

Project Nexus Planning Scenarios

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2 June 2016*

Covering note

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. (This document)

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.

This document is currently draft. Comments are welcomed as part of Ofgem's 2 June 2016 consultation.

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Executive summary

Executive Summary

Background

This document sets out planning scenarios for Project Nexus. The aim is to present different planning approaches in order to facilitate a decision on the most appropriate timeline to achieve Ofgem's stated intention of a **managed risk, high quality go-live at the earliest opportunity**.

Approach

Using the findings from the PwC Deep Dive Review, feedback from Market Participants and our experience from other cross-industry programmes, PwC have identified a set of critical project activities required to deliver Project Nexus. These activities were then used to inform the development of four planning scenarios 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.**

These scenarios will be reviewed and refined as a result of the consultation process.

Executive Summary

Each scenario has been evaluated against an evaluation framework comprising three key areas of evaluation.

- 1. Ofgem Project Nexus Success Factors** (set out in Ofgem’s letter of 2 June)
- 2. Xoserve and Market Participant considerations**
- 3. Critical project activities**

1. Ofgem Project Nexus Success Factors	2. Xoserve and Market Participant considerations	3. Critical project activities
1.1 Solution meets industry requirements	2.1 Date certainty	3.1 Market Trials
1.2 Solution is stable	2.2 Impact on resources	3.2 Data migration and cleanse (Bulk and Delta)
1.3 Solution is sustainable	2.3 Impact on delivery costs	3.3 Performance Testing (including Gas Day Testing)
1.4 Solution enables a positive customer experience	2.4 Impact on post go-live costs	3.4 Transition
	2.5 Impact on indirect costs	3.5 Service Operations
	2.6 Maintains momentum	

Executive Summary

Summary assessment of planning scenarios

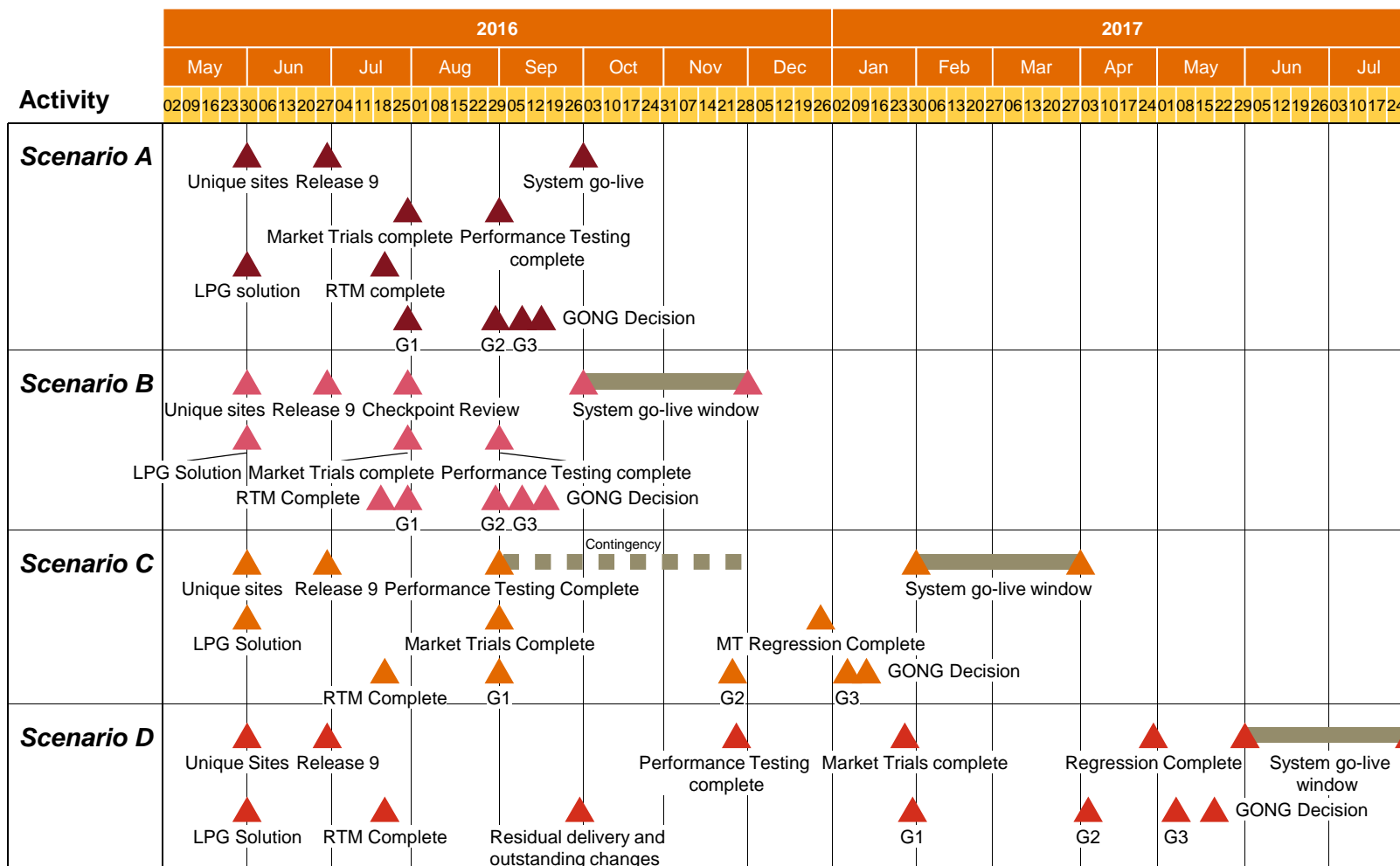
The summary evaluation of each of the four scenarios against the assessment framework is set out below.

1. Ofgem success factors	2. Xoserve and Market Participant considerations	3. Critical project activities	1. Ofgem success factors	2. Xoserve and Market Participant considerations	3. Critical project activities*		
1.1 Solution meets industry requirements	2.1 Date certainty	3.1 Market Trials	1.1 Solution meets industry requirements	2.1 Date certainty	3.1 Market Trials		
1.2 Solution is stable	2.2 Impact on resources	3.2 Data migration and cleanse	1.2 Solution is stable	2.2 Impact on resources	3.2 Data migration and cleanse		
1.3 Solution is sustainable	2.3 Impact on delivery costs	3.3 Performance Testing	1.3 Solution is sustainable	2.3 Impact on delivery costs	3.3 Performance Testing		
1.4 Solution enables a positive customer experience	2.4 Impact on post go-live costs	3.4 Transition	1.4 Solution enables a positive customer experience	2.4 Impact on post go-live costs	3.4 Transition		
Scenario A			Scenario B			2.5 Impact on indirect costs	3.5 Service Operations
						2.6 Maintains Momentum	2.6 Maintains Momentum
1. Ofgem success factors	2. Xoserve and Market Participant considerations	3. Critical project activities	1. Ofgem success factors	2. Xoserve and Market Participant considerations	3. Critical project activities		
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1.4 Solution enables a positive customer experience	2.4 Impact on post go-live costs	3.4 Transition	1.4 Solution enables a positive customer experience	2.4 Impact on post go-live costs	3.4 Transition		
Scenario C			Scenario D			2.5 Impact on indirect costs	3.5 Service Operations
						2.6 Maintains Momentum	2.6 Maintains Momentum

Does not meet criteria	Partially meets criteria	Meets criteria	Not assessed
Key: Evaluation changes post-checkpoint		Colour on left is the evaluation pre-checkpoint with the colour on the right the evaluation after the checkpoint	

Executive Summary

For each scenario, a timeline has been developed to illustrate the key activities, milestones and dependencies across the primary workstreams required to get to go-live, namely Market Trials, Data Migration and Cleanse, Performance Testing, Transition and Service Operations. Further detail in each of these timelines and the associated scenarios is contained within the body of this paper.



Executive Summary

The table below describes the primary differences between each of the planning scenarios as illustrated on the preceding slide.

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

Evaluation criteria

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Introduction to evaluation criteria

In order to evaluate the four planning scenarios, we have developed an evaluation framework that is shown in the diagram opposite.

Within the framework there are three key areas of evaluation:

- **Ofgem Project Nexus Success Factors:** This part of the evaluation framework rates how well the scenario supports the attainment of the Ofgem success criteria which are defined in their letter dated 2 June 2016.
- **Xoserve and Market Participant considerations:** This part of the evaluation framework rates the scenario against a set of more general project delivery considerations that have been raised by both Xoserve and Market Participants.
- **Critical project activities:** This part of the evaluation framework rates how well the scenario mitigates risks to key project activities.

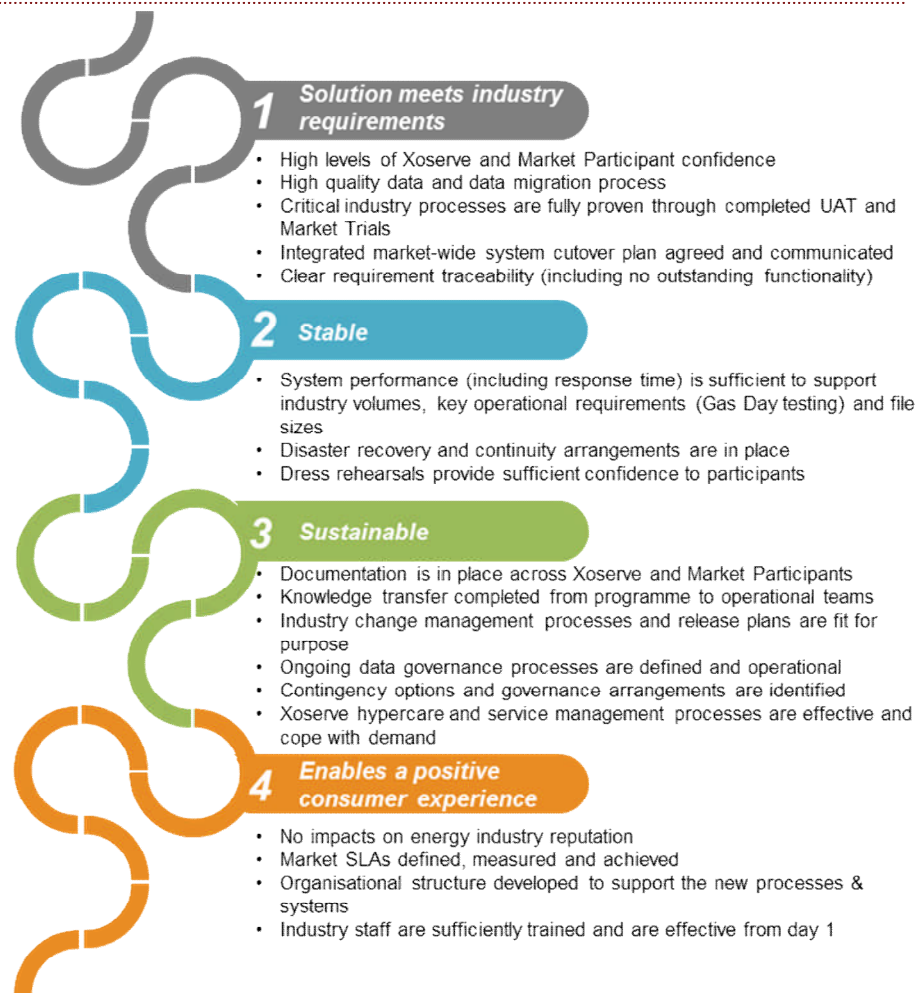
The following pages provide further detail on each of the three key areas.

1. Ofgem Project Nexus Success Factors	2. Xoserve and Market Participant considerations	3. Supports critical project activities
1.1 Solution meets industry requirements	2.1 Date certainty	3.1 Market Trials
1.2 Solution is stable	2.2 Impact on resources	3.2 Data migration and cleanse (Bulk and Delta)
1.3 Solution is sustainable	2.3 Impact on delivery costs	3.3 Performance Testing (including Gas Day Testing)
1.4 Solution enables a positive customer experience	2.4 Impact on post go-live costs	3.4 Transition
	2.5 Impact on indirect costs	3.5 Service Operations
	2.6 Maintains momentum	

Ofgem success factors

Ofgem have developed a set of Project Nexus Success Factors that have been used to inform a revised set of Go/No Go (GONG) decision. These same criteria are also included within the evaluation framework.

The degree to which each scenario supports the attainment of the success criteria is rated on a red/amber/green basis.



Xoserve and Market Participant considerations

These criteria relate to feedback we have had from Xoserve and Market Participants on what is important in the planning of the Project Nexus go-live approach and date. These cover considerations in relation to date certainty, resources and cost implications. They are described in more detail in the table on the right.

The criteria for indirect cost impacts has been included for completeness, however, this has not been assessed as it will vary widely from Market Participant to Market Participant.

2. Xoserve and Market Participant considerations

2.1 Date certainty	The degree to which the scenario provides certainty of implementation timeline to the market.
2.2 Impact on resources	The degree to which the scenario may have an adverse impact on project resources. This could be in relation to resource continuity and resource morale. A specific example of a continuity impact is where offshore resources are working in the UK and their visas cannot be renewed or it could be related to the need to work excessive hours to meet highly demanding deadlines.
2.3 Delivery costs	The costs associated with developing and implementing the system, people and process changes required in order to meet the scope of Nexus. Typically, an extended delivery timeline will increase costs.
2.4 Post go-live costs	The post go-live costs associated with working around any areas of process and system that are not functioning as required, or areas of scope that have not been delivered. Typically, allowing more time for testing the solution and planning transition will lead to these costs being reduced.
2.5 Indirect costs	The costs associated with Market Participants aligning other projects and initiatives with any schedule revision to Nexus.
2.6 Maintain momentum	The degree to which the scenarios maintain current industry focus on Project Nexus and ensures pace remains consistent with a desire for an early as possible implementation.

Critical project activities

We have identified five critical project activities that must be completed to ensure a successful implementation. These are described in more detail in the table on the right.

Our work on the Xoserve Deep Dive Review, Market Participant assurance and Project Nexus programme management, has identified that the current programme approach (Scenario A) leads to significant risks in each of these critical project activities.

The extent to which each scenario meets the description of each critical project activity has been evaluated on a red/green/amber rating with the overall rating being based on an average of the sub-ordinate ratings.

The following pages provide further information on each activity and the factors that have been considered in determining the rating of each scenario.

3. Critical project activities

Description

3.1 Market Trials

Market wide integrated test phase with an agreed approach that is able to be executed and progress monitored and assured.

3.2 Data migration and cleanse

The activity of Xoserve to extract, transform and load data from their legacy system to SAP IS-U along with the activities required by Market Participants to cleanse data.

3.3 Performance Testing

Performance Testing required to demonstrate the solution can process the expected peak volume of activity and support the industry during key operational windows. This includes Gas Day testing to ensure that batches can be processed in the required time window.

3.4 Transition

The process of planning, rehearsing and undertaking the transition to the new Project Nexus arrangements.

3.5 Service Operations

The period of heightened support following a system implementation (Hypercare). Governance during this period and transition to business as usual.

Market Trials

Market Trials are the way that the industry will prove that the central solution works and that cross-industry processes, such as Change of Ownership can be supported. As such it is a critical phase. Market Trials have been split into four sub-criteria as follows:

Level 1: Basic connectivity tests

Level 2: File format tests

Level 3: Scenario testing (single Market Participant)

Level 4: Scenario testing (multiple Market Participants)

Most Market Participants are currently executing Level 3 and 4 tests following an assessment of exit readiness for Level 1 and 2 performed by PwC.

In assessing the risk to a successful outcome of Market Trials, we have identified five sub-criteria. These are described in the table to the right.

3.1 Market Trials criteria

3.1.1 Time for Market Participants to complete Market Trials

This sub-criteria is used to assess the degree to which each scenario allows sufficient time for Market Participants to complete their test plans.

3.1.2 Period of stability after final release to conduct Market Trials

This sub-criteria is used to assess the degree to which each scenario allows for such a period of stability to be included.

3.1.3 Period for defect fixing prior to regression testing

Best practice would allow for a period of defect fixing and UAT regression at the completion of the Market Trials stage. This sub-criteria is used to assess the degree to which each scenario allows sufficient time for such a period.

3.1.4 Period for retest and regression testing after defect fixes

This sub-criteria is used to assess the degree to which each scenario allows for such a period.

3.1.5 Structured approach to Market Trials

A best practice Market Trials would incorporate a structured and managed test to ensure full test coverage and Market Participant readiness. Project Nexus adopted a sandbox type test where Market Participants determine exactly how and when they test each scenario. This sub-criteria is used to assess the degree to which each scenario allows for a structured and managed market test to be included.

Data migration and cleanse

SAP IS-U is known to be particularly exacting in regard to data quality. Data quality is, therefore, a key element in achieving a successful go-live and sustainable solution.

While the majority of data is being migrated from the legacy systems, additional data, including iGT portfolio data, is not currently held in legacy systems and is being included for the first time.

We have identified three sub-criteria for data migration and cleanse. These are described in the table to the right.

3.2 Data migration and cleanse criteria

3.2.1 Use of data loaded using the final transformation rules and routines in Market Trials

This sub-criteria is used to assess the degree to which each scenario allows for the Market Trials data to be refreshed with data loaded using the latest transformation rules.

3.2.2 Time to test and fix Delta Data Load routines

Delta (Data) Load build and test is on the critical path for Xoserve and must be completed prior to the commencement of their dress rehearsals. This sub-criteria is used to assess the degree of contingency that each scenario allows for the completion of Delta (Data) Load testing.

3.2.3 Time for the industry to define and execute a structured data cleanse plan

This sub-criteria is used to assess the degree to which each scenario allows time for a more robust industry approach to data cleansing.

Performance Testing

Project Nexus will be the largest SAP IS-U implementation by meter point, globally. In addition, while the PwC Deep Dive Review has found that customisation has been sensibly applied, many of the customised portions relate to performance critical activities.

Given the above, it is essential that the system undergoes a robust Performance Testing to provide confidence that it can meet the requirements of day 1 and the anticipated immediate future. Due to the unique nature of Project Nexus and the size and scale, there is no reference site that can provide confidence that the performance requirements can be met.

Performance Testing will demonstrate that the solution can process the expected peak volume of activity and support the industry during key operational windows and that cutover can be completed to schedule.

We have identified two sub-criteria for Performance Testing. These are described in the table to the right.

3.3 Performance Testing criteria

3.3.1 Time to complete Performance Testing and remediate issues

Performance Testing is on the critical path item on the Xoserve plan. While initial results are encouraging, the testing has progressed slower than planned due to defects and the need to switch environments mid-test. This sub-criteria is used to assess the likelihood that Performance Testing can complete on schedule and the degree to which the Performance Testing environment exactly matches the planned production environment.

3.3.2 Time to complete Gas Day testing and remediate issues

On the current schedule, Gas Day testing, is scheduled to conclude 3 weeks before the final GONG decision. Given this, there is limited time, if any, to remediate any performance issues. This sub-criteria is used to assess the degree to which issues identified during Gas Day testing can be remediated and retested without causing a delay to the implementation.

Transition

Transition covers the process of planning, rehearsing and undertaking the transition to the new Project Nexus arrangements.

Due to the multi-party nature of Project Nexus, it is not possible to reverse out of the transition once the cutover of the central Xoserve system has started. This is because Market Participants must simultaneously (or, in many cases, in advance) cutover their new systems. Because of this, the confidence requirement for commencing transition needs to be very high and sufficient evidence must be established from dress rehearsals to provide a high level of certainty that the cutover and overall transition can work successfully within the time allowed.

Lastly, there are certain periods of the year and dates within the year where the cutover to the new Nexus systems will be more or less disruptive.

Based on the above, we have identified four sub-criteria for transition. These are described in the table to the right.

3.4 Transition criteria

3.4.1 Cross-industry transition plan	This sub-criteria is used to assess the degree to which it is possible to develop such a plan in the time available.
3.4.2 Scope of dress rehearsals	This sub-criteria is used to assess the degree to which dress rehearsals involving Market Participants can be undertaken in the time available.
3.4.3 Time available for dress rehearsals	This sub-criteria is used to assess the degree to which the time allocated to each dress rehearsal factors in contingency to enable any issues identified over the course of each IDR to be addressed.
3.4.4 Impact of go-live date	This sub-criteria is used to assess the degree to which the scenario implementation dates will disrupt market and Market Participant operations.

Service Operations

Service Operations covers the activities required to design and implement the organisational changes and associated processes and tools required to effectively support the Project Nexus Solution in the production environment. This relates to both Xoserve and Market Participants.

In the period immediately following go-live, enhanced support will be required to ensure that issues are resolved quickly and the market operates effectively.

As with any large-scale, complex systems implementation, further releases of the Project Nexus solution will be required in order to fix priority defects and deliver additional functionality.

3.5 Service Operations criteria

3.5.1 Clarity of governance Enhanced governance will be required during the initial months of live operations in order that operational decisions can be made rapidly and to define post-implementation gates such as the wind down of Hypercare. This sub-criteria is used to assess whether sufficient time exists to define and establish this governance.

3.5.2 Hypercare Hypercare means enhanced support during the initial period of operations. This sub-criteria is used to assess whether sufficient time exists to define and establish an effective Hypercare capability.

3.5.3 Release plan Clarity on future releases for priority defects and additional functionality is required in order for Market Participants to plan business operations and staffing. This sub-criteria is used to assess whether there is sufficient time and stability to establish such a plan well in advance of go-live.

3.5.4 Crisis and incident management Operational contingency plans should be developed to define the industry's response to various incidents. For instance, it may be possible to temporarily relax some business validation rules in the event that they are causing a high number of exceptions. This sub-criteria is used to assess whether there is sufficient time and stability to establish such a set of pre-planned contingency options based on the likelihood of defined incidents and crisis events.

Scenarios and evaluation

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8	Scenario D - Revised approach with programmed delay	39

Approach to evaluation

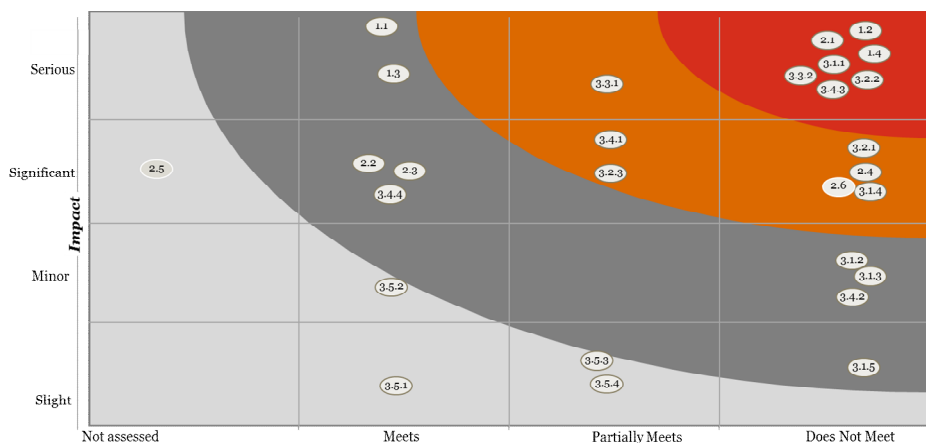
Each of the criteria presented in the preceding slides has been assigned an impact in the event that it were to become an issue. Impacts range on a scale from serious through to slight. The impacts of each criteria are fixed across all scenarios and are presented on the following page.

The evaluation then considers the degree to which each scenario meets the evaluation criteria. This is rated on a scale of meets through to does not meet.

The results of the evaluation are then plotted on an evaluation heat map as shown in the diagram below. This provides a visual representation of the evaluation of impact and degree to which the scenario meets the criteria.

Impact of criteria if not met	
Serious	If this criteria is not met it will have a serious impact (e.g. go-live date will be missed, or customers adversely impacted).
Significant	If this criteria is not met it will have a significant impact (e.g. additional costs are incurred).
Minor	If this criteria is not met it will have a minor impact (e.g. some reactive or emergency actions may be required).
Slight	If this criteria is not met it is unlikely in itself to have an impact.

Degree to which the scenario meets evaluation criteria	
Does not meet criteria	This criteria will almost certainly become an issue.
Partially meets criteria	Given the planning assumptions and constraints it is likely that the criteria will become an issue.
Meets criteria	The plan contains sufficient contingency or the risks to the criteria are viewed as unlikely to occur or can be effectively mitigated.
Highly likely prior to checkpoint	Scenario B only. It is highly likely that the criteria will not be met before the checkpoint. If the checkpoint is successful or contingency invoked then the criteria will move to meets or partially meets.
Not assessed	The criteria has not been assessed. Applies only to criteria 2.4 as we have no clear visibility of indirect cost impacts.



Scenario alignment with evaluation criteria

Impact of criteria not being met

The table below sets out the impact assessment weighting we have applied in the event that each criteria is not met. This weighting is applied consistently across all scenarios. The degree to which each scenario meets each criteria is set out in the following slides.

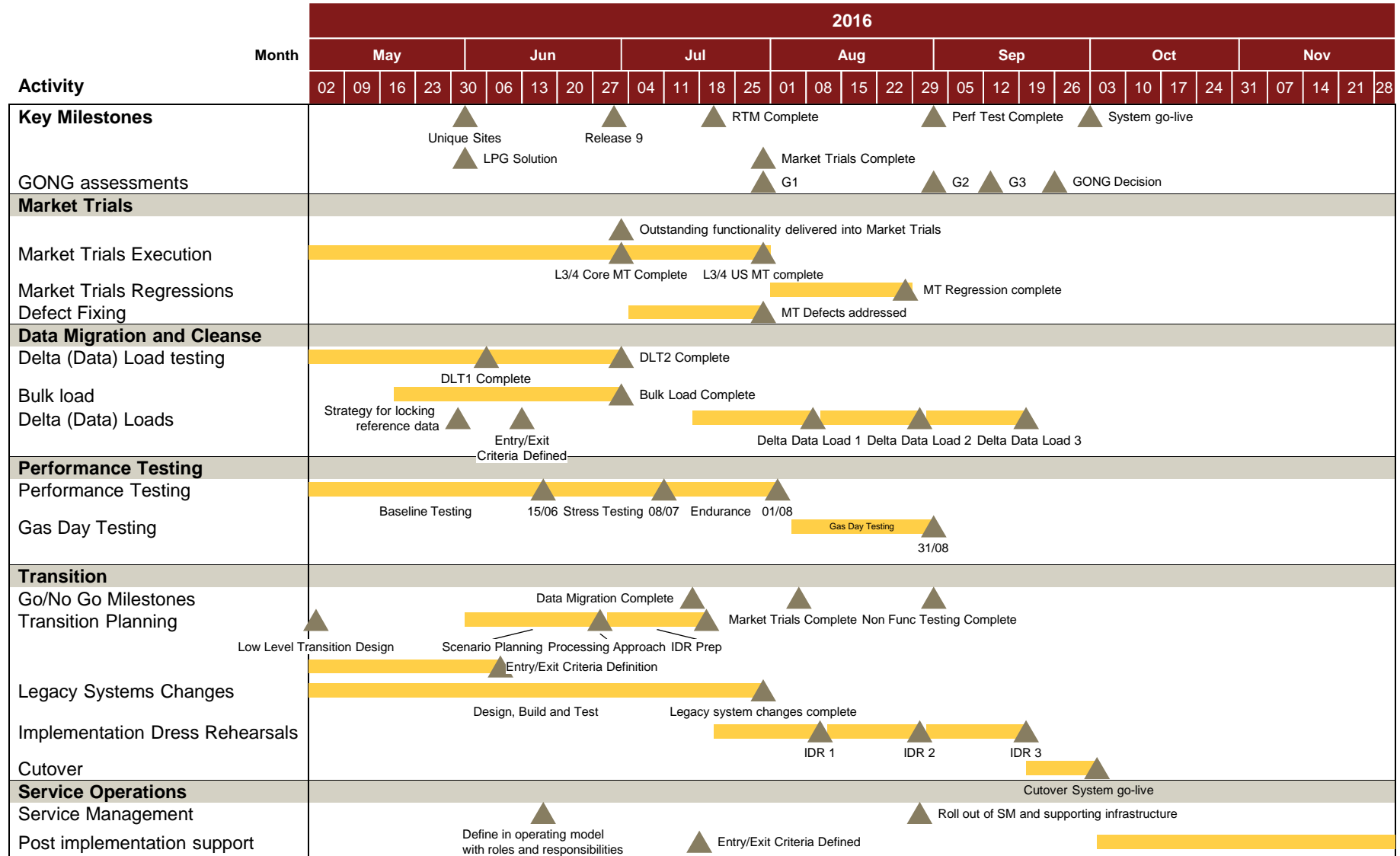
1. Ofgem success factors	2. Xoserve and Market Participant considerations	3. Critical project activities					
1.1 Solution meets industry requirements	2.1 Date certainty	3.1 Market Trials	3.1.1 Time for Market Participants to complete Market Trials				
			3.1.2 Period of stability after final release to conduct Market Trials				
			3.1.3 Period for defect fixing prior to regression testing				
			3.1.4 Period for retest and regression testing after defect fixes				
			3.1.5 Structured approach to Market Trials				
1.2 Solution is stable	2.2 Impact on resources	3.2 Data migration and cleanse	3.2.1 Use of data loaded using the final routines in Market Trials				
			3.2.2 Time to test and fix Delta (Data) Load routines				
			3.2.3 Time for the industry to define and execute a structured data cleanse plan				
1.3 Solution is sustainable	2.3 Delivery costs	3.3 Performance Testing	3.3.1 Time to complete Performance Testing and remediate issues				
			3.3.2 Time to complete Gas Day testing and remediate issues				
1.4 Solution enables a positive customer experience	2.4 Post go-live costs	3.4 Transition	3.4.1 Cross-industry transition plan				
			3.4.2 Scope of dress rehearsals				
			3.4.3 Time available for dress rehearsals				
			3.4.4 Impact of go-live date				
<table border="1"> <tr><td>Serious</td></tr> <tr><td>Significant</td></tr> <tr><td>Minor</td></tr> <tr><td>Slight</td></tr> </table>	Serious	Significant	Minor	Slight	2.5 indirect costs	3.5 Service Operations	3.5.1 Clarity of governance
	Serious						
	Significant						
	Minor						
Slight							
3.5.2 Hypercare							
3.5.3 Release plan							
3.5.4 Crisis and incident management							
	2.6 Maintains Momentum						

Scenario 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.

Risk profile <ul style="list-style-type: none"> No contingency to delivery and transition and so any delays will impact the go-live date or result in work arounds and/or remediation activity for both Xoserve and Market Participants Lack of a dress rehearsal walkthrough with industry may result in Market Participants not knowing cutover process Performance Testing due to complete towards the end of the delivery timeline meaning there is no time to revisit the transition strategy and plan should testing uncover problems which can't be addressed within the testing window. No market testing using production transformation rules 		Dependency Management <ul style="list-style-type: none"> Due to the increased level of parallel activities within the plan, it is difficult to manage the dependencies between activities i.e. the Performance Testing required to validate the transition strategy which is being tested during the IDRs to validate NED length is taking place partially in parallel with transition planning and the initial IDRs 	
Approach to critical project steps		Planning Scenario Assumptions <ul style="list-style-type: none"> Entry criteria for all dress rehearsals: <ul style="list-style-type: none"> Bulk and Delta (Data) Loads tested satisfactorily Cutover plan agreed Ability to process NED data volumes proven Cutover will take 2 weeks Build and test of Delta (Data) Loads will take 2 months and has already started Required technical environments are in place Continued industry support and participation in Market Trials IDR durations include time for defect fixes and environment reset. Any fixes put in for the IDRs will also be applied to the Market Trials environment 	Deep Dive Review Remediation <ul style="list-style-type: none"> There are still a high number of defects within HPQC (Nexus testing tool). These need to be resolved or workarounds identified if system is to go-live. System is not currently stable to allow overlapping test phases and additional test cycles have been recommended. Timeline would not allow for additional cycles. Level of defects being raised is not consistent with a solution entering final preparation for go-live
3.1 Market Trials <ul style="list-style-type: none"> Market Trials concludes end of July. No dedicated period for defect fixing prior to regression. 1 month of regression testing in August. Possibility that there may be insufficient time to remedy any defects found in regression testing prior to go-live. No final regression testing following IDR and Performance Testing. 	3.4 Transition <ul style="list-style-type: none"> No Market Participant involvement in Xoserve implementation dress rehearsals. 3 implementation dress rehearsals each of three weeks duration. Performance and Gas Day testing overlaps IDRs 1 and 2. 		
3.2 Data migration and cleanse <ul style="list-style-type: none"> Test of Delta (Data) Load will take place in parallel to Bulk Data Load. No industry testing using data created using the production data transformation rules. No time to establish Industry-Wide data cleanse plan. 	3.5 Service Operations <ul style="list-style-type: none"> Hypercare support model defined mid-June. Due to time constraints, defect counts and changes it will be difficult to confirm a future release plan ahead of go-live. 		
3.3 Performance Testing <ul style="list-style-type: none"> Performance Testing due to complete end July. Gas Day testing scheduled to complete end of August, just 3 weeks before final GONG decision. No contingency to both performance and Gas Day testing. 			

Scenario A – Continue



Scenario A – Continue

Degree to which scenario meets the evaluation criteria

1. Ofgem Success Factors and 2. Xoserve and Market Participant considerations

1. Ofgem success factors		2. Xoserve and Market Participant considerations	
1.1 Solution meets industry requirements	The Deep Dive Review has concluded that the Xoserve solution is fit for purpose, although this has to be proven through Market Trials. There are plans to address industry data quality with some defects to resolve.	2.1 Date certainty	While the date is fixed for 1 October there is little certainty that the date can be achieved due to multiple critical paths in the Xoserve programme and a lack of available contingency. In addition, Market Participants are not progressing through Market Trials at a fast enough rate to meet the completion date.
1.2 Solution is stable	Performance Testing is being carried out and initial results are encouraging however the schedule is highly compressed with little time to remedy any issues. Market Trials continues to raise a large number of defects. It is not certain that stability can be obtained before completion of Market Trials or commencement of dress rehearsals meaning that there is a risk that the solution will be unstable at transition and into live operations.	2.2 Impact on resources	Resources are secured and committed to the programme. There is potential for resource overload if critical problems arise.
1.3 Solution is sustainable	The programme is planning the right activities to prove the build is sustainable. There are some risks around up-to-date documentation and specialist knowledge that are planned to be addressed. Although there is work to do, the activities above should be possible within the 1 October timetable.	2.3 Delivery costs	Delivery costs up to 1 October are largely known. Additional costs could arise if critical situations arise that require intervention by expensive external resources.
1.4 Solution enables a positive customer experience	The lack of time for Market Participants to complete Market Trials, the absence of detailed Industry-Wide transition and data cleanse plans and the high level of defects found in Market Trials raise concerns over the potential for adverse impacts on customers.	2.4 Post go-live costs	The high levels of defects being encountered in Market Trials indicate the potential for a large number of exceptions during live operations. These will require additional staff and workarounds to be deployed.
		2.5 Indirect costs	Not assessed as we have no clear visibility of indirect cost impacts.
		2.6 Maintains Momentum	Published go-live date is unchanged. Current momentum is sustained.

Likelihood that scenario meets evaluation criteria:

Does not meet criteria

Partially meets criteria

Meets criteria

Not assessed

Scenario A – Continue

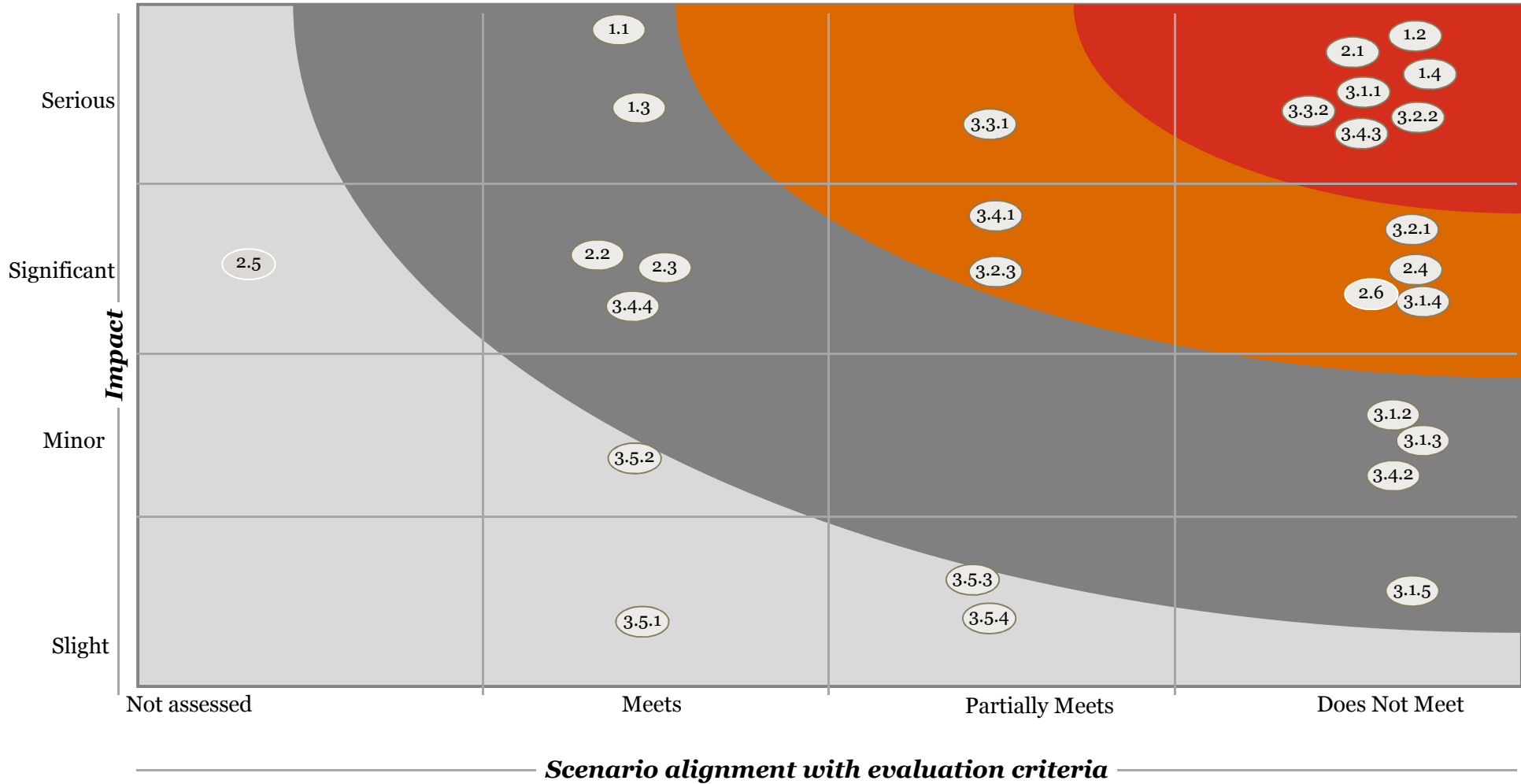
Degree to which scenario meets the evaluation criteria:

3. Critical project activities

3.1 Market Trials		3.4 Transition	
3.1.1 Time for Market Participants to complete Market Trials	There is insufficient time for Market Participants to complete Market Trials based on the current rates of progress.	3.4.1 Cross-industry transition plan	There is limited time to develop a comprehensive cross-industry transition plan.
3.1.2 Period of stability after final release to conduct Market Trials	There is no time for a period of stability due to functionality and defect fixes continuing to be deployed to Market Trials.	3.4.2 Scope of dress rehearsals	There is no time for Market Participant involvement in dress rehearsals and no plan for a formal industry-wide paper based dress rehearsal.
3.1.3 Period for defect fixing prior to regression testing	There is no dedicated period for defect fixing post Market Trials.	3.4.3 Time available for dress rehearsals	IDR 1, 2 and 3 will only last for three weeks each. Within each three week rehearsal period Xoserve must rehearse the set-up, any pre-NED activities, the 9 day NED period and any post-NED activities; remediate any issues; and then tear down the system in order to start the next rehearsal. This is a very tight schedule.
3.1.4 Period for retest and regression testing after defect fixes	A one month period of regression testing can be made available in August. However, the MTWG would prefer two or three months. No final regression following IDR and PT	3.4.4 Impact of go-live date	Transition is scheduled synchronously with the start of the gas year.
3.1.5 Structured approach to Market Trials	The Market Trials approach remains unstructured sandbox testing.	3.5 Service Operations	
3.2 Data migration and cleanse		3.5.1 Clarity of governance	Enhanced governance arrangements are not yet defined but there is time to define and establish these.
3.2.1 Use of data loaded using the final routines in Market Trials	There is no ability for Market Participants to test with data loaded using the latest transition rules prior to go-live.	3.5.2 Hypercare	There is sufficient time to establish a Hypercare function and the timetable allows experienced project resources to roll into this function.
3.2.2 Time to test and fix Delta (Data) Load routines	Delta testing remains on the critical path with no contingency should problems occur.	3.5.3 Release plan	Establishing a firm go forward release plan early enough for Market Participants to plan for the impacts of defects and missing functionality on live operations will be a challenge due to the large number of defects and instability of the solution.
3.2.3 Time for the industry to define and execute a structured data cleanse plan	There is limited time to establish an industry-wide data cleanse plan.	3.5.4 Crisis and incident management	There is limited time to develop a plan and the instability of the system makes it difficult to know where to focus attention.
3.3 Performance Testing		Likelihood that scenario meets evaluation criteria:	
3.3.1 Time to complete PT and remediate issues	Performance Testing remains on the critical path with no contingency should problems occur.	Does not meet criteria	Partially meets criteria
3.3.2 Time to complete Gas Day testing and remediate issues	Critical Gas Day testing is completed just 3 weeks prior to the final GONG decision.	Meets criteria	Not assessed

Scenario A – Continue

Evaluation heat map



Key: ■ Crisis level event ■ Monitor and take action on critical risks ■ Monitor and be careful ■ Be practical – no need for action

Scenario 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.

<p>Risk profile</p> <ul style="list-style-type: none"> 2 months contingency to delivery and transition and so any significant delays will impact the go-live date or result in work arounds and/or remediation activity for both Xoserve and Market Participants. Lack of a dress rehearsal walkthrough with industry may result in Market Participants not knowing cutover process. Performance Testing due to complete towards the end of the delivery timeline meaning there is no time to revisit the transition strategy and plan should testing uncover problems which can't be addressed within the testing window. The checkpoint decision is just 7 to 8 weeks prior to the go-live date. No market testing using production transformation rules. 		<p>Dependency Management</p> <ul style="list-style-type: none"> Due to the increased level of parallel activities within the plan, it is difficult to manage the dependencies between activities i.e. the Performance Testing required to validate the transition strategy which is being tested during the IDRs to validate NED length is taking place partially in parallel with transition planning and the initial IDRs. 	
<p>Approach to critical project steps</p>			
<p>3.1 Market Trials</p> <ul style="list-style-type: none"> Market Trials concludes end of July. No dedicated period for defect fixing prior to regression. 1 month of regression testing in August. Possibility that there may be insufficient time to remedy any defects found in regression testing prior to go-live. No final regression testing following IDR and Performance Testing. 	<p>3.4 Transition</p> <ul style="list-style-type: none"> No Market Participant involvement in Xoserve implementation dress rehearsals. 3 implementation dress rehearsals each of three weeks duration. Performance and Gas Day testing overlaps IDRs 1 and 2. Checkpoint in early August to assess achievability of 1 October go-live and if necessary invoke up to two months of contingency. 	<p>Planning Scenario Assumptions</p> <ul style="list-style-type: none"> Entry criteria for all dress rehearsals: <ul style="list-style-type: none"> Bulk and Delta (Data) Loads tested satisfactorily Cutover plan agreed Ability to process NED data volumes proven. Cutover will take 2 weeks Build and test of Delta (Data) Loads will take 2 months and has already started. Required technical environments are in place. Continued industry support and participation in Market Trials. IDR durations include time for defect fixes and environment reset. Any fixes put in for the IDRs will also be applied to the Market Trials environment. 	<p>Deep Dive Review Remediation</p> <ul style="list-style-type: none"> There are still a high number of defects within HPQC (Nexus testing tool). These need to be resolved or workarounds identified if system is to go-live. System is not currently stable to allow overlapping test phases and additional test cycles have been recommended. Timeline would not allow for additional cycles. Level of defects being raised is not consistent with a solution entering final preparation for go-live.
<p>3.2 Data migration and cleanse</p> <ul style="list-style-type: none"> Test of Delta (Data) Load will take place in parallel to bulk data load. No industry testing using data created using the production data transformation rules. No time to establish Industry-Wide data cleanse plan. 	<p>3.5 Service Operations</p> <ul style="list-style-type: none"> Hypercare support model defined mid-June. Due to time constraints, defect counts and changes it will be difficult to confirm a future release plan ahead of go-live. 		
<p>3.3 Performance Testing</p> <ul style="list-style-type: none"> Performance Testing due to complete end July. Gas Day testing scheduled to complete end of August, just 3 weeks before final GONG decision. No contingency to both performance and Gas Day testing. 			

Scenario B - Checkpoint decision process and evaluation approach

Scenario B – Checkpoint decision

Scenario B includes a checkpoint decision in August. The checkpoint timing relates to when a number of key activities in the critical project steps are due to be completed. These are:

1. The completion of L3/L4 Market Trials at the end of July;
2. The completion of Xoserve Performance Testing (with the exception of Gas Day testing) by the end of July;
3. The completion of Xoserve's first Implementation Dress Rehearsal (IDR) by early August; and
4. The completion of the first Delta (Data) Load (as part of IDR1) by early August.

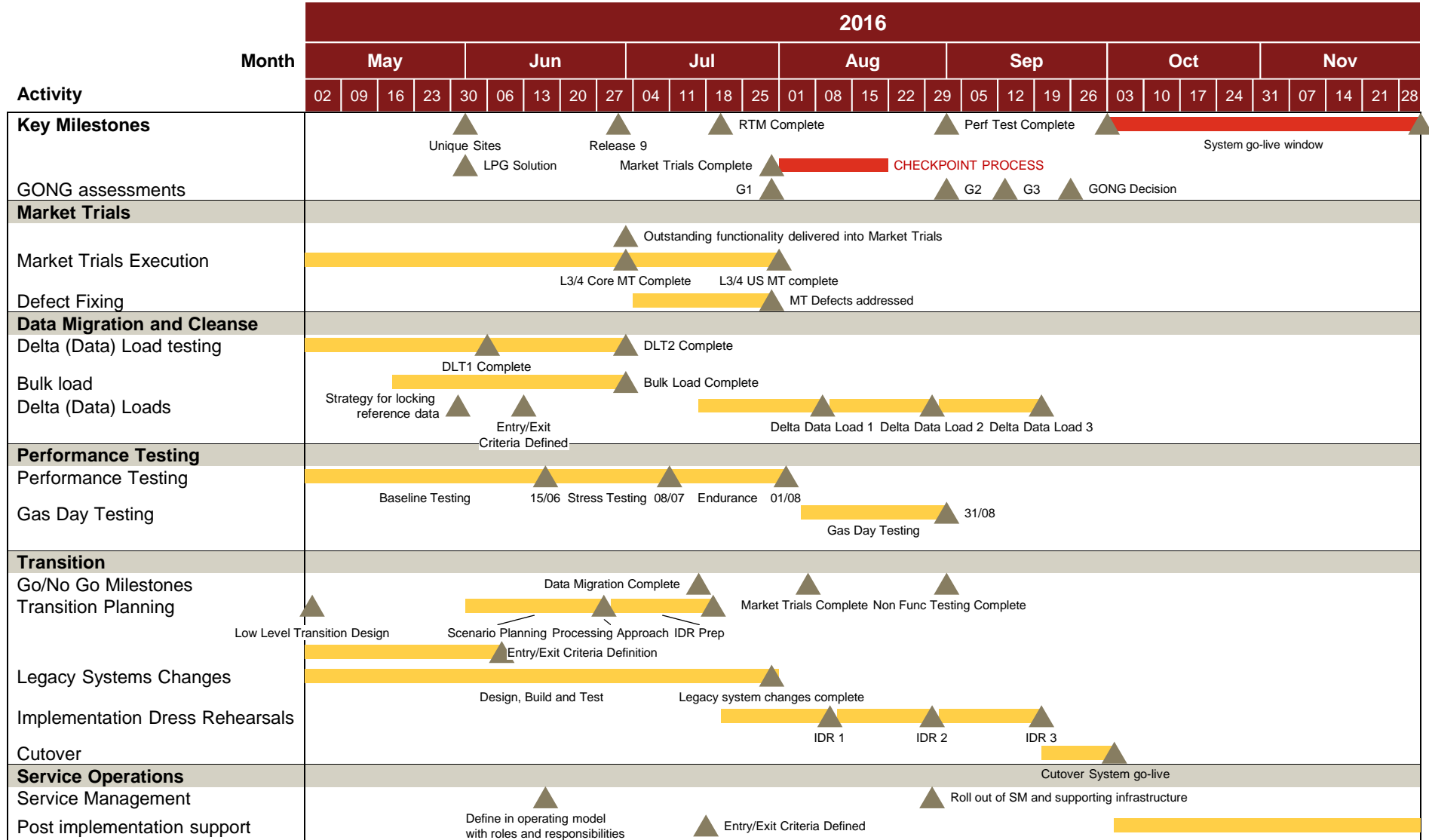
It is envisaged that the status of each of these items will be assessed at a checkpoint in August using the criteria set out in the GONG Framework. The checkpoint would require an assurance activity to verify status, followed by a report and a decision. We envisage that the checkpoint process would take at least two weeks to complete from assurance fieldwork, report preparation through to actual decision. A final decision on the go-live date would then be published in the second half of August.

Scenario B - Evaluation approach

The existence of a checkpoint reduces the risk of criteria becoming issues since, if they do, then by definition the checkpoint will be failed. To take account of this a modification to the criteria evaluation is employed just for scenario B. The approach is as follows:

1. The evaluation assumes that the checkpoint is passed and the implementation plan then follows the same path as Scenario A or that a 2 month contingency period is invoked.
2. Criteria that are not impacted by the checkpoint are rated as before as 'Highly Likely', 'Likely' or 'Unlikely'. There are two possible reasons why a criteria is not impacted by the checkpoint.
 1. The approach adopted is intrinsic to the plan (e.g. 3.2.1, were there is no time to use data loaded using the latest transformation rules in Market Trials); or
 2. According to the plan, certainty will not be obtained in advance of the checkpoint (e.g. 3.3.2 were Gas Day testing does not complete until after the checkpoint)
3. Items where the status must be known prior to the checkpoint have been assessed for alignment with the criteria before the checkpoint and after the checkpoint. Both ratings are shown. If the checkpoint is passed or the 2 month contingency period invoked, then these items by definition will then have a status of 'meets' or 'partially meets' for the remainder of the project.

Scenario B – Continue with checkpoint



Scenario B – Continue with checkpoint

Degree to which scenario meets the evaluation criteria:

1. Ofgem success factors and 2. Xoserve and Market Participant considerations

1. Ofgem Project Nexus Success Factors		2. Xoserve and Market Participant considerations	
1.1 Solution meets industry requirements	The Deep Dive Review has concluded that the Xoserve solution is fit for purpose, although this has to be proven through Market Trials. There are plans to address industry data quality with some defects to resolve.	2.1 Date certainty	While the date is fixed for 1 October there is little certainty that the date can be achieved due to multiple critical paths in the Xoserve programme and a lack of available contingency. In addition, Market Participants are not progressing through Market Trials at a fast rate to meet the completion date. The creation of a checkpoint will provide greater certainty post the checkpoint itself but a failure to pass the checkpoint will result in a late slippage.
1.2 Solution is stable	Performance Testing is being carried out and initial results are encouraging however the schedule is highly compressed with little time to remedy any issues. Market Trials continues to raise a large number of defects. It is not certain that stability can be obtained before completion of Market Trials or commencement of dress rehearsals meaning that there is a risk that the solution will be unstable at transition and into live operations.	2.2 Impact on resources	Resources are secured and committed to the programme. There is potential for resource overload if critical problems arise.
1.3 Solution is sustainable	The programme is planning the right activities to prove the build is sustainable. There are some risks around up-to-date documentation and specialist knowledge that are planned to be addressed. Although there is work to do, the activities above should be possible within the 1 October timetable.	2.3 Delivery costs	Delivery costs up to 1 October are largely known. Additional costs could arise if critical situations arise that require intervention by expensive external resources.
1.4 Solution enables a positive customer experience	The lack of time for Market Participants to complete Market Trials, the absence of detailed Industry-Wide transition and data cleanse plans and the high level of defects found in Market Trials raise concerns over the potential for adverse impacts on customers.	2.4 Post go-live costs	The high levels of defects being encountered in Market Trials indicate the potential for a large number of exceptions during live operations. These will require additional staff and workarounds to be deployed.
		2.5 Indirect costs	Not assessed as we have no clear visibility of indirect cost impacts.
		2.6 Maintains Momentum	Published go-live date is unchanged. Current momentum is sustained.

Likelihood that scenario meets evaluation criteria:

Does not meet criteria







Partially meets criteria



Meets criteria


Not assessed

Scenario B – Continue with checkpoint

Degree to which scenario meets the evaluation criteria: 3. Critical project activities

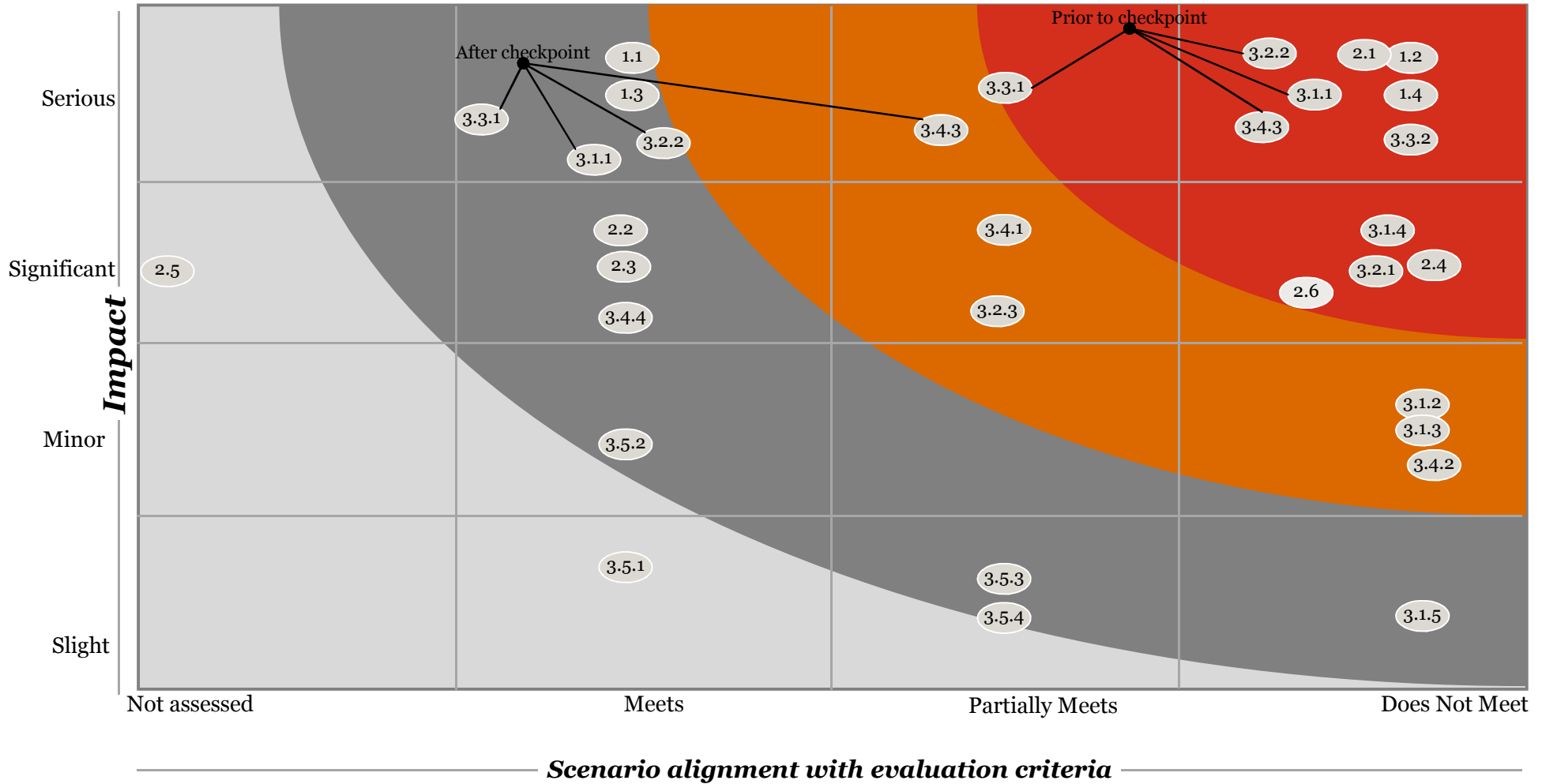
3.1 Market Trials 	
3.1.1 Time for Market Participants to complete Market Trials 	The evaluation assumes that by the August checkpoint it Market Trials will be complete save for regression testing. This is despite the current rate of progress being insufficient to hit that date.
3.1.2 Period of stability after final release to conduct Market Trials	There is no time for a period of stability due to functionality and defect fixes continuing to be deployed to Market Trials.
3.1.3 Period for defect fixing prior to regression testing	There is no dedicated period for defect fixing post Market Trials.
3.1.4 Period for retest and regression testing after defect fixes	Regression testing will not be complete at the time of the checkpoint and only one month is allowed vs the three months preferred by MTWG. No final regression following IDR and PT
3.1.5 Structured approach to Market Trials	The Market Trials approach remains unstructured sandbox testing.
3.2 Data migration and cleanse 	
3.2.1 Use of data loaded using the final routines in Market Trials	There is no ability for Market Participants to test with data loaded using the latest transition rules prior to go-live.
3.2.2 Time to test and fix Delta (Data) Load routines 	The evaluation assumes that delta testing is complete by the August checkpoint. This means that no problems occurred that caused the deadline to be missed.
3.2.3 Time for the industry to define and execute a structured data cleanse plan	There is limited time to establish an industry-wide data cleanse plan.
3.3 Performance Testing 	
3.3.1 Time to complete PT and remediate issues 	The evaluation assumes that Performance Testing is able to complete by the August checkpoint. This means that no problems occurred that caused the deadline to be missed.
3.3.2 Time to complete Gas Day testing and remediate issues	Critical Gas Day testing is not completed until just 3 weeks prior to the final GONG decision.

3.4 Transition 	
3.4.1 Cross-industry transition plan	There is limited time to develop a comprehensive cross-industry transition plan.
3.4.2 Scope of dress rehearsals	There is no time for Market Participant involvement in dress rehearsals and no plan for a formal industry-wide paper based dress rehearsal.
3.4.3 Time available for dress rehearsals 	IDR 1, 2 and 3 will only and last for three weeks each. Within each three week rehearsal period Xoserve must rehearse the set-up, any pre-NED activities, the 9 day NED period and any post-NED activities; remediate any issues; and then tear down the system in order to start the next rehearsal. This is a very tight schedule. By the time of the first checkpoint IDR1 is scheduled to complete but uncertainty will remain.
3.4.4 Impact of go-live date	Transition is scheduled synchronously with the start of the gas year.
3.5 Service Operations	
3.5.1 Clarity of governance	Enhanced governance arrangements are not yet defined but there is time to define and establish these.
3.5.2 Hypercare	There is sufficient time to establish a Hypercare function and the timetable allows experienced project resources to roll into this function.
3.5.3 Release plan	Establishing a firm go forward release plan early enough for Market Participants to plan for the impacts of defects and missing functionality on live operations will be a challenge due to the large number of defects and instability of the solution.
3.5.4 Crisis and incident management	There is limited time to develop a plan and the instability of the system makes it difficult to know where to focus attention.

Likelihood that scenario meets evaluation criteria:			
Does not meet criteria	Partially meets criteria	Meets criteria	Not assessed
Evaluation changes post-checkpoint		Colour on left is the evaluation pre-checkpoint with the colour on the right the evaluation after the checkpoint	

Scenario B – Continue with checkpoint

Evaluation heat map



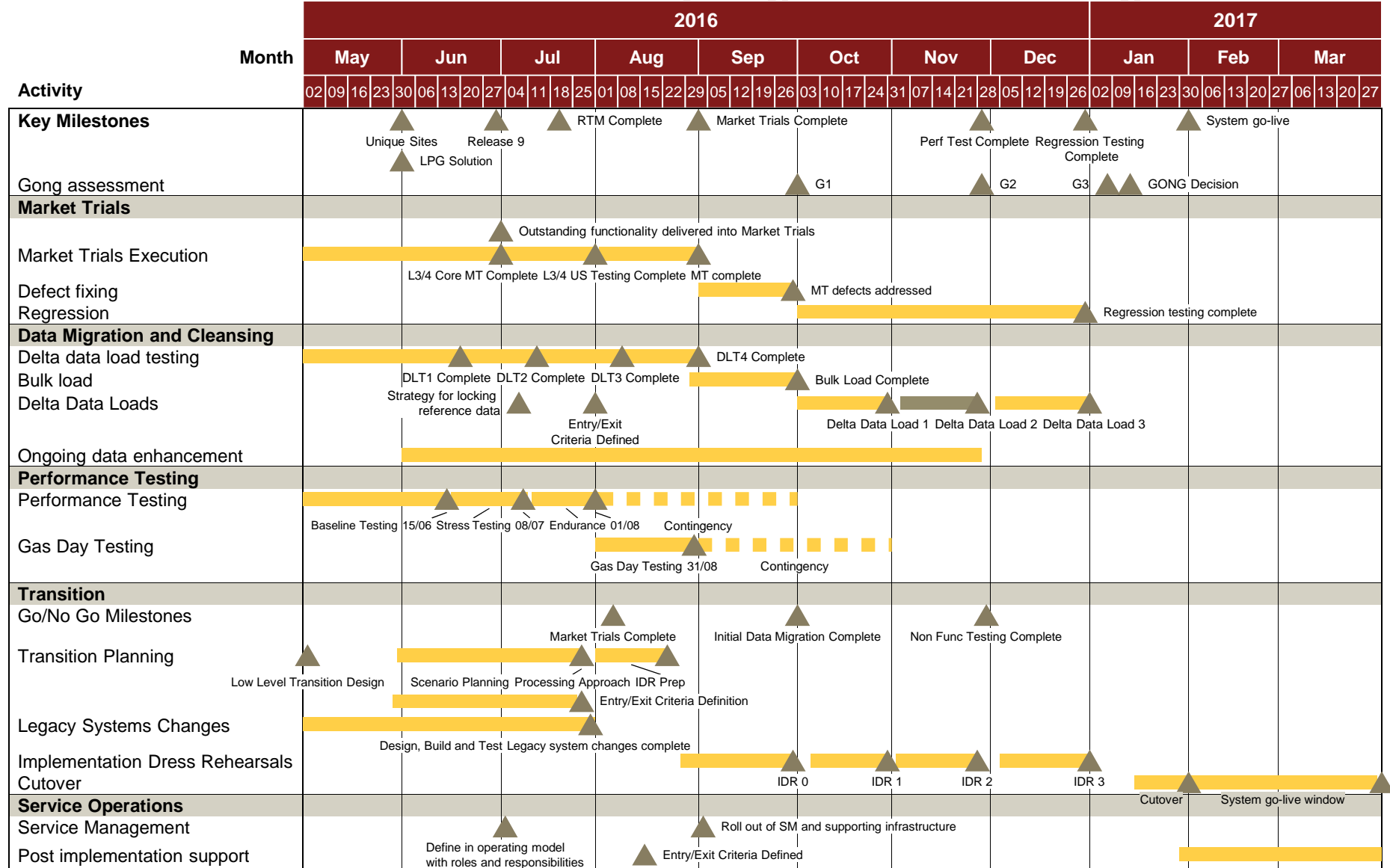
Key: ■ Crisis level event ■ Monitor and take action on critical risks ■ Monitor and be careful ■ Be practical – no need for action

Scenario 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.

Risk profile <ul style="list-style-type: none"> • Extension in timeline allows for mitigation of risks • May introduce a risk to resource continuity and loss of key knowledge for Xoserve and/or some Market Participants as a result of the delay 		Dependency Management <ul style="list-style-type: none"> • Dependency management becomes easier as activities are no longer compressed i.e. Market Trials completed prior to iDRs commencing 	
Approach to critical project steps			
3.1 Market Trials <ul style="list-style-type: none"> • Market Trials concludes end of August. • 1 month period for defect rectification at the end of Market Trials. • 3 months of regression testing (October through December). • Sufficient time to remedy defects found in regression testing prior to go-live. • Ability to regression test after fixes from IDR1 and Performance Testing. 	3.4 Transition <ul style="list-style-type: none"> • Paper-based IDR to walk industry through the full cutover. • Potential to explore option for Market Participant engagement in IDRs 2 and 3. • 3 implementation dress rehearsals each of four weeks duration. • Performance and Gas Day testing will complete prior to IDR1. 	Planning Scenario Assumptions <ul style="list-style-type: none"> • Entry criteria for dress rehearsals 1-3: <ul style="list-style-type: none"> ◦ Bulk and Delta (Data) Loads tested satisfactorily. ◦ Cutover plan agreed. ◦ Ability to process NED data volumes proven. • Cutover will take 2 weeks • Build and test of Delta (Data) Loads will take 4 months and has already started. • Required technical environments are available • Continued Industry support and participation in Market Trials. • IDR durations include time for defect fixes and environment reset. • Any fixes put in for the IDRs will also be applied to the Market Trials environment 	Deep Dive Review Remediation <ul style="list-style-type: none"> • Extending the time between dress rehearsals minimises risk of IDRs overrunning and allowing for the environment to be appropriately cleared down after each rehearsal. • Extending the deadline allows for further communication with the industry to ensure that they can operate their part of the cutover process. • Introducing regression test after Market Trials/Performance Testing is completed provides confidence that defects have been fixed.
3.2 Data migration and cleanse <ul style="list-style-type: none"> • 2 additional delta test cycles allow testing before bulk load, • 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. • Time to establish Industry-Wide data cleanse plan. 	3.5 Service Operations <ul style="list-style-type: none"> • Additional time available to refine Hypercare support model. • Time allows sufficient stability to be gained to develop a post go-live release plan. 		
3.3 Performance Testing <ul style="list-style-type: none"> • Performance Testing due to complete end July. • Gas Day testing scheduled to complete end of August, well ahead of final GONG decision • 2 months of contingency to both performance and Gas Day testing 			

Scenario C – Continue with programmed delay



Scenario C – Continue with programmed delay

Degree to which scenario meets the evaluation criteria:

1. Ofgem success factors and 2. Xoserve and Market Participant considerations

1. Ofgem Project Nexus Success Factors		2. Market Participant considerations	
1.1 Solution meets industry requirements	The Deep Dive Review has concluded that the Xoserve solution is fit for purpose, although this has to be proven through Market Trials. There are plans to address industry data quality with some defects to resolve. The additional time built into to this scenario provides greater certainty.	2.1 Date certainty	The new implementation date is set early allowing Market Participants and Xoserve the opportunity to optimise their plans going forward. The greater level of contingency provides greater confidence in the date.
1.2 Solution is stable	This scenario allows more time to complete Performance Testing and remediate any issues. Specifically Gas Day testing is completed far ahead of the go-live date allowing plenty of time to remediate any issues and retest. Market Trials continues until the end of August and is followed by a month of defect fixing and then three months of regression testing on a stable platform. Dress rehearsals remain in parallel with the regression testing but this is regarded as a manageable risk.	2.2 Impact on resources	Resources are secured and committed to the programme currently on the basis of a 1 October go-live. There is a risk that extending the deadline could cause issues with resource continuity (this could be the case with offshore staff working in the UK were it may not be possible to renew visas).
1.3 Solution is sustainable	The programme is planning the right activities to prove the build is sustainable. There are some risks around up-to-date documentation and specialist knowledge that are planned to be addressed. Although there is work to do, the activities above should be possible to complete prior to go-live.	2.3 Delivery costs	Delivery costs up to the new go-live date will increase as project overheads will need to be maintained for longer and additional activities such as regression testing need to be supported. However, the extended plan should allow more effective use of resources and reduce the need for expensive resource augmentation.
1.4 Solution enables a positive customer experience	There is greater time to complete Market Trials and to formulate a detailed Industry-Wide transition and data cleanse plan. There is a dedicated period set aside for Xoserve to close and retest defects at the conclusion of Market Trials.	2.4 Post go-live costs	The extended Market Trials window will provide greater confidence that live operations will be sustainable at reasonable cost. It is still likely though that additional staff will be required to support workarounds and exception handling during initial operations.
		2.5 Indirect costs	Not assessed as we have no clear visibility of indirect cost impacts.
		2.6 Maintains Momentum	Current Market Trials activity and Performance Testing continue maintaining Market Participant momentum and Xoserve momentum on key activities.

Likelihood that scenario meets evaluation criteria:

Does not meet criteria

Partially meets criteria

Meets criteria

Not assessed

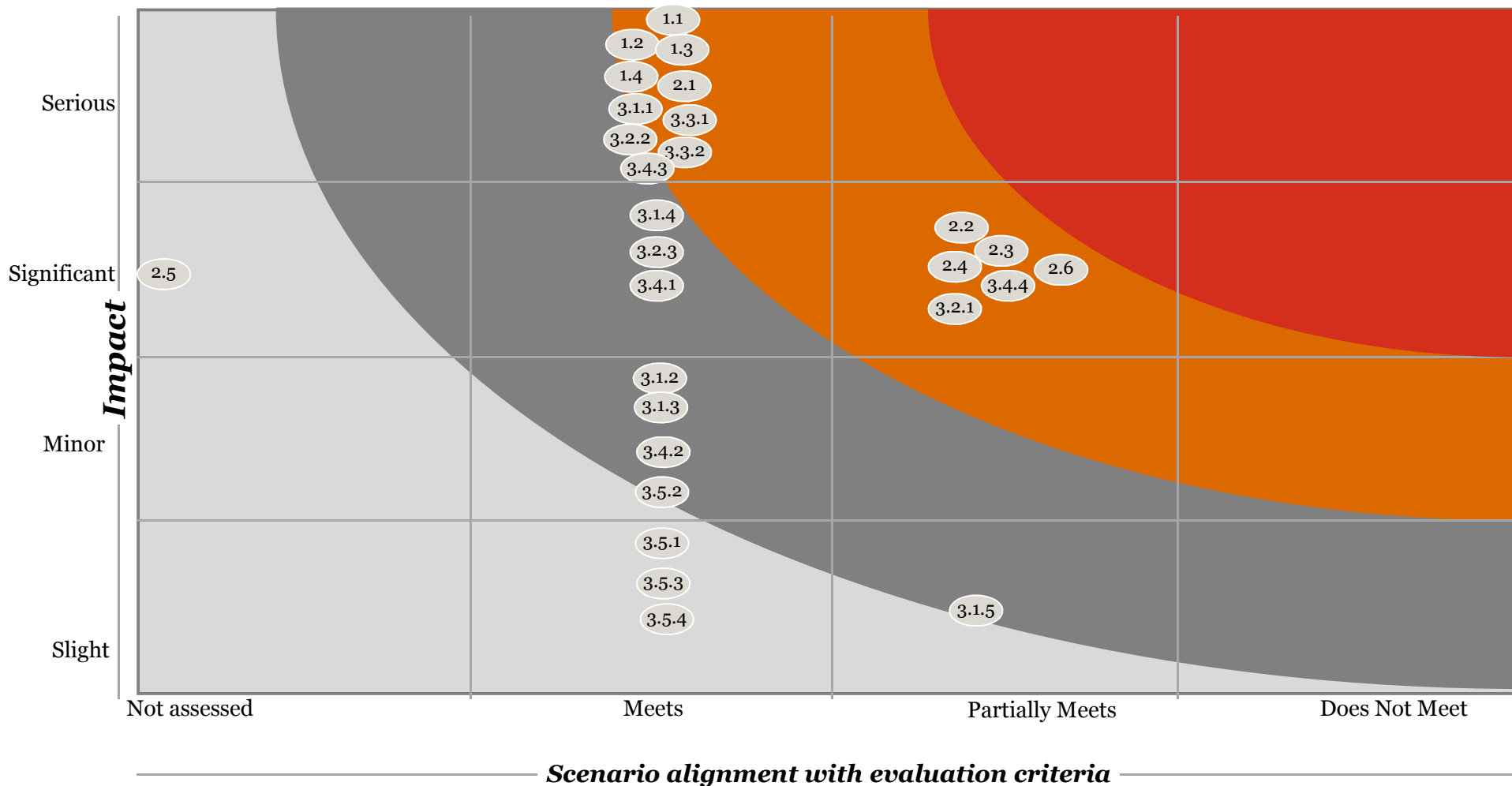
Scenario C – Continue with programmed delay

Degree to which scenario meets the evaluation criteria: 3. Critical project activities

3.1 Market Trials		3.4 Transition	
3.1.1 Time for Market Participants to complete Market Trials	Market Trials is extended to end of August allowing more time for Market Participants to complete their testing.	3.4.1 Cross-industry transition plan	There is time to develop a comprehensive cross-industry transition plan.
3.1.2 Period of stability after final release to conduct Market Trials	There is a period of two months following the final functionality being released into Market Trials. In addition a three month period of regression testing in a stable environment.	3.4.2 Scope of dress rehearsals	There is time for Market Participant involvement in a desk based dress rehearsal and potential for involvement of a subset of Market Participants in technical dress rehearsals.
3.1.3 Period for defect fixing prior to regression testing	There is a dedicated period of one month in September for defect fixing post Market Trials.	3.4.3 Time available for dress rehearsals	IDR 1, 2 and 3 will last for four weeks each and occur after a desk based IDR o. The extended time will provide grater contingency and time to remediate issues.
3.1.4 Period for retest and regression testing after defect fixes	A three month period of regression testing is included.	3.4.4 Impact of go-live date	Transition can be scheduled synchronously with the start of the second half of the gas year and can avoid the winter peak consumption period.
3.1.5 Structured approach to Market Trials	The Market Trials approach remains unstructured sandbox testing. It may be possible to identify some key scenarios for structured testing.	3.5 Service Operations	
3.2 Data migration and cleanse		3.5.1 Clarity of governance	Enhanced governance arrangements are not yet defined but there is time to define and establish these.
3.2.1 Use of data loaded using the final routines in Market Trials	There is potential to explore refreshing the Market Trials environment with data loaded during IDR1 using the production transformation rules.	3.5.2 Hypercare	There is sufficient time to establish a Hypercare function and the timetable allows experienced project resources to roll into this function.
3.2.2 Time to test and fix delta load routines	There is contingency to allow completion of delta load testing. Should issues occur the go-live will not be immediately impacted.	3.5.3 Release plan	Establishing a firm go forward release plan early enough for Market Participants to plan for the impacts of defects and missing functionality on live operations will be possible.
3.2.3 Time for the industry to define and execute a structured data cleanse plan	There is sufficient time to establish an industry-wide data cleanse plan.	3.5.4 Crisis and incident management	There is time to develop a plan based on the known status of the systems at the conclusion of Market Trials.
3.3 Performance Testing		Likelihood that scenario meets evaluation criteria:	
3.3.1 Time to complete PT and remediate issues	There is contingency to allow the completion of Performance Testing. Should issues occur the go-live will not be immediately impacted.	Does not meet criteria	Partially meets criteria
3.3.2 Time to complete Gas Day testing and remediate issues	Critical Gas Day testing is completed well ahead of the go-live.	Meets criteria	Not assessed

Scenario C – Continue with checkpoint

Evaluation heat map



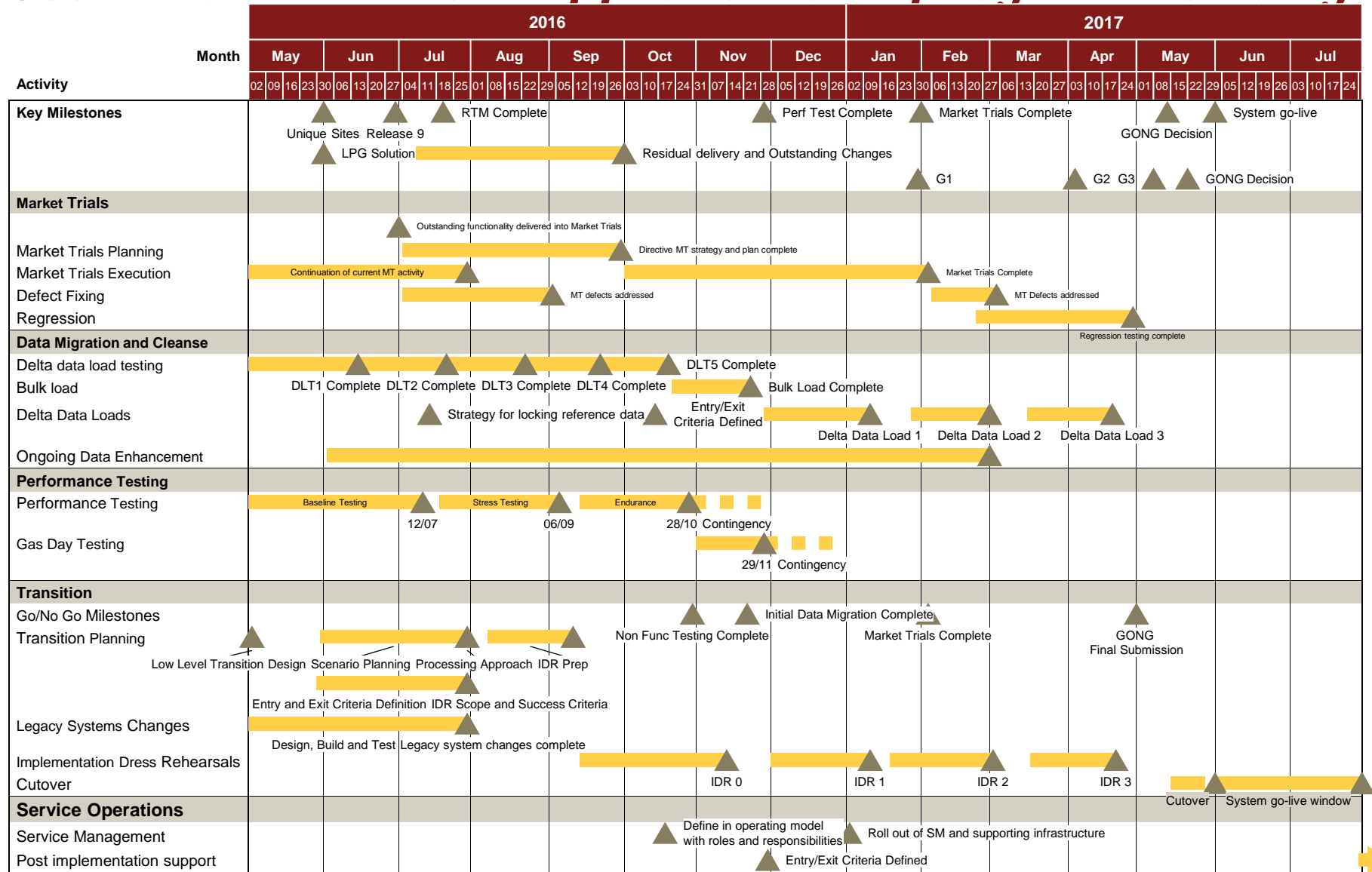
Key: ■ Crisis level event ■ Monitor and take action on critical risks ■ Monitor and be careful ■ Be practical – no need for action

Scenario 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.

Risk profile <ul style="list-style-type: none"> Risks can be mitigated with the increased contingency for each set of activities. There is a risk that the Market Participants will not be able to accommodate an 8-10 month delay. Risk to resource continuity and loss of key knowledge for both Xoserve and Market Participants as a result of the delay 		Dependency Management <ul style="list-style-type: none"> Dependencies can be actively managed and maintained as there is contingency time between activities . 	
Planning Scenario Attributes		Planning Scenario Assumptions	Deep Dive Review Remediation
3.1 Market Trials <ul style="list-style-type: none"> Existing Market Trials activity continues to identify further defects and concludes end July. 3 months to re-design Market Trials and a further 4 months to execute re-designed trials (October through January). 1 month period for defect rectification at the end of re-designed Market Trials. 2 months regression testing (March through April). Ability to regression test after fixes from IDR1, IDR2 and Performance Testing 	3.4 Transition <ul style="list-style-type: none"> Paper-based IDR to walk industry through the full cutover activity. Market Participant engagement in IDRs 2 and 3. 3 implementation dress rehearsals each of six weeks duration. Performance and Gas Day testing will complete prior to IDR1. 	<ul style="list-style-type: none"> Entry criteria for dress rehearsals 1-3: <ul style="list-style-type: none"> Bulk and Delta (Data) Loads tested. Cutover plan agreed. Ability to process NED data volumes proven. Cutover will take 2 weeks Build and test of Delta (Data) Loads will take 4 months and has already started. Required technical environments are in place IDR durations include time for defect fixes and environment reset. Any fixes put in for the IDRs will also be applied to the Market Trials environment and regression tested. There is no conflict with other industry programmes/implementations. 	<ul style="list-style-type: none"> Replanning Market Trials and re-executing will ensure defects have been resolved and solution fits requirements. Test phases do not overlap ensuring that latest build is being tested minimising regression test. Extended time to test for data migration. Ensures large file data handling issues can be correctly resolved. Increased length of time to plan for IDRs and communicate cutover strategy to Market Participants.
3.2 Data Migration and cleanse <ul style="list-style-type: none"> 3 additional delta test cycles allow testing before bulk load, Use of data created using production transformation rules in testing. Time to establish Industry-Wide data cleanse plan. 	3.5 Service Operations <ul style="list-style-type: none"> Additional time available to refine Hypercare support model. Time allows sufficient stability to be gained to develop a post go-live release plan. 		
3.3 Performance Testing <ul style="list-style-type: none"> Performance Testing rescheduled to complete end of October Gas Day testing rescheduled to complete end of November, well ahead of final GONG decision. 1 months of contingency to both performance and Gas Day testing 			

Scenario D – Revised approach with programme delay



Scenario D – Revised approach with programmed delay

Degree to which scenario meets the evaluation criteria:

1. Ofgem success factors and 2. Xoserve and Market Participant considerations

1. Ofgem success factors		2. Xoserve and Market Participant considerations	
1.1 Solution meets industry requirements	The Deep Dive Review has concluded that the Xoserve solution is fit for purpose, although this has to be proven through Market Trials. There are plans to address industry data quality with some defects to resolve. The additional time built into to this scenario provides greater certainty. In addition, the plan includes a structured market trial that will ensure full coverage of testing.	2.1 Date certainty	The new implementation date is set early allowing Market Participants and Xoserve the opportunity to optimise their plans going forward. The greater level of contingency provides greater confidence in the date.
1.2 Solution is stable	This scenario allows more time to complete Performance Testing and remediate any issues. Specifically Gas Day testing is completed far ahead of the go-live date allowing plenty of time to remediate any issues and retest. Market Trials continues until the end of August and is followed by a month of defect fixing and then three months of regression testing on a stable platform. Dress rehearsals remain in parallel with the regression testing but this is regarded as a manageable risk.	2.2 Impact on resources	Resources are secured and committed to the programme currently on the basis of a 1 October go-live. There is a risk that extending the deadline could cause issues with resource continuity (this could be the case with offshore staff working in the UK were it may not be possible to renew visas).
1.3 Solution is sustainable	The programme is planning the right activities to prove the build is sustainable. There are some risks around up-to-date documentation and specialist knowledge that are planned to be addressed. Although there is work to do, the activities above should be possible to complete prior to go-live.	2.3 Delivery costs	Delivery costs up to the new go-live date will increase as project overheads will need to be maintained for longer and additional activities such as regression testing need to be supported. However, the extended plan should allow more effective use of resources and reduce the need for expensive resource augmentation.
1.4 Solution enables a positive customer experience	There is greater time to complete Market Trials and to formulate a detailed Industry-Wide transition and data cleanse plan. There is a dedicated period set aside for Xoserve to close and retest defects at the conclusion of Market Trials. In addition, the plan includes a structured market trial that will ensure full coverage of testing.	2.4 Post go-live costs	The structured Market Trials will provide greater confidence that live operations will be sustainable at reasonable cost. It is still possible though that some additional staff will be required to support workarounds and exception handling during initial operations.
		2.5 Indirect costs	Not assessed as we have no clear visibility of indirect cost impacts.
		2.6 Maintains Momentum	Current Market Trials activity and Performance Testing continue maintaining Market Participant momentum and Xoserve momentum on key activities. The extent of the delay to the go-live could cause some Market Participants to slow activity.

Likelihood that scenario meets evaluation criteria:

Does not meet criteria

Partially meets criteria

Meets criteria

Not assessed

Scenario D – Revised approach with programmed delay

Degree to which scenario meets the evaluation criteria:

3. Critical project activities

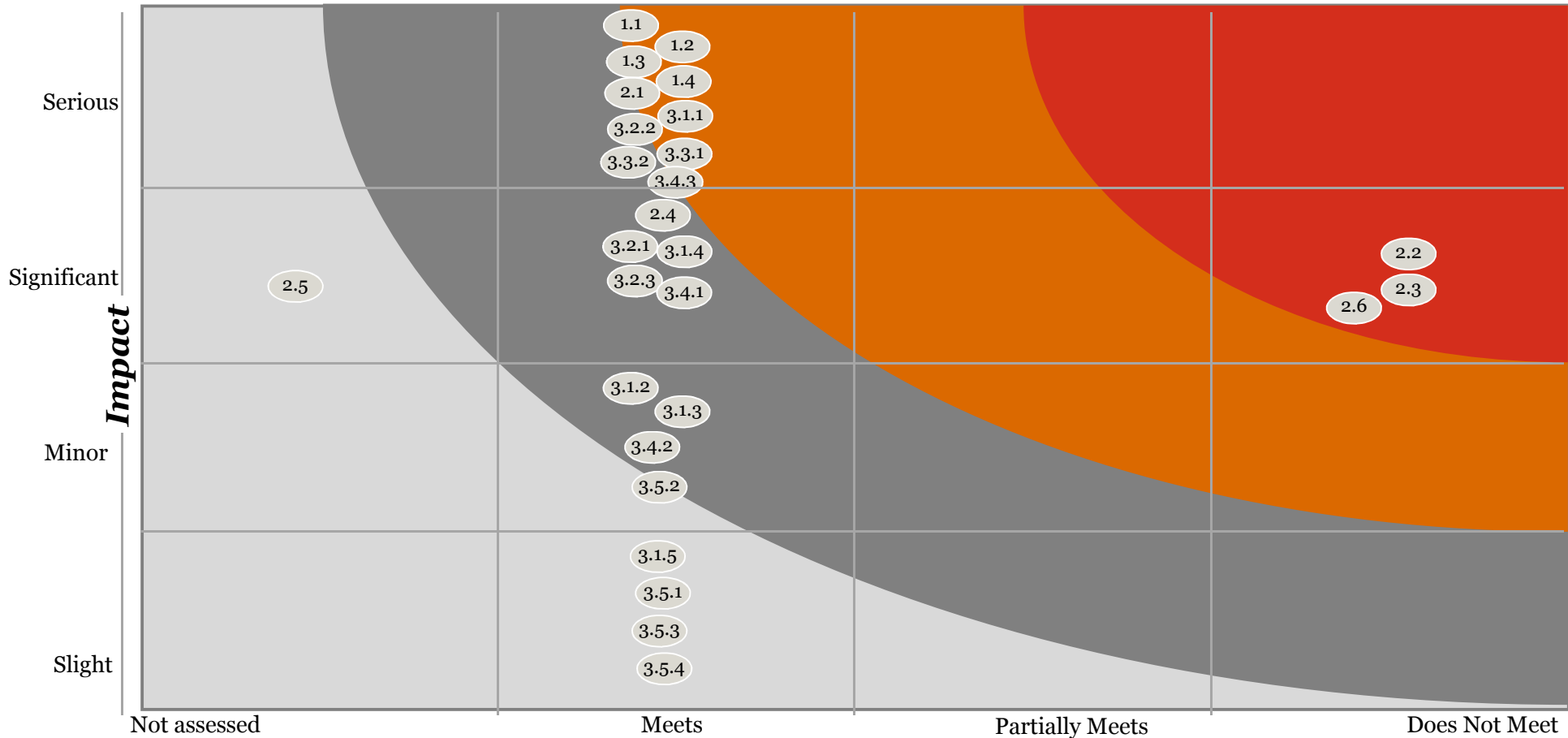
3.1 Market Trials	
3.1.1 Time for Market Participants to complete Market Trials	The existing Market Trials is extended to end of August allowing more time for Market Participants to complete their testing. A subsequent phase of Market Trials is also introduced.
3.1.2 Period of stability after final release to conduct Market Trials	There is a period of two months following the final functionality being released into Market Trials for defects to be addressed.
3.1.3 Period for defect fixing prior to regression testing	There is a dedicated period of two months in September for defect fixing post current Market Trials with a further month following completion of the redesigned Market Trials.
3.1.4 Period for retest and regression testing after defect fixes	A two month period of regression testing is included.
3.1.5 Structured approach to Market Trials	A subsequent phase of Market Trials is introduced to provide a structured test that ensures full test coverage.
3.2 Data migration and cleanse	
3.2.1 Use of data loaded using the final routines in Market Trials	The structured Market Trials is conducted using data created by the production transformation rules.
3.2.2 Time to test and fix delta load routines	There is contingency to allow completion of delta load testing. Should issues occur the go-live will not be immediately impacted.
3.2.3 Time for the industry to define and execute a structured data cleanse plan	There is sufficient time to establish an industry-wide data cleanse plan.
3.3 Performance Testing	
3.3.1 Time to complete PT and remediate issues	Performance Testing remains on the critical path with no contingency should problems occur.
3.3.2 Time to complete Gas Day testing and remediate issues	Critical Gas Day testing is completed within weeks prior to go-live.

3.4 Transition	
3.4.1 Cross-industry transition plan	There is time to develop a comprehensive cross-industry transition plan.
3.4.2 Scope of dress rehearsals	There is time for Market Participant involvement in a desk based dress rehearsal and potential for involvement of a subset of Market Participants in technical dress rehearsals.
3.4.3 Time available for dress rehearsals	IDR 1, 2 and 3 will last for six weeks each and occur after a desk based IDR o. IDRs 2 and 3 will include a sub-set of Market Participants.
3.4.4 Impact of go-live date	Transition is scheduled to start in the summer and does not synchronise logically with any part of the gas year,
3.5 Service Operations	
3.5.1 Clarity of governance	Enhanced governance arrangements are not yet defined but there is time to define and establish these.
3.5.2 Hypercare	There is sufficient time to establish a Hypercare function and the timetable allows experienced project resources to roll into this function.
3.5.3 Release plan	Establishing a firm go forward release plan early enough for Market Participants to plan for the impacts of defects and missing functionality on live operations will be possible.
3.5.4 Crisis and incident management	There is time to develop a plan based on the known status of the systems at the conclusion of Market Trials.

Likelihood that scenario meets evaluation criteria:			
Does not meet criteria	Partially meets criteria	Meets criteria	Not assessed

Scenario D – Revised approach with programmed delay

Evaluation heat map



Scenario alignment with evaluation criteria

Key: ■ Crisis level event ■ Monitor and take action on critical risks ■ Monitor and be careful ■ Be practical – no need for action

Summary of scenario evaluation

As set out in the previous section, each of the scenarios has been evaluated against

1. Ofgem success factors
2. Xoserve and Market Participant considerations
3. Critical project activities

This analysis is summarised on the following page. A set of heat maps illustrating the likelihood of each risk against its impact for each scenario then follows.

1. Ofgem Project Nexus Success Factors	2. Xoserve and Market Participant considerations	3. Critical project activities
1.1 Solution meets industry requirements	2.1 Date certainty	3.1 Market Trials
1.2 Solution is stable	2.2 Impact on resources	3.2 Data migration and cleanse
1.3 Solution is sustainable	2.3 Delivery costs	3.3 Performance Testing
1.4 Solution enables a positive customer experience	2.4 Post go-live costs	3.4 Transition
	2.5 Indirect costs	3.5 Service Operations
	2.6 Maintains Momentum	

Comparison of planning scenarios

1. Ofgem success factors	2. Xoserve and Market Participant considerations	3. Critical project activities	1. Ofgem success factors	2. Xoserve and Market Participant considerations	3. Critical project activities*		
1.1 Solution meets industry requirements	2.1 Date certainty	3.1 Market Trials	1.1 Solution meets industry requirements	2.1 Date certainty	3.1 Market Trials		
1.2 Solution is stable	2.2 Impact on resources	3.2 Data migration and cleanse	1.2 Solution is stable	2.2 Impact on resources	3.2 Data migration and cleanse		
1.3 Solution is sustainable	2.3 Impact on delivery costs	3.3 Performance Testing	1.3 Solution is sustainable	2.3 Impact on delivery costs	3.3 Performance Testing		
1.4 Solution enables a positive customer experience	2.4 Impact on post go-live costs	3.4 Transition	1.4 Solution enables a positive customer experience	2.4 Impact on post go-live costs	3.4 Transition		
Scenario A			Scenario B			2.5 Impact on indirect costs	3.5 Service Operations
						2.6 Maintains Momentum	2.6 Maintains Momentum
1. Ofgem success factors	2. Xoserve and Market Participant considerations	3. Critical project activities	1. Ofgem success factors	2. Xoserve and Market Participant considerations	3. Critical project activities		
1.1 Solution meets industry requirements	2.1 Date certainty	3.1 Market Trials	1.1 Solution meets industry requirements	2.1 Date certainty	3.1 Market Trials		
1.2 Solution is stable	2.2 Impact on resources	3.2 Data migration and cleanse	1.2 Solution is stable	2.2 Impact on resources	3.2 Data migration and cleanse		
1.3 Solution is sustainable	2.3 Impact on delivery costs	3.3 Performance Testing	1.3 Solution is sustainable	2.3 Impact on delivery costs	3.3 Performance Testing		
1.4 Solution enables a positive customer experience	2.4 Impact on post go-live costs	3.4 Transition	1.4 Solution enables a positive customer experience	2.4 Impact on post go-live costs	3.4 Transition		
Scenario C			Scenario D			2.5 Impact on indirect costs	3.5 Service Operations
						2.6 Maintains Momentum	2.6 Maintains Momentum

Key: Likelihood that scenario meets evaluation criteria:	Does not meet criteria	Partially meets criteria	Meets criteria	Not assessed
	Evaluation changes post-checkpoint		Colour on left is the evaluation pre-checkpoint with the colour on the right the evaluation after the checkpoint	



This document has been prepared only for Ofgem in support of their industry letter dated 2 June 2016 and solely for the purpose and on the terms agreed with Ofgem in our statement of work and 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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