# At what stage is this **UNC Request Workgroup Report** document in the process? UNC 0781R: 01 Request 02 Workgroup Report Review of the Unidentified Gas Final Modification Report process **Purpose of Request:** Review the process for allocating Unidentified Gas. The Workgroup recommends to the Panel that this Request be closed. The Panel will consider this Workgroup Report on 16 June 2022. The Panel will consider the recommendations and determine the appropriate next steps. High Impact: **Shippers** Medium Impact: Suppliers, CDSP, AUGE Low Impact:

**Transporters** 

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Any questions?

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## About this document:

This report will be presented to the panel on 21 July 2022.

The panel will consider whether the Request should be returned to the Workgroup for further assessment.

## 1 Request

## Why is the Request being made?

Quantifying and identifying the sources of Unidentified Gas (UIG) as a concept was first brought into the UNC via UNC Modification 0229 in June 2010. Though the gas settlement processes were substantially changed through the implementation of Project Nexus, the principle for identifying Unidentified Gas (UIG) and then weighting its allocation to different market sectors (currently by EUC Band and product class) in accordance with a derived methodology compiled by the Allocation of Unidentified Gas Expert (AUGE), has not altered.

When the UIG process was first developed in 2010, the industry did not have any visibility of the potential sources of gas losses downstream from the meter. Since then, significant progress has been made in tracking and addressing gas losses arising from such areas such as gas theft and unregistered sites. The AUGE process therefore no longer represents the sole assessment of these system losses.

The UIG process as it currently exists results in highly volatile allocation with unpredictable swings in allocation on a daily as well as an annually basis owing to the various factors that ultimately comprise it and the potentially significant changes in weighting factors.

As the Smart Metering programme has been set an effective deadline of 31 December 2025, there is an opportunity to assess how UIG is managed in the gas market and whether any improvements to the process can be identified.

### Scope

The Request will be limited to the following:

- The current process for allocating UIG to shippers, including the identification, allocation, and reconciliation processes.
- The AUGE process.
- Alternative data sources to determine UIG volumes and sources.
- Different options for managing UIG costs.
- Potential market changes (such as Smart metering) that may impact UIG.
- Meter Installation information (by-pass status etc).
- upstream theft and shrinkage are out of scope.

### **Impacts & Costs**

Undertaking a detailed review of the UIG arrangements may necessitate input from Shippers, Gas Transporters, AUGE and the CDSP as well potentially other external parties associated with theft such as Suppliers, Theft Risk Assessment Service and the REC.

#### Recommendations

Panel is requested to put in place a review of the current UIG arrangements to provide a single focus for UIG discussions under the UNC, to ensure they continue to remain fit for purpose and that the associated Meter Installation information held within industry systems remains accurate. It is anticipated that the workgroup could recommend changes to the industry arrangements and Codes if warranted by the findings of the review.

Version 1.0

08 June 2022

#### **Additional Information**

None

# 2 Proposer's assessment of Impacts and Costs

# **Consideration of Wider Industry Impacts**

# **Impacts**

Impact on Central Systems and Process	
Central System/Process	Potential impact
UK Link	Changes to how Unidentified Gas is allocated between industry parties.
Operational Processes	Change to how UIG allocation factors are derived and the AUG process.

Impact on Users	
Area of Users' business	Potential impact
Administrative and operational	Changes to UIG management processes.
Development, capital, and operating costs	Changes to how UIG costs are managed and account for.
Contractual risks	<ul> <li>Changes to how UIG costs are passed through to customers.</li> </ul>
Legislative, regulatory, and contractual obligations and relationships	Changes to how UIG costs are managed in customer contracts.

Impact on Transporters	
Area of Transporters' business	Potential impact
System operation	• None
Development, capital, and operating costs	• None
Recovery of costs	• None
Price regulation	• None
Contractual risks	• None
Legislative, regulatory, and contractual obligations and relationships	• None
Standards of service	None

Impact on Code Administration	
Area of Code Administration	Potential impact
Modification Rules	None

# Joint Office of Gas Transporters

Impact on Code Administration	
UNC Committees	Change and/or removal of AUG sub-committee.
General administration	Minor change to the publication of AUG information
DSC Committees	None

Impact on Code	
Code section	Potential impact
UNC TPD E9	Change to Unidentified Gas process.

Impact on UNC Related Documents and Oth	
Related Document	Potential impact
Network Entry Agreement (TPD I1.3)	• None
General	Potential Impact
Legal Text Guidance Document	• None
UNC Modification Proposals – Guidance for Proposers	• None
Self-Governance Guidance	• None
TPD	Potential Impact
Network Code Operations Reporting Manual (TPD V12)	• None
UNC Data Dictionary	• None
AQ Validation Rules (TPD V12)	• None
AUGE Framework Document	Changes to modify or remove the AUG process and Framework may be proposed.
Customer Settlement Error Claims Process	• None
Demand Estimation Methodology	• None
Energy Balancing Credit Rules (TPD X2.1)	• None
Energy Settlement Performance Assurance Regime	• None
Guidelines to optimise the use of AQ amendment system capacity	• None
Guidelines for Sub-Deduct Arrangements (Prime and Sub-deduct Meter Points)	• None
LDZ Shrinkage Adjustment Methodology	• None

Impact on UNC Related Documents and Oth	ner Referenced Documents
Performance Assurance Report Register	• None
Shares Supply Meter Points Guide and Procedures	• None
Shipper Communications in Incidents of CO Poisoning, Gas Fire/Explosions and Local Gas Supply Emergency	• None
Standards of Service Query Management Operational Guidelines	• None
Network Code Validation Rules	• None
OAD	Potential Impact
Measurement Error Notification Guidelines (TPD V12)	• None
EID	Potential Impact
Moffat Designated Arrangements	• None
IGTAD	Potential Impact
DSC / CDSP	Potential Impact
Change Management Procedures	• None
Contract Management Procedures	Potential changes to AUGE contract
Credit Policy	• None
Credit Rules	• None
UK Link Manual	• None

Impact on Core Industry Documents and other documents	
Document	Potential impact
Safety Case or other document under Gas Safety (Management) Regulations	• None
Gas Transporter Licence	• None

Other Impacts	
Item impacted	Potential impact
Security of Supply	None
Operation of the Total System	None
Industry fragmentation	None

Terminal operators, consumers, connected system operators, suppliers, producers and other non-code parties

Potential changes to how UIG costs are accounted for in supply contracts for customers.

### 3 Terms of Reference

### **Background**

Quantifying and identifying the sources of Unidentified Gas (UIG) as a concept was first brought into the UNC via UNC Modification 0229 in June 2010. Though the gas settlement process were substantially changed through the implementation of Project Nexus, the principle for identifying Unidentified Gas (UIG) and then weighting its allocation to different market sectors (currently by EUC Band and product class) in accordance with a derived methodology compiled by the AUGE has not altered. This initial forecast allocations are then adjusted as actual meter reads are received and reconciled over time.

As part of this work, the previous work undertaken by the CDSP in this area (the "UIG taskforce") will also be considered.

### Scope

The scope of the review should consider the end-to-end process for Unidentified Gas including but not limited to:

- UIG forecasting.
- UIG allocation.
- Reconciliation of UIG.
- The AUGE process.
- Potential alternative data sources to determine UIG.
- Potential mechanism for managing UIG.
- Potential market changes (such as Smart metering) that may impact UIG in the future.
- Meter Installation information (by-pass status etc).

### **Topics for Discussion**

- Understanding the objective.
- Assessment of alternative means to achieve objective.
- Development of Solution (including business rules if appropriate).
- Assessment of potential impacts of the Request and any proposed solutions.
- Assessment of implementation costs of any solution identified during the Request.
- Assessment of legal text.

### **Outputs**

Produce a Workgroup Report for submission to the Modification Panel, containing the assessment and recommendations of the Workgroup including a draft modification(s) where appropriate.

### **Composition of Workgroup**

The Workgroup is open to any party that wishes to attend or participate.

A Workgroup meeting will be quorate provided at least two Transporter and two User representatives are present.

### **Meeting Arrangements**

Meetings will be administered by the Joint Office and conducted in accordance with the Code Administration Code of Practice.

## 4 Workgroup assessment of Impacts and Costs

### **Consumer Impacts**

Workgroup did not specifically consider any further consumer impacts beyond those identified by the proposer in section 2:

- Changes to how UIG costs are passed through to customers.
- Changes to how UIG costs are managed in customer contracts.

Options for new ways to manage UIG costs were assessed in relation to some aspects of impact on consumers. For example in the criteria used to assess each option (e.g. Polluter Pays, Drives Improvement, Year on Year stability and Easy to explain).

Further work looking more closely at consumer impact will be needed should any of the options be selected for further development through to a modification, however this has not yet taken place within the Request Workgroup.

### **Cross-Code Impacts**

Workgroup did not specifically consider cross code impacts since the options discussed were not developed far enough to allow this.

Further work looking more closely at cross code impact will be needed, should any of the options be selected for further development through to a modification, however this has not yet taken place within the Request Workgroup.

### **Central Systems Impacts**

Options for new ways to manage UIG costs were assessed in relation to some aspects of impact on central systems, primarily feasibility.

Further work looking more closely at central systems impact will be needed, should any of the options be selected for further development through to a modification, however this has not yet taken place within the Request Workgroup.

#### **Panel Questions**

There were no Panel Questions raised when Panel considered the new Modification 0781R on 21 October 2021.

### **Workgroup Impact Assessment**

Workgroup met to discuss this review on the following dates:

- Workgroup 0781R 26 May 2022
- Workgroup 0781R 28 April 2022
- Workgroup 0781R 24 March 2022
- Workgroup 0781R 24 February 2022
- Workgroup 0781R 27 January 2022
- Workgroup 0781R 13 December 2021
- Workgroup 0781R 25 November 2021
- Workgroup 0781R 28 October 2021

At its first meeting in October 2021, Workgroup noted the Ofgem letter approving Modification 0229 - *Mechanism for correct apportionment of unidentified gas* and rejecting Modifications 0194, 0194A, 0228 and 0228A, dated 26 May 2010 and specifically, the reasons given in the letter, which are still considered very useful in guiding any consideration of new proposals seek to address the equity of the allocation of gas which cannot be identified as being the responsibility of any one shipper. https://www.gasgovernance.co.uk/0229 Modification 0229 was implemented on 10 June 2010.

### **Eight initial options**

The Proposer's representative outlined 8 initial options suggested by the Proposer for reform of the UIG mechanism, at the first Workgroup in October 2021:

- Uniform Allocation by LDZ
- 2. Static model
- 3. Static model (with regular audit)
- 4. Utilise existing industry datasets
- 5. Utilise existing industry datasets (AUGE top-up)
- 6. Balancer of last resort
- 7. Smoother transition of scaling factor changes
- 8. UIG framework responsibility of sub-committee

Each option is described below using both the descriptions provided by the Proposer's representative and input form the Workgroup as it was discussed.

#### Option 1 Uniform Allocation by LDZ

Allocate UIG to all throughput equally.

- Pros:
  - Simple.

• Reduces management costs (no AUGE, no sub-committee, etc).

#### · Cons:

- Any model will create "winners and losers" compared to current process.
- Removes incentives to reduce UIG if current process is seen to do so.
- Loses possible insight into UIG issues no regular review.

### Option 2 Static model

The AUGE process would be discontinued and replaced with a static model (a new set of static weighting factors) that Xoserve would manage, which would operate unchanged except via an industry process (e.g. UNC Modification). There are some underlying assumptions for this option such as LDZ apportionment and a residual amount that has to be managed, for example, settlement error; model error; leakage.

- Pros:
  - This proposal would add certainty, and stability to UIG charges which would allow easier forecasting of costs. Would reduce industry effort in managing annual AUGE process.
- Cons:
  - Any model will create "winners and losers" compared to current process.
  - Development of a robust model would require significant work and cost.
  - A static model may also drift over time where initial assumptions become invalid.
  - Loses possible insight into UIG issues no regular review.

### Option 3: Static model (with regular audit)

The AUGE process would be discontinued and replaced with a static model that Xoserve would manage which would operate unchanged except via an industry process (e.g. UNC Modification). There would be a requirement for an annual audit.

- Pros:
  - This proposal would add certainty, and stability to UIG charges which would allow easier forecasting of costs. Would reduce industry effort in managing annual AUGE process.
  - Annual Audit will allow potential issues to be identified.
- Cons:
  - Any model will create "winners and losers" compared to current process.
  - Development of a robust model would require significant work and cost.
  - Annual Audit may simply result in the current process with slightly different emphasis.

### Option 4: Utilise existing industry datasets

Existing industry datasets would be utilised for determining levels and proportions of UIG, with data used to update the model. An example of this would be industry theft reporting which has significantly

improved since the inception of the AUGE concept in 2009. Determination of unknown theft by the AUGE would no longer be included as the AUGE would not be involved.

- Pros:
  - This proposal would reduce the potential subjectivity of any assessment by the AUGE and reducing the risk of radical change.
  - Allows a development of a history of UIG information that is easily verifiable.
- Cons:
  - It may create incentives on shippers to skew data to suit its UIG allocation.
  - Would require robust industry data.
  - Loses possible insight into UIG issues no regular review.

### Option 5: Utilise existing industry datasets (AUGE top-up)

Existing industry datasets would be utilised for determining levels and proportions of theft where appropriate. The AUGE role would then be limited to identifying areas of UIG which cannot be derived from industry datasets.

- Pros:
  - This proposal would reduce the potential subjectivity of any assessment by the AUGE and reducing the risk of radical change.
  - Allows a development of a history of UIG information that is easily verifiable.
- Cons:
  - Who determines what areas need additional assessment?
  - It may create incentives on shippers to skew data to suit its UIG allocation.
  - Would require robust industry data.

#### Option 6: Balancer of last resort

This option aggregates UIG losses for each LDZ and allocates them to a 3<sup>rd</sup> party "Balancer of Last Resort" with the costs of the 3rd party recovered from the industry. This proposal, if raised, will require all losses, not allocated directly via a customer, to go to third-party (acting like a shipper) who would then buy the gas, e.g. one large player buying the gas on behalf of everyone, with the corresponding downside for certain individual Shippers that they lose the ability to manage this cost.

- Pros:
  - This proposal would allow aggregation of UIG management costs as the process would create a single UIG gas requirement for the market.
- Cons:
  - This would remove the ability for shippers to compete when managing UIG costs as part of their portfolio.
  - Would also require the development of a process where UIG is negative as the balancer party would have to be able to sell gas to the market to match its negative position.

### Option 7: Smoother transition of scaling factor changes

The annual AUGE process would continue, but any changes to scaling factors would be smoothed over a period of years (say 3 years). The scaling factors over a [3]-year period could be used on an averaging basis (rather than ignoring the previous year's factors on a year-by-year basis). Note this is not upon change of service provider but rather within the duration of the existing service provider.

- Pros:
  - This proposal will have a stabilising effect on UIG charges to shippers (and therefore to consumers) leading to more predictable costs and reduced risk associated to pricing.
- Cons:
  - Any model will create "winners and losers" compared to current process.
  - Potential improvements to UIG allocation would take longer to be realised.

### Option 8: UIG framework responsibility of Sub-Committee

UIG management would be formally controlled by a Sub-Committee who responsible for setting values and managing the model. This could be achieved by mirroring the current DESC process.

- Pros:
  - Accountability for the process rests with shipper representatives, not a third party.
  - Allow for continuity of understanding in the UIG allocation process.
- Cons:
  - Potential bias from the industry representatives on the committee.
  - May require significant input from shipper representatives will that be sustainable?

Workgroup made a couple of suggestions relating to Option 8:

- · Could a similar outcome be achieved by expanding the budget of the AUGE?
- Could a hybrid option be developed, where the sub-committee can do analysis as requested by the Workgroup.

Some Workgroup Participants wished to explore further the method used in the electricity market using Group Correction Factors, though the Proposer's representative believed this was overly complex. The Workgroup heard from D Thomas, Elexon at the December 2021 Workgroup, who gave an overview of Group Correction Factors (GCFs) and how are they are used in Electricity Settlement. For further details please see:

### https://www.gasgovernance.co.uk/0781/131221

Workgroup found the explanations useful and factored some ideas into the development of the options in the table

### Two further options

Two additional options were discussed at the November 2021 Workgroup:

### Option 9: Lengthen the duration of the AUGE term

As there is transitional uncertainty when there is a change of service provider whenever the consultants running the AUG process change and the approach to the methodology shifts, it would be beneficial to analyse the variance that occurs on consultant change, and to explore extending the minimum duration for the contract of the AUGE as a way of limiting the variance that occurs in such a scenario.

#### Pros:

- Familiar, current method is retained for longer.
- Allows for continuity of understanding in the UIG allocation process.
- This proposal would add a little certainty, and stability to UIG charges which would allow somewhat easier forecasting of costs.
- Would possibly reduce industry effort in managing annual AUGE process.
- Easy to implement in the gift of the CDSP to extend the AUGE contract duration.

#### Cons:

- Delays the inevitable change but doesn't avoid it.
- Potential improvements to UIG allocation would take longer to be realised.
- Downsides of current method are retained (difficult to explain, difficult or impossible to calculate independently, etc.)
- Retains potential subjectivity of any assessment by the AUGE.

# Option 10: Apply some method of smoothing/mitigation when transitioning from one AUGE service provider to the next.

This option is a smoothing between the AUG Statement of the one AUGE to the AUG Statement of the next AUGE. Potentially moving across from one table to the next without the cliff edge = a reduction in the step changes over time.

### • Pros:

- · Reduces volatility of individual allocations somewhat.
- Allows for continuity of understanding in the UIG allocation process.
- This proposal would add a little certainty, and stability to individual UIG allocations which would allow somewhat easier forecasting of costs.

### • Cons:

- Potential improvements to UIG allocation would take longer to be realised.
- Delays the inevitable change but doesn't avoid it.
- Retains potential subjectivity of any assessment by the AUGE.
- Downsides of current method are retained (difficult to explain, difficult or impossible to calculate independently, etc.
- Still requires industry effort in managing annual AUGE process.

At Workgroup in November 2021 a brief overview of how market changes would factor into this review was discussed:

- The Market is changing on a daily basis.
- Existing policy unlike electricity, there is no drive to mandating daily metering or shorter periods of granularity.
- No expected impact from the Faster Switching program.
- SMART Metering rollout program is looking to complete by 2025, noting that although 100% roll out is the target, reaching that target is not expected in practice. Upon completion of the roll out there is a possibility there could be an impact on the accuracy and speed with which UIG is calculated.
- It could be expected that theft will reduce over time as the regime exists to tackle it.

### Criteria for rating of each option

The list of criteria against which to rate each Option was discussed briefly by Workgroup in November 2021:

- Fairness in intent
- Feasibility
- · Overall volume volatility
- Stability from year to year
- Ease of explanation
- Scaling.

By February 2022 this list had been superseded and the criteria improved through Workgroup discussions:

- A. Polluter Pays (dynamic)
- B. Feasibility
- C. Drives Improvement
- D. Year on Year stability
- E. Easy to explain
- F. Robust
- G. Not likely to be continually challenged

The Workgroup Chair suggested that the current method should be critiqued as well, in order to highlight where alternative methods may better serve.

### **Brief critique of the current AUG Framework**

The purpose of the AUGE is to provide an independent expert who would determine which sectors contribute most to Unidentified Gas (UIG) and how to target the UIG allocations amongst the various sectors (in line with the polluter pays principle). The AUG Statement attempts to determine the position at Line in the Sand (LiS) and develops a set of UIG weighting factors that are used in daily gas allocation and in UIG reconciliation.

#### Pros:

- Somewhat familiar (framework has been in place since 2017, updated 2018).
- Aimed at incentivising sources of UIG.
- Allows for continuity of understanding in the UIG allocation process.
- Aimed at being fair in intent.

- AUGE is selected and appointed by the CDSP with input from a panel of independent stakeholders drawn from industry (Stakeholder Engagement Panel).
- Independent expert this is part of the selection process.

#### Cons:

- Temporary UIG (of which the prime component is model error) occurs at allocation and this can only be shared out using the weighting factors which are based on the LiS position. The consequence of this is the creation of volatility in individual allocations which is very difficult to predict.
- Substantial cross- Industry effort required to manage annual AUGE process (e.g. Shipper analysis and feedback on draft AUG statements, interaction with consultation process, attendance at UNC meetings, CDSP contract management and data provision, handling industry feedback and so on).
- Very difficult to explain to consumers. Industrial & Commercial (I&C) consumers in particular would like to understand more (because UIG is a material individual component in their charges) but find it difficult or impossible to understand or calculate independently. (Current method is overly complicated, with many factors and a substantial array of weightings).
- Difficult for anyone/Shippers to forecast costs between days (one day to the next) and for a given day, from nomination through to allocation and through reconciliations.
- Reselection of AUGE every 3-5 years can lead to volatility (1st AUGE period post-Nexus was 4 years, current AUGE was appointed 2020 and under current contract, will be in place up to 5 years).
- Potential subjectivity of any assessment by the AUGE, particularly where there is a lack of concrete information.

After the 24 March 2022 Workgroup meeting, participants were requested to bring to the next meeting their ranking of 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> preferred option. At the 28 April 2022 Workgroup meeting, participants ranked the following options in a rough order:

- Option 1: Uniform Allocation by LDZ
- Option 6: Balancer of last resort
- No change keep current AUG framework arrangements

It was recognised that option 6 would be challenging to implement.

Clarification was given that Option 1 ("a vanilla smear") would be made up of a value for each Exit Zone which would then be apportioned equally for each active Shipper; everybody has a proportional share, it is not volume weighted. The Proposer noted that Option 1 would remove the need for an AUGE and the associated AUGE process.

Those that expressed a preference for Option 1 summarised their reasoning thus:

- It would be easy to implement;
- Customers would understand it:
- UIG is quite volatile at the moment;
- Option 1 provides less risk for Shippers;
- All parts of the Industry would have the same weighting.

Workgroup Participants recognised that within Option 1 there could be a larger impact on some customers, for example, in line with polluter pays principle, it may be appropriate to consider whether or not Daily Metered (DM) sites should be out of scope.

Commenting on Option 6, some believed this would be akin to utilising the Shrinkage methodology to smear UIG costs. Noting that Shrinkage is out of scope for this Request Workgroup, some Workgroup Participants nevertheless believed Shrinkage should be reconsidered in addition to putting proper theft incentives through REC.

Some Workgroup Participants suggested that Option 1 Uniform Allocation model based on volume ("vanilla smear") could be the focus in the Workgroup Report adding that Options 1 and 6 could be taken forward plus a transitional approach for Option 1 combined with Option 6 (recognising Option 6 would take some time to implement).

### Systems change for Option 1

Workgroup Participants noted that a vanilla smear Option 1, could be implemented quite quickly, the calculation would still work the same as now, but everyone would be allocated the same percentage. In terms of handling a system change, the weighting factors could be changed and this could be implemented through the current structure and could include no allocation to Product Class 1, but this would need approval at UNCC. It was clarified that Option 1, Uniform Allocation model based on volume ("vanilla smear"), would be very easy to do with regards to a system change, this would entail just new numbers, it would be transparent to customers and would require a unanimous approval at UNCC. This would need to be tested across CDSP and customer systems, (However a new Modification to remove the AUGE and insert Option 1 into the UNC would be required as well.)

It will be for a Party to raise a suitable Modification if they wish to take forward the ideas and material generated by this Workgroup.

# 5 Modification(s)

Not applicable.

### 6 Recommendations

### **Workgroup's Recommendation to Panel**

• This Request should be closed.