

IGT UNC 23-05 Modification Workstream Meeting

Draft Minutes

Thursday, 11th May 2023 via Teleconference

Attendee	Initial	Organisation	Notes
Anne Jackson	AJ	Gemserv	Chair
Cher Harris	CH	Indigo Pipelines	
Charlotte Gilbert	CG	BUUK	
Claire Louise Roberts	CR	Scottish Power	
David Mitchell	DMi	SGN	Present for Items 7 and 8
David Morley	DMo	OVO	
Isaac Moore	IM	Gemserv	Secretariat
Jenny Rawlinson	JR	BUUK	
Michelle Brown	MB	Energy Assets	
Nick King	NK	Barrow Shipping	Present for Items 7 and 8
Talia Lattimore	TL	Gemserv	

1. Welcome and Apologies for Absence

The Chair welcomed everyone to the Workgroup and accepted apologies from Ellie Rogers (Xoserve).

2. Confirmation of Agenda

The Chair confirmed the items for discussion as outlined in the Final Agenda and asked attendees for 'Any Other Business' (AOB) items. Talia Lattimore (TL) added item 9 – Maternity leave.

3. Approval of the Previous Minutes 22-08

TL informed the Workgroup that no comments were received for the draft 23-04 Modification Workstream meeting minutes prior to the meeting. The Workgroup had no comments to add to the minutes at the meeting and they were approved as a true and accurate record of the meeting.

4. Outstanding Actions

The Chair informed the Workgroup that there were 3 outstanding actions:

- **23/04 – 01: The Proposer of UNC0842 to be invited to the next Workstream Modification meeting.** The Proposer was present at the current meeting. The Workgroup agreed to close this action.
- **23/04 – 02: Code Administrator to review UNC0828R with the INA Gas Technical subcommittee.** Chair informed Workgroup that they had been away and would now

communicate the questions to the INA imminently. The Workgroup agreed to keep this action open.

- **23/04 – 03: David Morley to report back on meeting with Ofgem regarding the Introduction of an independent Shrinkage expert.** The Chair invited David Morley (DMo) to provide their update. DMo noted that Ofgem would want the modification to proceed and have the respective panels vote on it. Then they would consult with industry and understand what the impacts would be. They did not provide a specific view on IGTs. The Workgroup agreed to close this action.

5. Cross-Code Modifications Implications Tracker

Watch list

- **UNC0845: Enhancements to Demand Side Response (DSR) Arrangements including a D-5 Product.** TL informed members that this Modification was allocated to Workgroup.
- **UNC0844: Enabling Direct Contractual Arrangements with Consumers for Demand Side Response.** TL informed members that this Modification was allocated to Workgroup.
- **UNC0843: Establishing the Independent Shrinkage Charge and the Independent Shrinkage Expert.** TL informed members that this Modification was allocated to Workgroup.
- **UNC0842: Gas Entry onto the Total system via an Independent Gas Transporter.** TL informed members that this Modification was allocated to Workgroup.
- **UNC0841: Introduction of cost efficiency and transparency requirements for the CDSP Budget, and revisions to DSC change processes.** TL noted a shift in the report to Panel, now going to the UNC Panel in July. There is not believed to be an impact. This will be confirmed once the Final Drafting is available.

TL noted that no new Modifications had appeared since final Agenda and papers had been published.

Charlotte Gilbert (CG) asked to confirm that the **UNC0734S – Reporting Valid Confirmed Theft of Gas into Central Systems and Reporting Suspected Theft to Suppliers IGT** equivalent had been received as they had sent in an initial draft. TL noted that they have received this draft but had not reviewed the Modification yet which is why it had not been noted but it would be added to the tracker once it had been formally raised.

Live Review Groups

- **UNC0835R: Review of Gas Demand Side Response Arrangements**

Jenny Rawlinson (JR) provided an update on the Demand Side Response (DSR) UNC changes. They informed Workgroup that they had communicated with Phil Hobbins and that they would set up a session to amalgamate all of the UNC Modifications and place them under one IGT UNC Modification.

- **UNC0828R: Introduction of an Independent Shrinkage Expert.** The Review Group was withdrawn at the previous Workgroup.

- **UNC0812R: Review of Alternatives to “Must Read” Arrangements.** The Report would be going to Panel in September 2023.

JR said that while initially it was thought that UNC0812R would have no impact on IGTs, there has been discussion with regards to procuring a body to undertake the must-reads process. A possible impact could arise from Shippers wanting to avoid different systems in the UNC and IGT UNC. TL said that it was their understanding that there was currently no defined preference. ~~CG responded that at the last UNC Workgroup they agreed to proceed with option 3a: CDSP procuring the service to replace what is done by Transporters.~~ CG informed the Workgroup that the approach put forward was option 3a: CDSP procuring the service to replace what is done by Transporters. They emphasised that while this was the most likely direction, no decisions had been made yet.

JR asked about the Review Group connected to 0843 – Establishing the Independent Shrinkage Charge and the Independent Shrinkage Expert. This has incorporated 0828R – Introduction of an Independent Shrinkage Expert. TL noted that while the Modification was reviewed at the April Workgroup, there was no conclusion reached regarding the need for an IGT UNC mirror Modification. The Chair noted that IGTAD articulates how shrinkage is dealt with. The IGT UNC is reflective of Code conditions within the IGTAD. CG said that industry parties were keen to regionalise the shrinkage, but this cannot work for IGTs. The Chair said that the current way of thinking about shrinkage is probably outdated in light of the current system of calculation. The Chair asked CG if the IGTs are considered within the 0843 Modification. CG said that they have made the Proposer aware of eventual difficulties and this will be discussed at Workgroup. The Chair suggested that rather than raise a Modification for the IGT UNC, it would be more productive to work in the IGTAD. JR added that DMO is aware of the possible need to raise the IGT UNC mirror Modification. The intention is that it be reflected in IGT supply points. JR added that the IGTs would be expected to fund these steps. The Chair added that Shrinkage is part of price control for distribution networks.

IGT UNC Impact Assessment tab

- **UNC0843 – Establishing the Independent Shrinkage Charge and the Independent Shrinkage Expert.** No formal indication of impact.
- **UNC0842 – Gas Entry onto the Total system via an Independent Gas Transporter.** The Workgroup agreed that there was a probable impact but waiting on additional information.
- **UNC0808 –Reverse Compression.** TL asked the Workgroup if they still believed that an IGTUNC Modification would not be necessary for 0808 reverse compression. JR said that the view is that a Modification is not required. TL amended the Impact assessment spreadsheet to clarify this. The Workgroup agreed to leave it impact as “no impact/not applicable”.

JR asked if TL should add that the 0843 discussion is dependent on the Proposer, and they see the impact on IGT supply points

6. IGT UNC Known Issues Register

TL advised the Workgroup that there were no new updates to the Known Issues Register.

AOB

7. UNC0808 – Reverse Compression

Summary of UNC Modification

Nick King (NK) took the Workgroup through the principles of this Modification. They explained that UNC0808 was drafted to enable green gas that would otherwise be prevented from entering the Total System due to localised capacity constraints in the DNO Systems, **by enabling an iGT to provide and operate new 'reverse compression' infrastructure that moves the gas to a higher-pressure tier, providing a larger demand base for the gas to be used, thereby overcoming the constraints.**

Anaerobic Digestion (AD) sites use waste and biomass to produce biomethane. These sites are usually connected directly to distribution networks. The gas plant produces biomethane which goes into the grid. The challenge for the AD producers is that they often encounter limitations in demand on the lower pressure tiers of the DNO networks. **Entry of additional, new, gas into such networks introduces challenges that are separate from the usual delivery of gas at peak demand that traditional gas networks perform.** If new AD gas can be taken directly to downstream consumers who consistently use the supplied volume of gas throughout the year, there is no problem. However, if it feeds into a network where there are insufficient numbers of downstream consumers (and hence demand), there are likely to be constraints, particularly in the summer periods, when demand will be lower. **They explained that when this occurs the gas pressure in the network rises to a point where the local regulators start to close off, limiting the amount of gas the AD Plant can output into the network.** This is the opposite to what happens in traditional gas scenarios where a central source of gas is routed through pipes at high pressure, cascading down pressure tiers to the low-pressure system, to which the largest number of consumers are connected. The AD plant system operators often like to connect to the network with the larger connected demand network; **this Modification is about when a DNO is not able to take the full volume of AD gas throughout the year.**

NK continued to explain that the local transmission network often has plenty of capacity to accept small quantities of AD gas. For gas to travel upstream, to feed into the systems supplying a wider geographic area, it requires the inverse of a Pressure Reduction System (PRS), i.e., reverse compression. Reverse compression is typically centred on a small compressor, electrically powered, typically reciprocating, which is about the size of a shipping container. Such compressors are also used for gas compression of CNG and/or hydrogen for vehicles. One of these compressors would be present in a compound and with ancillary equipment. The compressor would function at times when the AD gas does not have a destination i.e. somewhere to go. It would take gas from the lower pressure tier and deliver it to the higher-pressure tier. For example, there would be a new connection to the 7 bar (Intermediate Pressure) part of the network. A pipe would take gas from the grid and put it

in the compressor. A measuring device would record the quantity going through the compressor. Another pipe would then leave the compressor with a connection to higher pressure tier in the same DNO's exit zone. They added that there is no reason why a Large Transporter cannot create this process themselves.

This Modification is raised to further the opportunities for biomethane in the grid, to design and build a mini network between the exit and entry connections of the large transporters' networks.

Additional information from the Proposer: It also allows more biomethane to be produced and injected into the gas grid as currently there are a number of projects which cannot go ahead due to the AD developer not being able to get their gas away.

NK noted that Business Rules in the UNC mod proposal state that none of the gas that circulates in this process is going to individual premises, and that no new gas will enter the system. However, as the infrastructure would be connected to DNO System with the gas ultimately going to consumers via the DNO network, a gas transporter license is required for the Reverse Compression operator. They added that all of the definitions and provisions of the 'gas from DNO System into iGT System' already exist (Connected System Exit Point, unmetered CSEP, IGTAD etc.). The missing part is getting the gas back into the DNO System. The modification proposes to create both the concept and the provisions to enable a new entry point between an IGT system and large transporter system. The Modification would mean gas leaves the total system at the reverse compression unmetered CSEP and goes into **the IGT System**. NK indicated that the new point at which the gas would return to the DNO System would be defined as the "IGT LDZ System Entry Point". The only substantial change that is to the pressure levels of the gas being compressed. NK added that all the other concepts within the mod already exist in the UNC: Network Exit Provisions at an exit point, **and IGTAD "DN to IGT provisions"**. There would need to be a bilateral agreement to protect the GT's LDZ system entry points.

Discussion

JR thanked NK for the comprehensive presentation. They added that they believed that an IGT UNC Modification is not necessary and that this will remain within the IGTAD. They asked if an AD site could be connected directly to an existing IGT site with downstream premises in the future. NK directed the question to David Mitchell (DMi), the Proposer of UNC0842. DMi said that their Modification (UNC0842) was entirely separate, and there were no future plans to connect them. It was clearly stated that this process (UNC0842) would not fall under Reverse Compression. NK clarified that there will be no premises or ADs connected to the compressor. This is a custom solution for this Modification. They added that regarding JR's question of connecting the two Modifications, there is a challenge with pressure, connecting the AD site to an IGT network, because it depends entirely on summer demand. NK asked the asked the Workgroup how many supply points might be made to a large IGT network. JR said that there are networks with thousands of connections.

Conclusion

The Chair asked NK if this Modification was raised because of the physical layout of the network. NK said that the modification is to enable a new physical connection with reverse compression from a low-pressure to a high-pressure network where such a solution might overcome a constraint of the type discussed. Traditionally these issues are quite complex. For example, if a new AD plant is proposed to be located at a farm in the countryside, the nearby DNO's gas network might not have the capability to take the full volume produced. In this scenario, the potential reverse compression developer would look at all gas networks in the wider area as well, to find a place where different pressure tier networks cross. The reverse compression, which is a form of reinforcement, can happen even far away from the site. NK noted that on the electricity network equivalent, a substation can be upgraded. The Chair asked if there were any further questions. JR asked the Workgroup if any other members believed that an IGT mod is necessary. NK questioned if so, what any Modification would do, since Shippers are not involved in this process. NK also noted that no gas will leave the Total System other than in the pipe filling process (commissioning), which is already covered in IGTAD.

DMo asked why the gas is not metered in the Modification. NK said that a physical meter would be in place to record operational parameters including volume and pressures, but that **volume data would not be used for UNC purposes, following the existing iGTUNC and IGTAD principle of only using such when gas enters or leaves the 'Total System'**. The compressor enables increased throughput through pressure change, but does not put new gas in, or take gas out of it (there would be no User Defined Quantities Input and Output as the gas remains within the Total System). NK noted that if reverse compression facilities were built by a DNO as reinforcement of its network, there would be no impact on the UNC and so no mod is needed.

DMo asked if this process would contribute to UIG. NK said that gas in a reverse compression facility would remain in the same DNO network and within that, the same Exit Zone, with no new gas added and none taken out, so there would be no billing impact. The Unaccounted gas would only be the small quantity that enters the pipes when they are initially filled with gas (commissioning). It uses the established mechanism in the IGTAD.

The Workgroup had no further questions. The Chair thanked NK for their presentation.

8. UNC0842 – Gas Entry onto the Total System via an Independent Gas Transporter

DMi presented the Initial Modification to the Workgroup

They explained that this Modification was raised to allow gas to enter the Total System via an IGT. It works the same as a Biomethane plant, except that the input pipeline would be owned by an IGT.

Discussion

Claire Louise Roberts (CR) asked the Proposer why this Modification is specifically needed. DMi said that it will open up competition, to allow IGTs to lay pipelines in these circumstances. CR then asked if this Modification intends to allow hydrogen into the network. DMi said that they could not give a definite answer and that this was speculative at the moment. The Chair asked about the possibility of blending gas in this process. DM said that this is beyond the current hypothesis.

NK illustrated the pipeline system through a simple diagram, for DMi. The controls in place would measure the quality of the gas. The gas goes along the IGT pipeline and back into the Large Transporter’s system. The Chair pointed out that the demand on the local network is likely to be less than the gas being produced and added to the IGT network, allowing gas to head back into the upstream system. The Chair said that the IGT system is bolted onto the GDN system. Gas normally flows downward to them. In this scenario, the biomethane is attached to the IGT network allowing gas to flow back upstream.

Business rules

The Proposer took the Workgroup through the Business rules for the Modification:

1. Gas entry be defined in the IGTAD as gas entry into the Total System via an LDZ System Entry Point located on DNO network but connected to IGT network.

The Chair indicated that it would be metered but not a supply point. NK enquired whether there would be a meter between the AD and the IGT and no meter between the IGT and the large transporter network. DMi confirmed that this was the case.

2. Modify the IGTAD to allow Tri party agreement. (BR2).

The Proposer added that the business rule will be changed to remove the need for a triparty agreement. They would rather have additional agreements with each party. The Chair asked if this would be an amendment to an existing agreement, or a new agreement. DM said that it will be a new agreement, adding that the business rules agreement will cover the maintenance, gas quality, telemetry needs of the entry point.

3. There is no intention to change the meaning of the CSEP. The Exit points between the DNO system and the IGT will remain collectively a single unmetered CSEP.
4. UNC and IGTAD should be amended to permit bidirectional flow arrangements between the DNO and the IGT only at the Individual System Exit Point (ISEP).
5. Shrinkage provisions would apply equally to networks that facilitate entry into the total system.
This will remain unaltered.
6. The DNO will manage and operate flow of gas onto Total System in line with Tripartite Network Entry Agreement (NEA).

There was no additional discussion by the Workgroup.

7. Title and risk will pass from the IGT to the DNO on exit from IGT network. DMi noted that responsibility will go back to the IGT when the gas re-enters the IGT network.

The Workgroup focused their discussion on Business rule 7.

The Chair asked how one would know exactly when the gas has re-entered the IGT network. DM said that this was raised by the lawyers as a condition to take part in the system. It is a complicated legal mechanism to transfer across responsibility from one operator to another. The physical meter will be the IGT's interface with the AD plant, but within IGTAD the gas enters the Total System (i.e. it is agnostic to the physical reality) at the interface point. The Chair asked if the meter readings (consumption) of the supply points would be deducted. NK said that there would be no removal. The Shippers would take responsibility for the gas reaching supply points. An IGT Shipper will cover the gas from there to the meter. The amount of gas taken is based on the consumer's meter. In practice the transportation system will be using the IGT meters as though they are meters on the DN system.

JR said that they see no reason for an IGT modification but some of the metering might require change. DMi pointed out that there is no intention to change any commercial rules regarding exit. However, the IGT will want to charge the AD plant shipper for carrying the gas and getting to the meter point.

JR asked if it would be mixing with existing gas. DMi confirmed that it will. DMi said that the telemetry equipment for when the gas enters the system would be operated by the DNO. They would put the volume of gas into the Gemini system and at that point it is just like any CSEP system. JR pointed out that the transportation charges would be recovered. DM said this would be like a biomethane plant connected to a DNO system. The gas is metered at supply points.

JR asked about the Shipper in the process. They asked if there would be a Shipper for the biomethane. NK confirmed that there would be a Shipper who would pay capacity and transportation charges. They pointed out that the UNC has no problem with this process. The question is whether IGTs would provide the service to Shippers or through a more conventional arrangement and a question of a new Modification might arise. JR said that this would be done on a case by case basis. NK said that initially these sites might be entry only.

Cher Harris (CH) asked if the system would have an Annual Quantity (AQ). NK said that there would be no AQ as UNC has no such concept in entry. They added that the question is perhaps if there should be is a new section for the IGT UNC or rather a standalone arrangement. NK noted that the Interconnector System Operators have a Code of Operations. If a shipper uses an interconnector, they need to purchase capacity. If an IGT network is supplying premises, there has to be a physical flow interaction between the two, but not commercial. CH said that there

would be an agreement with the biogas plant. If an AQ is not received in the Xoserve process, that might change. They added that there is no process to bill in this scenario.

The Chair said that there is an assumption that the IGT would already have supply points on the relevant network. They asked if the biomethane site was connected to the DN network, would this Modification cover this scenario? NK said that DMI's Modification is only for Large Transporters. JR asked DMI if this Modification was "for IGTs to be ready" or whether an IGT is already anticipating this scenario and actively considering. DMI said that there is no current connection in preparation. They added that this is an enabling Modification, to ensure people can operate properly. NK added that with Barrow Shipping, there are developers who intend to use the Modifications (UNC0842 and 0808) and would like to use IGT pipelines as an alternative to direct Distribution Network connections. JR asked if NK could draw up a diagram of the situation. This prompted NK and DM to suggest they work together offline. They would then share a slide with the Workgroup.

8. IGT permitted to facilitate Gas exit points off their pipeline prior to the DNO network.
9. IGT Gas Entry onto a DNO's Network may be subject to fulfilling requirements in the DNO's Gas Transporters License Condition 4B Statement in relation to the initial connection. There was no additional discussion of the Business Rules by the Workgroup.

The Chair noted that the IGT UNC Code change requirement would come from the discussion between NK and DMI. JR said that the IGT UNC is about the Shipper and IGT relationship, which is also present in this Modification. The confusing part of the situation is that there is no concept of import or entry onto IGT networks. This could be a separate agreement, which can evolve over time as well. NK asked if there were any instances where any IGT has ever had a side agreement to the IGT UNC. They noted that the UNC has ancillary agreements. The Chair noted that there are ancillary agreements for DN sites within the IGT UNC to ensure DN needs are met. JR confirmed this. These agreements are mentioned in the IGT UNC. NK said that the CSEP ancillary agreement would be about how the Shipper deals commercially, rather than individual agreements you have the IGTAD and the IGT UNC.

NK asked if a separate transportation agreement for entry was a completely unheard-of idea. JR said the current side agreements are for existing supply points to accommodate the daily metered facility.

The Chair asked if this subject has come up at the IGTAD subcommittee. JR said that it had not yet. The Chair said that there were possible amendments that could be made to the IGTAD. JR pointed out that the results of NK and DMI's presentation would help find an answer.

The Chair asked Workgroup how they wished to proceed, noting that DMI had not yet confirmed if an IGT Modification was necessary. DMI noted that the Modification is still at the UNC workgroup. JR said that they would be better prepared to tell if an IGT modification was required at a later date.

CR asked about whether this Modification would be mandatory on IGTs. NK said that it is just an enabling Modification, requiring only voluntary participation from an IGT. It does not oblige the IGT to participate. CR asked if IGTs had been engaged in this process, to gauge if there was appetite for the Modification. No one was able to comment.

The Chair noted that the actions would be written into the next agenda, where the Workgroup would continue consideration of whether an IGT Modification would be necessary or not.

No further questions were raised and the item was closed.

23/05 – 01: Action: NK and DMi to prepare a diagram illustrating how an IGT network would be integrated into the scenarios for which their Modifications are required for distribution to the Workgroup.

9. TL on Maternity Leave

TL told Workgroup that they are going on maternity leave. The Workgroup congratulated them. The Chair informed the Workgroup that TL's work would be picked by multiple people within Gemserv.

10. Cher Harris – NexA Tables

CH informed Workgroup that the IGTs are doing the annual NexA review. They told Workgroup that the new NexA values will be distributed to the June Workgroup.

11. Jenny Rawlinson – New procedures

JR asked if inviting a UNC Modification proposer to the Workgroup was a new standard adopted by the Workgroup. TL said that when a new Modification is raised it should be considered in the traditional format and then if the Workgroup (or a party outside of a Workgroup meeting) wished to invite a Proposer they were happy to make it the default position to invite the Proposer to the Workgroup. They said that involving them in this process is certainly of value to the Workgroup, but inviting every proposer as a standard may not be the most efficient and there should be some agreement between Workgroup members or a request from a Party. No further questions were raised.

The next Workgroup meeting is scheduled for Thursday 8th June 2023.

Annex 1 – Actions Table

Reference	Action	Owner	Status
23/04 – 01	CA to invite the Proposer of UNC0842 to the Workgroup meeting on 11 th May 2023.	Code Administrator	Closed
23/04 – 02	CA to communicate questions to the INA regarding shrinkage.	Code Administrator	Open
23/04 – 03	DM to provide an update on outcome of Ofgem meeting to Workgroup regarding the role of Independent Shrinkage expert.	David Morley	Closed
23/05 – 01	NK and DM _i to report back on their discussion of crossover between 0808 and 0842.	Nick King & David Morley Mitchell	Open

DRAFT