

# Project Nexus Steering Group [PNSG]

*19 December 2016*

ofgem

# Agenda

#	Title	#
1	Agenda	2
2	Programme Summary	3
3	POAP Updates	4 - 8
4	Market Trials Regression	9 - 10
5	Code Stability	11 - 20
6	Data Check Point - Early Indicators	21 - 27
7	GONG Update	28 - 30
8	Actions	31
9	Appendices	32 - 34

Minutes can be found on the **Ofgem** website at:

<https://www.ofgem.gov.uk/gas/retail-market/market-review-and-reform/project-nexus>

# PNSG Programme Summary

**Overall Summary:** The Programme has been degraded to an Amber rating as a direct result of the pending decision surrounding the NED Transition period. This has been referred to the TPG for a recommendation and will be considered at an extraordinary PNSG established for 21 Dec 16. **Solution Delivery** continues to track Amber / Green reflecting the need for a confirmatory gas day test cycle and continued closure of residual defects. **Market Trials** has improved to an Amber / Green given Market Participants' readiness for MT regression. Code stability is driving the amber aspect due to the proximity of the milestone to the start of regression. **Data** The Amber / Green rating reflects enduring Data 'Fix and Prove' cycles, and In-flight/iGT Data Readiness for IDRs as well as concern over data cleanse activities. **GONG**, concern around iGT data and the finalisation of the LLTD drives the amber element of the status with focus on completion prior to G1 on 22 Dec 16.

**Status Since: 14 Dec 16**



Status

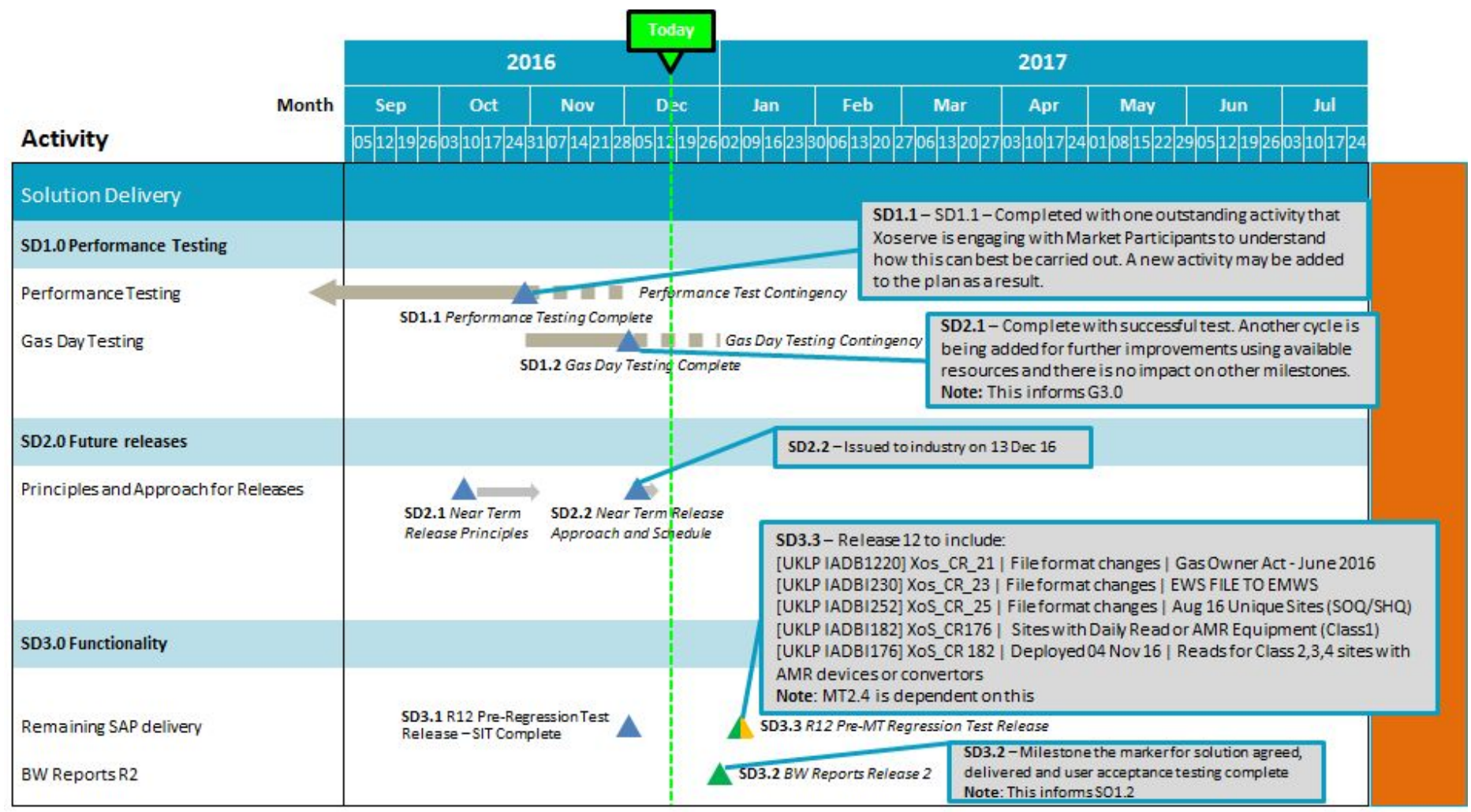


Trend

Significant risk to go-live - Immediate mitigation required
Increased risk to Go-live - Urgent mitigation required
Go-live at risk – manageable with mitigation
On track but being closely monitored
On Track
Complete
N/A or No information
Increase in severity since previous report
No Change in Status
Decrease in severity since previous report

	<b>Solution Delivery</b> ↔	<b>Market Trials</b> ↓	<b>Data</b> ↔	<b>Transition</b> ↑	<b>GONG</b> ↔
<b>Commentary</b>	<p>The Amber / Green rating is driven by: A second cycle of Gas Day testing has been introduced to confirm additional tuning opportunities have been successfully exploited. There is no impact to the downstream plan. Test due to complete 16 Dec 16.</p> <p>10 outstanding end-to-end UAT defects, fixing in progress due to complete by the end of December ahead of regression testing.</p> <p>Industry action in progress through TPG to confirm industry volumes against performance testing results.</p> <p>On track to successfully achieve industry checkpoint 2 and readiness for MT regression testing 09 Jan 17.</p>	<p>Market Trials is rated as Amber / Green, as participant readiness activities are broadly on track to commence MT Regression on 09 Jan 16. Achieving code stability will be critical prior to commencing MT Regression and Xoserve / Baringa are currently reporting this is on track. Achievement of this milestone is being closely monitored.</p> <p>Issues have been raised by participants with respect to the dummy data received from Xoserve for MT Regression. The nature of these issues are being further investigated. In some case this relates to specific items of data and therefore is considered lower risk but in at least one instance more pervasive issues have been reported.</p> <p>Contingency options for a delayed start to MT Regression are to be discussed in MTWG on 20 Dec 16.</p>	<p>The Data workstream is rated as Amber / Green against the 01 Jun 17 delivery plan.</p> <p>The Green element is driven by successful completion of planned milestones including Pre Bulk and Delta Test Cycles 3a (and this indicates that additional contingency that would result in a July implementation is not required) and iGT Test Cycle 4 with increased success of fixing defects particularly in the Bulk and iGT data.</p> <p>The Amber element reflects the data loads that still require enduring data 'Fix and Prove' cycles, and in-flight/iGT Data Readiness for IDRs.</p> <p>There are also concerns over participants data cleanse and reconciliation activities particularly in relation to iGT data. There are ongoing actions to address potential inconsistencies in information held between shippers systems and the iGT Migration database presented at DMG.</p>	<p>Transition has moved to a Red-Amber rating due to the uncertainty in the NED period length. There is a risk to all Transition milestones that these will slip without confirmation of how long the NED period will be. To mitigate this, an extraordinary TPG is set for 16 Dec 16 with the instruction that they put forward a recommended option to PNSG.</p> <p>The Contingency Planning Working Group met on 14 Dec 16. This session completed the identification of incidents for consideration. The draft playbook (T2.5) will be released in January for review by TPG participants.</p> <p>The Hypercare draft document is due to be released to Market Participants for review and comment on 16 Dec 16.</p> <p>The next TPG (20 Dec 16) will walk through the external dashboard to be used for IDR2 (T1.5) and the catch up batch principles in readiness for milestone T2.4 on 20 Jan 16.</p>	<p>The GONG workstream is rated as Amber/ Green. Levels of engagement from industry have been high in the G1 assessment on 25 Nov 16 with 49% of criteria being reported as 'green'. However, concerns were raised around open decisions and additional information required to achieve key transition milestones in Q1 2017 e.g. NED's.</p> <p>In total, 36 submissions were made by Market Participants and Xoserve for the G1 self-assessment on 25 Nov 16. The main concerns highlighted were consistent and revolved around iGT data readiness and the finalisation of the Low Level Transition Design and associated artefacts. Remediation activity is underway and being managed via the TPG and DMG accordingly.</p> <p>An interim GONG self-assessment submission on 27 Jan 16 is being considered to allow Market Participants an opportunity to provide feedback on the mitigating actions currently being carried out.</p>

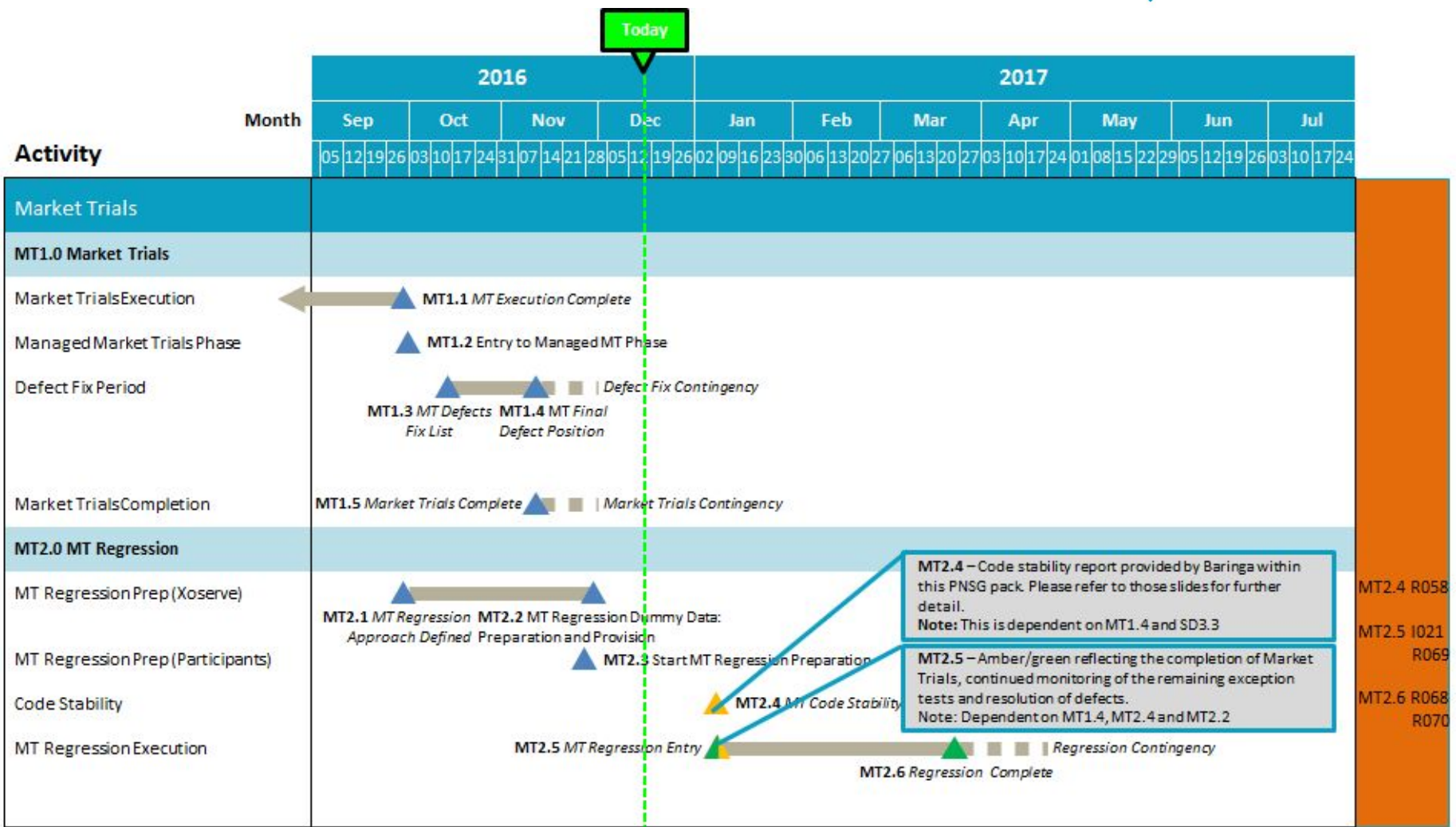
# Solution Delivery Plan



**Milestone RAG Key:**

- ▲ Industry Milestone
- Industry Activity
- Contingency
- ▲ Complete
- ▲ On Track
- ▲ On track but being closely monitored
- ▲ Milestone at risk: manageable with mitigation
- ▲ Increased risk to Milestone: Urgent mitigation required
- ▲ Significant risk to Milestone: Immediate mitigation required
- Slip/expected delay of milestone

# Market Trials Plan

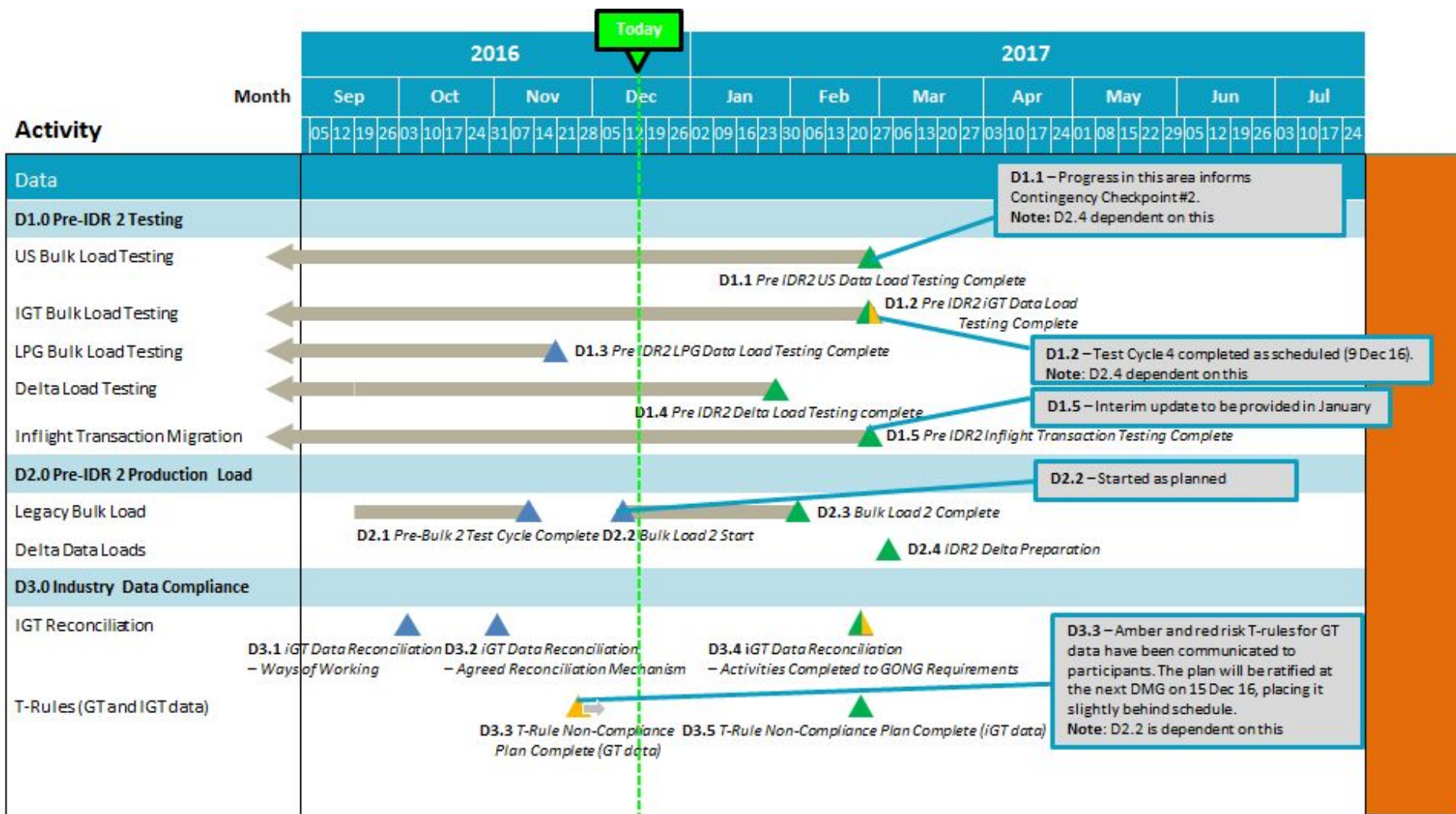


MT2.4 R058  
MT2.5 I021 R069  
MT2.6 R068 R070

**Milestone RAG Key:**

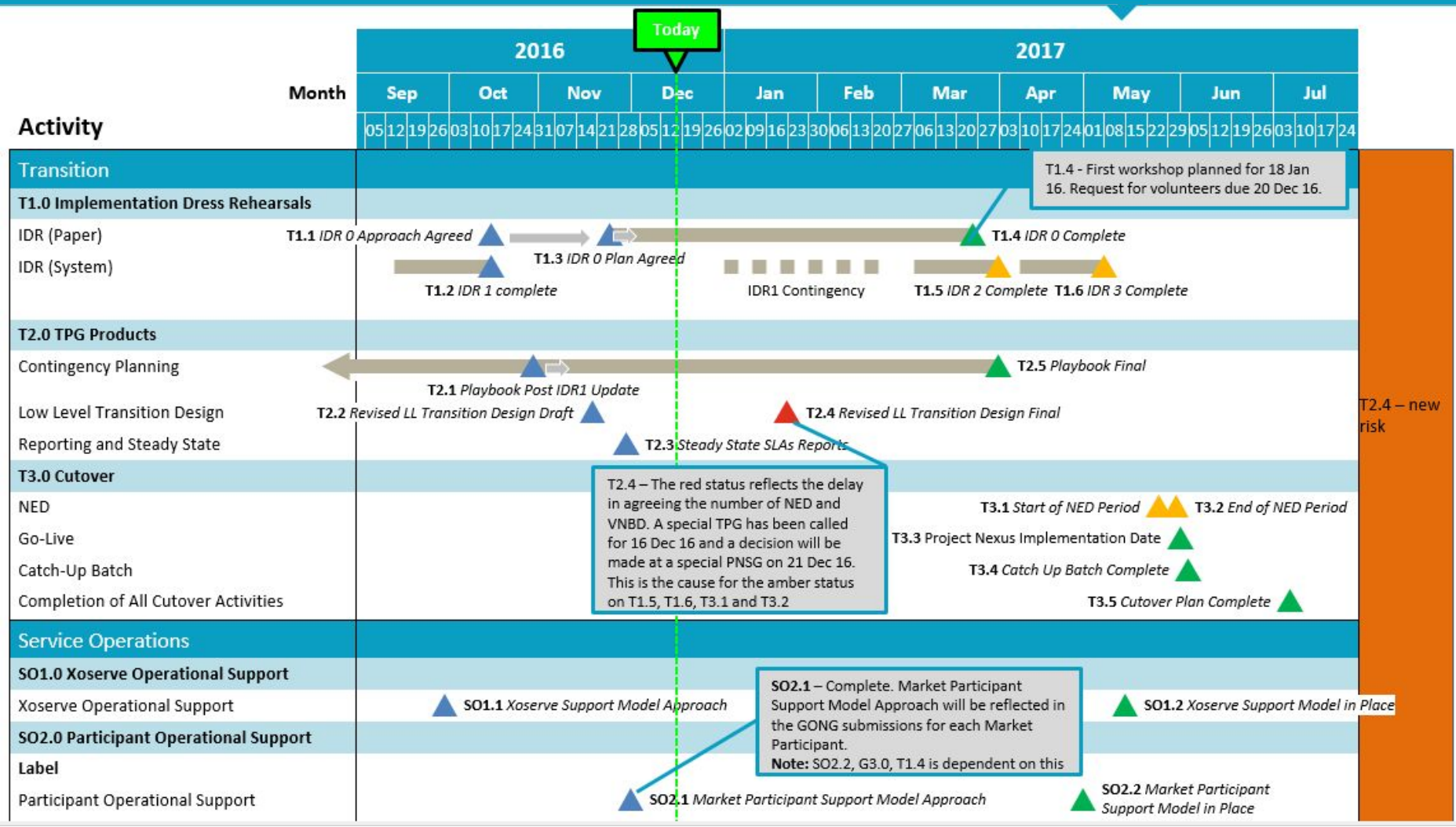
- ▲ Industry Milestone
- Industry Activity
- Contingency
- ▲ Complete
- ▲ On Track
- ▲ On track but being closely monitored
- ▲ Milestone at risk: manageable with mitigation
- ▲ Increased risk to Milestone: Urgent mitigation required
- ▲ Significant risk to Milestone: Immediate mitigation required
- Slip/expected delay of milestone

# Data Workstream Plan





# Transition Workstream Plan

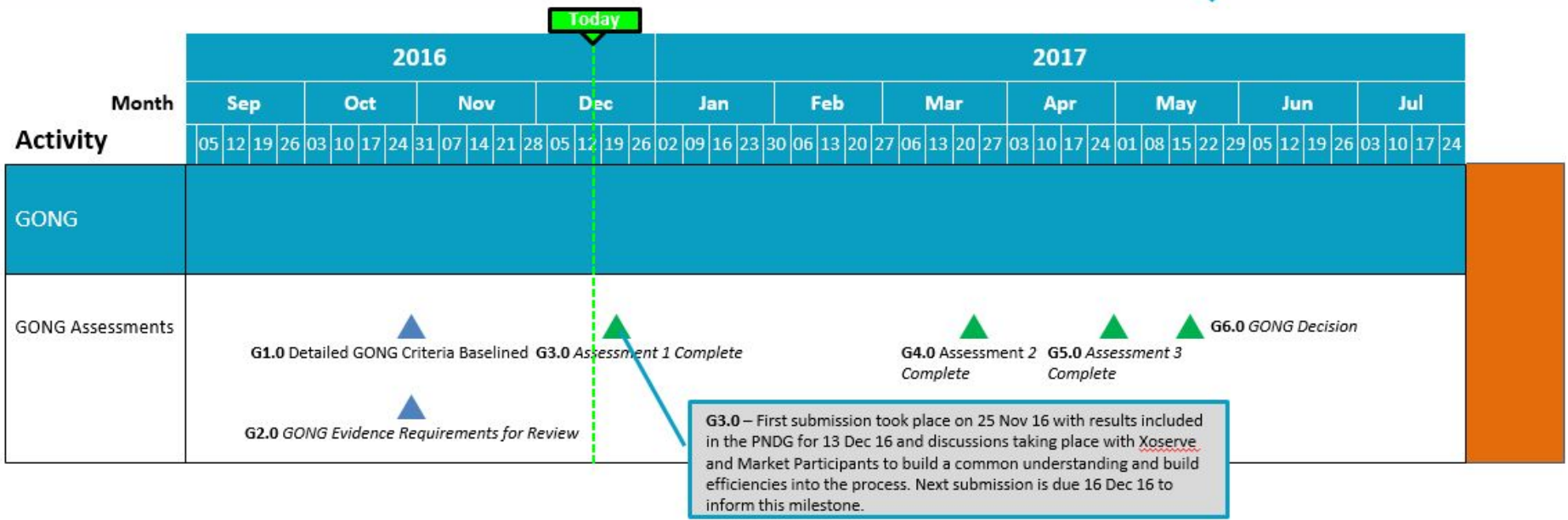


T2.4 – new risk

**Milestone RAG Key:**

- ▲ Industry Milestone
- Industry Activity
- Contingency
- ▲ Complete
- ▲ On Track
- ▲ On track but being closely monitored
- ▲ Milestone at risk: manageable with mitigation
- ▲ Increased risk to Milestone: Urgent mitigation required
- ▲ Significant risk to Milestone: Immediate mitigation required
- Slip/expected delay of milestone

# GONG Workstream Plan



**Milestone RAG Key:**

- ▲ Industry Milestone
- Industry Activity
- ■ ■ ■ Contingency
- ▲ Complete
- ▲ On Track
- ▲ On track but being closely monitored
- ▲ Milestone at risk: manageable with mitigation
- ▲ Increased risk to Milestone: Urgent mitigation required
- ▲ Significant risk to Milestone: Immediate mitigation required
- Slip/expected delay of milestone



# MT Reg Portal Submission

The MT Regression Entry portal submission on 09 Dec 16 included responses from **31 participants**, which equates to **87% Annual Quantity ('AQ')** and **94% of supply points**.

**5 participants** did not provide portal submissions, however have expressed intention to participate in MT Regression.

## Market Trials Regression participant entry status:

36

Participants confirmed intention to participate in MT Regression

31

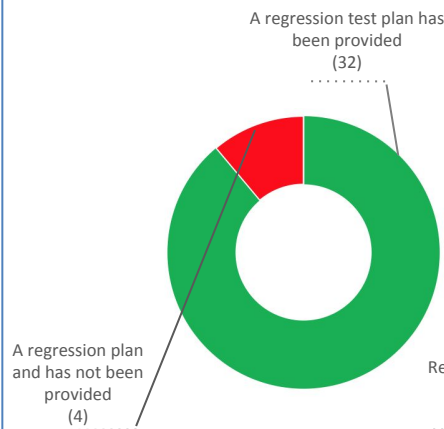
Participants completed portal self assessment

32

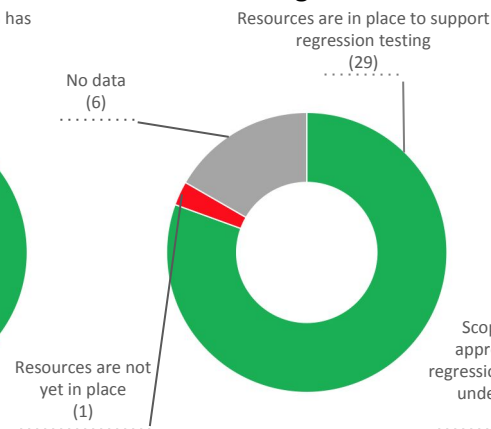
Participants have provided and MT Regression test plan

## Participant readiness for MT regression is on track with the exception of some dummy data issues

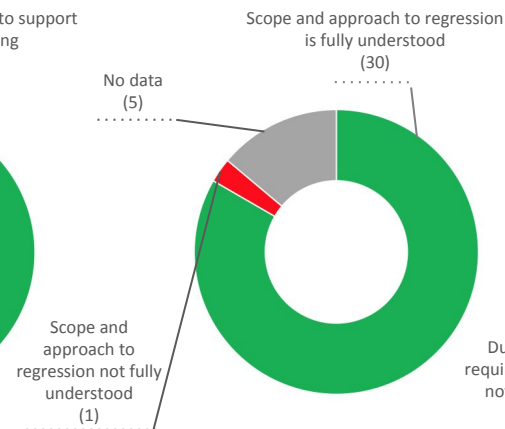
### 1. Participant organisation's regression test plan is defined



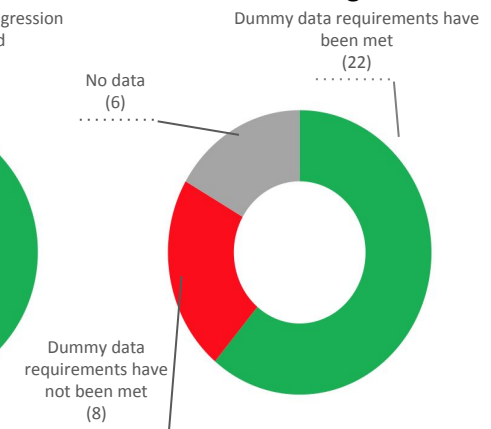
### 2. Participant resources are identified and available to support MT Regression



### 3. Participants Awareness/ understanding of scope



### 4. Required dummy data defined and provided for regression testing



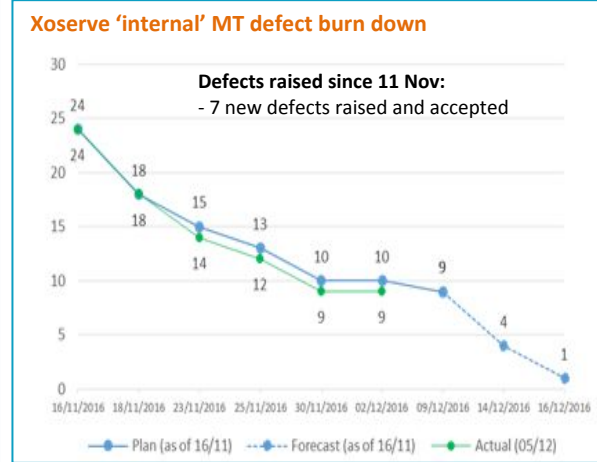
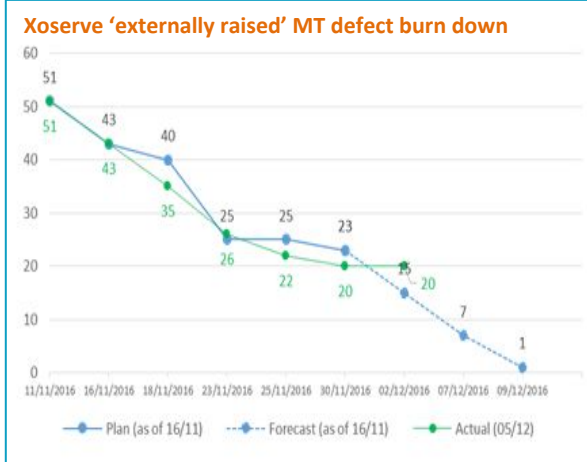
**Dummy data issues** - The submission data highlights that dummy data requirements have not been met for a number of participants. This could result in a delay to starting associated tests within MT Regression and have a knock on impact to completion of the phase. The nature of these issues are being further investigated with Xoserve and participants.

# MT Regression Readiness

Based on information: As @ 15 Dec 16 \*MMT test lines due to complete prior to MTR

↑ Improving Confidence  
 ↓ Deteriorating Confidence  
 ↔ No change

L3/4 Residual Testing @05 Dec 16					
	Total	Complete	Test lines remaining	Deferred to Regression	De-scoped
<b>MMT TEST LINES</b>	<b>49</b>	<b>14</b>	<b>21</b>	<b>13</b>	<b>1</b>
iGT RGMA	9	2	7	0	0
Defect Re-Testing	23	10	10	3	0
Invoices	10	1	1	8	0
AQ Validations (NRL)	4	1	1	1	1
CR176 / CR182	2	0	1	1	0
Unique Sites	1	0	1	0	0



Measures	Key supporting activities	07 Dec 16	14 Dec 16	Comments
Completion of residual testing from L3/4 MT	<ul style="list-style-type: none"> <li>Participant's completion of residual L3/4 MT test lines.</li> <li>Xoserve resolution of outstanding MT defects against fix plan (internal and external).</li> </ul>	↔	↓	21 test lines out of 49 were still to be completed on 05 Dec 16 with a further 13 test lines deferred to regression. Xoserve defect resolution remained broadly on track for 'internal' defects but has slipped behind plan for 'externally raised' defects.
Code Stability	<ul style="list-style-type: none"> <li>Xoserve delivery of the elements required to achieve code stability.</li> <li>Process for managing code stability once achieved.</li> </ul>	↔	↔	See code stability update provided by Xoserve on the next page.
Clear and baselined MTR test scope.	<ul style="list-style-type: none"> <li>Participant define and submit test plans to PwC as part of 09 Dec 16 portal submission.</li> <li>Agreement of participant test plans with PwC w/c 12 Dec 16.</li> <li>Baseline MTR scope and review C1 / C2 coverage.</li> </ul>	↔	↑	32 participants have provided MTR test plans to PwC and quality has been generally good. Calls scheduled / held with 31 participants w/c 12 Dec 16 to agree test plans to allow scope to be baselined.
Participant readiness to enter MTR	<ul style="list-style-type: none"> <li>Participant MTR entry self assessment in portal 09 Dec 16 and 04 Jan 17.</li> <li>Preparation calls with each case manager and assigned participant</li> </ul>	↔	↑	See previous slide for update on participant readiness for MTR from the 09 Dec 16 portal submission. Participant readiness on track with the exception of some dummy data issues.
Establish MTR Management Framework	<ul style="list-style-type: none"> <li>Finalise the approach to management framework over MTR and work with Xoserve and participants to establish the framework.</li> </ul>	↑	↑	A 'managed' approach to MTR has been agreed. The management framework has been communicated to participants as part of MTR preparation WebExes.



# Market Trials Code Stability

A review of readiness to enter MT Regression Test

**Client:** Project Nexus

**Date:** 14/12/16

**Version:** V1.4

Reputation built on results

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## Context

- ▶ Since replanning to a June 2017 Go Live in September 2016, Project Nexus has identified achievement of Market Trials code stability as a key milestone
- ▶ The objectives of this milestone have been agreed through industry governance (PNSG – September 2016) and are specifically targeted at providing stakeholders confidence in starting the MT Regression Test phase
- ▶ The definition of Market Trials 'Code Stability' was agreed as the following
  - ✓ Provision of stable code to enable a 'clean' run during MT Regression Testing – Building stakeholder confidence in the solution
  - ✓ No changes to code undergoing MT Regression testing (Or impacting Market Trials critical C1/2 processes)
- ▶ Achievement of MT Code Stability is based on the achievement of prior test phases, a controlled closure plan for any defects outstanding, and confidence in delivery of any Change Requests

## Scope of Document

Baringa have been requested by Ofgem to provide an assurance point of view on the degree of confidence in achieving MT code stability, that answers:

1. Have Xoserve achieved a level of functional code stability that is sufficient for MT Regression to start?
2. Do Xoserve have adequate controls and processes in place to ensure the ongoing maintenance of functional code stability through MTR and go-live?

In addition, Baringa had an action from last PNSG to describe the scale of wider functional change that exists on the Programme, and articulate the level of risk to the achievement of Market Trials code stability.

## Our Approach

Baringa's approach to validating the MT Code Stability status has been broken into the following elements:

- ▶ Defect analysis – Leveraging Programme reporting, and performing comparisons against underlying HPQC (test management tool) data to ensure that all defects are reported
- ▶ CR review – In depth review of the CR pipeline with the Programme change manager and Solution Architect
- ▶ Process review – Review of industry & internal processes supported by an enduring presence at Release Deployment Board (RDB) and in change governance.

## Conclusions

- ▶ Baringa believe that Xoserve are on track to meet code stability criteria by the 9th Jan to a satisfactory level – Supporting a decision for the Programme to enter Market Trials Regression Testing. This is based on comprehensive access to defect and CR data, and Baringa recognise the progress that Xoserve have made in the clarity of status reporting over the course of Market Trials
- ▶ Whilst there are still gaps in the criteria assessed, Xoserve have an opportunity to resolve the majority of these ahead of MT Regression Test – Notably through alignment of internal and external processes, and performance of a functional 'smoke / mini-regression' test on the MT environment prior to MT Regression test commencement
- ▶ With 6 months to go until Go Live, it is not unreasonable for there to still be functional change required – However governance processes must be used to minimise the level of this change, and ensure that change is delivered in a controlled manner to the Industry.

# Question 1 – Xoserve achieved a level of functional code stability that is sufficient for MT Regression to start?

- ▶ Summary findings documented below are based on data extracted from Xoserve’s source systems on 14<sup>th</sup> December
- ▶ The forecast RAG articulates a predicted status as of 9<sup>th</sup> January, assuming that recommendations are implemented

Question	RAG 14/12	Current Findings	Recommendation	F'cast RAG 9/1
<b>Summary Findings</b>				
<ul style="list-style-type: none"> <li>Have all the items on the dashboard been closed down?</li> </ul> <p><i>Dashboard included in Appendix A - MT Code Stability - Confidence Check Points</i></p>		<p><b>Dashboard item closure planned by 9<sup>th</sup> Jan</b> 3 defects confirmed as not being fixed prior to MT Regression Test. Xoserve also currently consider these to not be essential for June 1<sup>st</sup> Go-Live. 27 defects (3 P2s, 23 P3s, 1 P4) do not yet have a confirmed deployment date and hence represent a risk to code stability.</p>	<ul style="list-style-type: none"> <li>Establish a clear ‘line in the sand’ for target defect fixes – A prioritised list of those defects being, fixed / worked-around / deferred</li> <li>Take the 3 known defects through the MT workaround process</li> <li>Complete impact assessments for the residual 27 defects to understand any risk to MT Processes / code stability.</li> </ul>	
<ul style="list-style-type: none"> <li>If they have not, are there mitigation steps in place?</li> </ul>		<p><b>Mitigation steps are in place</b> Prioritisation and tracking of fix plans are being actively managed</p>	<ul style="list-style-type: none"> <li>Fix &amp; test teams to provide realistic deployment dates for ‘TBC’ defects.</li> </ul>	
<ul style="list-style-type: none"> <li>Do these mitigation steps place functional code stability at risk?</li> </ul>		<p><b>The mitigation steps themselves do not risk code stability</b> There is an inherent risk that any defects yet to be impact assessed might contain unexpected MT Reg test process impacts</p>	<ul style="list-style-type: none"> <li>Carry out process/code impact analysis of defects without a fix date to determine criticality of fix – de-prioritise non-MT impacting ones.</li> </ul>	
<ul style="list-style-type: none"> <li>Is the extent and quality of regression testing performed by Xoserve when functional items are delivered sufficient to ensure any new defects are identified and fixed prior to MT Regression?</li> </ul>		<p><b>Dedicated regression activities are performed for CR deployments</b> Each defect is tested through its own system and UAT test cycles however limited regression testing is performed on individual defect deployments</p>	<ul style="list-style-type: none"> <li>Execution of comprehensive smoke/regression test prior to commencement of MT regression test</li> <li>Definition of a standard regression pack for use ahead of each code release</li> <li>Inclusion of all functional changes in release notes not just MT raised.</li> </ul>	

# Detailed Findings: MT Code Stability Status



## Summary

Whilst a number of confidence points have been completed or tracking green, a number of areas still pose risk to the code stability milestone:

- Back Billing UAT closure – If defects are identified late in the test cycle there is a risk that they may not be fixed and internally proven/regression tested in time
- Analysis and External Comms of defects without a proposed full fix – 3 defects exist and need to be brought into the industry workaround process, initially agreeing if a fix is required

A plan to deliver the current set of functional defects ahead of MT Regression Test exists, but if additional defects are raised this would add strain to this plan.

#	Confidence Points	Due	Current Actual Position	Metric(s)	Mitigation	RAG
1	UAT E2E and MT Execution Complete	11/11	Execution <ul style="list-style-type: none"> <li>• Execution complete. A small number of invoice defects still outstanding, but all have been confirmed to have fixes available</li> </ul>	E2E Execution: 100%, MT Closure confirmed	N/A	Complete
			Defects – 3 defects have been confirmed as not deliverable for MT Regression Test. <ul style="list-style-type: none"> <li>• Re-Rec defects have a partial fix (3 fields on the AML file remain incorrect)</li> <li>• Return of Class 3 Smart reads</li> <li>• UMR Class 1&amp;2 AQ Tolerance checks</li> </ul> These are to be discussed with participants in the coming weeks	N/A	<ul style="list-style-type: none"> <li>• Internal analysis of identified defects needs to be completed</li> <li>• Clarity required on partial/workaround fix defects process, including industry agreement</li> <li>• Feed impacted defects into the industry workaround process</li> </ul>	Amber
2	DN Sales Analysis Completed	N/A	<ul style="list-style-type: none"> <li>• Proposed solution option reviewed and accepted internally – centred around manual workaround with no design/code change impact</li> </ul>	N/A	<ul style="list-style-type: none"> <li>• N/A - manual workaround (no code change) greed</li> </ul>	Complete
3	Back Billing UAT Closure	24/12	<ul style="list-style-type: none"> <li>• Bulk of scenarios have proceeded to billing/invoicing</li> <li>• Delayed close-out of some blocker defects as well as execution delays have held up progress in past weeks</li> <li>• Some late design and build changes for Back Billing processes have put UAT completion at risk</li> </ul>	Execution: 60% Defects open: 28 (1 critical, 9 major, 18 moderate)	<ul style="list-style-type: none"> <li>• Dedicated fix team focus on BB related defects to speed-up turnaround times</li> <li>• Further classification and IA of outstanding scenarios – to ensure focus is on high criticality processes</li> </ul>	Amber
4	Completion of Gas Day Testing and Residual PT	23/12	<ul style="list-style-type: none"> <li>• Phase 1 execution completed with minimal functional fallout</li> <li>• Batch schedule coping with Day 1 volumes</li> <li>• Second cycle required to complete residual GDT &amp; PT tests</li> <li>• PT exit report recommendations assessment still required</li> </ul>	GDT Phase 1 Complete Phase 2 in Plan	<ul style="list-style-type: none"> <li>• Monitor phase 2 GDT to ensure functional, code impacting defects are captured</li> <li>• Assessment of recommendations to determine necessity and/or stability impacts</li> </ul>	Green
5	MT Critical CRs Deployed	06/01	<ul style="list-style-type: none"> <li>• CR deliveries on track: CR176 and 182 deployed to MT (albeit Xo testing of remaining regression scenarios continues as dictated by process timelines)</li> <li>• CR 220, 230 and 252 have completed assurance ahead of schedule and awaiting linked defect closures prior to deployment</li> </ul>	CR220, 230 & 252 – Completed BAT CR176&182 – Deployed	<ul style="list-style-type: none"> <li>• Close last defect open related to CR230</li> <li>• Progress CRs 220, 230 and 252 through RDB to full deployment</li> </ul>	Green
6	Agreed Defects List Deployed	06/01	<ul style="list-style-type: none"> <li>• Internal review and prioritisation of remaining UAT/MT Internal defects completed</li> <li>• Despite room in the fix plan, there is a risk that more new defects (through BB or MT External testing) will add strain to this plan</li> <li>• Concerns regarding opportunity to fully regression test fixes prior to deployment given already heavy workload</li> </ul>	MT Defects: 40 (19 External, 21 Internal, raised prior to 11/11)	<ul style="list-style-type: none"> <li>• As per defect deployment risks and mitigations on slide 6</li> </ul>	Green / Amber

# Question 1 Conclusions

- ▶ Baringa believe that Xoserve are on track to meet code stability criteria by the 9<sup>th</sup> Jan to a satisfactory level –Supporting a decision for the Programme to enter Market Trials Regression Testing
- ▶ Baringa’s review has been based on comprehensive access to defect and CR data, and Baringa recognise the progress that Xoserve have made in the clarity of status reporting over the course of Market Trials
- ▶ Whilst there are still gaps in the criteria assessed, Xoserve have an opportunity to resolve the majority of these ahead of MT Regression Test – Notably through alignment of internal and external processes, and performance of a functional ‘smoke / mini-regression’ test on the MT environment prior to MT Regression test commencement
- ▶ When considering if the risk profile associated with these outstanding gaps is high enough to warrant a ‘No-go’ decision for MT Regression test, it is important to consider the alternative options that are available:

Option	Impact	Baringa View
Start MT Regression Test but allow incremental code drops	<ul style="list-style-type: none"> <li>• Reduces the value gained from Regression testing</li> <li>• Creates additional complexity within Regression Test plans</li> </ul>	<ul style="list-style-type: none"> <li>• Baringa would support this option in order to preserve the critical path for the overall Programme</li> <li>• Any incremental code drops must clearly identify impacted scenarios to aide retesting.</li> </ul>
Delay start of MT regression test, utilising the back-end contingency in the Regression Test plans	<ul style="list-style-type: none"> <li>• Extension of MT Regression test</li> <li>• Test lifecycle needs consideration i.e. Is a day-by-day slip is possible versus impacting whole invoicing months.</li> <li>• Back-loads risks into Programme delivery plans</li> </ul>	<ul style="list-style-type: none"> <li>• This is now considered less feasible due to the volume/duration of testing requested by participants within their submitted test plans</li> <li>• Baringa recommend commencing MT Regression Test on plan and utilising contingency based on test performance.</li> </ul>
Delay start of MT regression test and call off of Go Live contingency	<ul style="list-style-type: none"> <li>• Go-live delay from June to July 2017</li> </ul>	<ul style="list-style-type: none"> <li>• Not preferable given recent positive progress of the Programme and the contingency remaining in the downstream plans</li> <li>• Baringa do not consider this as an effective mitigant to the outstanding risks, given the cost to industry of a Programme extension.</li> </ul>

- ▶ With 6 months to go until Go Live, it is not unreasonable for there to still be functional change required – However governance processes must be used to minimise the level of this change, and ensure that change is delivered in a controlled manner to the Industry.

# Question 2 – Do Xoserve have adequate controls and processes in place to ensure the ongoing maintenance of functional code stability through MTR and go-live?

- ▶ Summary findings documented below are based on data extracted from source systems on 14<sup>th</sup> December
- ▶ The forecast RAG articulates a predicted status as of 9<sup>th</sup> January, assuming that recommendations are implemented

Question	RAG 14/12	Current Findings	Recommendation	F'cast RAG 09/01
<b>Summary Findings</b>				
<ul style="list-style-type: none"> <li>Do the processes integrate with the industry-wide processes developed by MTWG?</li> </ul>	Yellow	<p>The strategy to date has been to fix all defects ahead of MT regression test – Hence there has been limited requirement for integration of processes. Clear process hand-offs require clarification.</p>	<ul style="list-style-type: none"> <li>Establish individual accountabilities and triggers to link external 'post-MT Reg. test start' code management processes and Xoserve release deployment processes</li> <li>Prove process integration by taking the 3 defects known to not be deliverable for MT Regression Test through the process</li> </ul>	Yellow
<ul style="list-style-type: none"> <li>Are sufficient controls in place to ensure that changes to code, that could impact functional code stability, are properly identified and managed?</li> </ul>	Green	<p>Governance is in place through RDB Manual code management processes have not yielded significant issues to date</p>	<ul style="list-style-type: none"> <li>Demonstration of manual code control processes to provide confidence to Xoserve stakeholders</li> <li>Define the route to implementation of the full SolMan CHARM solution to provide Production code control</li> </ul>	Yellow
<ul style="list-style-type: none"> <li>Is there appropriate governance of changes which do not impact functional code stability?</li> </ul>	Green	<p>Baringa consider there to be appropriate governance, albeit with the need to set up a flash impact assessment group</p>	<ul style="list-style-type: none"> <li>Establishment of a dedicated group of resources to provide assessment of defects and changes against the MT Code stability criteria</li> </ul>	Green



## Assessment Findings

### 1. Process for Achieving code stability



- ✓ The process has been defined for achieving code stability in a controlled manner
- ✗ Lack of prioritisation across the full defect list has meant that this has not been widely utilised yet
- ✓ Discussions are in flight for the known defects confirmed as not going to be fixed ahead of MT Regression Test
- ✗ There is a risk that not having more widely enacted this process will lead to late notice of manual workarounds
- ✓ Release notes continue to be published to industry notifying of the scope of changes – Action has been taken to improve the quality/detail within these in line with MT lessons learned
- ✓ Publication of the release & forward fix plan only covers MT external raised defects rather than full functional

### 2. Achieving a baseline code position for MT Regression Test

- Currently the Programme is striving to fix as many defects as possible before MT regression test
- New defects continue to be raised – Drawing a ‘line in the sand’ across all sources has been a challenge
- A firm view is required of which defects are to be fixed / manually worked around / deferred to Post Go Live
- ✓ Established governance structures exist in the form of the Release Deployment Board
- ✓ All changes deployed are taken through this forum (Defects and CRs, Functional and Non functional)
- ✗ The numbers of functional defects have precluded individual defect level manual workaround / prioritisation discussions taking place with MTWG to date
- ✗ Regression testing of defects is limited – This has been partially mitigated whilst MT & UAT were in progress, however the risk increases while there is no other functional testing is being performed. This is however a key aim of MT regression test itself.

### 3. Onward Code Control (MT Regression Test to Go-Live)



- ✓ Industry Processes have been defined for managing code changes post entry to MT Regression Test
- ✗ Use of the SAP Solution Manager CHARM code management functionality has not been implemented to date
- ✗ A manual Code control and configuration management is being carried out – This has not yet been demonstrated to the Programme to provide confidence
- ✓ Whilst this increases future risk there have been very few mis-deployments, with no material impacts to delivery plans
- ✓ Regular code comparisons have been executed across the environments to ensure alignment, with Baringa having had validated the outputs

## Recommendations

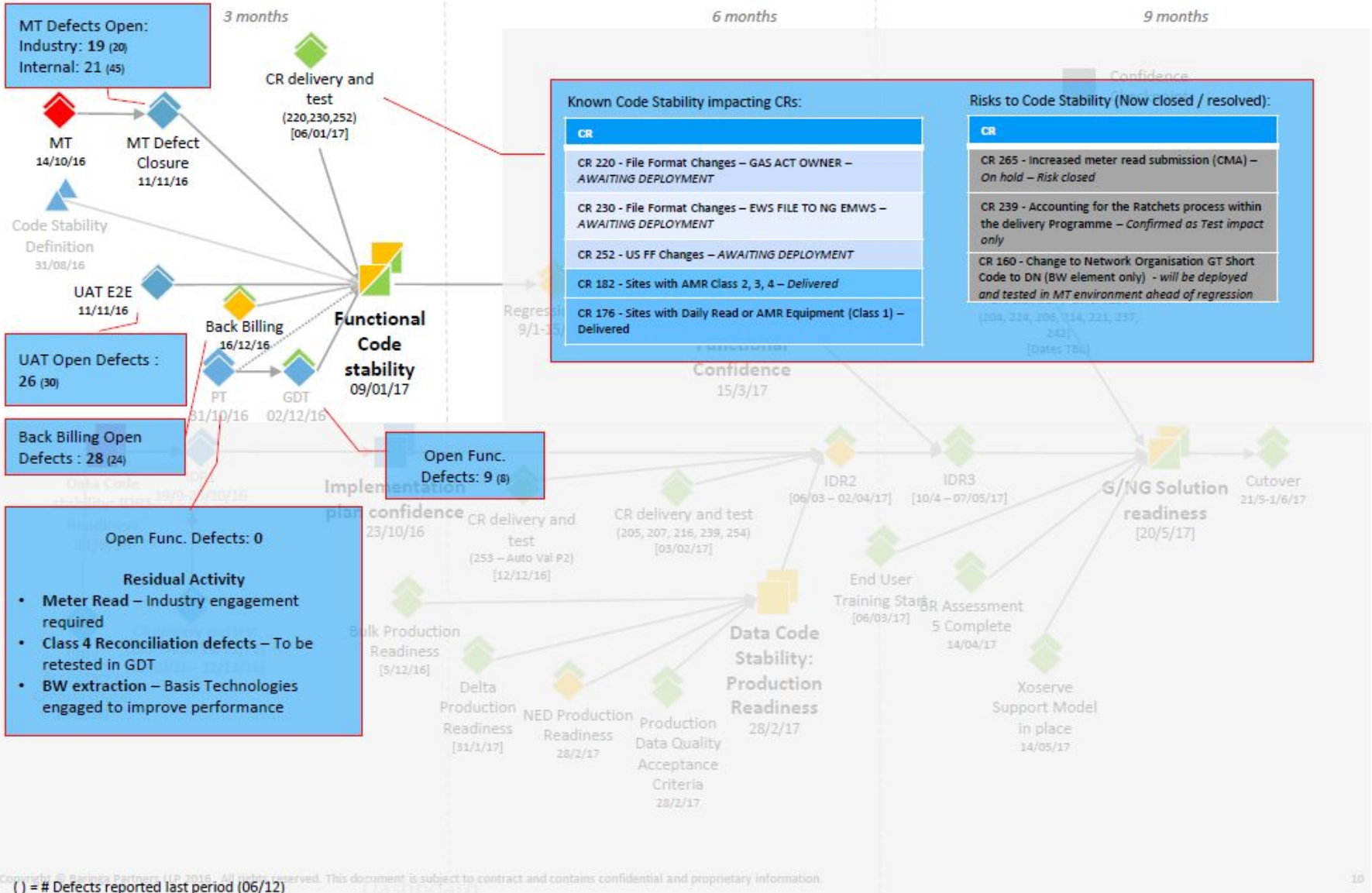
1. Establish a clear ‘line in the sand’ for target defect fixes – A clear cut off point and prioritised list of those defects being, fixed / worked-around / deferred
2. Formalisation is required in order to link external ‘post-MT Reg. test start’ code management processes and Xoserve release deployment board processes
3. Definition of a standard regression pack is needed to be executed ahead of each code release
4. Demonstration of manual code control processes to provide confidence to Xoserve stakeholders
5. Define the route to implementation of the full SolMan CHARM solution to provide Production code control
6. Inclusion of all functional changes in release notes not just MT raised defects
7. Establishment of a dedicated group of Xoserve resources to provide assessment of defects and changes against the MT Code stability criteria

- ▶ Good groundwork has been performed in establishing processes both within the Xoserve central programme and within industry forums
- ▶ These processes are yet to be 'used in anger' due to Xoserve's strategy of planning on fixing all functional defects - The risk of late identification of required workarounds should be mitigated through a clear review of the remaining defects and confirmation of those that require workarounds
- ▶ Further assessment of required manual code management control points will be carried out once the processes have been demonstrated to the Programme – However, Baringa are comfortable that the Release Deployment Board (RDB) acts as a reasonable safeguard, and should not prevent entry to MT Regression test
- ▶ These control points must however have been validated ahead of Go-Live, along side a clear plan on how Xoserve intend to implement the enduring code management solution.

# Appendix A - MT Code Stability - Confidence Check Points

# MT Code Stability - Confidence Check Points

(Against June 2017 – Plan v3.7.3 - Data extract 14/12/16)



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( ) = # Defects reported last period (06/12)



# Holistic Defect & Change Landscape

Baringa's assessment of wider sources of change on the UK Link Programme

**Client:** Project Nexus

**Date:** 14/12/2016

**Version:** V1.4

Reputation built on results

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## Context

- At PNSG on the 21<sup>st</sup> November, Baringa highlighted that there is a wider landscape of functional change that contains some risk to the achievement of Market Trials code stability. Baringa were asked to provide a summary report of the scale of this change.

## Defects

### Risks

- A number of defects (27) still require full analysis to determine a fix and deployment date
- Any additional defects raised (through Back Billing and residual MT testing) will add strain to an already full fix pipeline and may lead to unfixed defects

### Defect Burndown Graph



### Mitigations

- Fix & test teams to provide realistic deployment dates for 'TBC' defects
- Carry out process/code impact analysis of defects without a fix date to determine criticality of fix – de-prioritise non-MT impacting ones
- Agree any defects to be de-scoped with a workaround
- Continue to track progress against burndown plan on a regular basis

## Conclusions

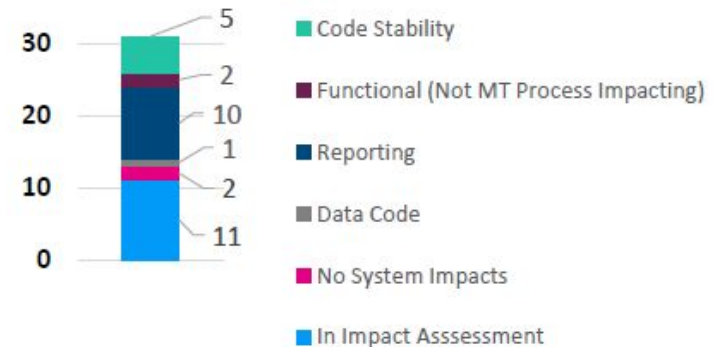
- 144 functional defects exist across all sources, with 27 currently being awaiting fix date confirmation. There is a risk that delays to this delivery plan impacts Xoserve's achievement of code stability criteria. There is also limited capacity in deployment plans to cater for new defects, should they be raised.
- Having reviewed the wider set of CRs, Baringa are comfortable that there is no functional risk from those where an IA has been conducted to understand scope. Where this has not yet happened (11) there remains an element of risk, but initial evaluations suggests that this is very low.

## Change Requests

### Risks

- There is a risk that new code stability impacting CRs might be raised
- Detailed IAs of existing CRs might identify unforeseen code stability impacts (albeit that initial assessments have not raised concerns)

### CR Classification



### Mitigations

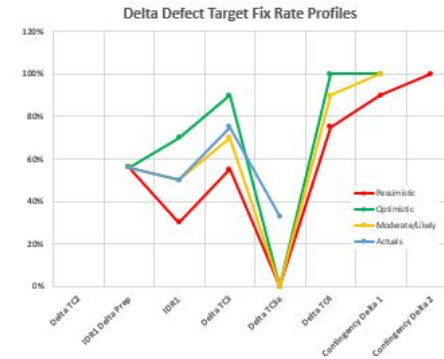
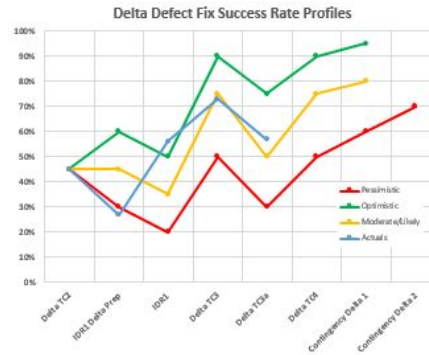
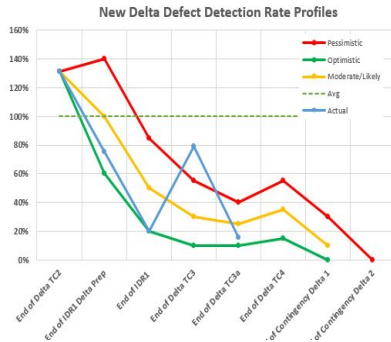
- CR IA process to continue to rigorously test the necessity of each CR and identify workarounds wherever possible
- Heighten regression test requirements – in particular for any functional CRs
- Ensure regression test needs are comprehensively assessed as part of an IA and validated within Business Acceptance Testing

# Delta summary position

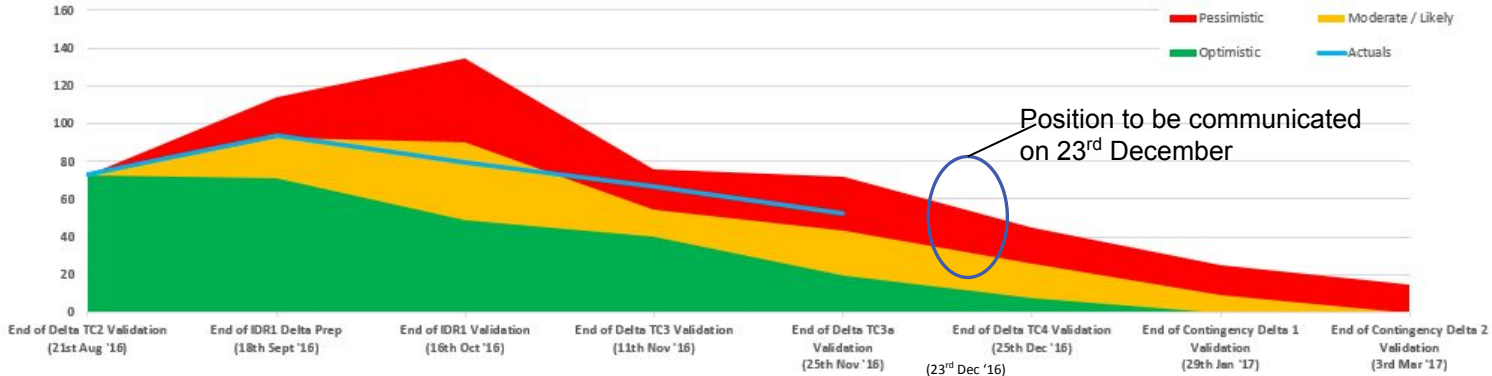
- Delta is the key component of assessing whether to retain a June implementation date, or utilise contingency and consequently move to a July implementation
- Delta solution health is being regularly monitored to support contingency decisions
- **Based on the TC3 Delta testing to the end of November the current measurement of the Delta solution indicates that additional contingency that would result in a July implementation is not required.**
  - All 73 known open Delta defects were fixed in Delta TC3 and TC3a
  - The defect fix rate within TC3 and TC3a continue to be in line or better than our planned levels
  - We were hopeful that newly identified defects would be low following the trend we had witnessed, however, a late spike in proactive validation during TC3 fell outside of our planned levels
  - Delta TC4 is continuing on track with ETL plan with completion on 20<sup>th</sup> Dec. Validation commences on 19 Dec 16 and is due to finish on 23 Dec 16.
  - Auto validation phase 2 may identify more defects, so we remain cautiously optimistic of the Delta solution's stability at this stage
  - Defect materiality (e.g. business impact and volume of MPRN's affected) is to be more understood late-Dec
  - TC5 in January will utilise two agile stages to increase likelihood of meeting acceptance criteria
  - The above factors lead us to conclude February contingency is not required; we continue to monitor

# Delta Data Defect Update (Post TC3)

- Our Delta defect forecasting trend moved into the pessimistic profile following the completion of Delta TC3.
- Delta TC3 achieved its forecasted Defect Fix Success Rate and Target Fix Rate, however 30x new delta data defects were identified which wasn't envisaged following the downward Defect Detection Rate witnessed from TC2, IDR1 Delta Prep and IDR1.
- Delta TC3a achieved better than expected results for all three variable forecast factors.



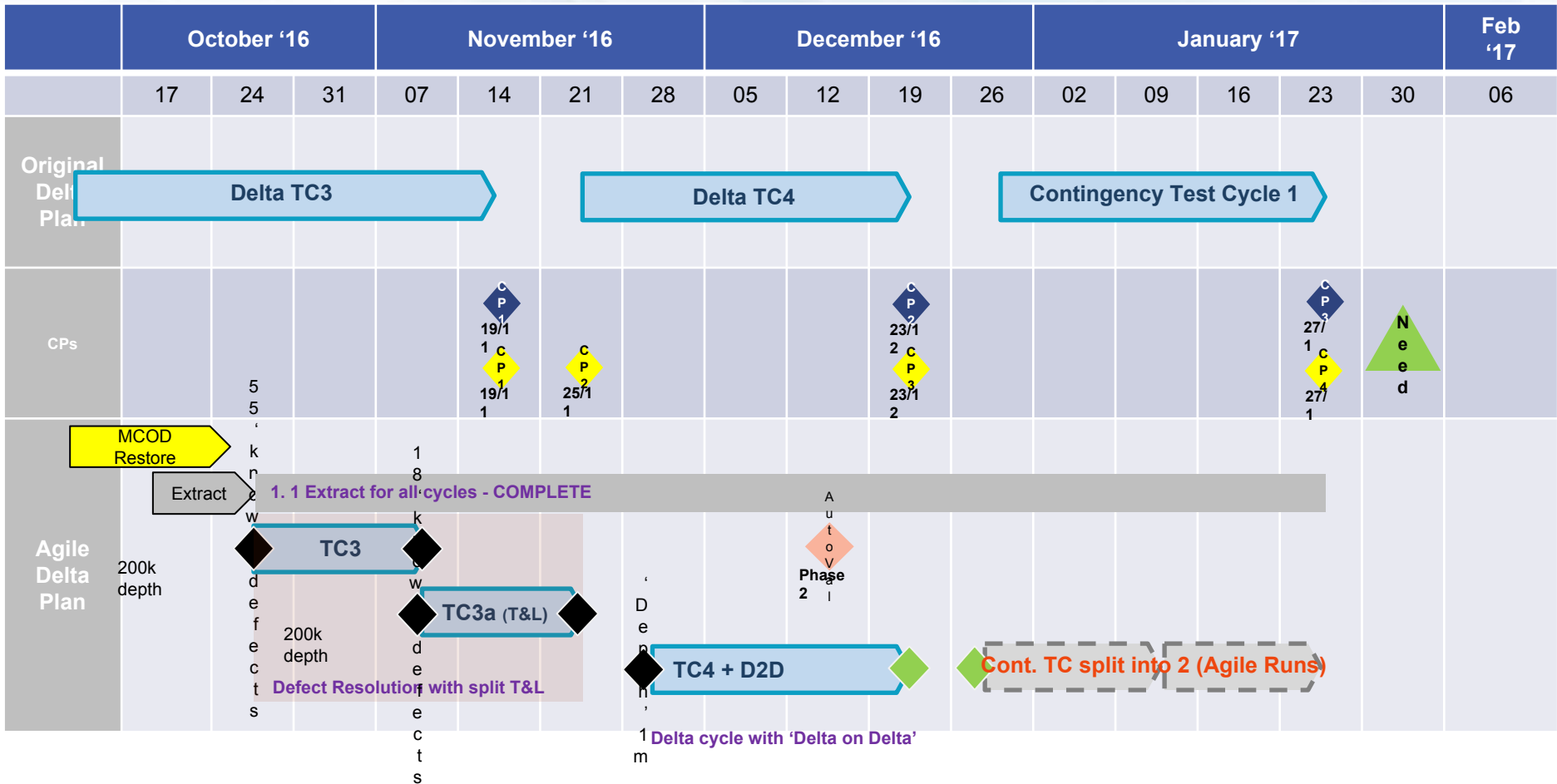
Aggregate Delta Defect Forecasted Profile Comparison



- Delta TC4 is now underway with fixed defects being proven within this cycle (Results of Validation will be available on 23<sup>rd</sup> of Dec)
- To return into moderate/likely profile trend, Delta TC4 has to follow Delta TC3a in achieving better than expected results for all three variables and a new defect count as expected.
- Auto Validation is required for all delta data attributes to determine severity/priority (true impact) of each defect.
- Delta Contingency Cycle 1 to run as 2 Agile ETL sub cycles to achieve greater confidence on defects that may likely remain open from TC4



# Delta Plan (Revised)



# iGT & Unique Sites summary position

## iGT update :

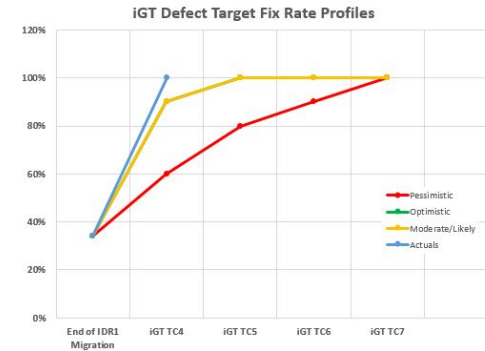
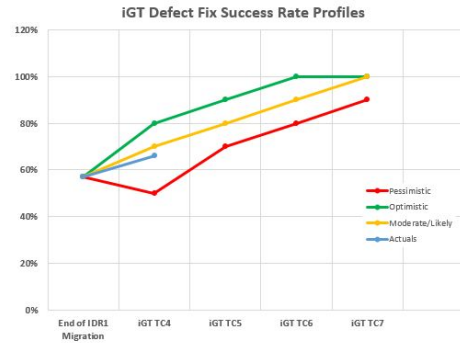
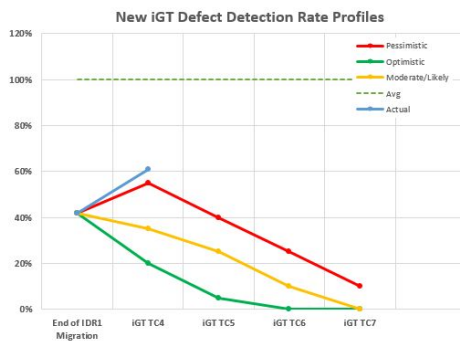
- iGT solution health is being regularly monitored to support IDR2 readiness
- **The current measurement of the iGT solution indicates that previously published plan still holds (2 iGT data cycles + 1 contingency cycle) with the contingency cycle within iGT (early February) likely to be invoked for achieving solution stability and clearing down defects.**
  - iGT Test Cycle 4 completed within published plan timescales but **did not** meet the NED window expectations (*transformation and load took longer*) that are needed within IDR2/3/Go Live
  - We remain in discussions with Transition and Industry on what this means for the NED window.
  - The defect fix rate within iGT TC4 is tracking to slightly below moderate/likely forecast levels
  - The Forecast Model predicted a lesser “new” defect detection rate, however, a higher than forecast rate has been witnessed in this cycle that is currently being evaluated and root cause analysis is being performed with a view to fix these for TC5
  - Auto validation phase 2 may identify more defects, so we remain cautiously optimistic of the iGT solution’s stability at this stage
  - Next planned iGT cycle (TC5) is due to start early Jan ‘17.

## Unique Sites update :

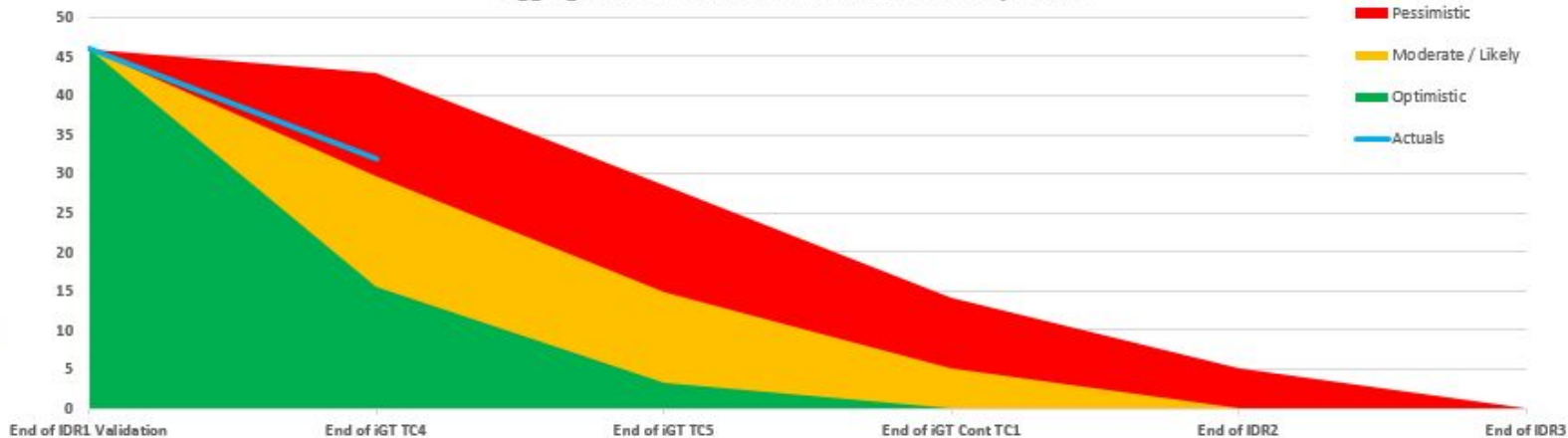
- Unique Sites solution remains key for achieving IDR2 readiness
- **The current measurement of the Unique Sites solution indicates good performance & confidence in timings as witnessed in IDR1. A number of ‘Open’ defects are being worked through with the intent to test the fixes in a planned cycle late January ‘17 in order to achieve clear down of known defects pre start of IDR2**

# iGT Data Defect Update – 13<sup>th</sup> Dec midday

- Excluding iGT/DM CSEP defects current with Industry or Xoserve for cleanse, we are currently tracking slightly within the pessimistic forecast trend.
- iGT TC4 saw 22x new defects identified and these are being evaluated for root cause.
- iGT TC4 yielded a defect fix success rate of 66%.



**Aggregate iGT Defect Forecasted Profile Comparison**



## What next?

- To return to a moderate/likely profile trend, RCA is required upon all open iGT/DM CSEP data defects particularly those newly discovered in iGT TC4 in order to improve the fix rates for iGT TC5 and stem the flow of further new/regression defects.


# G1 Dashboard – Participants

The information is based on self assessment information provided on the Nexus Assurance Portal on 25 Nov 16 and follow up activity conducted directly with Market Participants between 28 Nov 16 and 12 Dec 16.


<b>36</b>	Market Participants provided a portal submission on 25 Nov 16.
<b>07</b>	Market Participants did not make a portal submission on 25 Nov 16.
<b>04</b>	Market Participants made an incomplete submission for G1.
<b>14</b>	Market Participants did not provide a projected status for G2 and G3.
<b>32</b>	Market Participants (of the 36 submissions) provided or indicated they will provide evidence for G1.

**Market Coverage:**

- The G1 self-assessment submission on 25 Nov 16 received responses from 36 of 43 Market Participants. This equates to 97% Annual Quantity ('AQ') and 98% of supply points coverage.

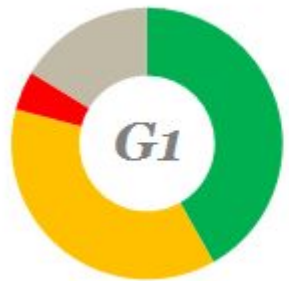


**Market AQ %**

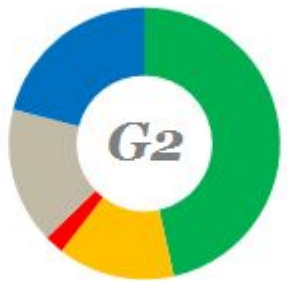


**Market Supply Point %**

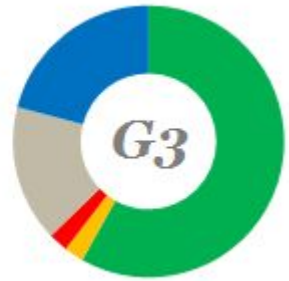
**Market Participant self-assessed overall RAG status projections**



**G1 RAG status**



**G2 RAG status**



**G3 RAG status**









Attained or on track to attain	Will not be attained and no mitigation plan to bring back on track	No Submission
Mitigating actions to bring back on track by next assessment	Data missing – partial submission made	

**GONG criteria G1 self-assessment commentary:**

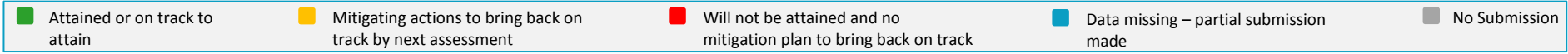
- 7 Market Participants who failed to make a self assessment have been escalated to Ofgem.
- The number of Market Participants self assessing their overall RAG status as 'Green' increases from 18 at G1 (40% AQ) to 25 (79% AQ) by G3. This suggests that Market Participants believe that the current mitigating actions are likely to be feasible and practical to address issues prior to go-live.
- 16 Market Participants self assessed their overall RAG status Amber for G1. Areas that require mitigating actions relate to known Transition and Data workstreams.

# G1 Assessment Milestone

Based on data received through the self assessment submission on 25 Nov 16 and follow up activity performed directly with Market Participants the G1 Assessment milestone is tracking to complete to plan with the noted actions below required prior to G2.

Success Factor	Self Assessment (25 Nov-12 Dec)	Observations	Actions
Solution meets industry requirements	MP 	<ul style="list-style-type: none"> <li>Finalisation of key transition deliverables is at risk due to outstanding decisions and information (e.g. NED's).</li> <li>There is insufficient visibility of Market wide data readiness specifically relating to iGT data.</li> </ul>	<ul style="list-style-type: none"> <li>Closely monitor progress of the known decisions required to achieve transition milestones.</li> <li>Develop data questionnaire to establish detailed market status on data readiness.</li> </ul>
	Xoserve 	<ul style="list-style-type: none"> <li>All activity reported as on track in this area.</li> </ul>	<ul style="list-style-type: none"> <li>Continue to monitor GONG criteria at subsequent submissions.</li> </ul>
Solution is stable	MP 	<ul style="list-style-type: none"> <li>Low level transition design (LLTD) documents which are not final impact participants' ability to develop transition plans and test/rehearse them.</li> </ul>	<ul style="list-style-type: none"> <li>Make LLTD documents available sooner to expedite the review process and support finalisation.</li> </ul>
	Xoserve 	<ul style="list-style-type: none"> <li>Inflight and iGT data migration testing is not complete and is required to be proven prior to IDR2.</li> </ul>	<ul style="list-style-type: none"> <li>Continue to monitor GONG criteria at subsequent submissions.</li> </ul>
Solution is Sustainable	MP 	<ul style="list-style-type: none"> <li>Cutover governance, hypercare and post go-live release/change management processes need to be finalised to support participant transition planning.</li> </ul>	<ul style="list-style-type: none"> <li>Develop a single source document to align transition artefacts and support participant transition planning.</li> </ul>
	Xoserve 	<ul style="list-style-type: none"> <li>All activity reported as on track in this area.</li> </ul>	<ul style="list-style-type: none"> <li>Continue to monitor GONG criteria at subsequent submissions.</li> </ul>
Enables positive consumer experience*	MP 	<ul style="list-style-type: none"> <li>Degree of organisational change required varies and analysis is ongoing across the market.</li> </ul>	<ul style="list-style-type: none"> <li>Continue to monitor GONG criteria at subsequent submissions.</li> </ul>
	Xoserve 	<ul style="list-style-type: none"> <li>All activity reported as on track in this area</li> </ul>	<ul style="list-style-type: none"> <li>Continue to monitor GONG criteria at subsequent submissions.</li> </ul>

\*Only 1 criteria has a G1 threshold.



# Next Steps

**1**

Evaluate self-assessment submissions received from the 16 Dec 16 portal submission and make required amendments to the G1 Assessment summary in advance of the PNSG on 9 Jan 17.

**2**

Review and approve completion status of G1 milestones at PNSG on 09 Jan 17.

**3**

Identify the common blocking issues across the market and work with the appropriate governance body or cross programme workstreams (TPG and DMG) to monitor progress.

**4**

Implement an interim GONG assessment on 27 Jan 17.

**5**

Review supporting evidence uploaded for the G1 assessment point threshold and identify gaps to be addressed with Market Participants prior to the G2 assessment.

# Action Log

Action #	Action	Progress	Owner	Status	Due	Forum
A138	Xoserve to i) Confirm the final list of files and reports unchanged by Nexus. In addition indicate which are platform independent (CMS) and which are unchanged but now part of the SAP ISU solution. ii) Demonstrate the level of internal testing carried out, or planned to be carried out on these files and reports. iii) Share the above analysis with all participants to review and determine if they need to include in their MTR plans. Where participants do want to include files/reports in MTR plans they need to provide a rationale as part of their entry submission.	This work is ongoing and will be shared with the industry by 30 Nov 16. The due date has been updated to reflect this.	Xoserve		26 Sep 16 → 28 Sep 16 → 05 Oct 16 → 14 Oct 16 → 26 Oct 16 → 30 Nov 16 → 16 Dec 16	MTWG
A146	Xoserve to explore whether the IDL approach can be duplicated in production post go live in the event of suspended operation e.g. following an incident.	Xoserve and iGTs had a call on 21 Oct 16 to discuss whether it would be possible to stop and start IDL generation during Market Trials to ensure the manual workaround enacted by the Market Trials following iGT request team could be duplicated. Xoserve has confirmed that it would not be possible to do this again during market trials, but they have agreed to explore whether the IDL approach can be duplicated in production post go live in the event of suspended operation e.g. following an incident. CR has now been initiated and is pending an update.	Xoserve		04 Nov 16 → 23 Dec 16	PNDG
A181	Provide a date when Market Participants will know the final set of defects after the auto-validation run.		Xoserve		24 Nov 16 → 15 Dec 16	PNDG
A183	For outstanding test lines from Managed Market Trials, provide detail of the residual test activity on an anonymised basis to PNDG.	Reports have been provided to PNDG indicating the total number of test lines and a breakdown of what they relate to. With each participant involved PwC has been involved in detailed discussions on outstanding items. PROPOSE TO CLOSE	PwC		01 Dec 16 → 15 Dec 16	PNSG
A186	Determine whether to add additional milestones for in-flight testing.		Xoserve		12 Dec 16 → 15 Dec 16	PNDG

# Appendices

#	Title	Slide
1	Governance Meeting Schedule	33
2	Key Short Term Activity	34
3	Disclaimer	35
4		
5		
6		
7		
8		
9		



# Governance: Meetings

## RIAG Meeting Focus

15 Dec 16	19 Jan 17	02 Feb 17	16 Feb 17	02 Mar 17
<ul style="list-style-type: none"> <li>Environment initial discussion</li> <li>Code Stability dashboard</li> <li>Assumptions initial review</li> </ul>	<ul style="list-style-type: none"> <li>CMA</li> <li>Inflight transactions</li> </ul>	<ul style="list-style-type: none"> <li>Risk log refresh with input from working group discussions (conducted ahead of time)</li> <li>Assumptions deep dive</li> </ul>	<ul style="list-style-type: none"> <li>Disengaged Market Participants and new market entrants framework</li> </ul>	<ul style="list-style-type: none"> <li>Assumptions check in</li> <li>Project Nexus in wider industry</li> </ul>

## PNDG Meeting Focus

13 Dec 16	17 Jan 17	31 Jan 17	14 Feb 17	14 Mar 17
<ul style="list-style-type: none"> <li>Programme Update</li> <li>Workstream Update</li> <li>Code Stability</li> </ul>	<ul style="list-style-type: none"> <li>Programme Update</li> <li>Workstream Update</li> </ul>	<ul style="list-style-type: none"> <li>Programme Update</li> <li>Workstream Update</li> </ul>	<ul style="list-style-type: none"> <li>Programme Update</li> <li>Workstream Update</li> <li>Proposed Face to Face session</li> </ul>	<ul style="list-style-type: none"> <li>Programme Update</li> <li>Workstream Update</li> </ul>

## PNSG Meeting Focus

19 Dec 16	09 Jan 17	1 Feb 17 (TBC)	20 Feb 17	29 Mar 17 (TBC)
<ul style="list-style-type: none"> <li>Programme Update</li> <li>Workstream Update</li> </ul>	<ul style="list-style-type: none"> <li>INTERIM</li> <li>GONG Assessment 1</li> <li>Contingency Checkpoint 2</li> </ul>	<ul style="list-style-type: none"> <li>Programme Update</li> <li>Workstream Update</li> <li>Contingency Checkpoint 3</li> </ul>	<ul style="list-style-type: none"> <li>Programme Update</li> <li>Workstream Update</li> </ul>	<ul style="list-style-type: none"> <li>Programme Update</li> <li>Workstream Update</li> <li>GONG Assessment 2</li> </ul>

## PNSF Meeting Focus

Jan 17 (TBC)	Apr 17 (TBC)
<ul style="list-style-type: none"> <li>Contingency Checkpoint 3</li> </ul>	<ul style="list-style-type: none"> <li>Programme Update</li> <li>Workstream Update</li> </ul>

# Key activities ahead of Interim PNSG

Activity	2016			2017				
	Dec			Jan				
	12	19	26	02	09	16	23	30
Market Trials Entry		Code Stability Report		▲ Confirmation of MMT Testing Completed	▲ Code Stability milestone	▲ MT Regression Entry		
Contingency Checkpoint 2		▲ Contingency Checkpoint 2		▲ Communication received from Xoserve whether contingency is required				
GONG2		▲ G1 Assessment						
Governance				▲ Ofgem indicative decision (Entry Regression Issue)	▲ Interim PNSG slides issued	▲ Interim PNSG		

▲  
15. Dec 2016

- **22 Dec 16** - GONG G1 Assessment
- **23 Dec 16** - Contingency checkpoint 2 milestone. Note: information for the 4 criteria from Xoserve will be shared with Ofgem and PwC in the first week of January ahead of an indicative decision being made by Ofgem

- **No later than 03 Jan 17** - Code stability report from Baringa
- **W/C 03 Jan 17** - Ofgem indicative decision (entry reg) issued
- **05 Jan 17** - Interim PNSG slides issued including MT Regression entry assessment and confirmation of MMT testing completion status
- **09 Jan 17** - Interim PNSG held to speak to G1 assessment, Contingency Checkpoint 2 and start of Regression

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