

Stage 02: Workgroup Report

0473 0473A:

Project Nexus – Allocation of Unidentified Gas

At what stage is this document in the process?



These modifications two of a series seeking to implement the requirements identified under Project Nexus. These modifications identify changes to the UNC to enable determination in the proposed energy allocation process to enable an appropriate distribution of Unidentified Gas.



The Workgroup recommends that these modifications should be issued to consultation.



High Impact:
Shippers

0473 0473A

Workgroup Report

10 October 2014

Version 2

Page 1 of 13

© 2014 all rights reserved

Contents

| | | |
|----|--|----|
| 1 | Summary | 3 |
| 2 | Why Change? | 5 |
| 3 | Solution | 5 |
| 4 | Relevant Objectives | 9 |
| 5 | Implementation | 11 |
| 6 | Legal Text | 11 |
| 7 | Recommendation | 11 |
| 8 | Appendix one – AUGE Framework | 12 |
| 9 | Appendix two – UGIE Framework | 12 |
| 10 | Appendix three – 0473A Transitional Arrangements | 12 |

About this document:

This report to the panel on 16 October 2014.

The panel will consider whether the modification should proceed to consultation or be returned to the workgroup for further assessment.



Any questions?

Contact:
Code
Administrator



enquiries@gasgo
vernance.co.uk



0121 288
2107

Proposer:
Steve Mulinganie
Gazprom



stevemulinganie@
gazprom-
energy.com



07590
245256

Transporter:
Northern Gas
Networks



jferguson@northe
rngas.co.uk



0113 397
5323

Systems Provider:
Xoserve



[commercial.enqui
ries@xoserve.co
m](mailto:commercial.enquiries@xoserve.com)

0473 0473A

Workgroup Report

10 October 2014

Version 2

Page 2 of 13

© 2014 all rights reserved

1 Summary

Is this a Self-Governance Modification?

The Modification Panel determined that these are not self-governance modifications because they may have material effect on competition.

Why Change?

Following the decision to implement Modification 0432 - Project Nexus – Gas Demand Estimation, Allocation, Settlement and Reconciliation reform¹. The Business Requirements Documents (BRDs) which constitute the business rules currently provide that no manual intervention in the distribution of Unidentified Gas² between relevant market sectors would occur, as might be a consequence of the determination of an Allocation of Unidentified Gas Expert (AUGE)³. Notwithstanding this, Modification 0432 and associated legal text identifies a mechanism whereby, should such determination be deemed necessary, this could be readily incorporated within the proposed regime.

The use of a single scaling factor proposed in Modification 0432 could offer a less accurate means of allocating unidentified gas than is currently offered by the Allocation of Unidentified Gas Expert (AUGE). As the aim should be to reduce unidentified gas, not simply target its allocation, and a universal scaling factor would seem to dilute any existing incentives to do so. Modifications 0473 and 0473A offer two different approaches to the allocation of unidentified gas.

Solution

Modifications 0473 and 0473A propose arrangements to determine the allocation of unidentified gas between markets by the use of an appointed expert in readiness for the Project Nexus go live date. The expert will be responsible for the development of a methodology for allocating unidentified gas on an equitable basis.

Modification 0473 proposes that an Allocation of Unidentified Gas Expert be appointed so that a methodology can be developed and used to populate the AUG table prior to the Project Nexus Go live date.

Modification 0473A proposes that a new Independent Expert be appointed in readiness for Project Nexus Go Live Date. The new Independent Expert will be responsible, if required following assessment and analysis of evidence/data, for the development of a methodology for correcting Project Nexus allocation arrangements, which subject to a consultation and approval processes will be modified and applied on an annual basis.

Relevant Objectives

Implementation of the changes identified within these modifications could be expected to facilitate the securing of effective competition between Users. The changes are expected to lead to more accurate allocation of Unidentified Gas costs between Users.

¹ [Modification Proposal 0432: http://www.gasgovernance.co.uk/0432](http://www.gasgovernance.co.uk/0432)

² [TPD Section E10.1.1\(a\): http://www.gasgovernance.co.uk/TPD](http://www.gasgovernance.co.uk/TPD)

³ [TPD Section E10.1.1\(f\): http://www.gasgovernance.co.uk/TPD](http://www.gasgovernance.co.uk/TPD)

Implementation

No implementation timescales are proposed. However, implementation as soon as possible after an Authority decision to do so would maximum the time available for the tender process ahead of the Project Nexus implementation date.

Do these modifications affect the Nexus delivery, if so, how?

Both modifications are proposing changes to the arrangements approved under Modification 0432 - Project Nexus – Gas Demand Estimation, Allocation, Settlement and Reconciliation reform. However, with the exception of the risk identified below it is not anticipated that either of these modifications would impact Project Nexus delivery.

Some participants consider there is a risk that the introduction of Modification 0473 may inadvertently produce an incentive for sites to migrate sooner and in larger volumes than currently predicted, from Product Class 3 and 4 into Class 2. This may require a review of the Project Nexus Product Class 2 design arrangements as current User product Class predicted volume estimates might not be robust. Some workgroup members believe that the risk is not material, on the basis that Nexus is being built (as described in Modification 0432) for the volumes likely to be affected based on current DECC figures (18 Sept 2014):

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/355786/Smart_Meters_Great_Britain_Quarterly_report_FINAL.pdf

2 Why Change?

The proposed energy allocation framework identified within Modification 0432 presently does not identify a methodology for the redistribution of Unidentified Gas between the Smaller Supply Point (SSP) and Larger Supply Point (LSP) market sectors over and above the simplistic approach which would occur as part of the proposed 'Allocation Scaling Adjustment mechanism.

For the purposes of avoiding unnecessary delay to the development of Modification 0432, separate modifications have been raised to propose mechanisms by which the allocation of unidentified gas can be shared should the industry determine that this be necessary. The benefits of this approach is that the Transporter's agent (Xoserve) can proceed to develop relevant supporting systems and processes with certainty and with sufficient flexibility to accommodate determination in Unidentified Gas allocation should this ultimately be required.

The new individual supply point reconciliation arrangements being introduced by Project Nexus are significantly different to the incumbent RbD arrangements; therefore it is not appropriate to take a simplistic approach to settlement as proposed in Modification 0432 and both Modifications 0473 and 0473A offer options for the allocation of unidentified gas.

Modification 0473 proposes to continue with an AUGE type process as now and adopt a methodology for the year ahead. Modification 0473A the independent expert will make an assessment based on actual evidence after the event and to recommend an adjustment if required.

3 Solution

Modification 0473

The purpose of this Modification Proposal is to develop an Unidentified Gas determination and sharing methodology utilising the services of an AUGE.

Modification of the UNC is required is required to incorporate appropriate arrangements to permit the sharing of Unidentified Gas between market sectors by an AUGE post Nexus implementation. Rather than as an 'after the event' adjustment process as is presently the case, this would occur as part of the process of deriving and applying the 'Allocation Scaling Adjustment' developed within the remit of Modification Proposal 0432.

Business Rules

- 1) A person, the Allocation of Unidentified Gas Expert (AUGE), shall be appointed and engaged by the Gas Transporters through an AUG Expert Contract for the purposes of:
 - a) developing an AUG Statement or (as the case may be) a modification of the prevailing AUG Statement and recommending it to the Committee; and
 - b) by applying the AUG Statement, preparing and recommending to the Committee an AUG Table;
- 2) The AUG table, is incorporated into the UNC, which shall be used by the transporters in determining the allocation factors applicable to each meter point class and band by LDZ.

0473 0473A

Workgroup Report

10 October 2014

Version 2

Page 5 of 13

© 2014 all rights reserved

| Supply Meter Point Classification | Allocation Factor | | | |
|-----------------------------------|-------------------|---------|---------|---------|
| | Class 1 | Class 2 | Class 3 | Class 4 |
| EUC Band 1 | | | | |
| EUC Band 2 | | | | |
| EUC Band 3 | | | | |
| EUC Band 4 | | | | |
| EUC Band 5 | | | | |
| EUC Band 6 | | | | |
| EUC Band 7 | | | | |
| EUC Band 8 | | | | |
| EUC Band 9 | | | | |

- 3) The Transporters be required to publish a Framework Document “Framework for the Appointment of an Allocation of Unidentified Gas Expert”.
- 4) The initial content of the Framework Document be that which is provided as an Appendix to this modification proposal (Appendix 1 below).
- 5) The Framework Document may be modified if The Committee votes by majority vote in favour of a proposed change.
- 6) For the avoidance of doubt, the current AUGE process will continue until the implementation of Project Nexus.

Modification 0473A

The purpose of this modification is to introduce a new Independent Expert, known as the Unidentified Gas Independent Expert (UGIE) in readiness for Project Nexus Go Live date. The UGIE will be responsible for assessing the quantity of Unidentified Gas, based on the actual evidence/data following the implementation of Project Nexus. The output of the UGIE will be to make a recommendation as to whether any further intervention to the incumbent allocation of unidentified gas is required. If required the UGIE will recommend any adjustment required to the incumbent arrangements. During the transitional period between Project Nexus Go Live Date and the new Independent Expert’s findings and recommendations, Transitional Arrangements will be used to make an “offline” amendment to the incumbent allocation of Unidentified Gas process. (See Appendix 1.1) The overall aim of this proposal is to introduce an independent, evidenced-based assessment, for the correct allocation of Unidentified Gas, to ensure that all industry participants are equally incentivised to reduce it.

For the avoidance of doubt, this proposal does not seek to amend current pre Project Nexus implementation arrangements, the current AUGE process will continue until the implementation of Project Nexus.

0473 0473A

Workgroup Report

10 October 2014

Version 2

Page 6 of 13

© 2014 all rights reserved

Business Rules

- 1) The Unidentified Gas Independent Expert (UGIE), shall be appointed and engaged by the Gas Transporters through an UGIE Contract for the purposes of:
 - a) each year, utilising actual evidence and data, to develop an Unidentified Gas Allocation (UGA) Statement or (as the case may be) a modification to the prevailing UGA Statement, and recommending it to the Committee.
 - b) by applying the UGA Statement, preparing and producing indicative and final Unidentified Gas Allocation Factors to the Transporters for inclusion in a UGA Table and publication.
- 2) For the initial year following Project Nexus implementation, undertaking a review of the incumbent Mod 432 arrangements in addition to any transitional arrangements in place and assessing whether any further intervention is required.
- 3) Where under Business Rule 1 the UGIE produces a UGA Statement and subsequently produces Unidentified Gas Allocation Factors for publication in a form which enables the UGA Table as detailed below to be fully populated. The UGA Table will subsequently be populated by the Transporters and used to determine the Allocation Factors applicable to each meter point class and band by LDZ for the next UG Year. The Transporters will be responsible for publishing the UGA Table in accordance with timescales detailed within the new Framework Document “Framework for the Appointment of an Unidentified Gas Independent Expert (UGIE)”

See table set out in Modification 0473 Solution above.

- 4) For the purposes of transitional arrangements, (which is the period between Project Nexus Go Live Date and the approval and implementation of the UGIE’s recommendation) as set out within their initial UGA Statement, there will be an offline adjustment undertaken to correct for the Directly Measured Components, as identified by the prevailing AUG Table in place immediately preceding Project Nexus go live date. This adjustment will be applied to Users by Larger DM SPCs, Larger NDM SPCs and Smaller SPCs, as defined under the previous AUG arrangements, in the proportions identified by the most recently published AUG Table. Further description of the proposed transitional arrangements, are detailed within Appendix 1.2.
- 5) The process for appointing the UGIE is set out in a new UNC Related Document “Framework for the Appointment of an Unidentified Gas Independent Expert (UGIE)”. See Appendix 1.1.
- 6) The Transporters shall be required to publish a Framework Document “Framework for the Appointment of an Unidentified Gas Independent Expert (UGIE)” and publish annually the Unidentified Gas Allocation Statement”.
- 7) The initial content of the Framework Document shall be that which is provided as an Appendix to this modification proposal.
- 8) The Framework Document may be modified if The Committee votes by majority vote in favour of a proposed change.
- 9) For the avoidance of doubt the UGIE will be required to publish a UGA Statement each year regardless of whether any intervention or changes are required from the previous iteration.
- 10) The methodology for implementing the proposed Transitional Arrangements will mirror the existing ‘Allocation of Unidentified Gas Invoice Process’ currently undertaken by Xoserve.

0473 0473A

Workgroup Report

10 October 2014

Version 2

Page 7 of 13

© 2014 all rights reserved

11) Based upon the working assumption that Project Nexus Go Live Date will be 1st October 2015, under this proposal the UG Year will commence from 1st October each year.

| User Pays |
|---|
| Classification of the modification as User Pays, or not, and the justification for such classification. |
| These modifications propose to introduce new arrangements for the introduction of a new allocation of unidentified gas expert, which will result in the Transporter Agency (Xoserve) incurring costs associated with procurement and appointment, thus resulting in User Pays charges. |
| 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. |
| 100% Users |
| Proposed charge(s) for application of User Pays charges to Shippers. |
| Modification 0473/0473A - The proposed process for allocating Unidentified Gas post Project Nexus is to do so in proportion of total system throughput. It therefore is appropriate for the charge for managing the process to be allocated in the same way, namely in proportion of shipper AQ, as of the 1 April each year. |
| Proposed charge for inclusion in the Agency Charging Statement (ACS) – to be completed upon receipt of a cost estimate from Xoserve. |
| An ACS will be published on the Joint Office website. |

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. | Impacted – 0473 and 0473A |
| 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. | None |
| 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 |

The implementation of the changes identified within these modifications would be expected to impact Relevant Objective d): the securing of effective competition between Users. The changes are expected to lead to more accurate allocation of Unidentified Gas costs between Shipper Users by implementing the recommendations of an industry expert rather than is currently proposed under 0432 using an allocation scaling adjustment.

Modification 0473

The proposer and some Workgroup participants believed that the 0473 transition process is consistent with the current view of Unidentified Gas arrangements under the AUGE and that this represents the most accurate and appropriate mechanism to deal with unidentified gas.

Some participants consider the 0473 transition may introduce a perverse incentive which offers protection from Unidentified Gas costs to sites within Product Class 2. This may lead to sites migrating from Product Class 3 and 4 into Class 2 to avoid Unidentified Gas costs and that this could be detrimental to Relevant objective d) Securing of effective competition.

Some workgroup members believe that the risk is not material, on the basis that Nexus is being built (as described in Modification 0432) for the volumes likely to be affected based on current DECC figures (18 Sept 2014):

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/355786/Smart_Meters_Gre_at_Britain_Quarterly_report_FINAL.pdf

Some participants believed that the 0473 transition does not, in practise, replicate the current AUGE process arrangements because it would only work if the actual measured unidentified gas is equal to the estimated seasonal normal total from the AUGE. These participants also don't believe that 0473 is the most accurate and appropriate mechanism to deal with unidentified gas.

Modification 0473A

The Proposer and some participants consider the 0473A transition would result in a more appropriate and accurate allocation of costs between Shippers as the allocation of Unidentified Gas will be based upon the 0432 Project Nexus settlement mechanism and retains the 'known source' unidentified gas elements of the existing AUGE arrangements. These participants believe that this more accurately allocates costs during transition and that using matured data generated from the new settlement regime allows the new Independent Expert to provide a more accurate assessment of the value and allocation of unidentified gas which would further Relevant Objective d).

Other participants disagree, believing that 0473A transition does not more accurately represent previous allocation of unidentified gas on the basis that daily settled sites will be allocated significant unidentified gas. These participants believe that the additional 6 months of transition to achieve this matured position imposes a prolonged exposure to the transition rules.

5 Implementation

No implementation timescales are proposed. However, implementation as soon as possible after an Authority decision to do so would maximum the time available for the tender process ahead of the Project Nexus implementation date.

Xoserve have indicated that they will need at least two months between the modification being approved and the tender being issued.

6 Legal Text

Text

The Text published alongside this report has been prepared by Northern Gas Networks at the request of the Modification Panel. The workgroup has reviewed this text for 0473 and is satisfied that it achieves the intent of the modification.

The text for 0473A is at an advanced stage of development but may not be available in time for a Panel decision on whether to issue for consultation. It is proposed that the text is finalised with both Proposers before issuing to Consultation and workgroup members are happy with this approach since they have been involved in its development.

7 Recommendation

The Workgroup invites the Panel to:

- AGREE that these modifications should be issued to consultation.
- Determine whether it wants to see the Legal Text before issuing it to Consultation.
- Note that the Final Modification Report will be received by the November Panel at short notice.

8 Appendix one – AUGE Framework

Modification 0473

Framework for the Appointment of an Allocation of Unidentified Gas Expert and the provision of the Allocation of Unidentified Gas Statement is published alongside this report

9 Appendix two – UGIE Framework

Modification 0473A

Framework for the Appointment of an Unidentified Gas Independent Expert and the provision of the Allocation of Unidentified Gas Statement is published alongside this report.

10 Appendix three – 0473A Transitional Arrangements

The Transitional Arrangements are designed to adjust the straight throughput based Modification 0432 arrangements for the Directly Measured Components identified by the incumbent AUGE arrangements (see red highlighted area of example table below).

| Unidentified Gas source | Aggregate Quantity of Unidentified Gas/GWh | Unidentified Gas Quantity/GWh | | |
|----------------------------------|--|-------------------------------|-----------------|--------------|
| | | Larger DM SPCs | Larger NDM SPCs | Smaller SPCs |
| iGT CSEPs | 288 | 0 | 0 | 288 |
| Shipperless/Unregistered | 417 | 0 | 321 | 96 |
| - Shipper Activity | 0 | 0 | 0 | 0 |
| - Orphaned | 33 | 0 | 28 | 5 |
| - Unregistered <12 Months | 57 | 0 | 49 | 7 |
| - Shipperless PTS | 25 | 0 | 14 | 11 |
| - Shipperless SSrP | 291 | 0 | 223 | 68 |
| - Shipperless <12 Months | 11 | 0 | 5 | 5 |
| Meter Errors | 21 | 0 | 21 | 0 |
| Balancing Factor (Theft + Other) | 3779 | 0 | 962 | 2817 |
| Total (inc Independents) | 4506 | 0 | 1304 | 3202 |

Worked example:

The method proposed to do this is to take the total Aggregate Quantity of Unidentified Gas/GWh as defined by the most recent AUG Table at the point of Project Nexus Go Live Date (highlighted green in the above example table).

0473 0473A

Workgroup Report

10 October 2014

Version 2

Page 12 of 13

© 2014 all rights reserved

In this example this would equate to $288 + 417 + 21 = 726\text{GWh}$

It should be noted that this is for a full year and therefore to apply the adjustment monthly the calculation would be $726/12 = 60.5\text{GWh}$ (subject to UNC value rounding rules)

For this example (as per the example table above), according to the AUG Table above, the 60.5GWh would be allocated along the following proportions:

Larger DM SPCs = $0/726 = 0\%$

Larger NDM SPCs = $342/726 = 47.1\%$

Smaller SPCs = $384/726 = 52.9\%$

Under the proposed transitional arrangements, the 60.5GWh will have been allocated by Modification 0432 arrangement in-line with throughput rather than as per the AUG Table above. Therefore to correct for this, the 60.5GWh is removed each month from the UG allocation in proportion to throughput. Assuming the following market shares as an example:

Larger DM SPCs = 17% throughput = $60.5 * 0.17 = 10.3\text{GWh}$

Larger NDM SPCs = 23% throughput = $60.5 * 0.23 = 13.9\text{GWh}$

Smaller SPCs = 60% throughput = $60.5 * 0.60 = 36.3\text{GWh}$

This 60.5GWh is then allocated to the sectors each month as per the AUG Table above.

Larger DM SPCs = 0% Directly Measured Components = $60.5 * 0.0 = 0\text{GWh}$

Larger NDM SPCs = 47.1% Directly Measured Components = $60.5 * 0.471 = 28.5\text{GWh}$

Smaller SPCs = 52.9% Directly Measured Components = $60.5 * 0.529 = 32.0\text{GWh}$

Therefore the net effect of this transaction is:

Larger DM SPCs = $-10.3\text{GWh} + 0\text{GWh} = -10.3\text{GWh}$

Larger NDM SPCs = $-13.9\text{GWh} + 28.5\text{GWh} = 14.6\text{GWh}$

Smaller SPCs = $-36.3\text{GWh} + 32.0\text{GWh} = -4.3\text{GWh}$

The methodology for implementing the proposed Transitional Arrangements will mirror the existing 'Allocation of Unidentified Gas Invoice Process' currently undertaken by Xoserve.

0473 0473A

Workgroup Report

10 October 2014

Version 2

Page 13 of 13

© 2014 all rights reserved