

AUG Sub-Committee Meeting

18th February 2022

The logo for 'engage' features the word in a blue, lowercase sans-serif font. To the right of the text is a graphic of five stylized human figures in various colors (green, purple, blue, yellow, red) arranged in a circle, suggesting a group or community.
engage

ELECTRICITY | GAS | INDUSTRY EXPERTS

Introductions



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Agenda

- ▶ **Consultation Responses and Considerations**
- ▶ **Future Considerations**
- ▶ **Industry Issues**

Consultation



Consultation

Background

- ▶ The draft AUG Statement was published on 22nd December 2021
- ▶ The consultation ran from 31st December 2021 to 21st January 2022
- ▶ We received 8 consultation responses
- ▶ 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 and the individual responses were published by the Joint Office on 9th February along with the feedback received: [AUG Statement 2022/23 | Joint Office of Gas Transporters \(gasgovernance.co.uk\)](https://www.gasgovernance.co.uk/aug-statement-2022-23-joint-office-of-gas-transporters)

Consultation

Summary

- ▶ The AUG Statement Consultation was published on 31st December. Comments were requested in relation to:
 - ▶ 1. Our methodology and principles
 - ▶ 2. The Investigations/refinements
 - ▶ 3. Other Contributors
 - ▶ 4. Other Relevant Matters
- ▶ The following slides are a summary of the responses split by question and topic and our consideration
- ▶ We list any actions resulting from our consideration of stakeholder views in the relevant slide
- ▶ We welcome any further views at this meeting, whether or not they have already been shared as part of this consultation process

Question 1- Methodology

Methodology

Summary and Outcomes

- ▶ We welcome the valuable engagement and feedback that this consultation has provided regarding the approach we have taken to forecast UIG for the Target Gas Year, and are grateful for the broad support for the additional contributors and refinements we have made to our methodology
- ▶ We have received useful feedback in several areas which we are following up as immediate additional analysis including
 - ▶ Modification 0664 impacts on the Consumption Forecast
 - ▶ IGT Shrinkage
- ▶ We will also refresh the outputs for Isolated Sites, No Read at Line in the Sand, Theft, Shipperless and Unregistered Contributors using the latest data from the CDSP

Methodology

Principles and Bottom-up Approach

- ▶ We are pleased to see continued support for our overarching methodology principles. Some respondents re-iterated their view that the bottom-up approach we use is not fit for purpose. We remain convinced that our approach is a robust way to derive a credible set of Weighting Factors, and that the judgements we have made in doing so are founded on the best available information and data
- ▶ One Shipper suggested validating the outputs of our bottom-up methodology using appropriate top-down methodologies. We understand the intent behind this suggestion and would be happy to discuss further detail before concluding on its merits or practicality
- ▶ We again reject the suggestion of reverting the methodology or proposed Weighting Factors to those used for the Gas Year 2019-2020. We consider that the benefit in doing this has not been demonstrated

Methodology

Variability of Output Year on Year

- ▶ We acknowledge stakeholder concerns about the variability of the Weighting Factors each year and understand the challenges in pricing and contracts that this may give rise to
- ▶ Variability in output is driven by variability in input (except in cases where there are fundamental changes in the methodology, as occurred last year). It is inherent to the nature of the undertaking that reflecting new and up-to-date data inputs each year has the potential to drive material change
- ▶ We believe there would be some disadvantages in implementing a year on year smoothing process to limit the impact of annual changes to Weighting Factors, we are happy to discuss this issue further with stakeholders

Methodology

Small Sample Size and Impact

- ▶ **Some respondents have expressed concerns about the inclusion of limited-size samples in our datasets and that the inclusion has a material impact on outputs**
- ▶ **We accept that single sites can sometimes have a considerable impact on Weighting factors in Matrix Positions with small populations. However, we are unconvinced that this alone is sufficient reason to exclude them, and they form a significant sample in certain Matrix Positions**
- ▶ **With specific reference to one comment about the accuracy of data used to calculate UIG in the Unregistered and Isolated Sites contributors, if this is data that is known to be inaccurate but that is provided to us as part of the CDSP data provision, this accuracy will improve as Shippers continue to update CDSP records**

Methodology

Data Visibility and Sharing

- ▶ More than one respondent noted the challenges in reviewing the AUGÉ's output owing to the high level at which data and calculations are presented
- ▶ We have no objections in principle in sharing any data or calculation results
- ▶ However, we note that some of the data is confidential and so cannot be shared without the permission of the source
- ▶ We have shared a high-level view of our model which should help with the visibility of the Weighting Factor calculation
- ▶ We think it would be helpful for stakeholders to identify specific areas in which they are interested in looking more deeply at data and calculations
- ▶ We are also happy to support proposals for Shipper or industry support that we can undertake under our Advisory Service or assess for progression under our Innovation Service

Methodology

Market Data and Impact of AUGS on Market Incentives

- ▶ We note one respondent's comment on the impact of the Statement on Classes 3 and 4
- ▶ We restate our position that we make no consideration of the potential impact of UIG allocation on Shipper behaviours as our Terms of Reference are solely to produce Weighting Factors that allocate UIG equitably taking into consideration market trends
- ▶ We would support another respondent's observation that the AUGE's output is reliant on the quality of data available to us. Incentives on Shippers to work to improve the quality of this data are beyond our remit, but we will always be happy to contribute to any industry initiatives where it is felt that we may be able to provide valuable insight
- ▶ A further respondent points out that the AUGE process does not address the fundamental issues in the industry that contribute to the creation of UIG. We agree, and whilst noting that this is not our role, we restate our commitment to assisting in identifying the root cause of these issues where the data allows

Methodology

Allocation to EUC Bands and Complexity and Other Considerations

- ▶ We note the comments about the additional complexity arising when allocating across EUC Bands. This element of the methodology results from the implementation of UNC Modification 0711
- ▶ We are grateful to all suggestions for future refinements and additions to our methodology. We are especially mindful of requests to consider how we present fluctuations in UIG, associated Weighting Factors, and the reasons for them
- ▶ We are happy to discuss again the potential provision of UIG levels at initial allocation stage and will approach the respondent to facilitate this. The methodology for this has been established in the past but owing to our bottom-up approach it no longer forms a necessary part of the UIG calculation. We suggest this would be best considered as part of our Advisory Service.

Methodology

Actions

AUGE Action	
22/1a	We will discuss identifying UIG at initial allocation stage with interested stakeholders as a potential Advisory Service.
22/1b	We will consider the practicalities of a further level of top-down validation of our outputs.
22/1c	We will collate and present a list of potential areas for industry initiatives in data quality, identified during our analysis, as part of our potential Advisory Services.

Question 2 - Investigations

140 – Meters with By-Pass Fitted

Consideration and Action

- ▶ We welcome stakeholder interest and engagement in this topic, and we thank stakeholders for proposals to increase availability of useful information for this contributor
- ▶ We are very interested in all industry insight in this area and will engage with the ongoing industry workgroup to exchange insight
- ▶ We thank one respondent for sharing their assumption that very few Consumption Adjustments will be required relating to bypass operation. However, we note that bypass operations that do not require a Consumption Adjustment will still create positive UIG, so we should be interested in how many bypass operations are undertaken
- ▶ To be clear our investigation did not proceed to an estimation of UIG because the available data did not allow it. We have not concluded that the UIG associated with meter bypasses is negligible

AUGE Action

22/2a

We will include Meter Bypass in our list of topics for annual assessment for the Gas Year 2023-2024.

160 – Isolated Sites

Consideration and Actions

- ▶ We acknowledge the impact of a single large site on the UIG calculated for the draft AUG Statement. In the latest report there are no Class 1 Isolated Sites and on we judge that it is unlikely that another such site will exist in the target Gas Year
- ▶ We agree that alternatives to actual AQ data might improve the accuracy of our calculations. We will investigate this, although note that there is currently no data available from CDSP on the connection details of Isolated Sites
- ▶ We are grateful to one respondent for the suggestion of further ways to validate the Isolated Sites dataset. We will be assessing all suggestions for inclusion as a refinement to this contributor in future years.

AUGE Action	
22/2b	As part of our annual assessment for the Gas Year 2023-2024, we will investigate additional ways to validate the Isolated Sites data for inclusion in future AUG Statements.
22/2c	We will assess whether additional data is available to improve the accuracy of AQ assumptions for Isolated Sites.

010 – Theft of Gas

AMR Refinement and Summary

- ▶ Respondents agree that our data-led consideration of AMR-enabled Supply Meter Points has resulted in an improvement to the methodology for calculating UIG associated with Theft
- ▶ We thank respondents for identifying that there may be a category of meter missing from the cohort of AMR-enabled meters. This is plausible. Industry input was invaluable in identifying the meters currently included in this dataset, and we would welcome again any insight into any meter models or types that may have been overlooked
- ▶ We agree with one respondent that the current energy crisis may result in changes to theft levels. We will not pre-judge what those impacts may be but will continue to consider our overall theft assumptions in light of the best information available at the time

010 – Theft of Gas

Other Considerations

- ▶ In response to some respondents' continued concerns as to the validity of our assumptions to the GB gas market and to inadequate data we gave careful consideration to these points in last year's consultation. We welcome any and all further insight that will help to strengthen the assumptions used for this contributor and will continue to consider improvements to our methodology for allocation
- ▶ A respondent suggested that based on observed TRAS cases, the AUGE's weighting towards theft at domestic pre-payment meters might be too low
- ▶ Whilst TRAS data is part of our dataset, it has inherent shortcomings, not least the inherent bias introduced by the associated incentives to report theft. This is why we combine TRAS with TOG data. It is also important to consider not just the number of cases, but also the size of the theft in each case

010 – Theft of Gas

Further Categorisation and ‘Unbilled Gas’

- ▶ We welcome all suggestions for further areas of ‘unbilled gas’ that may be contributing to UIG
- ▶ In the two examples of this given by the respondent, we believe we have already captured potential UIG under other contributors, where this is within the AUGE’s scope to do so:
 - ▶ Anything that is consumed before first registration (new connection) is dealt with under shrinkage generally and this is outside of the AUGE’s Terms of Reference
 - ▶ The voluntary withdrawal scenario mentioned by the respondent is catered for under 025 - Shipperless Sites

010 – Theft of Gas

Smart vs Traditional Meters

- ▶ One respondent noted that their own data on the impact of smart on theft contradicts what the industry-level data is showing. This is quite possible. Again, we can only reiterate that we are led by the data in aggregate. Individual Shipper data will be a part of this and so have some bearing on it, but we are not able to put a greater weighting on one or more Shipper's sub-sets within the overall dataset unless there is clear justification for doing so
- ▶ In this case, we believe that the impact of smart metering on theft may show over time, and because we carry out detailed analysis each year based on the latest data available to us, the effect of this will carry through to the Weighting Factors

Undetected theft similar to detected theft	
Meter Type	Share of undetected theft
Traditional	80%
Smart	19%
AMR	1%

- ▶ The splits by meter type for undetected theft that were used on the draft AUG Statement are shown here

010 – Theft of Gas

Mod 0664 Impacts

- ▶ **One respondent highlighted to us the potential impact that the implementation of Modification 0664 (“Transfer of Sites with Low Valid Meter Reading Submission Performance from Classes 2 and 3 into Class 4”) may have on volumes of theft in Classes 2 and 3**
- ▶ **We note this with interest and will look to understand whether we need to make any adjustments to our assumptions. As a first step, we will be looking to acquire the necessary data from the CDSP to be able to investigate whether the suggested impact is manifesting**
- ▶ **We have already discussed with Xoserve provision of the necessary data to us. As this is not a straightforward data request for them to deliver, it is likely that investigations will be undertaken as part of our assessment of potential refinements for the next Gas Year**

010 – Theft of Gas

Increase in Total Theft Despite Removal of AMR Theft

- ▶ One respondent has questioned why total gas stolen has increased when a large amount of UIG has been removed thanks to the low incidence of theft identified for AMR sites
- ▶ The analysis of AMR-related theft which is now applied in our model does not result in UIG being reduced. Instead, it impacts on the way total theft UIG is equitably split between Shippers
- ▶ The Weighting Factors for Matrix Positions which have a high proportion of AMR-enabled Supply Meter Points have seen a relative reduction this year
- ▶ The total theft UIG figure is independent of this, driven largely by overall throughput and an unchanged set of assumptions about the overall likelihood of gas being stolen

010 – Theft of Gas

Disincentives to Report Gas Theft

- ▶ **One respondent noted a disincentive to report gas theft on the basis that having done so, they would subsequently attract more UIG. We do not know the extent to which this is the case as we have no access to Shipper-specific data. However, we would note the obligations in place to ensure that theft is reported**
- ▶ **We would like to emphasise that this is not an issue with the way that UIG is allocated to Matrix Positions. AUGE's Terms of Reference are to produce a set of Weighting Factors that allocate UIG equitably among Matrix Positions based on the available data at that time**

010 – Theft of Gas

Actions

► A summary of the actions is provided below

AUGE Action	
22/2d	We will continue to monitor closely any output from other research and analysis being undertaken in the area of energy theft, and specifically the outcome of the current RECCo review.
22/2e	We will acquire the relevant data to investigate the impacts of Mod 0664 and whether there is a relationship between read frequency and theft. We will include this in our assessment of potential refinements for Gas Year 2023-2024.
22/2f	We will re-share the existing list of asset identifiers used for AMR-enable devices.

090 – No Read at the Line in the Sand

Read Rejections and Further Analysis of Affected MPRNs

- ▶ **One respondent suggests that further analysis could be undertaken into rejected reads. We are happy to be involved in industry discussions on read performance if our insight would be helpful**
- ▶ **We confirm that the datasets we use are subject to robust validation and would question what further analysis is required for the AUGÉ's purposes. If two reads approximately a year apart are rejected for the same reason, we assume that they are valid readings and that the read held on UK Link is incorrect, thus causing the rejection. From this assumption we determine UIG associated with the Supply Meter Point in question**
- ▶ **We now only exclude reads rejected owing to a different number of dials because including these cases could lead to an incorrect volume calculation**
- ▶ **We are happy to be party to any such performance assurance discussions if our insight would be helpful**

090 – No Read at the Line in the Sand

Consideration

- ▶ We agree that read performance should improve in line with Smart and AMR penetration in the market. This has not been evident in the industry-wide datasets that we use for this contributor. We think it is likely we may start to see some change in the future, the onus remains on Shippers to ensure flows are operating effectively
- ▶ One respondent suggested that a 38% increase in UIG for this contributor is a surprise given such a small refinement to the methodology. Our view is that the incorporation of dozens of additional read rejection reasons for consideration, whilst only impacting one element of the methodology, was always likely to capture a reasonable amount of additional UIG
- ▶ As the respondent noted in their response, the effects seen in the Matrix Position are indeed attributable to the increasing number of large consuming sites that are being 'trapped' in a Band they shouldn't actually be in. The read rejection process is operating as it is designed to and can only be resolved via the Shipper submitting an AQ correction. There is no anomaly in the calculation and the reason it stands out is because of the size of these trapped sites relative to the underlying (genuine) population in the Matrix Position

Question 3 – Other Contributors

020 – Unregistered Sites

Consideration

- ▶ We are also surprised that this site has not been rectified and removed from the dataset. However, given we have evidence of similar sites being in the same status in future, we consider it to be representative of the population and so it remains in our dataset on the basis of our probabilistic determination
- ▶ We are in the process of updating our results based on the latest Unregistered sites reports

060 – IGT Shrinkage

Consideration

- ▶ We have reconsidered our position on this, and have now undertaken some further analysis, with the data showing that there is indeed a relatively higher proportion of domestic Supply Meter Points attached to IGT networks when compared to DNO networks
- ▶ We will update our methodology to reflect this mapping to CSEP populations rather than the LDZ profile. This will be reflected in the proposed final Statement for Gas Year 2022-2023

AUGE Action

22/3a

We will update the calculation and output to reflect the alternative mapping and reflect this in the proposed final Statement for Gas Year 2022-2023.

Question 4 – Other Relevant Matters

Other Relevant Matters

Reference Levels of UIG

- ▶ We understand that a 'scaled up' version of the UIG tables may give Shippers a clearer picture of likely cost.
- ▶ We note that our 83% figure is a comparator to an historical UIG level, and not the likely UIG for the target Gas Year. It is a sense check that our overall UIG estimations are broadly sound. It is therefore likely to be inappropriate as a starting point for scaling towards a future actual UIG figure
- ▶ We thank the respondent for the suggested methodology for scaling up the Weighting Factors. This scaling up of estimated UIG in order to better represent likely actual UIG in the target Gas Year is a step that has been considered in the past, but to date did not score highly given that the AUGÉ's ultimate deliverable is a set of Weighting Factors

AUGE Action

22/4a

We will assess the scaling up of our UIG estimate under contributor '180 – Unfound UIG Contributors', after discussion with interested Shippers.

Other Relevant Matters

Substantiation of Class 4 Band 1 Outcomes

- ▶ We understand that affected Shippers will be especially concerned when it is perceived that our methodology allocates a disproportionate amount of UIG in certain Matrix Positions. We remain committed to helping Shippers to understand and explain this to their customers.
- ▶ Ultimately, our approach is data-driven, supported by a rigorous approach to data validation. We can therefore only comment that this allocation is the direct result of what the industry data shows and is the result of an equitable sharing of UIG on the basis of that data relative to other Matrix Positions.
- ▶ We would welcome the opportunity to discuss further support, analysis or presentation of outputs for individual Shippers under our Advisory Service.

Other Relevant Matters

Discrepancies in Class 3 Weighting Factors

- ▶ The perceived discrepancies highlighted by one respondent in Class 3 are the result of our deliberate substitution and smoothing process for cells with very low or zero values. We can confirm that this is the process described below
 - ▶ We calculated the Weighting Factors as a proportion of UIG relative to throughput in our Consumption Forecast for each Matrix Position within the AUG Table
 - ▶ Some cells had a very small number or no Supply Meter Points so we substituted values
 - ▶ We smoothed the values in EUC bands 03-09 for class 2-4 to dampen any spikes across like groups with similar characteristics
 - ▶ After these processes, the factors were normalised so that no UIG was created by the substitution or smoothing process
- ▶ The changes to Weighting Factors in these Matrix Positions are also a result of a reduction in consumption forecast for those Matrix Positions

Other Relevant Matters

Unreflective Domestic Pre-Payment Numbers

- ▶ We recognise the concern about an unreflective population size for domestic pre-payment customers. We reiterate our reliance on industry data, and Shippers maintaining its accuracy. We also refer the respondent to our view on industry incentives under Question 1. The role of the AUGE is not to incentivise or anticipate changes to Shipper behaviours
- ▶ We would be happy to support industry initiatives in data quality and performance assurance under our Advisory Service

Future Considerations 2022

Summary

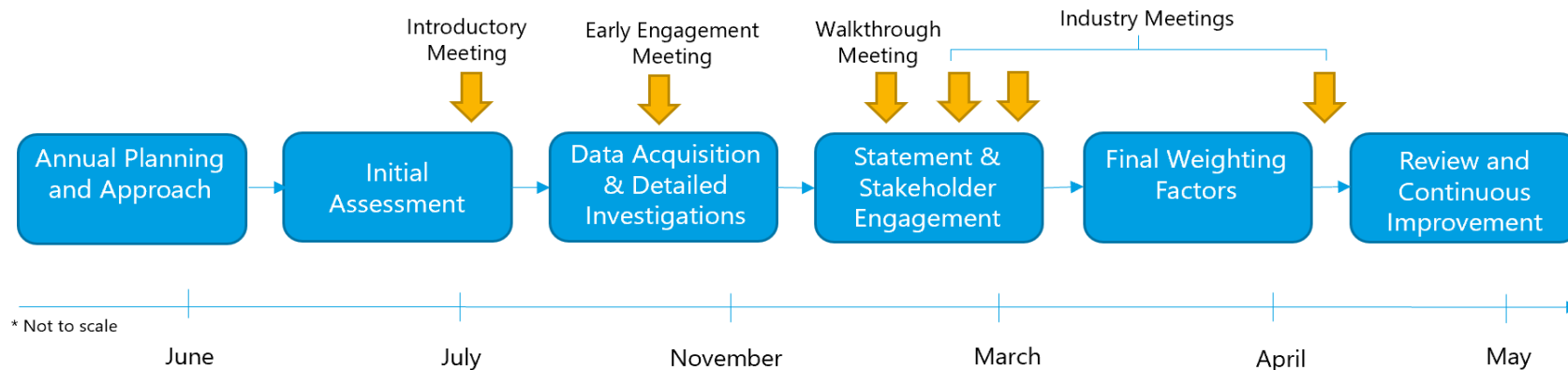
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22/1b	We will consider the practicalities of a further level of top-down validation of our outputs.
22/1c	We will collate and present a list of potential areas for industry initiatives in data quality, identified during our analysis, as part of our potential Advisory Services.
22/2a	We will include Meter Bypass in our list of topics for annual assessment for the Gas Year 2023-2024.
22/2b	As part of our annual assessment for the Gas Year 2023-2024, we will investigate additional ways to validate the Isolated Sites data for inclusion in future AUG Statements.
22/2c	We will assess whether additional data is available to improve the accuracy of AQ assumptions for Isolated Sites.
22/2d	We will continue to monitor closely any output from other research and analysis being undertaken in the area of energy theft, and specifically the outcome of the current RECCo review.
22/2e	We will acquire the relevant data to investigate the impacts of Mod 0664 and whether there is a relationship between read frequency and theft. We will include this in our assessment of potential refinements for Gas Year 2023-2024.
22/2f	We will re-share the existing list of asset identifiers used for AMR-enable devices.
22/3a	We will update the calculation and output to reflect the alternative mapping and reflect this in the proposed final Statement for Gas Year 2022-2023.
22/4a	We will assess the scaling up of our UIG estimate under contributor '180 – Unfound UIG Contributors', after discussion with interested Shippers.

Future Considerations 2021

Action Number	Future Consideration	Latest Update	Status	Date Opened	Date Closed
2f	We will consider the potential impact of flow rates on Consumption Meter errors for subsequent years.	This will require individual site data. This data has not been requested this AUG Year.	Live	05/02/2021	
3f	We will consider the potential inclusion of Shipperless sites awaiting their GSR visit in our data and analysis for subsequent years.	We were not provided with the data this AUG Year. Once the data is available, we will be able to progress the consideration.	Live	05/02/2021	

Next Steps

- ▶ Any revision of the draft AUG Statement following consideration of responses received will be provided to the AUG Sub-Committee by 4th March 2022
- ▶ 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 AUG Sub-Committee Meeting on 11th March 2022
- ▶ The final AUG Statement will be provided to the AUG Sub-Committee by 31st March 2022 and presented at the 6th April AUG Sub-Committee Meeting, prior to consideration at the UNCC Meeting on 15th April 2022
- ▶ Engagement with stakeholders will continue throughout the process. We can also be contacted at auge@engage-consulting.co.uk



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 2021/2022 Statement where appropriate. We have considered the impact of COVID-19 in the 2022-2023 draft Statement	Live	01/06/2020	
3	Changes to theft arrangements due to REC v1.1	RECCo have appointed Capgemini to quantify the scale of theft in Great Britain which will feed into the development of a Theft Reduction Strategy and theft methodology. We will consider any ensuing impact on our methodology for future years	Live	22/10/2020	
4	Faulty Meters	Potential issue around energy associated with faulty meters not entering Settlement. Identified as part of the 2021-2022 Gas Year Investigation	Live	01/03/2021	
5	Must Reads on Supply Meter Points with no read	Our investigation into must reads provided very limited results. Therefore, we would suggest a more detailed review into why must reads for monthly read sites were not being completed before the Line in the Sand. Recent outcome of must reads could also be used as a feed into the error percentage	Live	01/03/2021	
6	AQ corrections on Supply Meter Points with no read	A review group 0783S (Review of AQ Correction Processes) has been set up who will hopefully progress the issue	Live	01/03/2021	



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