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| **UNC Request Workgroup Report** | At what stage is this document in the process? |
| UNC 0781R:Review of the Unidentified Gas process  |  |
| **Purpose of Request:**Review the process for allocating Unidentified Gas. |
| Description: YES_GREEN | The Workgroup recommends to the Panel that this Request required further assessment and should be returned to Workgroup.The Panel will consider this Workgroup Report on 21 July 2022. The Panel will consider the recommendations and determine the appropriate next steps. |
| Description: High_Impact | High Impact:Shippers |
| Description: Low_Impact | Medium Impact:Suppliers, CDSP, AUGE |
| Description: Medium_Impact | Low Impact: Transporters |

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| Contents1 Request 32 Impacts and Costs 43 Terms of Reference 74 Modification(s) 85 Recommendations 8About 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. |  **Any questions?** |
| Contact:**Joint Office of Gas Transporters** |
| **Description: Description: email_us_go_online** **enquiries@gasgovernance.co.uk** |
| **Description: Description: call_us0121 288 2107** |
| Proposer:**Dan Fittock****Corona Energy** |
| **Description: Description: email_us_go_online** **dan.fittock@coronaenergy.co.uk** |
| **Description: Description: call_us 07769285306** |
| Systems Provider:**Xoserve** |
| **Description: Description: email_us_go_online** **UKLink@xoserve.com** |
| **Description: call_us telephone** |
| Additional contacts:**Gareth Evans** |
| **Description: email_us_go_online** **gareth@watersye.co.uk** |
| **Description: call_us 07500 964447** |

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.

**Additional Information**

None

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 | * + Changes to how UIG costs are passed through to customers.
 |
| 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
 |
| 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 Other Referenced Documents  |
| --- |
| 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
 |
| 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
 |

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| 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.
 |

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.

Workgroup assessment of Impacts and Costs

**Consumer Impacts**

*The Workgroup may provide an assessment of the impacts on all consumer groups that may be affected.*

*If ‘none’, please also explain.*

Insert text here.

**Cross-Code Impacts**

*The Workgroup is to identify and assess any other impacted energy code – a full list is available in the CACoP (*[*Ofgem*](https://www.ofgem.gov.uk/licences-codes-and-standards/codes/industry-codes-work/code-administration-code-practice-cacop)*) - and the extent of those impacts e.g. a similar modification has been raised in another Code.*

Insert text here.

**Central Systems Impacts**

*The Workgroup may provide an assessment of the impacts on central systems (inc. Gemini and UK Link) that may be affected; this will be supported by further input from the Central Data Services Provider (Xoserve) later in the process. If ‘none’, please also explain.*

Insert text here.

**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](https://www.gasgovernance.co.uk/0781R/260522)
* [Workgroup 0781R 28 April 2022](https://www.gasgovernance.co.uk/0781/280422)
* [Workgroup 0781R 24 March 2022](https://www.gasgovernance.co.uk/0781/240322)
* [Workgroup 0781R 24 February 2022](https://www.gasgovernance.co.uk/0781/240222)
* [Workgroup 0781R 27 January 2022](https://www.gasgovernance.co.uk/0781/270122)
* [Workgroup 0781R 13 December 2021](https://www.gasgovernance.co.uk/0781/131221)
* [Workgroup 0781R 25 November 2021](https://www.gasgovernance.co.uk/0781/251121)
* [Workgroup 0781R 28 October 2021](https://www.gasgovernance.co.uk/0781/281021)

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.

The Proposer’s representative outlined 9 initial options suggested by the Proposer for reform of the UIG mechanism, at the first Workgroup in October 2021.

1. 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.

**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 3rd 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 (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).

* 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.

A further option was suggested by a Workgroup Participant where a flat volume is determined, creating a pence / meter charge, with UIG overlaid on top as a balancing volume, with the overall charge being proportional to numbers of meter points.

Some Workgroup Participants wished to explore further the method used in electricity market using Group Correct 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 addition options were discussed at the November 2021 workgroup:

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

As there is a greater propensity for complaints about the AUG Statement whenever the consultants running the AUG process change and 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 regime to the next.**

* Pros:
	+ Reduces volatility somewhat
	+ 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.
* 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.

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.
* Meters installed prior to the implementation of Modification 0473 - Project Nexus – Allocation of Unidentified Gas.

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:

1. Polluter Pays (dynamic)
2. Feasibility
3. Drives Improvement
4. Year on Year stability
5. Easy to explain
6. Robust
7. Not likely to be continually challenged

The Workgroup Chair suggested that the current method should be understood in order to highlight where alternative methods may better serve:

**Current AUG Framework Method**

The purpose of the AUGE was to provide an independent expert who would determine which sectors contribute most to Unidentified Gas (UIG) and how to target the UIG charges amongst the various sectors (in line with the polluter pays principle).

Pros:

* + Somewhat familiar (framework has been in place since x)
	+ Aimed at incentivising sources of UIG
	+ Allows for continuity of understanding in the UIG allocation process.
	+ Aimed at being fair in intent
	+ AUGE chosen by fair process, Shippers have the chance to be involved in this process periodically
* Cons:
	+ Industry effort required to manage annual AUGE process
	+ Very difficult to explain to consumers, I&C consumers in particular would like to understand more (because UIG is itemised in their bill) but find it difficult or impossible to understand or calculate independently.
	+ Difficult for anyone to forecast costs
	+ Change of AUGE every x years can lead to volatility
	+ Potential subjectivity of any assessment by the AUGE

Modification(s)

Workgroup concluded on 28 April 2022 that it is not yet appropriate to begin drafting a Modification based on the current findings of the Review. If Panel closes the Workgroup at the June Panel (as requested by the Proposer and agreed by the Workgroup) it will be for a(nother) Party to raise a suitable Modification if they wish to take forward the ides and material generated by this Workgroup.

Recommendations

#### Workgroup’s Recommendation to Panel

* This Request should be closed.