing, Market Trials, transition and Service Operations. These are illustrated below:





**Figure 6:** The high-level timelines for the four scenarios. These are based on the currently known information. The preferred scenario from the consultation will be subject to more detailed planning work.

The planning scenarios differ across the four key dimension of data, testing / trials, transition and service operations / business readiness. The key differences are identified in **Figure 7** below. Further information is included in the “Project Nexus Planning Scenarios” document.

	Market Trials	Data Migration and Cleanse	Performance Testing	Transition	Service Operations
Scenario A	<ul style="list-style-type: none"> <li>Market Trials concludes end of July.</li> <li>No dedicated period for defect fixing prior to regression.</li> <li>1 month of regression testing in August.</li> <li>Possibility that there may be insufficient time to remedy any defects found in regression testing prior to go-live.</li> <li>No final regression testing following IDR and Performance Testing.</li> </ul>	<ul style="list-style-type: none"> <li>Test of delta (data) load will take place in parallel to bulk data load.</li> <li>No industry testing using data created using the production data transformation rules.</li> <li>No time to establish Industry-Wide data cleanse plan.</li> </ul>	<ul style="list-style-type: none"> <li>Performance Testing due to complete end July.</li> <li>Gas Day testing scheduled to complete end of August, just 3 weeks before final GONG decision.</li> <li>No contingency to both performance and Gas Day testing.</li> </ul>	<ul style="list-style-type: none"> <li>No Market Participant involvement in Xoserve implementation dress rehearsals.</li> <li>3 implementation dress rehearsals each of three weeks duration.</li> <li>Performance and Gas Day testing overlaps IDRs 1 and 2.</li> </ul>	<ul style="list-style-type: none"> <li>Hypercare support model defined mid-June.</li> <li>Due to time constraints, defect counts and changes it will be difficult to confirm a future release plan ahead of go-live.</li> </ul>
Scenario B	<ul style="list-style-type: none"> <li>As for Scenario A.</li> </ul>	<ul style="list-style-type: none"> <li>As for Scenario A.</li> </ul>	<ul style="list-style-type: none"> <li>As for Scenario A.</li> </ul>	<ul style="list-style-type: none"> <li>As for Scenario A, plus:</li> <li>Checkpoint in early August to assess achievability of 1 October go-live and if necessary invoke up to two months of contingency.</li> </ul>	<ul style="list-style-type: none"> <li>As for Scenario A.</li> </ul>
Scenario C	<ul style="list-style-type: none"> <li>Market Trials concludes end of August.</li> <li>1 month period for defect rectification at the end of Market Trials.</li> <li>3 months of regression testing (October through December).</li> <li>Sufficient time to remedy defects found in regression testing prior to go-live.</li> <li>Ability to regression test after fixes from IDR1 and Performance Testing.</li> </ul>	<ul style="list-style-type: none"> <li>2 additional delta (data) test cycles allow testing before bulk load.</li> <li>Review successful Market Trials transaction files to identify data which would change as a result of the additional transformation rules introduced after the Market Trials data extract. Assess implications of findings and agree any remediation required.</li> <li>Time to establish Industry-Wide data cleanse plan.</li> </ul>	<ul style="list-style-type: none"> <li>As for Scenario A, plus:</li> <li>2 months of contingency to both performance and Gas Day testing.</li> </ul>	<ul style="list-style-type: none"> <li>Paper-based IDR to walk industry through the full cutover.</li> <li>Potential to explore option for Market Participant engagement in IDRs 2 and 3.</li> <li>3 implementation dress rehearsals each of four weeks duration.</li> <li>Performance and Gas Day testing will complete prior to IDR1.</li> </ul>	<ul style="list-style-type: none"> <li>Additional time available to refine Hypercare support model.</li> <li>Time allows sufficient stability to be gained to develop a post go-live release plan.</li> </ul>
Scenario D	<ul style="list-style-type: none"> <li>Existing Market Trials activity continues to identify further defects and concludes end July.</li> <li>3 months to re-design Market Trials and a further 4 months to execute re-designed trials (October through January).</li> <li>1 month period for defect rectification at the end of re-designed Market Trials.</li> <li>2 months regression testing (March through April)</li> <li>Ability to regression test after fixes from IDR1, IDR2 and Performance Testing.</li> </ul>	<ul style="list-style-type: none"> <li>3 additional delta (data) test cycles allow testing before bulk load.</li> <li>Use of data created using production transformation rules in testing.</li> <li>Time to establish Industry-Wide data cleanse plan.</li> </ul>	<ul style="list-style-type: none"> <li>Performance Testing rescheduled to complete end of October</li> <li>Gas Day testing rescheduled to complete end of November, well ahead of final GONG decision.</li> <li>1 months of contingency to both performance and Gas Day testing.</li> </ul>	<ul style="list-style-type: none"> <li>As for Scenario C, plus:</li> <li>Market Participant engagement in IDRs 2 and 3.</li> <li>3 implementation dress rehearsals each of six weeks duration.</li> </ul>	<ul style="list-style-type: none"> <li>As for Scenario C.</li> </ul>

**Figure 7:** The key differences of the four high-level planning scenarios, with ‘PwC assessment’ against the stated intention of a low risk, high quality go-live that is unnoticed by consumers.



These scenarios have been assessed against a number of criteria. The panels below show the summary from this evaluation. Further information is included in the “Project Nexus Planning Scenarios” document.

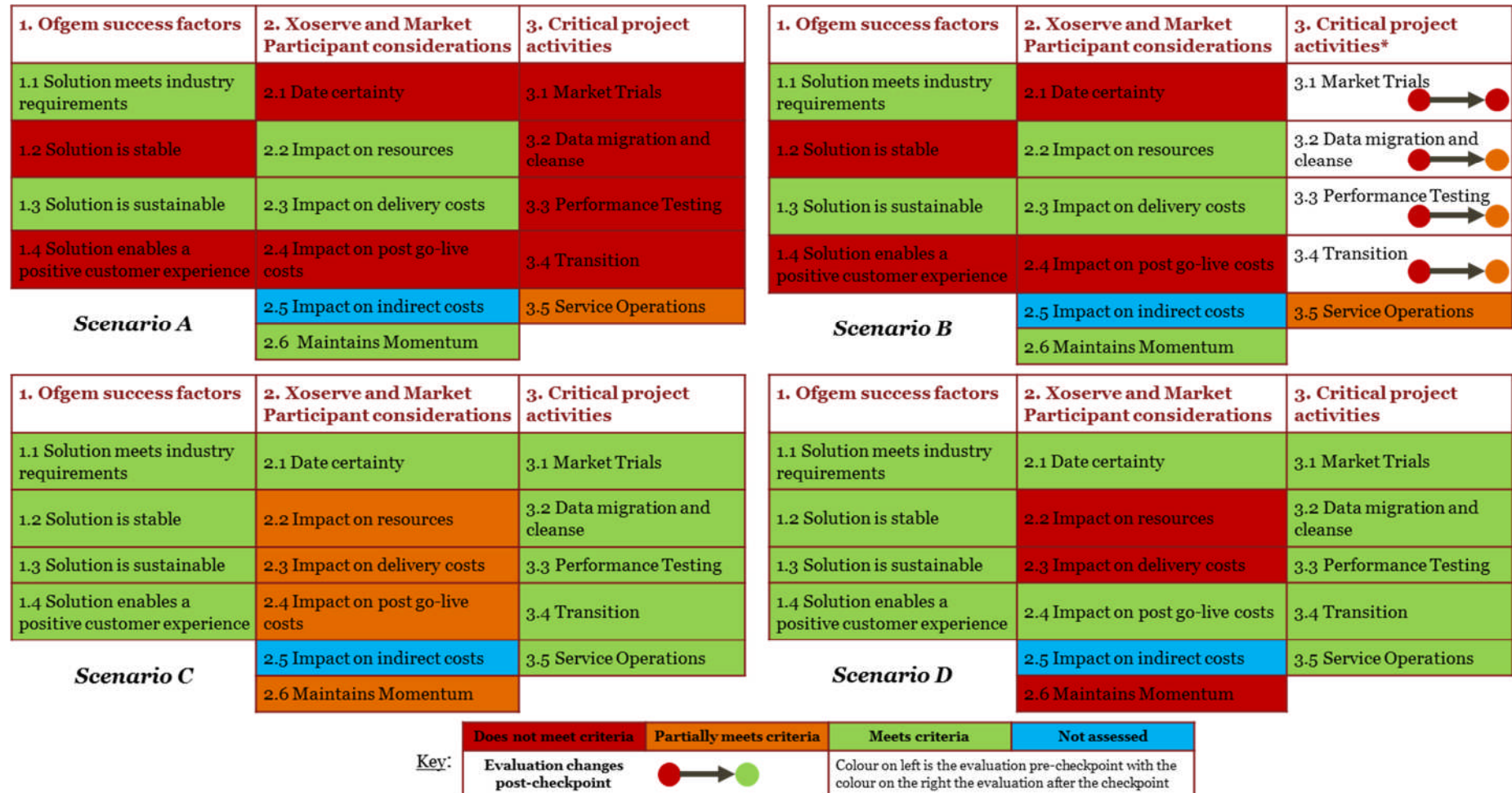


Figure 8: The summary scenario assessment, taken from the “Project Nexus Planning Scenarios” document.

## 6. Our recommendation and the proposed process for consultation/engagement around re-planning

**Based on the findings and analysis to date, our overall recommendations are as follows:**

- The current 1 October 2016 go-live (Scenario A), should be **discounted** as it is highly unlikely to meet the stated objective of a **fit-for-purpose gas settlement solution that supports industry requirements, is stable and sustainable and enables a positive consumer experience**;
- An approach of ‘**continue and consider alternatives**’ should be followed until Ofgem have completed their consultation process and a new Industry-Wide programme plan is baselined and confirmed;
- **Xoserve should continue their recent momentum and progress to their plan** following Unique Sites delivery into Market Trials. Continued focus and pace is required to support Market Trials, complete Performance and Gas Day testing and execute the current Bulk (Data) Load/Delta (Data) Load validation and testing approach;
- **Market Participants should continue their efforts to complete Market Trials.** This is a critical activity to de-risk the programme and build confidence in the readiness to go-live. In some cases, we believe that participants need to increase the pace of trial activity, or clearly identify why testing cannot be progressed. In all planning scenarios the target date for completion of Market Trials is imminent (either end of July or end of August) so there is no room for any deceleration.
- The overall **solution scope and design** remains as currently agreed.

Recommended  
Option

Scenario

C

Continue  
with a  
programmed  
delay

The above findings support taking Scenario C forward as the recommended option for further consultation.

We recommend Scenario C as the most appropriate planning scenario, to support the Project Nexus Success Factors that have been set out by Ofgem. The basis for this recommendation is that Scenario C:

- Provides the best balance between risk and the desire for as early an implementation as possible
- Best supports market participants’ requirements for a period of regression testing on a stable code set once all functionality has been deployed into Market Trials and key defects have been addressed by Xoserve;
- Meets the stated industry requirements to know a viable and realistic implementation date as soon as possible, following a period of consultation and engagement. This scenario provides the earliest decision point to re-plan;
- Allows for a 1/2 gas year cutover;
- Provides extended time for enhanced transition planning and alignment of cutover approach, befitting a ‘fix forward’ strategy where, once cutover is commenced by the industry and Xoserve, there is no fall-back position;
- Mitigates the risks identified in the PwC Deep Dive report, Baringa’s Client Side Assurance reports and those discussed at the Xoserve Programme Management Board (‘PMB’);
- Is consistent with the likely delay identified in the PwC Deep Dive report, which indicated a delay of 4 months, considering the aggregate likelihood and impact of the risks identified;
- Maintains the momentum of Market Trials and Xoserve’s performance testing to build confidence in the stability and performance of the solution;
- Avoids winter peak volumes;
- Provides sufficient time for market participants to re-plan their activities, whilst retaining and increasing the momentum of Market Trials participation; and
- Provides Xoserve and participants with more time to prepare for a smooth transition into hypercare and Service Management.



This document has been prepared only for Ofgem in support of their industry letter dated 02 June 2016 and solely for the purpose and on the terms agreed with Ofgem in our call-offs under the framework agreement dated 11th April 2016. We accept no liability (including for negligence) to anyone else in connection with our work or this document..

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