





Modification	At what stage is this document in the process?
<h1>IGT172: Provision for gas entry</h1>	<div style="display: flex; flex-direction: column; gap: 5px;"> <div style="border: 2px solid green; border-radius: 10px; padding: 5px; display: inline-block;">01 Modification</div> <div style="border: 2px solid blue; border-radius: 10px; padding: 5px; display: inline-block;">02 Workgroup Report</div> <div style="border: 2px solid purple; border-radius: 10px; padding: 5px; display: inline-block;">03 Draft Modification Report</div> <div style="border: 2px solid orange; border-radius: 10px; padding: 5px; display: inline-block;">04 Final Modification Report</div> </div>
<p><b>Purpose of Modification:</b> To introduce to the IGT-UNC, provisions that replicate, as closely as practicable, the established LDZ entry arrangements in UNC. This will ensure suitable arrangements are in place if and when entry to a Pipeline is sought.</p>	
	<p>The Proposer recommends that this modification should be:</p> <ul style="list-style-type: none"> <li>assessed by a Workgroup before proceeding to Consultation</li> <li>be subject to an Authority Decision</li> </ul> <p>This modification will be presented by the Proposer to the Panel on <b>27 October 2023</b>. The Panel will consider the Proposer’s recommendation and determine the appropriate route.</p>
<p><b>Impacted Parties and Codes</b></p>	
	<p>High Impact:</p> <p>Developers of gas production facilities for whom delivery to an IGT Pipeline is optimal</p> <p>Pipeline Operators that accept delivery of gas to their Pipeline(s)</p>
	<p>Medium Impact:</p> <p>None</p>
	<p>Low Impact:</p> <p>Large Transporters and Pipeline Users</p>

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Timetable			
<b>The Proposer recommends the following timetable:</b>			
Initial consideration by Workgroup		09 November 2023	
Amended Modification considered by Workgroup		N/A	
Workgroup Report presented to Panel		26 January 2024	
Draft Modification Report issued for consultation		29 January 2024	
Consultation Close-out for representations		19 February 2024	
Variation Request presented to Panel		N/A	
Final Modification Report available for Panel		22 March 2024	
Modification Panel decision		22 March 2024	

# 1 Summary

## What

UNC TPD Section I 'Entry Requirements' is designed to ensure that gas entering the GB 'Network' (as defined in GS(M)R, which includes the NTS, Large Transporter Systems and IGT Pipelines as one) meets all requirements including GS(M)R compliance.

The IGT-UNC does not include the equivalent provisions for direct entry of gas to a Pipeline. The IGT-UNC is also silent on how gas flowing from a Pipeline into a Large Transporter System would be treated. This modification proposal seeks to remedy this.

## Why

A number of potential gas producers have identified that the optimal way in which to inject gas to the GB network may be via an IGT Pipeline. While there is nothing in the IGT-UNC that precludes this, it is in all parties' interest to ensure that appropriate arrangements are in place to ensure all safety (i.e. gas composition and measurement) and commercial (i.e. use of system) requirements are met.

Similarly, there are no IGT-UNC nor UNC provisions that preclude gas entering a Large Transporter system via an IGT Pipeline. Clarifying issues around this transfer of gas in both the UNC and IGT-UNC will deliver the necessary consistency and clarity.

## How

To address UNC related issues, SGN has raised UNC modification proposal 0842 'Gas Entry onto the Total system via an Independent Gas Transporter'. IGT-UNC modification 172 proposes the necessary IGT-UNC provisions, which are consistent with the existing and proposed UNC requirements.

IGT-UNC Modification 172 proposes to codify arrangements between Pipeline Users and Pipeline Operators for new gas entry directly into a Pipeline, and indirectly from such Pipeline into a Large Transporter System, completing the marry of the two modifications.

The main proposal is to incorporate into the IGT-UNC, amended to adopt IGT-UNC terminology, UNC TPD Section I 'Entry Provisions' as it applies to 'LDZ System Entry Points' with minor associated additions and consequential changes to other existing IGT-UNC sections where they are needed. The commercial use of system and connection arrangements would also follow the LDZ entry equivalent – Gemini logical meter to record energy and allocate to a Shipper; and charging for connection on a case by case basis in accordance with the established methodologies of each transporter.

## 2 Governance

### Justification for Authority Governance Procedures

This Modification is a marry to UNC Mod 0842, with the overarching objective that they work together to allow new sources of gas to be entered directly into a Pipeline and on to a Large Transporter System, thus allowing new sources of gas onto the Total System through a new, additional route. The modification is particularly aimed at allowing increased volumes of biomethane and other green gases to be injected.

The UNC Modification Panel determined that UNC Mod 0842 is material change that warrants an Authority decision, so this modification should follow the same governance, ideally with the two being considered together.

### Requested Next Steps

This modification should:

- be considered a material change and not subject to Self-Governance.
- be assessed by a Workgroup before proceeding to Consultation.

## 3 Why Change?

Biomethane is being injected across the GB gas grid with over 100 sites connected to Large Transporter networks. There is potential for more biomethane (and other green gases) to be developed, but producers only have the one option of connecting to a Large Transporter system. In some cases, developers have identified that delivering gas to a Pipeline would be more economic than delivery to a Large Transporter. This may be, for example, because there is no suitable Large Transporter network nearby, or because a Pipeline Operator may offer a more economic and efficient solution than a Large Transporter.

There is therefore an opportunity to extend the market for such connections by modifying the IGT UNC to introduce arrangements that apply when gas is injected to a Pipeline.

When coupled with the proposed changes on UNC Mod [0842 - Gas Entry onto the Total system via an Independent Gas Transporter](#), this modification will facilitate competition in connections and gas transportation, and the expansion of GB produced gas.

If one or both of the proposed changes to the two codes is/are not made, the prospective developers will continue to have only the one connection option, with no commercial alternative and limited potential for alternative products and/or services, and in some cases, the development will not take place, resulting in less green gas displacing gas from traditional sources.

## 4 Code Specific Matters

### Technical Skillsets

None specifically, although an understanding of how LDZ gas entry works in UNC and provisions in both codes concerning operator to operator agreements would be helpful across the UNC and IGT UNC.

### Reference Documents

#### Industry Codes

IGT-UNC

UNC TPD Section A definitions relating to System Entry Points

UNC TPD Section I in its entirety, but with focus on 3.11 and exclusion of NTS provisions

British Gas Network Code High Level Principles 1995

British Gas Business Rules / Detailed Business Rules 1995-6

LDZ Network Entry Agreements (NEA)

#### UNC modifications referred to in the proposal

UNC 0154 – ‘Enduring Provisions for LDZ System Entry Points’ <https://www.gasgovernance.co.uk/0154>

UNC 0842 – ‘Gas Entry onto the Total system via an Independent Gas Transporter’ <https://www.gasgovernance.co.uk/0842>

UNC 0440 – ‘Project Nexus – iGT Single Service Provision’ <https://www.gasgovernance.co.uk/0440>

#### UNC mod 440 associated IGT-UNC modification

IGT039: ‘Use of a Single Gas Transporter Agency for the common services and systems and processes required by the IGT UNC’ [https://www.igt-unc.co.uk/wp-content/uploads/2018/01/iGT039\\_D.pdf](https://www.igt-unc.co.uk/wp-content/uploads/2018/01/iGT039_D.pdf)

#### Ofgem documents (relevant to UNC mod 0154)

'Gas Transmission – new NTS entry points, reserve prices in auctions and unit cost allowances (UCAs), Consultation Document – May 2005' <https://www.ofgem.gov.uk/publications/gas-transmission-new-nts-entry-points-reserve-prices-auctions-and-unit-cost-allowances-ucas>

'New entry arrangements for connecting to the gas distribution network, Consultation Document – July 2006' <https://www.ofgem.gov.uk/sites/default/files/docs/2006/07/14588-11606.pdf>

'Entry arrangements for connecting to the gas distribution network | Ofgem (3 Jan 2007)' <https://www.ofgem.gov.uk/publications/107-entry-arrangements-connecting-gas-distribution-network>

**UNC Pricing Paper (relevant to UNC mod 0154)**

PDDN03 – LDZ System Charges – Charging for LDZ System Entry Points (December 2007) <https://www.gasgovernance.co.uk/pddn03>

## 5 Solution

### Outline

The proposed Modification consists of two elements, which will:

- Complete the marriage of IGT-UNC to UNC Mod 0842, with the overarching objective that the two codes work together when gas enters directly into a Pipeline and is transported to a Large Transporter System.

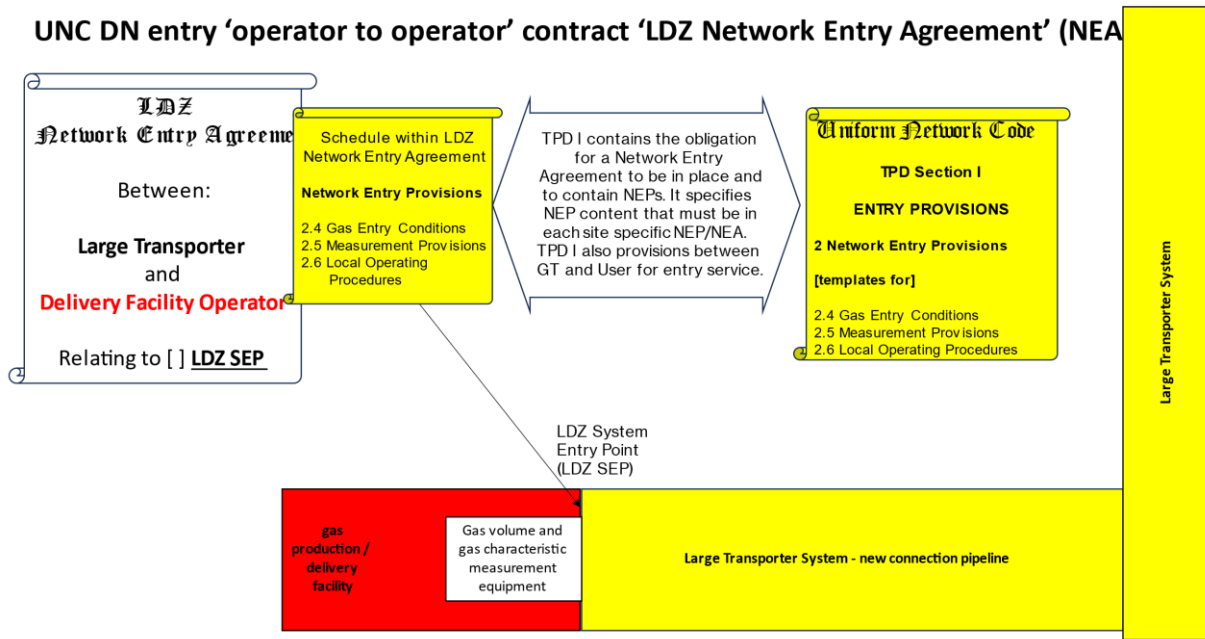
The key 'marriage' features of UNC 0842 are that:

- An entry agreement must be entered in to, based on the UNC LDZ Network Entry Agreement that contains contractual gas composition and volume measurement provisions that are directly binding on the delivery facility operator through the terms of the agreement, and on Pipeline Users and UNC Users through the IGT-UNC and UNC respectively (UNC modification 0842 refers to this agreement as a 'tripartite agreement'); and
  - The transfer of title and risk already in place in other UNC and IGT-UNC arrangements where gas moves between systems be extended to include transfer from a Pipeline User to Pipeline Operator at the point of entry of new gas into a Pipeline.
- Introduce commercial provisions in IGT-UNC, to apply to Pipeline Operators and Pipeline Users, when gas is entered directly into a Pipeline from a gas delivery facility.

The UNC has commercial provisions for gas entry within TPD Section I 'Entry Requirements', which were introduced in the original Network Code in 1996 and other than a few additions irrelevant to this Modification proposal, remain substantially unaltered. The principles were developed by formal industry work groups, using iterations of business rules, followed by detailed business rules, and following a process similar to those used for present day UNC and IGT-UNC modifications, the rules became the legal text that this Modification proposes to incorporate.

The core concept within Section I is that site specific 'Network Entry Provisions' (NEPs) comprising 'Gas Entry Conditions' and 'Measurement Provisions' are held in a schedule of a 'Network Entry Agreement' (NEA) between the Large Transporter and a 'Connected Delivery Facility Operator'. The NEPs are subject to UNC governance, but the remainder of the NEA, which is otherwise an 'operator to operator' bilateral agreement, primarily concerning parties engineering responsibilities and obligations at the physical interface, is outside UNC governance. The link between NEPs in a NEA and wider TPD is that Section I 1.3 requires that NEPs remains in force for the entry service to be permitted. If the UNC provisions are breached by the User trying to deliver gas that does not comply with the NEPs, the Large Transporter can discontinue flow.

UNC DN entry 'operator to operator' contract 'LDZ Network Entry Agreement' (NEA)



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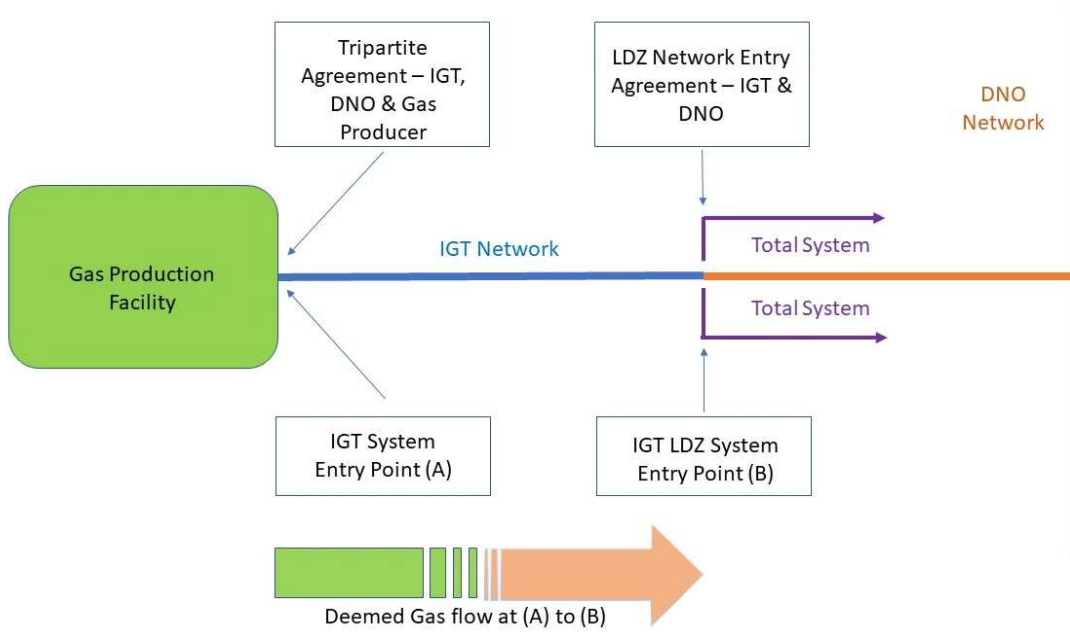
In the interests of avoiding industry fragmentation, it is not desirable for an arrangement that differs from this to be introduced, so UNC Mod 0842 is based on LDZ entry arrangements being replicated in IGT-UNC, requiring that Pipeline Operators providing the service put in place an agreement (similar to a NEA but with the Large Transporter able to be an additional party) to “...contain provisions equivalent to Network Entry Provisions and Local Operating Procedures – i.e. rules specifying requirements for the delivery of gas to the Total System...” at the physical entry point to the Pipeline. Under the proposed arrangement, the Large Transporter’s rights would be identical to those at an LDZ System Entry Point and would notably include monitoring of compliance with the site-specific NEPs and the right of transporters to isolate the gas source if necessary to safeguard the Network.

Gas entering the Pipeline therefore needs to be subject to IGT-UNC equivalents of the UNC TPD concepts of LDZ System Entry Point, Section I ‘Entry Requirements’, and site-specific NEPs for gas measurement and composition mechanism which ensure GS(M)R compliance and protect pipeline systems. However, as NEPs are strictly a UNC concept, for use under that code, UNC Mod 0842 does not require that IGT-UNC should use UNC NEPs, but instead requires that IGT-UNC has ‘provisions equivalent’ to them.

As closely as is practicable, this IGT UNC modification proposes replicating the relevant provisions of ‘LDZ System Entry Point’ within UNC TPD Section I ‘Entry Requirements’.

For the avoidance of doubt the required changes to UNC and IGT-UNC will require creation of two ‘operator to operator’ agreements, one each to apply at each end of the pipeline, which would have the Pipeline Operator and Large Transporter as parties, for example as shown in the graphic and tables below.

**UNC Modification 842 – Agreement and entry points.**



**The proposed ‘operator to operator’ agreement at the physical interface between gas producer and Pipeline as proposed by UNC Mod 0842**

Upstream Party	Downstream Party	Agreement
<b>Non-IGTAD party</b> (owns and maintains apparatus)	<b>Pipeline Operator</b> (owns and maintains Pipeline apparatus) and <b>Large Transporter</b> (controls the Pipeline Operator’s valve)	<b>UNC Mod 0842</b> “...an agreement the ( <i>‘tripartite agreement’</i> ) between the DN Operator, the IGT and the gas production operator of the facility connected to the IGT System in relation to the (corresponding) IGT SEP’ [to] ‘contain provisions equivalent to Network Entry Provisions and Local Operating Procedures – i.e. rules specifying requirements for the delivery of gas to the Total System at the IGT LDZ SEP and the IGT SEP.”

**The proposed ‘operator to operator’ agreement at the physical interface between Pipeline and Large Transporter System as proposed by UNC Mod 0842**

Upstream Party	Downstream Party	Agreement
<b>Pipeline Operator</b> (owns and maintains apparatus)	<b>Large Transporter</b> (owns and maintains apparatus)	<b>IGT LDZ Network Entry Agreement</b> (between the DNO and the IGT) which treats the provisions in the <i>tripartite agreement</i> ... as Network Entry Provisions and Local Operating Procedures.”

A complete list of documents to potentially be changed and/or created follows:

**Existing documents to be amended in line with the Modification intention and requirements:**

1. IGT-UNC (this Modification proposal)
2. UNC TPD Sections A and I (UNC Mod 0842)



3. Participating Pipeline Operators' Licence Condition 4B Connection Charging Statement Methodologies
4. Participating Large Transporters' Licence Condition 4B Connection Charging Statement Methodologies

**New generic template 'operator to operator' agreements to be created by participating Large Transporters and/or Pipeline Operators as proposed by UNC Mod 0842, to be based on LDZ Network Entry Agreements:**

1. 'gas production facility or non-UNC IGTAD party pipeline' to 'Pipeline' physical interface
2. 'Pipeline to Large Transporter System' physical interface

**New agreement to be created by participating Pipeline Operators based on the LDZ equivalent introduced by UNC Mod 154:**

A commercial 'bilateral agreement', enabled by the Pipeline Operator's LC4A Transportation Charging Statement or LC4B Connection Charging Methodology Statement.

## Business Rules

1. This Modification shall:
  - a. introduce physical flow and commercial provisions to IGT-UNC, by incorporating to the greatest extent practicable, the provisions contained in UNC TPD Section I 'Entry Requirements'
  - b. marry IGT-UNC to UNC Mod 0842 by completing the dovetailed principle of transfer of title and risk at the Pipeline Entry Point (UNC term - IGT entry point) as shown below:

**Interface - Pipeline Entry Point (UNC term - IGT entry point)**

Transferor	Transferee	Legal provisions
Pipeline User	Pipeline Operator	Legal text to be added to <b>IGT-UNC</b> by this Modification

For information and the avoidance of doubt, the remainder of the transfer of risk is at the **Downstream System Entry Point** (UNC term - LDZ SEP) and is or will be as follows:

Transferor	Transferee	Legal provisions
Pipeline Operator	<i>Pipeline User</i>	<b>IGT-UNC Part J 2.2</b> (existing)
<i>Pipeline User</i>	<i>UNC Shipper User</i>	UNC Mod 0842 proposes adding new provisions to <b>UNC TPD Section I</b> (specifically 3..12.7)
<i>UNC Shipper User</i>	<b>Large Transporter</b>	

2. A new provision is required to confirm that a physical interface between a Pipeline and a Large Transporter System can comprise a CSEP, IGT LDZ System Entry Point or both, just as UNC TPD enables the equivalent in Sections I 1.2.4 and J 1.4.6.
  
3. IGT-UNC already has provisions relating to ‘operator to operator’ physical interfaces at both Pipeline entry and Pipeline exit. The main sections containing such provisions are Part H ‘SYSTEM MAINTENANCE AND PLANNING and Part I ‘EMERGENCIES’. These Parts contain some provisions that are identical to those in UNC TPD Section I and a few that are new or differ slightly. To avoid duplication through the creation of new content, these Parts should be extended in scope and content to pipeline entry defined terms alongside Connection Point and Downstream System Exit Point where appropriate.
  
4. Further minor consequential changes are required to IGT-UNC parts to knit together existing provisions with the proposed new content.

## 6 Impacts & Other Considerations

### Does this modification impact a Significant Code Review (SCR) or other significant industry change projects, if so, how?

There is no identified impact on Significant Code Reviews or other significant industry change projects.

### Consumer Impacts

#### What is the current consumer experience?

The number of gas producers and sources of gas is limited today by their only being one option for connection to the Total System – the LDZ entry service.

#### What would the new consumer experience be?

This modification will result in increased injection to the grid of bio-methane which helps towards Net Zero targets.

<b>Impact of the change on Consumer Benefit Areas</b>	
<b>Area</b>	<b>Identified Impact</b>
<p style="color: #00a651;">Improved safety and reliability</p> <p>No Change as the new sources of gas would not materially improve the security of supply.</p>	None
<p>No change as the additional sources of gas would not be material in volume.</p>	None
<p style="color: #00a651;">Reduced environmental damage</p> <p>A growing number of bio-methane producers want to inject green gas onto the Total System, this modification allows this to take place and will expand this market which will have a positive impact on Greenhouse Gas Emissions by allowing Pipeline Operators to provide this facility.</p>	Positive
<p style="color: #00a651;">Improved quality of service</p>	None

No change identified.	
<p><b>Benefits for society as a whole</b></p> <p>By facilitating the building of additional Bio-Methane plants there will be additional jobs and general economic activity for UK Plc.</p>	Positive

### Cross-Code Impacts

Detailed legal analysis in relation to the drafting of legal text for UNC Modification 0842, which is in the final stages of work group development, identified that mirrored arrangements are required in the IGT-UNC; This modification proposal aims to provide these.

UNC	<input checked="" type="checkbox"/>
REC	<input type="checkbox"/>
Other	<input type="checkbox"/>
None	<input type="checkbox"/>

### Environmental Impacts

Biomethane is generally produced with a flat profile as it is made from a 24/7 biological process. The producers cannot flare biogas other than for safety reasons and so they need the gas grid to have capacity for 100% of the time. There are good sources of feedstock that may not be near the existing gas grid but are suitable for AD but need a connection pipeline, typically at LTS pressure which is high capex. This modification would allow such projects to use an IGT Pipeline and will expand this market which will have a positive impact on Greenhouse Gas Emissions by allowing Pipeline Operators to provide this facility.

## 7 Relevant Objectives

Impact of the modification on the Relevant Objectives:	
Relevant Objective	Identified impact
(A) Efficient and economic operation of the pipe-line system	Positive
(B) Co-ordinated, efficient and economic operation of <ul style="list-style-type: none"> <li>(i) the combined pipe-line system; and/or</li> <li>(ii) the pipe-line system of one or more other relevant gas transporters</li> </ul>	Positive
(C) Efficient discharge of the licensee’s obligations	None
(D) Securing of effective competition: <ul style="list-style-type: none"> <li>(i) between relevant shippers;</li> <li>(ii) between relevant suppliers; and/or</li> </ul>	None

(iii) between DN operators (who have entered into transportation agreements with other relevant gas transporters) and relevant shippers	
(E) Provision of reasonable economic incentives for relevant suppliers to secure that the domestic customer supply security standards... are satisfied as respects the availability of gas to their domestic customers	None
(F) Promotion of efficiency in the implementation and administration of the Code	None
(G) Compliance with the Regulation and any relevant legally binding decisions of the European Commission and/or the Agency for the Cooperation of Energy Regulators	None

(A): - The proposed new IGT-UNC Pipeline entry service will enable more connections of low carbon footprint biomethane, and the increased competition in routes for such green ‘gas to grid’, together with increased diversity in supply, will enhance the economic and efficient operation of the pipeline.

(B): - By enabling a new IGT-UNC Pipeline entry service that is based on and dovetails with the established UNC equivalent, this Mod provides consistency throughout both the UNC and the IGT UNC.

## 8 Implementation

As this Modification proposal will marry to UNC Mod 0842, implementation should be at the same time, ideally as soon as possible after an Authority Decision.

There is at least one Pipeline Operator / prospective Pipeline Operator keen to provide this service, with several potential Pipeline Delivery Facility Operators (mainly biomethane) with projects which would be economic if they could inject into existing IGT Pipelines.

This Mod should therefore be implemented as soon as possible (supported by optional participation) and the arrangements outside code to support introduced similarly.

## 9 Legal Text

### Text Commentary

To be provided in due course.

## 10 Recommendations

### Proposer’s Recommendation to Panel

Panel is asked to:

- Agree that Normal governance procedures should apply
- Refer this proposal to a Workgroup for assessment.