

AUG Sub-Committee Meeting

12th February 2021



Introductions



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Purpose of Meeting

- The purpose of the meeting is to
 - **▶** Provide an overview of our response to the consultation feedback received
 - Provide details of actions that we have taken in response to the feedback received
 - **P**Revisit our proposals for innovation and agree next steps



Agenda

- **▶** Methodology Principles
- **Consumption Forecast Update**
- **▶** Investigation Responses and Updates
- **▶** Other Contributors Responses and Updates
- Benchmarking Process Update
- Next Steps
- Innovation Service
- Industry Issues

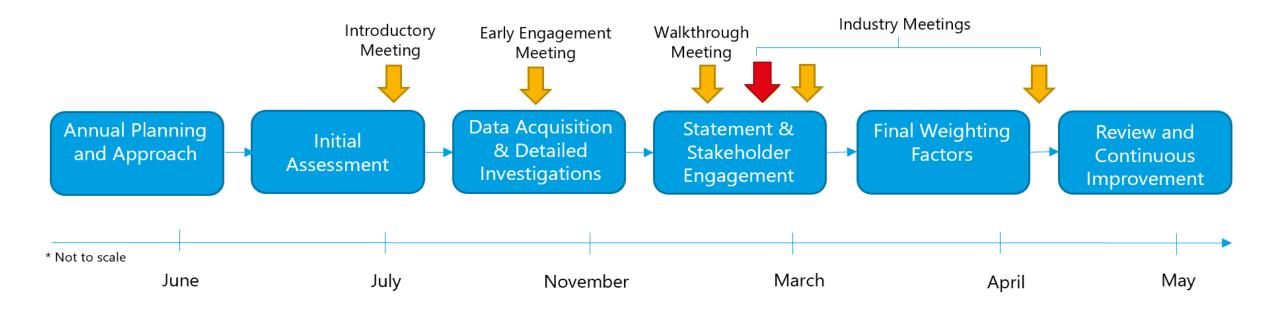


Consultation Introduction

- ▶ The AUG Statement Consultation was published on 30th December. Comments were requested in relation to:
 - Our overall methodology
 - The four contributors that received a detailed investigation (Theft, Consumption Meter Errors, LDZ Meter Errors, No Read at the Line in the Sand)
 - The six contributors that did not receive a detailed investigation (Average Pressure Assumption, Average Temperature Assumption, Incorrect Correction Factors, Unregistered Sites, Shipperless Sites, IGT Shrinkage)
 - Any other issues that respondents believe materially affect the Weighting Factors contained within the draft AUG Statement
- ➤ Eight responses were received one of which was anonymous. We thank all stakeholders for their responses. We have reviewed these carefully, considering the arguments made and the rationale presented, along with any evidence provided
- Our response was published by the Joint Office on 5th February along with the feedback received: https://www.gasgovernance.co.uk/augenex2122



Delivery Timeline





Methodology Principles

- Bottom-up calculation of the forecasted energy associated with each UIG contributor
- This forecast is the amount of UIG that will exist at the Line in the Sand
- The forecast UIG is allocated to the Matrix Position that creates the UIG ie Polluter Pays
- Most respondents agreed with our principles
- We are not going to make any changes to these principles in the proposed final Statement



Consumption Forecast

- Based on feedback as part of the consultation we have re-validated the datasets used in the consumption forecast
- Multi metered sites were found to be duplicating some figures within the report
- We also decided to look at the national values rather than the individual LDZ trends based on the fact a small number of supply meter points were creating a large impact
- We hope to be able to share a more detailed update as a late notice paper, if not possible this will be provided to the industry at the earliest possible point
- There was a consultation comment on the potential inaccuracy of the sub-EUC bands. We base our forecast on validated and definitive CDSP data. We welcome market participants' continued efforts to update CDSP data to reflect what they know about the Supply Meter Points in their portfolios



Other Methodology Comments

- Treatment of outliers in the data
- **▶** Allocation to EUC Bands and complexity
- **COVID-19** assumptions
- **▶** Impact of AUGS on market incentives
- **▶** Validity of datasets used



Investigation Topics

Investigation Topics reminder

- Four topics were identified for detailed investigation this year as part of our initial assessment
 - Theft of Gas
 - **Consumption Meter Errors**
 - LDZ Meter Errors
 - **>** No Read at the Line in the Sand
- The following set of slides provides a summary of consultation responses, the actions we have taken in response and the likely result changes



Total Theft Amount

- > We received a number of comments about the total theft amount
- Full details of the sources that we used have been provided within the consultation response document
- We placed significantly more weight on the electricity data than the water data
- The total theft amount will be updated based on the output from the consumption forecast but there has been no change to the 1.5% total theft estimate



Total Theft Amount Comparison

- ➤ We received a comment suggesting that we should use the previous AUGE's method to calculate total theft
- Our analysis of previous Statement values shows that the top-down method would result in
 - > 35.33% higher than our bottom-up quantification; and
 - > 2.00% of throughput (less shrinkage) compared to the figure we used of 1.48%

Gas Year	2017/18	2018/19	2019/20	2020/21	2021/22*
Observed Volume of Close-out UIG (GWh)	20,827	11,589	11,713	Not available	14,109†
Statement Estimate of Total UIG (GWh)	Not provided	3,837	5,958	7,846	14,109
Balancing Factor	Not Provided	98.4%	95.9%	89.6%	80.5%
Statement Estimate of Theft (GWh) [implicit]	3,000	3,775	5,713	7,032	11,362
Resulting Quantification of Theft (GWh)	Not derivable	11,401	11,230	Not derivable	11,362
Throughput less Shrinkage (GWh)	562,671	531,202	537,255	Not available	569,140
Resulting post ECV Theft Percentage	Not derivable	2.2%	2.1%	Not derivable	2.0%
Resulting Top-down Differencing Quantification of Theft as a Percentage of Our 8,396 GWh Bottom-up Quantification	Not derivable	136%	134%	Not derivable	135%



Advanced Theft

- > We received two opposing comments relating to the total amount of advanced theft
- **▶** Organised crime accounted for 13.34% of overall theft in the retail sector. We acknowledge the error in our draft Statement which reported this at 21.97%
- ➤ We still believe it is reasonable to assume that the levels of advanced and very difficult to detect theft that exist across the gas sector is equivalent to at least half of the organised crime theft percentage
- **▶** Based on our methodology our estimate of advanced theft is 6.67% which will be updated in the proposed final Statement



Detected Theft Dataset

- **▶** We received comments about the dataset used to split undetected theft
- **▶** Our rational is to use ten years as this is the most complete set, the previous option of using "unbiased" TRAS theft was limited and insufficiently representative
- We have decided not to make any updates based on these comments



Class 3 and 4 differences including smart and traditional meter theft

- The previous AUGE's method split allocated theft to class 3 sites based on a very small number of thefts associated with class 3 Supply Meter Points
- ➤ A methodology is required for Smart and traditional meters as different meter types are in different matrix positions which are also changing year on year
- We believe that it is fairer and a more equitable approach to base it on meter type by
 - Taking the undetected theft forecast for the target Gas Year
 - **Establishing what percentage of it would be on smart meters and what proportion would be on traditional**
 - ➤ Allocating the percentage on traditional meters across matrix positions, based on the volume proportions in our theft dataset and
 - Allocating the percentage on smart meters across matrix positions, based on the numbers of smart meters in our smart meter forecast

Other comments

- **▶** Impact of smart meters on undetected theft
- **Separate consideration of dataloggers and AMR**
- **▶** Impact of AUGS on market incentives
- Theft at small businesses
- Data provision and sharing



Combination of prepay and credit populations

- ➤ We agree with the suggestion of combining EUC bands EUC01PI non-domestic prepayment with EUC01NI non-domestic credit at a class level
- This is consistent with our approach for EUC Band 02 02PI and 02NI and is a reasonable approach given the limitations of extrapolating the theft forecast from a small number of Supply Meter Points
- This adjustment will be reflected in the proposed final Statement



Summary

- **▶** Based on the feedback we are planning to
 - **Revise the Advanced Theft percentage**
 - **▶** Update total Theft based on our re-validated consumption forecast
 - Combine EUC bands where there is a small population (1PI and 1NI)
 - We will consider UIG caused by dataloggers as part of our theft investigations next year
 - We will consider splitting the theft calculation to treat Supply Meter Points with AMR meters as a separate population as part of our theft investigations next year



040 – Consumption Meter Errors

- **▶** We received three comments as part of the consultation process
 - The identification and analysis of Consumption Meter Errors is a positive development
 - The use of in-service test data from OPSS is a positive step and this should continue for future years
 - The impact of flow levels on Consumption Meter Errors should be considered in the future
- We have made no changes to the proposed final Statement based on the responses and the investigation of extreme of use is already on our contributor log
- The results will update based on the updated consumption forecast



050 – LDZ Meter Errors

- **>** We received two comments as part of the consultation process
 - We agree that there is unlikely to be a significant amount of permanent UIG from this source
 - ▶ We disagree that it is possible to infer that there is an effective assurance regime in place from a static trend in Meter Error Reporting
- We have made changes to the wording in relation to the assurance regime but no changes to the calculation
- The results will be the same as those presented within the draft Statement



090 – No Read at the Line in the Sand

- We received three comments as part of the consultation
 - The analysis fails to account for a peak of read submissions occurring as the Line in the Sand approaches
 - The data contained within the report may be incorrect
 - The reconciliation rate method is incorrect
- We have made changes based on the input report corrections. These will be included in the proposed final Statement
- There was no evidence of the reconciliation rates changing significantly between recent reports and historical figures
- Our reconciliation rate for class 4 sites is based on reconciliation percentages not on the no read report therefore the respondent's suggestion was not valid and the method used will remain as described in the draft Statement
- The results will update based on the updated no read reports



090 – No Read at the Line in the Sand

Calculation Methodology Update

- ➤ We identified another read rejection to include in our error percentage Outside inner tolerance
- The same method was used to calculate potential AQ and extrapolate this to the set of sites with no read
- The output of the analysis will be added to the error rate and the details will be presented at the next AUG meeting in March



Detailed Investigation Key Points

Key Points

- ▶ We have made a few changes to the theft calculations, but the underlying principles remain the same
- ▶ We have updated the methodology for sites with No Read at the Line in the Sand to take account of an additional read rejection code and have updated the calculation based on recent reports
- **▶** No changes are proposed to the Consumption Meter Errors or LDZ Meter Errors contributors
- > We have noted several suggestions to carry forward for investigation in future Gas Years



Other Contributors

Other Contributors

- The other contributors are
 - Unregistered Sites
 - Shipperless Sites
 - > IGT Shrinkage
 - **▶** Average Pressure Assumption
 - Average Temperature Assumption
 - Incorrect Correction Factors
- ➤ As we received a small number of comments related to these contributors the following slides provide a high-level summary of the responses, the actions that we are taking in the proposed final Statement and any changes in the results



020 – Unregistered Sites

- We received two comments as part of the consultation
 - The UIG is overstated due to overstated AQs
 - The unregistered mandatory DM site should be excluded from the calculation because it will not remain unregistered for long
- We have made no changes based on the feedback
 - **▶** We do not consider that the historical site should be excluded as there are other potentially unregistered sites in EUC9 which could create UIG in the target Gas Year
 - The overstated AQs is likely to be immaterial, but we will consider this for investigation next year. We will need further data to do this
- The results will be the same in the proposed final Statement



025 – Shipperless Sites

- We received one response
 - > Shipperless sites awaiting their GSR visit have been omitted from the AUGE's analysis
- We have not made any changes this year based on the response due to the low materiality, but will consider updating this in future years
- The results will be the same in the proposed final Statement



060 – IGT Shrinkage

- **▶** We received three consultation responses
 - The previous average main length of 8.6m should be used
 - The IGT population should be used rather than the total population to split the UIG
 - **Linking the shrinkage to the IGT population rather than DN shrinkage is a positive step**
- **▶** We will update the average main length for the proposed final Statement



070 – Average Pressure Assumption

- **▶** We received two comments as part of the consultation
 - The altitude reference should be changes from 66 to 67.5
 - The proportion of volume correctors in EUC band 9 does not look to be correct
- We will update the altitude figure for the proposed final Statement
- > We are validating the volume correction data and will update as required
- The results will be revised based on the altitude update and the updated consumption forecast



080 – Average Temperature Assumption

- We received two comments as part of the consultation
 - The average temperature difference is surprising. Having reviewed the methodology outlined, we believe it seems sensible and will not challenge the outcome.
 - **P** Question on the proportion of correction factors
- We have made no changes to the methodology based on the consultation responses
- The results will be updated based on the re-validated consumption forecast



100 – Incorrect Correction Factors

- **▶** We received one comment as part of the consultation
 - The methodology described in the draft Statement appears to be suitable
- **▶** No changes have been made as a result of the consultation response
- The results will be updated based on the re-validated consumption forecast



Other Contributors Key Points

Key Points

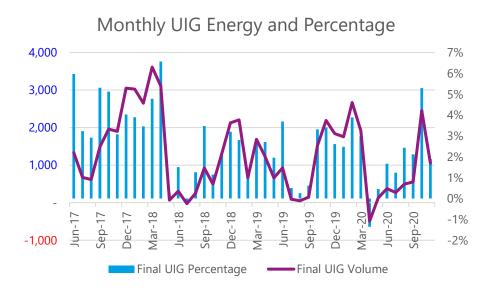
- There were only a small number of comments received
- Minor changes will be incorporated on a couple of the contributors
- The results will be updated based on the re-validated consumption forecast

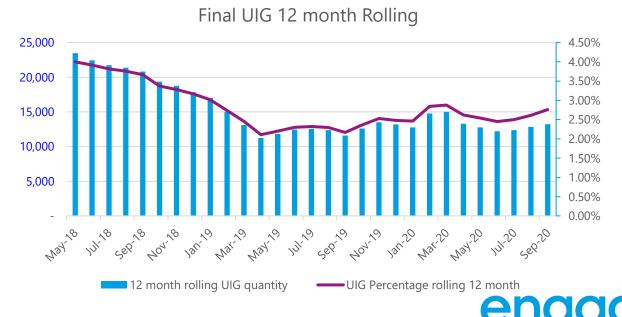


Results Validation

Benchmarking Against Observed UIG

- > We updated our benchmarking tracking with data for September, October and November
- **>** Below is the same data just displayed differently
- **Lower volumes happen in lower percentage months therefore plotting a straight line on an average graph is inaccurate**
- The value of 2.47% is a reasonable benchmark to apply to the updated consumption forecast





Other Comments

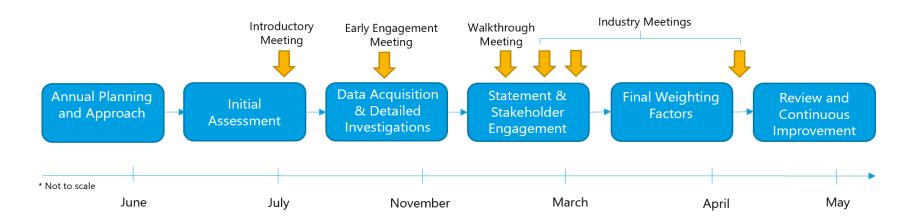
Future Contributor Topics

- The following new topics have been added to our list for initial assessment next year
 - **Consumption Adjustment Errors**
 - **▶** Meter Bypass Arrangements



Next Steps

- ➤ Any revision of the draft AUG Statement following our assessment of responses received will be provided to the AUG Sub-Committee by 5th March
- ➤ An updated explanation of the Weighting Factors methodology, including sources of data and quantification of any changes to the draft AUG Statement (if required) will be presented at the 12th March AUG Sub-Committee Meeting
- ▶ The proposed final AUG Statement will be provided to the AUG Sub-Committee by 31st March and presented at the 6th April AUG Sub-Committee Meeting, prior to consideration at the UNCC Meeting on 15th April
- **▶** Engagement with stakeholders will continue throughout the process. We can be contacted at auge@engage-consulting.co.uk



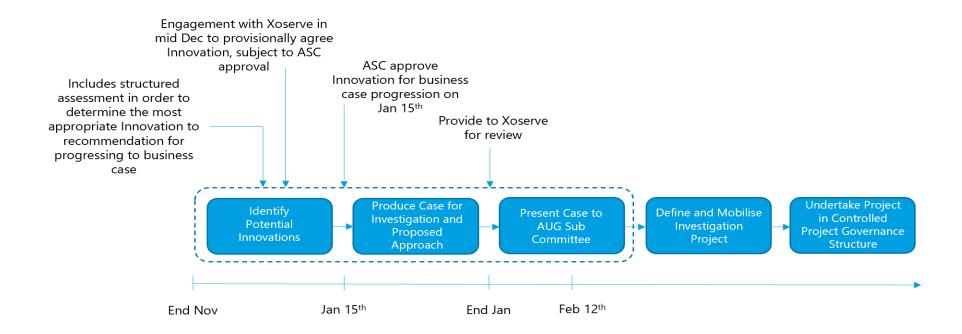


Innovation Service



Innovation Service

The proposed timeline for our innovation service presented at the last AUG Sub-Committee meeting was as follows:





Identified Innovations

Proposed Innovation	Detail	Investigation
Investigation into the Temperature of Gas in the Meter	The temperature studies used for the Average Temperature Assumption contributor were conducted almost 20 years ago and details of the conditions of those studies are limited.	Any investigation would consider the benefits of organising a study into the temperature of gas under different conditions including air temperature, meter location and service material. Given that we identified this as the second largest contributor to UIG after Theft of Gas, we believe that this would potentially provide the greatest benefit to UIG reduction of the three proposed innovations described if the temperature was used in the Settlement process.
Audit of the Correction Factors	Site-specific correction factors are used to take account of the altitude of a site, the average temperature assumption and the inlet pressure of the gas.	We have identified that there are a small number of correction factors that are too low and a larger number that have incorrectly been set to the standard correction factor. Any investigation would assess the benefit to UIG reduction of conducting an audit.
LDZ-Specific Weighting Factors	LDZs have varying levels of UIG, as well as different proportions of domestic and commercial properties.	The current usage of national-level weighting factors could be leading to inaccurate allocation of UIG. Any investigation would assess whether the usage of LDZ-specific weighting factors would be likely to result in more equitable allocation. However, there may be a potential issue in obtaining a significant sample size due to potentially small datasets. This will also not lead to any direct reduction in UIG.



Industry Feedback

- The innovations were presented at the AUG Sub-Committee meeting of 15th January, with feedback requested from stakeholders as to which of these should be progressed to innovation investigation business case stage
- ➤ Although we have received views from a small number of stakeholders, we would like to take the opportunity to record additional views today
- We would also like to receive guidance from the AUG Sub-Committee as to whether the innovation receiving the most support can be referred to the UNCC for formal approval
- Should such approval be forthcoming, we will complete the investigation business case as soon as possible thereafter and present this at the next available AUG Sub-Committee meeting for discussion



Industry Issues



Industry Issues Log

Issue Number	Issue	Latest Update	Status	Date Opened	Date Closed
1	Modification 0711 - Update of AUG Table to reflect new EUC bands	Approved by the CDSP, work to reflect this in the AUGS and Table is ongoing	Closed	01/06/2020	30/12/2020
2	COVID	Potential impacts assessed and included in the 2020/21 draft Statement where appropriate. We will continue to consider the impact of COVID-19 for forecasts in subsequent years.	Live	01/06/2020	
3	Changes to theft arrangements due to REC v1.1	There is no immediate impact on our existing methodology. However, we will await further information as to RECCo's progress in the development of a Theft Reduction Strategy and theft methodology	Live	22/10/2020	



Future Considerations



Consultation Response Future Considerations (1)

Action Number	Future Consideration	Latest Update	Status	Date Opened	Date Closed
2c	We will consider splitting the theft calculation to treat Supply Meter Points with AMR meters as a separate population as part of our theft investigations next year		Live	05/02/2021	
2f	We will consider the potential impact of flow rates on Consumption Meter errors for subsequent years		Live	05/02/2021	
2h	We will include the 'outside inner tolerance' code in data requests for subsequent forecast years		Live	05/02/2021	
3d	We will consider the use of newly available AQ data for unregistered Supply Meter Points that have since been registered for subsequent years		Live	05/02/2021	
3 e	We will consider for subsequent years the comparison of Requested AQs and actual AQs where data is available. This consideration will be made for the Unregistered Sites and Shipperless Sites Contributors		Live	05/02/2021	



Consultation Response Future Considerations (2)

Action Number	Future Consideration	Latest Update	Status	Date Opened	Date Closed
3f	We will consider the potential inclusion of Shipperless sites awaiting their GSR visit in our data and analysis for subsequent years		Live	05/02/2021	
3h	We will try again to obtain mains length data from the IGTs next year for consideration in estimating IGT Shrinkage UIG.		Live	05/02/2021	
4 a	We will consider UIG caused by Meter Bypass Arrangements in line with our initial assessment procedure, for subsequent years.		Live	05/02/2021	
4b	We will consider UIG attracted by Consumption Adjustment Errors in line with our initial assessment procedure, for subsequent years.		Live	05/02/2021	



