Project Nexus

Readiness Criteria Framework and Manual

Version 0.12 – draft for discussion only

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Contents

Introduction

Background

PwC have been appointed by Ofgem as the Project Assurance/Manger ('PA/M') for Project Nexus. As part of this role, it was agreed by the Project Nexus Steering Group that a go / no-go ('GONG') framework and associated readiness criteria should be developed to provide an enhanced level of governance in the period before go-live.

Why is a readiness framework needed?

Based on our experience of similar, market-wide changes, a GONG framework plays a key role in effective evaluation of readiness across complex, multi-party change programmes. With over forty organisations involved, Nexus requires clear and effective coordination of system, process and people change. The readiness framework will provide a mechanism to capture both qualitative and quantitative evidence and provide the Nexus Steering Group the information and confidence to make a clear recommendation.

The target outcomes of this framework:

- Each party understands what it is aiming for in order to be assessed as 'ready';

- Integrates Xoserve, shippers, GTs and iGTs;

- Efficient to execute, with targeted assurance of the evidence provided by each party against each criteria;

- Periodic self-reporting and assurance gives transparency over each individual organisation's state of readiness.

- Supports timely intervention and acceleration where this is needed;

- Increased confidence that the revised target go-live date is achievable;

- Early warning of where parties may be implementing mitigating actions or work arounds;

- Seamless integration of GONG, market trials entry and market trials exist criteria – one is a subset of another; and

- Aggregation to a market-wide readiness view – easily builds from "is an individual party ready?" to "is the market ready?"

We have developed a tailored readiness framework to assess and support the go-live decision, based on our experience of major technology enabled transformations. The framework also encompasses the supporting criteria for joining and exiting market trials.

A draft and indicative set of go-live criteria was shared with the Project Nexus Steering Group on the 14th April 2015. We have received feedback from a number of parties and we have incorporated the views expressed in developing this document. The primary feedback received was that there was no explanation of how the framework would be deployed, which this document is seeking to address.

The readiness framework and approach

Design Principles

In designing the framework, we have kept to the following guiding principles:

- Streamlined – the smallest number of criteria possible that cover the critical go-live activity that we believe are significant to the market as a whole;

- A recognition that **system**, **people**, **processes** and **data** need to work together to support a successful outcome from a major change such as Nexus and the UK Link Replacement Programme;

- Use of simple business language to support a common understanding;

- A sharp focus on the market critical processes and the core objectives of Nexus;

- Measurable and demonstratable criteria, supporting an evidence-based assessment of readiness; and

- There is a clear 'glide path' of activity in the run-up to a successful go-live.

From these principles we have developed the building blocks of readiness that outline how the critical phases will be navigated and ultimately result in a factbased recommendation on go live readiness.

Figure 1 – The building blocks of market readiness for Nexus:

This approach addresses a gap that has existed to date on Project Nexus. There has not previously been:

- A contolled approach to managing market trial readiness to enter and exit;

- A clear definition of how 'ready' will be assessed at an individual organisation level;

- Definition and agreement of the market critical processes required to be operational at go live as a minimum; and

- An ability to consolidate the market wide readiness position and impact assess scenarios in which not all parties are ready at the same time.

Based on these principles the GONG framework has been developed and is explained in detail in this document

The key components of the readiness framework

Building a framework to support IT system changes in isolation does not ensure success. Our experience suggests that 70% of projects fail when the solution is right, but the implementation has not addressed wider people and process aspects. As a result, our GONG framework recognises **system, people, processes and data** as four categories that need to work together to support a successful outcome from a major change such as Project Nexus. Supplementing these four categories are a set of:

- **Market Critical processes** – The Change Overview Board Testing Forum outlined three market critical processes on the 17th March 2015. This framework will focus on whether participants are ready to operate these processes:

  1. Manage supply meter point registration – the facilitation of supply meter point transfers;
  2. Manage supply meter point register – the update of data held against a register supply meter point; and
  3. Record supply meter point (MPRN creation).

- **Criteria** –measureable standards that can be judged when measuring the go-live readiness of an individual organisation;

- **Assessment metrics** – the specific measures associated with each criteria;

- **Evidence** – the specific artefacts or other evidence that would be expected in order support the completion of any criteria;

- **Role applicable to** – defines the criteria applicable to each organisation.

- **Thresholds of readiness** – the requirements for each organisation to achieve in order to demonstrate readiness against the criteria. Initially this will be a self-assessment, followed by independent validation from the PA/M. This may include site visits and other assurance work to ensure that a consistent interpretation has been taken by participants.

  The self assessment process defines three levels of completion:

  – Red (fail) – Incomplete critera with no credible mitigation plan*
  – Amber – Incomplete with a credible mitigation plan*
  – Green – completed with credible supporting evidence

  Feedback received on the go-live criteria shared with the Nexus Steering Group on the 14th April 2015 suggested that an amber rating is needed to allow an assessment of the volume of possible mitigations or workarounds that may exist across the market. It may be that the combined effected of multiple amber ratings would result in the market as a whole deciding not to accept the associated risk.

  We propose that the mitigation plans will be subject to indpendent evaluation by P/AM to determine if they can be maintained without an adverse affect on the market.

How the framework will be rolled out and operated across the market

We understand that a level of support will be required in order to embed the framework into Project Nexus. Our approach will include the following elements of support:

- We will further develop the Project Nexus Hub web portal that we used to collect information for our project plan assessment. The portal will be adapted to allow each organisation secure access to their own market trials and readiness criteria. As with the project plan assessment, participants will only have acess to their own information and PwC are the only organisation that will have access to all of the information provided;

- The portal will contain the agreed criteria for each stage, as set out in this document, and provide clear guidance and work instructions for the self-assessment. We will ask each organisation to submit self-assessment and supporting evidence against the criteria via the portal to support the timeline set out below and our reporting to the Steering Group;

- We will deliver a number of webex sessions prior to launching the framework to provide further information and guidance and allow for organisations to raise questions or concerns. We will post FAQs and any common 'lessons learnt' from our validation and assurance of responses; and

- During the self-assessment period we will be available to respond to any queries raised through the Project Nexus Portal. We will arrange further webex sessions where required in order to support the process.

We envisage that the framework will be deployed during **July 2015** and will operate in the following windows:

- *July 2015 – August 2015* – initial market trials entry self-assessment and assurance reviews. Communicate 'lessons learnt' to all participants, with further support as needed;

- *September 2015 – October 2015* – finalise market trials entry self-assessment and assurance. Focussed follow-up with organisations that are off-track to understand when they are likely to meet the criteria to enter market trials;

- *October 2015 – March 2016* – market trials exit and initial GONG self-assessment and assurance reviews. Communicate 'lessons learnt' to all participants, with further support as needed; and

- *March 2016 – April 2016* – finalise GONG asessement and make final go / no-go recommendation to the Steering Group.

These timelines are dependent on finalisation of the revised Nexus go-live date and agreement of this draft framework.

Overall Governance and assurance plan

1. Governace

The Project Nexus Steering Group has oversight of the execution of market trials, the market trials entry criteria and the final readiness / GONG criteria. The Steering Group will continue to meet on a monthly or fortnightly basis up to the revised Nexus go-live.

PwC, in their role as PA/M, will provide monthly update reporting of the progress towards market trials entry and the final readiness assessment. This will be based on the information submitted to the PwC Project Nexus web portal, regular dialogue with organisations and our follow-up assurance activity (see below). As with the initial assessment of project plans, any information submitted to the Steering Group will be anonymised and presented at a market role level.

2. Assurance

To ensure that organisations interpret and self-assess their progress and readiness in a consistent manner, PA/M will conduct a targeted programme of assurance activity around the market trials and GONG criteria information provided by shippers, iGTs and GTs.

Throughout the phases of pre-market trial entry, pre-market trial exits and pre-Nexus go-live, we anticipate that we will:

- Aggregate the information provided to us via the portal to present to the Nexus Steering Group on a periodic basis (e.g. monthly). We will ask organisations to update and refresh their information to support this objective;

- Review the supporting evidence provided to us via the portal and determine if it is in line with the expected evidence set out in this framework;

- Pick a sample of organisations to visit and inspect 'first hand' to understand how they have interpreted the criteria and the level of evidence they have reviewed to support their self-assessment. We expect to split these visits across different categories of market roles and participants;

- Work with Baringa, Xoserve's assurance partner, to understand how they will assure the information provided by Xoserve against the market trials and GONG assessments;

- Publish anonymous lessons learned and case studies for wider education and to support effective adoption of the assessment framework; and

- Provide a final go-live recommendation to the Project Nexus Steering Group.

The below table outlines the timeline of activity over the next 10 months:

Table 1

Activity	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr
GONG Framework		✓										
Roll out framework		✓										
Market Trials L1/L2	L1				L2							
Market Trials L3/L4						L3/L4 - Core				Unique & Retro		
'Audit' criteria measurement					*MT Entry*	✓	*GONG*	✓	*MT Entry**	✓	*GONG/ MT Exit*	✓
Assess mitigation for GONG 'fails'											✓	✓
Steering group	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

*The second market trials entry check point in January will be related to the readiness to test unique site and retrospective amendment functionality. The criteria for entry will be the same as the core market trial criteria, but relate specifically to the functionality supporting unique sites and retrospective amendments.

Market trials entry criteria

| Organisation: Ready for Market Trials? | → | Organisation: Completion of Market Trials | → | Organisation: are they ready for go-live? | → | Market: How many are ready? | → | Market: Determine the impact | → | Overall level of risk to market objectives | → | Final go / no-go recommendation |

This section outlines the market trials entry criteria that we propose all organisations should meet in order to participate in **Level 2** (data file format), **Level 3** (process scenario) and **Level 4** (end-to-end change of ownership) market trials. These are a newly defined feature of Nexus and are important for the following reasons:

- Organisations should be appropriately prepared to join market trials, or time may be lost getting participants 'up to speed'; and

- Organisations should have completed their internal testing prior to joining market trials in order to prevent contamination from defects that do not relate to the end-to-end market critical processes. This mitigates the risk that time is spent dealing with defects relating to the solutions of individual market participants, rather than the operation of the end-to-end processes.

Table (1) and (1.1) summarise the market trials entry criteria, which are more fully explained below the tables. We expect that each organisation should use this framework to self-report their readiness for market trials using the PwC Nexus Hub web portal.

Table (1) – Market trial entry criteria Level 1 and Level 2

Criteria		Assessment metric	Role				Thresholds		
			Shipper	IGT	GT	X'sv	Red	Amber	Green
1. Market Trial Entry – Level 1 – 2									
1.1	**Completion of preparatory testing –** completion of internal and L1 /L2 market trials testing	**Market critical processes** have been built and there are no critical or high impact defects that are open and unresolved.	✓	✓	✓	✓	Less than 100% complete	Less than 100% complete credible mitigation plan	100% complete

Table (1.1) - Market trial entry criteria Level 3 and Level 4

Criteria		Assessment metric	Role				Thresholds		
			Shipper	IGT	GT	X'sv	Red	Amber	Green
1. Market Trial Entry – Level 3 - 4									
1.2	**Completion of preparatory testing –** completion of internal and L1 /L2 market trials	**Level 1 Connectivity and L2 File format testing** has been successfully completed and there are no critical of high open defects. There are no critical or high impact defects that are open and unresolved.	✓	✓	✓		Less than 100% complete	Less than 100% complete credible mitigation plan	100% complete
1.3	Market trial scope and approach is clearly defined - a prescriptive plan has been agreed and communicated to the relevant parties.	Mandatory Level 3 and Level 4 test scenarios and scripts have been fully documented.	✓	✓	✓	✓	Less than 100% complete	Less than 100% complete with a credible mitigation plan	100% complete
		A clear defect management process that has been communicated to all parties and appropriate governance is in place in order to impact assess defects				✓			
		Primary and secondary SLA's for defect support and resolution are in place	✓	✓	✓	✓			

1.4	Market trial pre-requests are in place.	Test data requirements have been clearly defined and an appropriate process in place to manage data requirements	✓	✓	✓	✓	Less than 100% complete	Less than 100% complete with a credible	100% complete
		Resources are in place to support test execution, defect management and status monitoring	✓	✓	✓	✓			
		Suitable test environments are available for use	✓	✓	✓	✓			

Market trial entry criteria – detailed guidance for Level 1 and Level 2

Criteria – 1.1 Completion of preparatory testing

It is critical to ensure that market trials focus on proving the integrated solution and end-to-end market processes. As a result, each organisation should be able to demonstrate they have completed their build and, as a minimum, carried out internal testing of the market critical processes. Good practice suggests that at least three test phases should be carried out prior to market trial entry; system testing, system integration testing and user acceptance testing. Across these three phases, we would expect that organisations have conducted a level of testing that gives them comfort that the functionality is working as intended. We will be flexible and pragmatic in considering the evidence that is available to confirm that an appropriate level of testing has been performed.

Assessment Metric

- Market critical processes have been built and tested by each organisation internally. There are no critical or high impact defects that are open and unresolved.

    The PA/M Proposes the following definitions for critical and high impact defects:

    – Critical – Defects, whether functional or technical, that mean testing cannot continue.
    – High – Defects, whether functional or tehcnical that require use of the system in a way that deveates from the agreed desgin. These defectsintroduce workarounds that are not maintainable when the soluiton is live.

Examples of appropriate supporting evidence

- Test phase completion reports should be provided. They should be approved by an appropriate senior leadership team member/s and should clearly outline how any workarounds or ongoing issues have been impact assessed;
- MI and KPIs that show the progress and completion of internal testing, with the number of critical or high impact defects that remain open;
- Individual test scripts that relate to the market critical processes; and
- Description of how any unresolved critical or high impact defects are mitigated so that the organisation can enter market trials with minimal disruption.

Thresholds

- Red (fail) - Less than 100% complete with no credible mitigation plan;
- Amber - Less than 100% complete with a credible mitigation plan; and
- Green (pass) – All criteria evidenced as complete.

Market trial entry criteria – detailed guidance for Level 3 and Level 4

Criteria – 1.2 Completion of preparatory testing

In order to proceed to **Level 3** (process scenario) and **Level 4** (end-to-end change of ownership) market, we expect organisations to have successfully executed **Level 1** (connectivity) and **Level 2** (file format) testing with Xoserve.

Assessment Metric

- Level 1 Connectivity and L2 File format testing has been successfully completed

Examples of appropriate supporting evidence

- Test phase completion reports should be provided. They should be approved by an appropriate senior leadership team member/s and should clearly outline how any workarounds or ongoing issues have been impact assessed;
- MI and KPIs that show the progress and completion of connectivity and data file format testing, with the number of critical or high impact defects that remain open;
- Individual test scripts that relate to connectivity and the key market file data flows; and
- Description of how any unresolved critical or high impact defects are mitigated so that the organisation can enter level 3 and level 4 trials with minimal disruption.

In addition to the above, we expect to review MI from Xoserve showing their central view of the organisations that have completed connectivity and data file format testing.

Thresholds

- Red (fail) - Less than 100% complete with no credible mitigation plan
- Amber - Less than 100% complete with a credible mitigation plan
- Green (pass) – All criteria evidenced as complete.

Criteria – 1.3 Market trial approach is clearly defined

Prior to the commencement of market trials, we expect that a prescriptive market trials plan is produced outlining but not limited to the following key elements:

- Confirmation of the mandatory[1] test scenarios – be this discrete functional tests or end-to-end process testing (e.g. change of ownership). These should be related to the agreed market critical processes;
- A schedule of testing for each of these processes;
- Appropriate availability of test environments during each phase of trials. Identification and consideration of how catch-up is peformed where organisations cannot meet the prescribed timelines;
- A clear and effective defect management process with associated primary and secondary support SLAs; and
- A defined process for managing intershipper testing for change of ownership scenarios.

This information should be available for review by all organisations in order that the market trials can be appropriately planned. We expect that the Xoserve market trials approach document will provide the core of the above, but each organisation should define its own approach to interact with that of Xoserve.

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[1] *There are currently a total of 27 test scenarios in the Xoserve market trial approach document. The PA/M recommends that those relating to market critical processes are mandated.*

Assessment Metric

- Documented market trials approach. A clear schedule of testing should be confirmed and communicated. The approach document should also outline environment availability during the test window as well as opportunities to test outside of these windows.
- Mandatory Level 3 and Level 4 test scenarios and scripts have been fully documented.
- A clear defect management process that has been communicated to all parties and appropriate governance in place in order to impact assess defects; and
- Primary and secondary SLAs for defect support and resolution are in place.

Examples of appropriate supporting evidence

- Prescriptive market trials approach documentation;
- Test scenarios and test scripts; and
- Defect management process description.

Thresholds

- Red (fail) - Less than 100% complete with no credible mitigation plan
- Amber - Less than 100% complete with a credible mitigation plan
- Green (pass) – All criteria evidenced as complete.

Criteria 1.4– Market trial pre-requisits are in place

As well as ensuring that participants have completed testing, we also expect some other key foundations to be in place to support market trials:

- Test data requirements are understood and test data is ready and available for use;
- Test environments are ready and operational in order to support the market trials process; and
- Testing resources are available to execute the defined scenarios, support defect resoluton and monitor the test execution status against the exit criteria.

Assessment Metric

- Test data requirements are clearly defined and an appropriate process is in place to manage them;
- Suitable test environments are available for use; and
- Sufficient resources are in place to support test execution, defect management and status monitoring

Examples of appropriate supporting evidence

- Market trials approach documentation with evidence of appropriate review and approval, ideally from the Nexus Steering Group; and
- Confirmation from market trial participants that appropriate data, test environments and resources are in place to support the process.

Thresholds

- Red (fail) - Less than 100% complete with no credible mitigation plan
- Amber - Less than 100% complete with a credible mitigation plan
- Green (pass) – All criteria evidenced as complete.

Governance and decision-making over market trials entry

We expect to evaluate and report whether individual organisations are ready to enter market trials. We do not expect to aggregate this to a market-wide decision to start (or otherwise) the market trials, as we believe that it is appropriate that individual organisations are able to progress into market trials when ready to do so. The only exception to this would be if Xoserve is not ready, given their pivotal role in providing the market trials environment and the hub systems.

Self assessment – market trials completion/exit criteria

| Organisation: Ready for Market Trials? | Organisation: Completion of Market Trials | Organisation: are they ready for go-live? | Market: How many are ready? | Market: Determine the impact | Overall level of risk to market objectives | Final go / no-go recommendation |

This section defines the criteria each organisation should be able to demonstrate to complete the market trial phase and formally exit testing. This is the second building block in demonstrating readiness to go-live. Evidence of the completion **Level 3** (process scenario) and **Level 4** (end-to-end change of ownership) phases of market trials will be essential in providing confidence to the Project Nexus Steering Group that the intgerated solutions can support the market critical processes.

Table (2) summarises the full market trials exit criteria, which are further explained below the table. We expect that each organisation should use this framework to self-report their readiness for market trials using the PwC Nexus Hub web portal.

Table (2) – Market trial exit criteria

	Criteria	Assessment metric	Role					Thresholds
			Shipper	IGT	GT	Red (fail)	Amber	Green (pass)
2 Market trial exit								
2.1	**Market critical processes** (as defined above) have been built and subjected to market trials by the organisation and Xoserve. There are no critical or high impact defects that are open and unresolved.	% completion of market trials test scenarios relating to the market critical processes. For example, has the change of ownership process been tested between the organisation, Xoserve and other shippers?	✓	✓	✓	Less than 100% complete	Less than 100% complete credible mitigation plan	100% complete
		Number of unresolved critical and high impact defects from market trials relating to the market critical processes	✓	✓	✓	1 or more critical or high defects	Less than 100% complete credible mitigation plan	0 critical or high defects
		Number and extent of of workarounds required to support market critical processes	✓	✓	✓		Less than 100% complete credible mitigation plan	

Market trial exit criteria – detailed guidance

Criteria – 2.1 Market critical processes

As previously defined, three market critical processes were agreed during the testing forum held on the 17th March 2015.

- Manage supply meter point registration – the facilitation of supply meter point transfers;
- Manage supply meter point register – the update of data held against a register supply meter point; and
- Record supply meter point (MPRN creation).

Assessment Metric

- % completion of market trials test scenarios relating to the market critical processes. For example, has the change of ownership process been tested between an individual shipper, Xoserve and other shippers?
- Number of unresolved critical and high impact defects from market trials relating to the market critical processes; and
- Number and extent of workarounds required to support market critical processes.

Examples of appropriate supporting evidence

A market trials completion report or management information ('MI') approved by senior business leadership. The completion report or MI should outline:

- The scope of market trials including:
  - Test scripts executed; and,
  - Test scripts descoped which should be supported by a clear rationale and agreement from senior leadership;
- The number and severity of any open defects; and
- A description of any workarounds with clear agreement from any impacted stakeholders that the workaround is acceptable. There should also be a plan to resolve the workaround.

Thresholds

- Red (fail) - Less than 100% complete with no credible mitigation plan
- Amber - Less than 100% complete with a credible mitigation plan
- Green (pass) – All criteria evidenced as complete.

Governance and decision-making over market trials exit

We expect to evaluate and report whether individual organisations have successfully exited market trials. We do not expect to aggregate this to a market-wide decision to exit (or otherwise) the market trials, as we believe that it is appropriate that individual organisations are able to exit market trials when ready to do so. However, we expect that the aggregate view of the organisations that have successfully exited will play a role in determining whether the market as whole is ready to go-live.

Self Assessment – Are individual organisations are ready to go-live?

Organisation: Ready for Market Trials?	Organisation: Completion of Market Trials	Organisation: are they ready for go-live?	Market: How many are ready?	Market: Determine the impact	Overall level of risk to market objectives	Final go / no-go recommendation

This section combines elements of the market trials enty/exit criteria and our view on good programme practice to provide an integrated set of go/no-go ('GONG') readiness criteria. This allows individual organisations to assess their readiness to go live. The PA/M will use this data to form a market wide readiness view for presentation to the Nexus Steering Group. We expect that each organisation should use this framework to self-report their readiness for market trials using the PwC Nexus Hub web portal.

Table (3) – Summary of the GONG Criteria

	Criteria	Assessment metric	Role			Thresholds		
			Shipper	IGT	GT	Red (fail)	Amber	Green (pass)
3.1 Process								
3.1.1	Market critical processes as are 'ready' (defined below)							
3.1.1a	Manage Supply Meter Point Registration (facilitation of supply meter point transfers)	Consolidation of the underlying criteria.	✓	✓		Any 'red' rating with no credible mitigation plan = '**not ready**'	Less than 100% complete with credible mitigation plan	No 'red' rating = '**ready**'. Amber with a credible mitigation plan = '**partially ready**'.
3.1.1b	Manage Supply Meter Point Register (the update of data held against a register supply meter point)		✓					
3.1.1c	Record Supply Meter Point (MPRN Creation)			✓				
3.1.1e	A readiness assessment of non-market critical processes has been carried out to determine if the total number not ready pose a significant impact when aggregated.	Number of non-market critical processes not available or fully tested at go live.				Less than 100% complete	Less than 100% complete with credible mitigation plan	100% complete
3.1.2	Ensure that an assessment of current system and processes has been carried out to determine the need to create or update a requirements traceability matrix.	Assessment completed. Requirements Traceability Matrix completed.	✓	✓	✓			
3.1.3	End-to-end process guides and documents have been updated and communicated to the people operating the market critical processes defined above.	% completion and communication and formal business acceptance of end to end process document and guides	✓	✓	✓			

	Criteria	Assessment metric	Role			Thresholds		
			Shipper	IGT	GT	Red (fail)	Amber	Green (pass)
3.2 System								
3. 2.1	**Market critical processes** (as defined above) have been built and subjected to integration and user acceptance testing by the organisation. There are no critical or high impact defects that are open and unresolved.	% completion of build of the system functionality supporting the market critical processes	✓	✓	✓	Less than 100% complete	Less than 100% complete with credible mitigation plan	100% complete
		% completion of integration and user acceptance testing relating to market critical processes	✓	✓	✓	Less than 100% complete	Less than 100% complete with credible mitigation plan	100% complete
		Number of unresolved critical and high impact defects relating to the market critical processes	✓	✓	✓	1 or more critical or high defects	Less than 100% complete with credible mitigation plan	0 critical or high defects
		Where the shipper is acting on behalf of a number of other suppliers, the integration of data flows, supporting the market critical processes, to / from other suppliers has been tested	✓	✓	✓	Integration with other suppliers not tested.	Less than 100% complete with credible mitigation plan	Integration with other suppliers has been tested.
3.2.2	**Market critical processes** (as defined above) have been built and subjected to market trials by the organisation and Xoserve. There are no critical or high impact defects that are open and unresolved.	% completion of market trials test scenarios relating to the market critical processes. For example, has the change of ownership process been tested between the organisation, Xoserve and other shippers?	✓	✓	✓	Less than 100% complete	Less than 100% complete with credible mitigation plan	100% complete
		% completion of connectivity testing relating to the market critical processes.	✓	✓	✓	Less than 100% complete	Less than 100% complete with credible mitigation plan	100% complete
		Number of unresolved critical and high impact defects from market trials relating to the market critical processes	✓	✓	✓	1 or more critical or high defects	Less than 100% complete with credible mitigation plan	0 critical or high defects
3.2.3	Key non-functional tests have been conducted - for example, load testing and security testing.	% completion of load and security testing prior to go-live.	✓	✓	✓	Less than 100% complete	Less than 100% complete with credible mitigation plan	100% complete/ confirmed as NA
3.2.4	Detailed system cutover plan has been documented, approved and rehearsed. This includes a fall back plan.	Completion of detailed system cutover plan and approval by project governance board. Rehearsal conducted to identify improvements and pinch points.	✓	✓	✓	Less than 100% complete	Less than 100% complete with credible mitigation plan	100% complete
3.2.5	An assessment has been performed on current business continuity and IT disaster recovery plans. The plans have been updated as appropriate.	Assessment completed	✓	✓	✓	Less than 100% complete	Less than 100% complete with credible mitigation plan	100% complete

	Criteria	Assessment metric	Role			Thresholds		
			Shipper	IGT	GT	Red (fail)	Amber	Green (pass)
3.2 System cont.								
3.2.6	Post go-live / hyper care IT support processes have been communicated to the people impacted by the changes in market critical processes.	% completion of communication around cut-over period and post go-live IT support processes.	✓	✓	✓	Less than 100% complete	Less than 100% complete with credible mitigation plan	100% complete
3.2.7	Robust criteria defined for hyper care exit including ongoing incident and change management and associated responsibilities defined post hypercare.	% completion of hyper care planning and definition of roles & responsibilities.	✓	✓	✓	Less than 100% complete	Less than 100% complete with credible mitigation plan	100% complete
3.3 People								
3.3.1	Organisational structure assessment conducted to define and communicate any new roles and responsibilities	% completion of organisational structure assessment	✓	✓	✓	Less than 100% complete	Less than 100% complete with credible mitigation plan	100% complete
3.3.2	People impacted by changes in market critical processes (defined above) have been trained in time for go-live.	% people trained versus the number identified for training (i.e. those directly impacted by changes in the market critical processes).	✓	✓	✓	Less than 100% complete	Less than 100% complete with credible mitigation plan	100% complete
3.4 Data								
3.4.1	Data requirements are documented and understood. The quality of data is at the right level to support market critical processes.	Data migration approach documented and signed-off by the organisations' programme governance body. Analysis of 'as is' and 'to be' data objects and quality documented and signed-off.	✓	✓	✓	Less than 100% complete	Less than 100% complete with credible mitigation plan	100% complete
3.4.2	Data migration, for data supporting the market critical processes, has been subject to at least two, preferably three, dry run rehearsals.	Number of data migration rehearsals conducted relating to the data supporting the market critical processes.	✓	✓	✓	Less than 100% complete	Less than 100% complete with credible mitigation plan	100% complete
		Number of critical or high impact data defects that remain unresolved and impact the market critical processes.	✓	✓	✓	1 or more critical or high defects	Less than 100% complete with credible mitigation plan	0 critical or high defects

GONG Criteria – deailed guidance

The following section explains each category; **process, system, people and data,** the criteria and the expected evidence required to demonstrate readiness.

Process criteria

Criteria 3.1.1 - Market Critical Processes are 'ready'

As previously defined, three market critical processes were agreed by the testing forum on the 17th March 2015.

- Manage supply meter point registration – the facilitation of supply meter point transfers;
- Manage supply meter point register – the update of data held against a register supply meter point; and
- Record supply meter point (MPRN creation).

Combined with the three market critical processes the PA/M recognise that if a significant number of other processes are not ready the impact could still be signifincat. As a result it is recommended that as part of the GONG a readiness assessment of non-market critical processes is carried out to determine if the total number not ready pose a significant impact when aggregated.

Assessment Metric

The ability to demonstrate end to end market critical processes is an aggregation of the results of the other ***system, people and data*** criteria set out below.

Examples of appropriate supporting evidence

The artefacts that would be expected to support the completion of market critical processes is a combination of the artefacts relating to the other ***system, people and data GONG criteria***. The most critical element will be the successful completion of **Level 3** (process scenario) and **Level 4** (end-to-end change of ownership) market trial testing of the critical processes.

Thresholds

- Red (fail) - Less than 100% complete with no credible mitigation plan;
- Amber - Less than 100% complete with a credible mitigation plan; and
- Green (pass) – All criteria evidenced as complete.

Criteria 3.1.2 - System change impact assesment

We believe that it is important for each organisation to consider the respective impact of Nexus on their systems landscape. This assessment will then define the level of rigour and control that is required over the resultant change project. Specifically, if this is a large scale change or a new system is being implemented, we would expect a formal requirements traceability matrix to clearly show the link between the requirements and the actual design / build of the system(s). The specific criteria is defined *as* ***'ensure that an assessment of current system and processes has been carried out to determine the need to create or update a requirements traceability matrix'***.

Assessment Metric

- System change impact assessment completed; and
- Requirements Traceability Matrix completed (dependent on the conclusion from the above).

Examples of appropriate supporting evidence

It would be expected that evidence of internal impact assessments would be provided and where applicable a requirements traceability matrix. This should be approved by senior leadership representing the business.

Thresholds

- Red (fail) - Less than 100% complete with no credible mitigation plan
- Amber - Less than 100% complete with a credible mitigation plan
- Green (pass) – All criteria evidenced as complete.

Criteria 3.1.3 - Business process/operating model impact assesment

The specific criteria is defined *as* ***'End to end process guides and documents have been updated and communicated to the people operating the market critical processess'***

If any business process need to be updated as part of Project Nexus, it is critical that the supporting business process documentation is updated and the process changes have been agreed with the business.

Assessment Metric

- % completion and communication and formal business acceptance of end to end process document and guides

Examples of appropriate supporting evidence

Updated business process documentation approved by appropriate members of the business leadership team.

Thresholds

- Red (fail) - Less than 100% complete with no credible mitigation plan
- Amber - Less than 100% complete with a credible mitigation plan
- Green (pass) – All criteria evidenced as complete.

System criteria

Whilst 3.2.1 and 3.2.2 'market critical process testing' form part of the market trials entry and exit criteria, they are included in the GONG criteria for completeness.

Criteria 3.2.1– market critical processes – internal testing

It is critical to ensure that market trials focus on proving the integrated solution and end-to-end market processes. As a result, each organisation should be able to demonstrate they have completed their build and, as a minimum, carried out internal testing of the market critical processes. Good practice suggests that at least three test phases should be carried out prior to market trial entry; system testing, system integration testing and user acceptance testing. Across these three phases, we would expect that organisations have conducted a level of testing that gives them comfort that the functionality is working as intended. We will be flexible and pragmatic in considering the evidence that is available to confirm that an appropriate level of testing has been performed.

Assessment Metric

- Market critical processes have been built and tested by each organisation internally. There are no critical or high impact defects that are open and unresolved.

  The PA/M Proposes the following definitions for critical and high impact defects:

  o Critical – Defects, whether functional or technical, that mean testing cannot continue.
  o High – Defects, whether functional or tehcnical that require use of the system in a way that deveates from the agreed desgin. These defectsintroduce workarounds that are not maintainable when the soluiton is live.

Examples of appropriate supporting evidence

- Test phase completion reports should be provided. They should be approved by an appropriate senior leadership team member/s and should clearly outline how any workarounds or ongoing issues have been impact assessed;
- MI and KPIs that show the progress and completion of internal testing, with the number of critical or high impact defects that remain open;
- Individual test scripts that relate to the market critical processes; and
- Description of how any unresolved critical or high impact defects are mitigated so that the organisation can enter market trials with minimal disruption.

Thresholds

- Red (fail) - Less than 100% complete with no credible mitigation plan;
- Amber - Less than 100% complete with a credible mitigation plan; and
- Green (pass) – All criteria evidenced as complete.

In order to ensure the more complex phases of market testing are efficient each organisation should be able to demonstrate they have completed the build and carried out internal testing to prove their systems can execute the market critical processes.

Criteria – 3.2.2 Market critical processes – Market trials

As previously defined, three market critical processes were agreed during the testing forum held on the 17th March 2015.

- Manage supply meter point registration – the facilitation of supply meter point transfers;
- Manage supply meter point register – the update of data held against a register supply meter point; and
- Record supply meter point (MPRN creation).

Assessment Metric

- % completion of market trials test scenarios relating to the market critical processes. For example, has the change of ownership process been tested between an individual shipper, Xoserve and other shippers?
- Number of unresolved critical and high impact defects from market trials relating to the market critical processes; and
- Number and extent of workarounds required to support market critical processes.

Examples of appropriate supporting evidence

A market trials completion report or management information ('MI') approved by senior business leadership. The completion report or MI should outline:

- The scope of market trials including:
    - Test scripts executed; and,
    - Test scripts descoped which should be supported by a clear rationale and agreement from senior leadership;
- The number and severity of any open defects; and
- A description of any workarounds with clear agreement from any impacted stakeholders that the workaround is acceptable. There should also be a plan to resolve the workaround.

Thresholds

- Red (fail) - Less than 100% complete with no credible mitigation plan
- Amber - Less than 100% complete with a credible mitigation plan
- Green (pass) – All criteria evidenced as complete.

Criteria – 3.2.3 Key non-functional tests have been conducted

Where new systems or major enhancements are being made to existing systems it is essential to carry out a non-functional test phase to supplement the functional process testing. In the case of Project Nexus, we would expect that organisations will need to perform testing in the following non-functional areas:

- Performance testing;
- Load testing; and
- Security of external connections.

Assessment Metric

- % completion of appropriate non-functional testing to support go live.

Examples of appropriate supporting evidence

A non-functional test phase completion report, or similar summary output, should be available and approved by senior business leadership. The completion report should outline:

- The scope of non-functional testing which should include but not be limited to;
    - Performance testing;
    - Stress testing;
    - Load/volume testing; and,
    - Recovery testing.

    Should any tests have been descoped there should be a clear rationale and agreement from senior leadership;

- The number and severity of any open defects relating to non-functional test scenarios; and
- A description of any workarounds with clear agreement from any impacted stakeholders that the workaround is acceptable. There should also be a plan to resolve the workaround.

If any organisation deems that non-functional testing is not applicable, a valid rationale or explanation should be provided which has been confirmed by senior business/IT leadership.

Thresholds

- Red (fail) - Less than 100% complete with no credible mitigation plan;
- Amber - Less than 100% complete with a credible mitigation plan; and
- Green (pass) – All criteria evidenced as complete or approporiatelty demonstrated as not being required.

Criteria – 3.2.4 Detailed system cutover plan has been documented

For an IT project of the scale of Nexus where significant system change is required, we expect organisations to create a detailed cutover plan. This should consider, but not be limited, to:

- The deployment of the technical changes;
- Any manual activity required;
- Data migration activity;
- Ramp down/scale up of activity;
- Resourcing during the cutover period; and
- Communication of any downtime.

We would expect that dress rehearsals are carried out in order to validate that all of the required tasks have been captured, correctly sequenced and that the assumed timings are accurate. This process allows refinement and further de-risks the go-live and production cutover.

Assessment Metric

- Completion of detailed system cutover plan and approval by project governance board; and
- Ideally evidence of two dress rehearsals conducted to refine plan and confirm timings.

Examples of appropriate supporting evidence

- A detailed cutover plan with associated approval should be provided. This should be accompanied by evidence that rehearsals have been completed. Ideally, each rehearsal will be accompanied by a completion report outlining lessons learned in each iteration to provide appropriate confidence that the go-live has been de-risked.

Thresholds

- Red (fail) - Less than 100% complete with no credible mitigation plan;
- Amber - Less than 100% complete with a credible mitigation plan; and
- Green (pass) – All criteria evidenced as complete.

Criteria – 3.2.5 Business continuity and IT disaster recovery plan

This criteria relates to an assessment of the degeree of system and process change required as a result of implementing Project Nexus against existing business continuity and disaster recovery plans. We believe that these plans should be updated for the impact of Project Nexus in the event that they are required following go-live,

Assessment Metric

- An assessment has been performed on current business continuity and IT disaster recovery plans and the plans updated as appropriate.

Examples of appropriate supporting evidence

- Confirmation by senior leadership that the assessment has been appropriately conducted and updates to documents have been completed and approved.

Thresholds

- Red (fail) - Less than 100% complete with no credible mitigation plan;
- Amber - Less than 100% complete with a credible mitigation plan; and
- Green (pass) – All criteria evidenced as complete or approporiatelty demonstrated as not being required.

Criteria – 3.2.6 Post go-live / hypercare IT support processes have been communicated

IT projects of the scale and complexity of Project Nexus often experience early life peaks in the numbers of incidents, defects and change requests. It is good practice to support this period with enhanced IT and business support process often termed 'hypercare'. This often includes the provision of additional resources, the relaxation of production change windows allowing issues to be resolved quickly and regular meetings with IT and business teams to ensure all issues are being captured and addressed.

Assessment Metric

- A clear set of processes to support hypercare should be defined and appropriately communicated to IT support teams as well as business operational teams. This should encompass the support that is available, the processes for logging and addressing defects and the additional resourcing that is available.

Examples of appropriate supporting evidence

- Documented hypercare support plan; and
- Confirmation by senior leadership that the communication and hypercare support plan has been created and diseminated to the appropriate stakeholders.

Thresholds

- Red (fail) - Less than 100% complete with no credible mitigation plan;
- Amber - Less than 100% complete with a credible mitigation plan; and
- Green (pass) – All criteria evidenced as complete or approporiatelty demonstrated as not being required.

Criteria – 3.2.7 Post go-live / hypercare exit criteria have been defined

IT projects of the scale and complexity of Project Nexus often experience early life peaks in the numbers of incidents and change requests. It is good practice to support this period with enhanced IT and business support process often termed 'hypercare'. It is important that a clear set of hypercare exit criteria are defined as the project can not sustain enhanced support indefinitely. The criteria should measure system and process stability and should not be purely time bound.

Assessment Metric

- A clear set of hypercare exit criteria should be defined and appropriately agreed with senior business leadership.

Examples of appropriate supporting evidence

- Documented hypercare exit criteria; and
- Confirmation by senior leadership that a set of robust hypercare exit criteria have been defined and agreed between the programme, IT function and business as appropriate.

Thresholds

- Red (fail) - Less than 100% complete with no credible mitigation plan;
- Amber - Less than 100% complete with a credible mitigation plan; and
- Green (pass) – All criteria evidenced as complete or appropriately demonstrated as not being required.

People criteria

It is important that appropriate consideration is given to non-system elements of the changes required for Nexus. If business processes or job roles need to change as a result of Project Nexus, it is important that these changes are defined and planned as rigorously as the system changes that are required.

Criteria – 3.3.1 Organisational structure assessment

We would expect that organisations will need to consider the level of change required in their organisation structure to adopt the changes introduced by Project Nexus. For example, we would potentially expect organisational change in areas that introduce new funtionality, such as iGT common service provision.

Assessment Metric

- An organisational structure assessment has been conducted to idenitfy and define and communicate any new roles and responsibilities.

Examples of appropriate supporting evidence

- Confirmation by senior leadership that the organisational structure assessment has been conducted and new roles and responsbilities confirmed and communicated;
- Organisational structure assessment document, or equivalent document; and
- Confirmation that this has been formally assessed and the level of change has been deemed as negligible.

Thresholds

- Red (fail) - Less than 100% complete with no credible mitigation plan;
- Amber - Less than 100% complete with a credible mitigation plan; and
- Green (pass) – All criteria evidenced as complete or approporiatelty demonstrated as not being required.

Criteria – 3.3.2 Training

This is a core component of any major change programme of the scale of Nexus. We expect that there will be a need to train employees in the data flow changes and the new areas of functionality that are introduced by Nexus.

Assessment Metric

- Percentage of people trained versus the number identified for training (i.e. those directly impacted by changes in the market critical processes).

Examples of appropriate supporting evidence

- Training plans and attendance logs with confirmation from senior business leadership that appropriate training has been delivered. For example, KPIs should be presented to confirm that the majority of employees targeted for training have been trained.

Thresholds

- Red (fail) - Less than 100% complete with no credible mitigation plan;
- Amber - Less than 100% complete with a credible mitigation plan; and
- Green (pass) – All criteria evidenced as complete or approporiatelty demonstrated as not being required.

Data criteria

It is recognised that data considerations will not be applicable to all organisations in their delivery of Project Nexus. However, it is important that an assessment has been carried out and appropriate review and approval received to confirm the approach to data.

Criteria – 3.4.1 Data requirements documented and understood

An assessment should have been undertaken to identify any data requirements as part of the Porject Nexus changes. Should there be a requirement to manage any data, an appropriate level of documentation should be available outlining the approach.

Assessment Metric and Evidence

- Data migration approach documented and signed-off by the organisations' programme governance body. Analysis of 'as is' and 'to be' data objects and quality documented and signed-off.

Thresholds

- Red (fail) - Less than 100% complete with no credible mitigation plan
- Amber - Less than 100% complete with a credible mitigation plan
- Green (pass) – All criteria evidenced as complete or approporiatelty demonstrated as not being required.

Criteria – 3.4.2 Data migration dress rehearsals

We expect that some organisations will need to undertake some level of data migration activity to support Project Nexus and the extent of this activity will vary across organisations. For example, we understand that some organisations are implementing new systems in parallel. Should there be a requirement to conduct any data migration activity, we would recommend that at least two dress rehearsals are conducted.

Assessment Metric and Examples of appropriate supporting evidence

- Confirmation that data migration needs have been considered and deemed not applicable;
- Number of data migration rehearsals conducted relating to the data supporting the market critical processes; and
- Appropriate existence and approval of dress rehearsal completion reports.
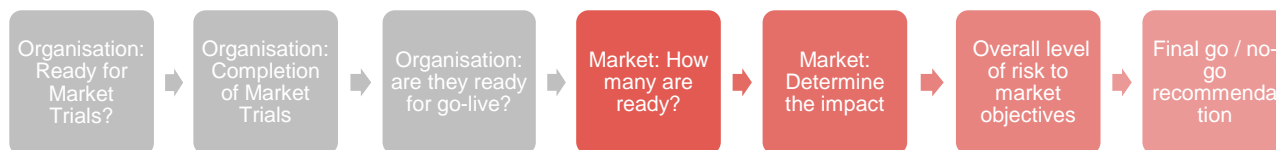
Thresholds

- Red (fail) - Less than 100% complete with no credible mitigation plan
- Amber - Less than 100% complete with a credible mitigation plan
- Green (pass) – All criteria evidenced as complete or approporiatelty demonstrated as not being required.

Governance and decision-making over go / no-go

In the run-up to go-live, we expect to evaluate and report whether individual organisations are ready to go-live, on the basis of the above criitera. This information will be shared on an anonymous basis with the Steering Group to show how individual organisations are progresssing towards the go-live date.

As Nexus is a 'big bang' approach, we anticipate that there is a need to assist the Steering Group in determining whether the market as a whole is ready to go-live. Our proposed approach for this aggregation is set out in the following section.

Aggregation process and final go/no go recommendation– market view and impact

Organisation: Ready for Market Trials?	→	Organisation: Completion of Market Trials	→	Organisation: are they ready for go-live?	→	Market: How many are ready?	→	Market: Determine the impact	→	Overall level of risk to market objectives	→	Final go / no-go recommendation

It is highly unlikely that all organisations will be ready to go live on the agreed dates. Therefore, the Nexus Steering Group are likely to need to determine if a minimum acceptable level of readiness has been achieved across the market. We propose that this is achieved by the following process.

How many are ready?: In the run-up to a final go-live decision (expected to be in the region of 3 to 4 weeks before go-live), the individual readiness assessments will be aggregated to give a market-wide view on the readinesss to go-live. We expect to report the number of organisations that are in each of the following categories:

> ***Ready*** **– All go-live readiness criteria are achieved, green status achieved.**
> ***Ready with mitigating actions*** **– One or more go-live criteria missed, but appropriate mitigation is in place.**
> ***Not ready*** **– One or more go-live criteria missed, appropriate mitigation is not in place.**

Determine the impact: We will overlay up-to-date market data, such as the number of supply points and AQ, to determine the market coverage of each readiness category. We also consider how the organisations in each category are spread across market roles (i.e. Xoserve, shipper, GT, iGT) and the type of shipper (Big 6, small /challenger and I&C). We believe that aspects such as the recent growth in customer gains should also be included so that organisations undergoing fast growth are adequately identified for consideration.

As an illustration of how this impact / coverage assessment could work in practice, the aggregate market share information as at March 2015 is shown below, with an example of how this could be used to drive a market-wide go-live condition.

Group	% Supply Points	%AQ
Big 6 shipper total	87.4	63.0
I&C shipper total	4.5	31.4
Challenger / small shipper total	4.0	3.3

Example go-live scenario / condition:

Go-live condition: All organisations with more that 2% of total Market AQ are 'ready', or are ready with appropriate mitigation.

Result required against this condition: Based on the above data, 13 organisations would need to meet this condition in order to go-live, representing 92%coverage of market AQ:

Determine the risk to the market and final go / no-go recommendation: Using the categorisation and market coverage information, we expect that the Steering Group will have a clear view on the percentage of organisations that are ready / not ready, their market coverage and therefore the risk that the go-live may entail to the successful operation of the market. For example, if a significant proportion of Big 6, challenger / small and I&C suppliers are not ready, then this is likely to compromise the ability of customers to switch suppliers. On the basis of this information, we expect the Steering Group to be able to make a clear recommendation to Ofgem and the market.