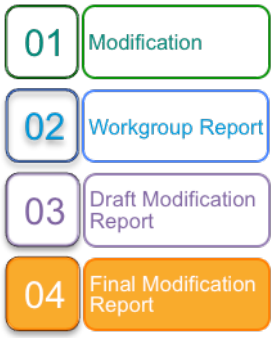
Final Modification Report	At what stage is this document in the process?
# 0531: ## Provision of an Industry User Test System	

This modification seeks to put an obligation on the Transporters to provide a testing system and regime that will provide flexibility to Users to support their testing requirements for changes post Project Nexus go live. This will enable all parties to gain confidence that changes to their systems identified post Nexus go live will not have any detrimental impacts to the new systems implemented under Project Nexus. Future testing requirements post Nexus go live will be placed under the control of the UK Link Committee.

	The Panel recommends implementation
	High Impact: Shippers, Transporters' Agent
	Medium Impact: -
	Low Impact: -

Contents

Timeline:

Modification timetable:

Initial consideration by Workgroup	10 March 2015
Amended Modification considered by Workgroup	09 August 2016
Workgroup Report presented to Panel	18 August 2016
Draft Modification Report issued for consultation	18 August 2016
Consultation Close-out for representations	09 September 2016
Final Modification Report published for Panel	12 September 2016 *(short notice)*
UNC Modification Panel recommendation	15 September 2016

Any questions?

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1 Summary

Is this a Self-Governance Modification?

The Modification Panel determined that is not a self-governance modification because it is expected to have a material effect on commercial activities connected with the shipping of gas.

The Workgroup requests Panel to consider the self-governance status of this modification as it proposes User Pays services which should have no direct impact on consumers or competition, however, the associated costs may be material.

Is this a Fast Track Self-Governance Modification?

No. It is not a Fast Track self-governance modification as it is not a housekeeping modification.

Why Change?

The Transporters and Shippers all need confidence that as they implement changes to their systems post UK LINK Replacement Programme (Project Nexus), that they can assure themselves and gain confidence that their systems are still fit for purpose and that they will be able to be amended successfully without unexpected impacts. This modification of the UNC is required to mandate Transporters to offer the level of support in an enduring testing regime for the UK LINK Programme that Users require.

Solution

An obligation will be created on transporters to create a test environment. The solution introduces a new UNC subsidiary document "UK Link Testing System and Procedures" that will be reviewed annually by the UK Link Committee (or equivalent authority) and approved by the UNCC

Relevant Objectives

This modification will provide confidence to Transporters and Shippers that any changes to the systems developed for implementation after Project Nexus will have been tested rigorously and that the market will operate effectively when changes to the Nexus requirements are implemented going forward. Therefore, the proposal is positive in respect of (d): Securing of Effective Competition between Shippers and f) Promotion of efficiency in the implementation and administration of the Code.

Implementation

No implementation timescales are proposed. However, it would be desirable for this proposal to be implemented at the earliest practical opportunity.

Does this modification impact a Significant Code Review (SCR) or other significant industry change projects, if so, how?

This modification would have no impact on the industry programme for replacement of UK-Link systems.

2 Why Change?

Project Nexus is introducing new systems which underpin the whole of the gas settlement regime in the UK including invoicing and settlement processes involving billions of pounds per year, and also amending the change of supplier process that covers all gas customers, including putting the iGT customers into single service provision which is being done by the Transporters' Agent. It is probably the biggest change that has ever been made to the UK's Gas systems. Failure of the new systems could lead to catastrophic losses for Users and have a severe detrimental impact on customers. A large market failure could also impact those Users who were operating correctly under the new arrangements as, due to the way that gas is settled, no User would be immune form a large scale failure. The absence of a testing facility that allows parties to robustly test functionality is likely to lead to a market where the quality of data within it is degraded.

After the new systems have gone live it will be necessary to make changes to the new systems and all market participants will be required to make changes to their systems. It would be bad practice, and a high risk strategy, to promote such changes directly to production.

The Transporters and Shippers all need confidence that as they implement changes to their systems post UK LINK Replacement Programme (Project Nexus), that they can assure themselves and gain confidence that their systems are still fit for purpose and that they will be able to be amended successfully without unexpected impacts

This modification of the UNC is required to mandate Transporters to offer the level of support in an enduring testing regime for the UK LINK Programme that Shipper Users require.

3 Solution

It is proposed that:

1. An obligation will be created on transporters to create a test environment.
2. The Transporters are required to publish an "UK Link Testing System and Procedures" document, which sets out requirements to access the test environment.
3. The initial content of the "UK Link Testing System and Procedures" document be that which is provided as an Appendix to this modification.
4. That the "UK Link Testing System and Procedures" document be reviewed annually by UK Link Committee (or equivalent authority).
5. Proposed amendments to the "UK Link Testing System and Procedures" document be submitted to the UNCC for approval.
6. Create two new User Pays services as defined in the subsidiary "UK Link Testing System and Procedures" document:

   6.1 Industry Testing;

   6.2 User Testing.

The subsidiary "UK Link Testing System and Procedures" document will include the following:

- be based on an agreed (at UK Link Committee or equivalent authority) relevant version of a production environment;

- be separate from the live environment;
- apply production-standard data protection and UNC confidentiality;
- provide manufactured data (including pseudo-shipper operations for supply point administration);
- provide a representative sample of supply meter points datasets on the production system.
- be compliant with the UNC subsidiary document “UK Link Testing System and Procedures”.

Gemini and Active Notification System (ANS) are excluded from the scope of this modification.

For the avoidance of doubt funding for this change excludes testing environments required for the delivery of Project Nexus functionality and its associated future phases including the RAASP functionality.

User Pays	
Classification of the modification as User Pays, or not, and the justification for such classification.	This modification should be a User Pays service as Shipper Users will directly benefit from the use of the testing services.
Identification of Users of the service, the proposed split of the recovery between Gas Transporters and Users for User Pays costs and the justification for such view.	It is anticipated that Shipper Users will be the only users of the service and so will fund 100% of the development costs. Industry testing will be specific to each modification or change required and the split of the recovery of the costs will be stipulated by the UK Link Committee for each incidence of industry testing. User testing will be specific to each user.
Proposed charge(s) for application of User Pays charges to Shippers.	The development costs will be invoiced in proportion to each Shipper User based on the number of Supply Meter Points in each Shipper’s ownership as a proportion of the total number of Supply Meter Points, measured at the point of implementation of UNC Modification 0531. The development costs will be invoiced to Shippers in full when the service becomes available. Ongoing costs will be in line with the decision made by the UK Link Committee for each Industry change. For User testing a proportion of the total annual charge based on the number of weeks required. Any annual shortfall in cost recovery of the testing system will be smeared across Shippers according to Supply Meter Point market share.
Proposed charge for inclusion in the Agency Charging Statement (ACS) – to be completed upon receipt of a cost estimate from Transporters’ Agent.	See High Level Cost Estimate published alongside this document.

4 Relevant Objectives

Impact of the modification on the Relevant Objectives:	
Relevant Objective	Identified impact
a) Efficient and economic operation of the pipe-line system.	None
b) Coordinated, efficient and economic operation of (i) the combined pipe-line system, and/ or (ii) the pipe-line system of one or more other relevant gas transporters.	None
c) Efficient discharge of the licensee's obligations.	None
d) Securing of effective competition: (i) between relevant shippers; (ii) between relevant suppliers; and/or (iii) between DN operators (who have entered into transportation arrangements with other relevant gas transporters) and relevant shippers.	Positive
e) Provision of reasonable economic incentives for relevant suppliers to secure that the domestic customer supply security standards… are satisfied as respects the availability of gas to their domestic customers.	None
f) Promotion of efficiency in the implementation and administration of the Code.	Positive
g) Compliance with the Regulation and any relevant legally binding decisions of the European Commission and/or the Agency for the Co-operation of Energy Regulators.	None

This proposal will provide confidence to Users and transporters that changes to systems developed after Project Nexus will have been tested rigorously and that the market will continue to operate effectively after Nexus changes are implemented. Furthermore the testing framework will ensure that all future changes to and releases of the UK Link systems can be fully tested. Therefore, this proposal is positive in respect of (d) Securing of Effective Competition between Shippers, and (f) Promotion of efficiency in the implementation and administration of the Code.

5 Implementation

No implementation timescales are proposed. However, it would be desirable for this proposal to be implemented at the earliest practical opportunity and that the test environment should be available for RAASP testing.

6 Impacts

Does this modification impact a Significant Code Review (SCR) or other significant industry change projects, if so, how?

This modification would not impact the industry programme for replacement of UK-Link systems (Nexus) as it is not envisaged that implementation will be before Nexus go-live.

Workgroup supplemental considerations

Transporters confirmed they have no intentions of using the test environment and therefore should not be expected to fund any part of the test system development or operation.

Some participants felt that as Transporters have been funded to provide system test capability for RAASP as part of Project Nexus implementation, the enduring test environment could be provided using this capability and the marginal cost difference charged to Shippers. However, others were concerned that this would change the nature and type of investment/funding required, as the test system would change from a temporary system as a feature of the new systems deployment, to an enduring system and service provision.

7 Legal Text

Text Commentary

The following Legal Text Commentary was provided by National Grid Distribution.

TPD Section U (UK Link)	Topic	BRDs	Explanation
New paragraph 8.7.1	UK Link Testing System and Procedures	-	Defines UK Link Testing System and Procedures as being the systems and procedures set out in a document of the same name issued by Transporters. The UK Link Testing System and Procedures shall be governed and amended in accordance with TPD Section V12 (General Provisions Relating To UNC Related Documents) unless, upon the application of a User, the Authority determines otherwise in respect of a particular amendment.
New paragraph 8.7.2	UK Link Testing System and Procedures	-	States that the UK Link Testing System and Procedures will identify the systems and procedures which will allow Users to test proposed changes to the functionality or performance of UK Link.
TPD Section V (General)	Topic	BRDs	Explanation
New paragraph 12.1(h)	UNC Related Document		Adds the UK Link Testing System and Procedures to the list of UNC Related Documents and therefore makes the document subject to the governance arrangements which apply to UNC Related Documents.

Text

The following Text has been prepared by National Grid Distribution at the request of the Modification Panel.

TRANSPORTATION PRINCIPAL DOCUMENT

SECTION U - UK LINK

Add new paragraph 8.7 to read as follows:

"**8.7 UK Link Testing System and Procedures**

8.7.1 The "**UK Link Testing System and Procedures**" are the systems and procedures described in the document issued by the Transporters and so entitled and governed and amended in accordance with Section V12 unless the Authority shall upon application of any User within one month after such notice, give Condition A11(18) Disapproval to the Transporters making any amendment in accordance with Section V12.

8.7.2 The UK Link Testing System and Procedures will identify the systems and procedures which will enable Users to test proposed changes to the functionality or performance of UK Link."

SECTION V - GENERAL

Amend paragraph 12.1 to read as follows:

" …

(f) ; ~~and~~

(g) ;~~.~~ and

(h) the UK Link Testing System and Procedures.

8 Consultation Responses

Panel invited representations from interested parties on 18 August 2016. The summaries in the following table are provided for reference on a reasonable endeavours basis only. We recommend that all representations are read in full when considering this Report. Representations are published alongside this Final Modification Report.

Of the 8 representations received 5 supported implementation, 1 offered qualified support, 1 provided comments and 1 was not in support

Representations were received from the following parties:

Organisation	Response	Relevant Objectives	Key Points
Gazprom	Support	d - positive	• Will ensure that, Post Nexus go-live, robust central system testing facilities are available for both existing users and new market entrants. • Surprised that the provision of an enduring test environment was not fundamental to the procurement

			of the new industry central system and funded under Nexus. • A test environment will have to be "stood up" in order to test the late delivery of Retrospective Asset functionality (expected to be delivered Nexus go-live + 12 months). It is unclear as to why this environment cannot become an enduring test environment at marginal cost to the market. The delivery of the solution is estimated to take 12 months + to deliver and thus aligns with the likely timeline for delivering and testing Retrospective Asset functionality. • Xoserve have confirmed its intent to remove the Nexus test environment once industry testing is complete and it is unclear how the industry will deal with any requirements for testing post Nexus go-live either to fix issues that become apparent in live operation or to support new market entrants. • Seems foolhardy and naïve to believe that a project so beset with delays and problems to date will not be subject to corrective action following go-live. With no test environment available it is unclear how testing corrective actions from go-live will be robustly managed. • Would like to see the modification implemented as soon as reasonably practicable to provide certainty that a robust testing environment will be available to market participants on a fair and equitable basis. If such an environment cannot be made available until Nexus go-live + 12 months, they would like to understand how the risk associated with not having a test environment for corrective action and changes will be mitigated post go-live following the industry implementing its most significant system upgrade in its history.
E.ON Energy Solutions	Oppose	d - negative f - negative	• The benefit case for the creation of an industry testing system has not been met. It is not clear there is a sufficiently justified and defined future use of the system. • Provisioning arrangements in advance of understanding a business need means a system has to be built, and maintained in the expectation of a possible future need. It is assumed that testing is delivered on today's technology, rather than considering the best available and most cost effective solutions at the time the need arises. • Testing of changes should be evaluated and considered during the development of changes, which

			will mean that the case for testing will be demonstrated as a strong need; it will challenge the effective and usefulness of the resource and will ensure that the requirements are time-relevant. • So far decisions about testing have been made on a case-by-case basis, and this is considered the most effective use of the resources. • The alternative proposition was that the environment is available, not to support industry implementations but to support individual parties own system development, however should the industry collectively fund the building of a test environment to provide for uncertain future developments of individual parties' systems and would this result in cross subsidy. • The modification does not meet the self-governance criteria, as the costs of the service (in excess of £2m) have to be met by all users, despite not having demonstrated an industry wide agreed requirement. This would be a sunk cost that consumers would ultimately meet, without having demonstrated a clear business case.
National Grid Distribution	Support	d - positive f - positive	• Provides for an enduring test environment to be made available to all Shipper Users Post Nexus go live. Implementation will fulfill Shipper Users requirement for an enduring testing environment. • Anticipate that as the Core Nexus delivery is the priority that an implementation date for the test environment is likely to be some time after Project Nexus Implementation Date.
National Grid NTS	Comments	d - potentially none f - potentially none	• Questions the level of assurance the UNC obligation would provide for Users over and above that obtained via the extent of testing available to Users for such changes and systems releases under prevailing arrangements. For instance, the industry planning approach adopted for Project Nexus sought views from all industry stakeholders in respect of the period required to complete sufficient systems testing ('Market Trials') before identifying the appropriate duration of such testing. For any future changes, it is expected this collaborative approach to testing arrangements to continue notwithstanding this proposed change. • Unclear whether there will be any impact (either positive of negative) on the identified code relevant objectives. Further, in absence of a view as to the usage levels of the proposed Industry User Test

			Systems, it is also difficult to draw a conclusion on the overall cost benefit in light of the potentially material implementation costs. • Concurs with the view that this proposal is not a self-governance modification, as implementation would entail Users incurring additional 'User Pays' costs, which in aggregate are expected to exceed £2 million for development of the service. • The User Pays approach would ultimately target all development costs at Users, with costs initially met by Transporters with subsequent cost recovery via User Pays charges.
Scottish Power	Support	d - positive f - positive	• It is imperative that there is an option to have an industry test environment going forward post Nexus as a means of testing any subsequent changes to the Nexus baseline. With the significant industry change expected going forward, the industry will need a facility to ensure changes are fully tested before enacted. It is in the interest of the consumer and the wider market that there is a facility to test such wide scale changes ahead of implementation to ensure that there is no risk of system or market failure. • Given that the retrospective adjustment aspect of the Nexus solution is not going to be delivered at the same time as the core solution, it is also obvious that there will be a need for a test environment after the Project Nexus Implementation Date. • Agrees with that this proposal does not meet the self-governance criteria • There will be a requirement for a test environment for the RAASP part of the Nexus solution, which is due to be introduced 12 months after the core Nexus solution. Ofgem has confirmed that the Transporters have already received funding for the Project Nexus solution therefore ScottishPower believe that the test environment needed for the RAASP has already been funded and wants to ensure that any costs incurred by the Shippers should only be the incremental cost of the environment, over and above that which the Transporters will require for RAASP and that has already been funded. For this reason ScottishPower does not agree that the Transporters will not make use of the test environment and would welcome clarity from Ofgem on whether or not it should just be the incremental costs that Shippers should fund.

Scotia Gas Networks	Qualified Support	d - positive f - positive	• Consider that the provision of an industry user test system will assist in providing confidence to Users and the industry that, as parties implement changes to their systems post Project Nexus, these systems are suitable and fit for purpose and that the risk of unexpected impacts are minimised where changes are put into production. However, they believe a cautious and measured approach must be taken in developing system changes on this scale, particularly given their potential to distract from the delivery of RAASP and other large-scale industry changes requiring dedicated resource. • Agree that Shipper Users are likely to be the only users of the proposed service and therefore should fund 100% of the development costs as a User pays service with such development costs being smeared according to market share and ongoing costs recovered according to decision by the UK Link Committee for each change. • This is not a self-governance modification as the prospective ongoing and developmental costs are material.
SSE	Support	d - positive f - positive	• Project Nexus is a huge change to the gas settlements system functionality and processes and the delivery of the Project has been fraught with delays and problems. It is highly likely that after it has gone live there will be significant changes to the system due to fixes. • Also further amendments for additional requirements that will lead to changes that will have to be made and implemented by the whole industry. Without a test system there can be no confidence that these new changes will work across all Shippers' systems and the changes could have a huge negative impact on gas settlement allocation and end customers if they were not implemented correctly. • Of the opinion that this modification meets the self-governance criteria.
Wales & West Utilities	Support	d - positive f - positive	• Provides a process whereby Users can obtain access to a test environment and will enable better testing of changes to both UK Link systems and Users systems. • This modification is suitable for self-governance. • It should enable Xoserve and Users to more efficiently implement system changes and thereby should positive affect competition by facilitating industry change.

			• From 2016/17 onwards funding of Xoserve will align costs of service provision to the users of services. They believe that only users of this system will be attributed the costs associated with this service. Therefore WWU would not envisage any development or ongoing costs of this service at this time.

Please note that late submitted representations will not be included or referred to in this Final Modification Report. However, all representations received in response to this consultation (including late submissions) are published in full alongside this Report, and will be taken into account when the UNC Modification Panel makes its assessment and recommendation.

9 Panel Discussions

Discussion

The Panel Chair summarised that Modification 0531 would place an obligation on the Transporters to create and provide a testing environment that will provide Users with the ability to test system changes post Project Nexus go-live. Testing requirements will be placed under the control of the UK Link Committee and the solution will introduce a new UNC subsidiary document "UK Link Testing System and Procedures" that will be reviewed annually by the UK Link Committee (or equivalent authority) and approved by the UNCC

Members considered the representations made noting that, of the 8 representations received, 5 supported implementation, 1 offered qualified support, 1 provided comments and 1 was not in support.

Consideration of the Relevant Objectives

Members noted that some respondents did not believe that the implementation of this modification would have a positive effect on relevant objectives d) *Securing of Effective competition between Shippers* and f) *Promotion of efficiency in the implementation and administration of the Code*. Members recognised that in the absence of the likely usage levels of the proposed testing system, it was difficult to draw a firm conclusion on the benefits against the implementation costs.

Members considered relevant objectives d) and f), and agreed that, on balance, implementation would have positive impacts because the modification will enable Users to test system changes before implementation and provide assurance that the market will operate effectively when system changes are made. Members considered whether the availability of a testing environment would make entry to the market easier for new participants; views differed, with some Members supporting whilst others indicated there was no evidence to suggest this had been a problem so far.

Determinations

Members voted with 10 votes in favour (out of a possible 11), to recommend implementation of Modification 0531

10 Recommendation

Panel Recommendation

Members recommended:

- that Modification 0531 should be implemented