

UNC Shrinkage Forum Minutes Wednesday 22 March 2023 via Microsoft Teams

Attendees

Yvonne Reid-Healy (Chair)	(YRH)	Joint Office
Vera Li (Secretary)	(VL)	Joint Office
Ben Jones	(BJ)	Wales & West Utilities
Charlotte Gilbert	(CG)	BU-UK
Clara Onojorhovwo	(CO)	Brook Green Gas
Colin Wainwright	(CW)	SGN
David Morley	(DM)	OVO Energy
Glen Thistlethwaite	(GT)	Ricardo Energy & Environment
Gregory Edwards	(GE)	Centrica
Hollie Manicom	(HM)	Cadent Gas
Mark Jones	(MJ)	SSE
Matthew Atkinson	(MA)	SEFE Energy
Paul O'Toole	(POT)	Northern Gas Networks
Simon Holden	(SH)	IADS Co

Shrinkage Forum meetings will be quorate where all four Distribution Networks and at least two Shippers are in attendance.

Please note these minutes do not replicate detailed content provided within the presentation slides, therefore it is recommended that the published presentation material is reviewed in conjunction with these minutes. Copies of papers are available at: <https://www.gasgovernance.co.uk/sf/220323>

1.0 Introduction and Status Review

Yvonne Reid-Healy (YRH) welcomed all parties to the meeting.

1.1. Apologies for Absence & Note of Alternate

Apology received from Emma Buckton and Matt Marshall

Paul O'Toole and Hollie Manicom as alternates respectively.

1.2. Quoracy Status

The meeting was deemed to be quorate.

1.3. Approval of Minutes (18 January 2023)

The minutes of the previous meeting were approved.

Simon Holden (SH) pointed out in the November Shrinkage Forum Minutes, Agenda item 2.2 which stated, "it was noted that OUG assumptions are unlikely to have a material impact on investment decisions.", and that from his notes of the meeting, what was explained was that OUG assumptions **would have** a material impact on investment decisions if they were found to be inaccurate.

YRH agreed to highlight this in the Meeting minutes.

1.4. Review of Outstanding Actions

Action 1101: All GDNs are to advise if the OUG re-valuation is subject to independent validation and if so, how is it being evaluated.

Update: GDNs advised there is no further update on this. They are waiting for the DNB and confirmation from Newcastle University to finalise the Services Agreement and time frame. All GDNs agreed to pay for the cost of procurement services from Newcastle University.

Simon Holden (SH) asked if further updates were to be provided before the September meeting and CW agreed to provide further updates (e-updates) to Joint Office to circulate when available.

David Morley (DM) asked if the Agreement is to be shared with GDNs only and CW confirmed that it is an internal Agreement with GDNs for Newcastle University to carry out the re-validation work and Ofgem has agreed to the carrying out of this work.

Shippers queried about the original issue was to create the credit of independence and that Newcastle University is being contracted through DNB and that whoever is paying for the reporting would mean that it is not independent. CW advised that the procurement of Newcastle University has nothing to do with DNB and Newcastle University is an independent body to validate the OUG.

Members in attendance agreed to the action to be carried forward. **Carried Forward**

Action 1102: GDNs to consider introducing Profiling into the current Shrinkage and Leakage Model and whether this is a feasible report in January 2023 Meeting.

Update: CW stated that GDNs have started working on this and are keen to understand how Gregory Edwards (GE) expected the GDNs to implement the Shrinkage Profiling.

CW confirmed that communication has been carried out. GDNs are to reach an agreement on the method and sources of data to be used on the Shrinkage Profile.

GDNs confirmed that the Shrinkage and Leakage Model Review Consultation has been published on 17 February 2023 and ends on 17 March, and one response received.

The final Model will be published on 31 March 2023.

Members in attendance agreed the action be carried forward to the September meeting. **Carried Forward.**

Action 1103: GE to provide some worked up examples to illustrate the impacts of using flat profiling and how this impacts Shippers.

Update: GE confirmed that conversations have been carried out with Matt Marshall (MM) and further communications with other GDNs.

Members in attendance agreed the action could now be closed. **Closed**

Action 0101: Joint Office (VL) to publish the New Terms of Reference on 19 January 2023.

Update: New Terms of Reference published. Members in attendance agreed the action could now be closed. **Closed**

Action 0102: Joint Office to check and update the Meeting Notices Distribution List.

Update: Action completed and members in attendance agreed the action could now be closed. **Closed**

2.0 Introduction of National Atmospheric Emissions Inventory (NAEI) Query: SLM access and documentation

YRH welcomes Glen Thistlewaite (GT) to the Forum Meeting.

GT explained Ricardo is contracted to DESNZ to deliver the NAEI which includes the UK GHG inventory. Since DESNZ now has a greater focus on the underlying model – data, assumptions and documentation, Ricardo would like to request access to the recent Shrinkage & Leakage Model (SLM) to improve spatial resolution and enable some degree of QA of the model to have a better understanding of the risks.

GT further provided an overview of the NAEI submissions/tasks, the emission estimation methods and drivers for UK inventory Improvement.

Details could be found in the Presentation slide pack [here](#)

GT then asked the Shrinkage Forum if Ricardo could have access to the populated versions of the SLM per GDN to:

- QA the model
- Understand the scope, risk of gaps / double counts
- Improve our understanding of the uncertainty of the outputs
- Improve the quality of the UK submissions to UNFCCC, UNECE
- Enable DESNZ to determine the next steps
- Spatial information and information per sub-source (e.g. per AGI type, including locations) will help improve NAEI emission maps (for the modelling community)

Other related considerations:

- Can we access more highly resolved data on the fossil/bio split of gas in the supply network?
 - Currently only national data on transfers of biogas to the network
- Ofgem - DESNZ have similar data requirements → Data Supply Agreement?
 - Reduce the burden on industry reporting
 - Greater consistency

GT thanks the Forum for allowing him to introduce Ricardo and NAEI.

Paul O'Toole (POT) thanked GT for the presentation and helpful to understand what is required from all GDNs. POT agreed to set up a Workgroup with other GDNs to discuss how the model is populated and checked with DNB what information could be shared.

David Morley (DM) asked if Ricardo and GT could include Shippers in the conversations with Ricardo on data in the current data that feeds into the shrinkage and leakage model.

GT confirmed Ricardo is happy to engage with any experts from within the Gas industry that can help to understand the current data and models and to identify possible issues or opportunities to improve the data – GDNs, Shippers, and others. If and when they have made any progress on these issues, they are happy to communicate via the Joint Office Shrinkage forum.

DM further queried what levels of methane are currently detected and whether can this be attributed to GDNs.

GT expressed that it is not Ricardo or DESNZ directly that is conducting the measurement trials, it is typically academic experts from across UK universities in their work to conduct research (often NERC-funded projects). GT agreed he will collate a recent set of relevant academic publications to circulate to the members of the forum.

DM further requested if there are quick wins.

GT replied *“In terms of improvements to the SLM, it isn't for me to say whether there are any quick wins or not – it is much more in the hands of the Shrinkage forum members who are the experts in the field and fully understand the model and how it is maintained and updated. Our focus is to seek information that helps us to understand where the greatest uncertainties lie in the current data and methods deployed within the SLM, and as we haven't had direct access to a populated version of the SLM yet, we haven't got to that point yet.*

That said, based on a review of the public domain information on the SLM that we have found (mainly on your website) and on the feedback from academic researchers, one possible next step to explore is whether there are recent measurement data (or LDAR survey information) on methane / other gases in the vicinity of the higher-emitting Above Ground Installations (e.g. NTS off-takes). If so, it might be possible to conduct some validation checks on the accuracy of the SLM method for those sources and gather up-to-date evidence on the typical range and frequency of methane releases and to determine more suitable methods and/or emission factors and assumptions to apply in the modelling of the AGI releases?

Another high priority, it seems to me, is to revisit the initial analysis that was conducted to set up the model and determine the methods and EFs. There appears to be considerable uncertainty/lack of clarity around the derivation of the emission factors and methods used within the SLM for several sub-sources. For example, there was a discussion on the call regarding the origin of the source of the “own gas use” factors in the model. If the original analysis cannot be found or justified for a specific source then presumably that ought to be a priority for action by the forum members?”

DM then asked what the outputs of the investigations will be.

GT advised that *“Our short study is concluding in the next few weeks, but will feed into the UK GHG inventory improvement programme, managed by DESNZ. Where there is scope for further work and/or engagement (with the forum, with Ofgem etc), then that will be subject to agreement with DESNZ that this is a high priority for further work and hence funding. DESNZ will consider the full range of inventory improvement options, across all anthropogenic emission sources and determine which projects are likely to deliver the greatest benefit in terms of reducing inventory uncertainty.*

Irrespective of whether specific further work is prioritised specific to the SLM, however, we will continue to seek leakage data from the GDNs for the purposes of inventory compilation and reporting and would hope to pick up on any improvements implemented by the industry through that annual activity.”

SH queried “given that the aim was to understand emissions at a more granular level than large emitters (which were already well-documented), what criteria or method was being used to determine 'smaller' emitters?” GT implied the aim was to understand *all* emissions points, right down to residential.

SH then suggested *“Ricardo (GT) may find data collected as part of the Medium Plant Combustion Directive (MPCD) would be a useful source for cross-checking the outputs of the shrinkage and leakage model. GT stated he was intending to use the model as a basis for emissions calculations) because many of the GDNs' AGIs which use gas (Own Use Gas) would fall within the category of the MPCD and therefore be required to submit data to the government on emissions.”*

GT thanks the Forum and all attendees for their input and would like to have further discussion on this.

3.0 Specific Topics/Projects Update

3.1. Digital Platform for Leakage Analytics (DPLA) Update

Hollie Manicom (HM) provided an update on the Digital Platform for Leakage Analytics (DPLA):

The Beta application is ongoing and will be submitted today to Ofgem and will find out if the project is approved and funding granted in June. If funding is granted, work will commence in August 2023.

3.2. Own Use Gas (OUG) Update

Previously discussed in Review of Outstanding Action 1101 and 1102. GDNs are waiting for DNB's comments on the Services Agreement and GDNs could sign the agreement and start the engagement with Newcastle University in terms of the validation of data.

CW will provide an update to Joint Office for circulation.

3.3. Shrinkage Profiling

GE agreed to provide an update every two months between now and the next meeting in September.

YRH asked GE and GDNs to provide an e-update to the Joint Office on the discussion of the Profiling update in May and July.

4.0 Any Other Business

None raised.

5.0 Diary Planning

Further details of planned meetings are available at: www.gasgovernance.co.uk/events-calendar/month

Time / Date	Paper Publication Deadline	Venue	Workgroup Programme
09:30 Wednesday 20 September 2023	17:00 Monday 11 September 2023	Team Meeting	Standard Workgroup Agenda
09:30 Wednesday 22 November 2023	17:00 Monday 13 November 2023	Team Meeting	Standard Workgroup Agenda

Action Table (as at 18 January 2023)

Action Ref	Meeting Date	Minute Ref	Action	Owner	Status Update	Due Date
1101	23/11/22	2.2	All GDNs to advise if the OUG re-valuation is subject to independent validation and if so, how is it being evaluated.	All GDNs	Carried Forward	March 2023 Sept 2023
1102	23/11/22	2.3	GDNs to consider introducing Profiling into current Shrinkage and Leakage Model and whether this is feasible report in January 2023 Meeting.	All GDNs	Carried Forward	March 2023 Sept 2023