

Price Control for Northern Ireland's Gas Transmission Networks GT22

Draft Determination 16 December 2021





About the Utility Regulator

The Utility Regulator is the independent non-ministerial government department responsible for regulating Northern Ireland's electricity, gas, water and sewerage industries, to promote the short and long-term interests of consumers.

We are not a policy-making department of government, but we make sure that the energy and water utility industries in Northern Ireland are regulated and developed within ministerial policy as set out in our statutory duties.

We are governed by a Board of Directors and are accountable to the Northern Ireland Assembly through financial and annual reporting obligations.

We are based at Queens House in the centre of Belfast. The Chief Executive leads a management team of directors representing each of the key functional areas in the organisation: Corporate Affairs, Markets and Networks. The staff team includes economists, engineers, accountants, utility specialists, legal advisors and administration professionals.



- · Be a collaborative, co-operative and learning team.
- · Be motivated and empowered to make a difference.





Abstract

We are publishing the draft determination for GT22 for the four high pressure gas conveyance licence holders in Northern Ireland, GNI (UK) Ltd, Premier Transmission Ltd (PTL), Belfast Gas Transmission Ltd (BGTL), and West Transmission Ltd (WTL) for the years from October 2022 to September 2027.

The price control will set out the amount the gas transmission companies will have to run their businesses and maintain the gas network. The key decisions for the companies are on operating expenditure, replacement expenditure and the proposed rate of return.

While maintenance and replacement costs are forecast to increase as the pipelines age, savings in other areas mean that the overall forecast is relatively stable.

Audience

This document is most likely to be of interest to: regulated companies, the energy industry, consumers, government and other statutory bodies.

Consumer impact

Gas transmission pipelines transport gas to gas distribution networks and to power stations. Therefore, gas transmission charges apply to both gas and electricity consumers.

Traditionally, the postalised tariff comprises around 10% of the final price for a domestic gas consumer, however this is a reducing proportion at a time of rising wholesale gas prices.

We conclude that transmission charges should at least remain stable as a result of GT22.





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Acronyms and Glossary

AGI	Above Ground Installation
ARR	Actual Required Revenue
BCO	sum of the amount of each item of Controllable Operational Expenditure determined to be reasonable by the Authority according to condition 3.1.6(b) of the PTL licence
BGTL	Belfast Gas Transmission Limited
BGTP	Belfast Gas Transmission Pipeline
C&I Panel	Control & Instrumentation Panel
Capex	Capital expenditure
САРМ	Capital Asset Pricing Model. A model that describes the relationship between risk and expected return.
CJV	Contractual Joint Venture – Single system operation for TSOs
СМА	The Competition and Markets Authority is a non-ministerial government department in the United Kingdom, responsible for strengthening business competition and preventing and reducing anti-competitive activities.
Co.	County
CPI	Consumer Price Index
e.g.	for example
FOIA	Freedom of Information Act 2000
FRR	Forecast Required Revenue
FTE	Full Time Equivalent
GB	Great Britain
GD23	This is the name given to the next price control for the NI GDNs, to cover the period 2023 – 2028 (calendar years).
GMO NI	Gas Market Operator for Northern Ireland, the Contractual Joint Venture to deliver a single system operator
GNI	Gas Networks Ireland, parent company of GNI (UK)
GNI (UK)	Gas TSO operating in Northern Ireland





GT17	This is the name given to the gas transmission price control period from October 2017 to September 2022
GT17 actuals	The period 2017/18 to 2019/20 for which actual expenditure is available
GT22	This is the name given to this price control for high pressure gas conveyance licence holders in Northern Ireland covering October 2022 to September 2027
GT27	The next price control for high pressure gas conveyance licence holders is expected to run from October 2027 to September 2032
IC	Interconnector
ILI	In-line Inspections
ISO	International Organisation for Standardisation
ІТ	Information Technology
m	Million
MEL	Mutual Energy Limited
MERC	Maintenance and Emergency Response Contract
NI	Northern Ireland
NIEN	Northern Ireland Electricity Networks
NWP	North-West Pipeline
OBR	Office of Budget Responsibility
Ofgem	Office of Gas and Electricity Markets. Regulates the electricity and gas markets in Great Britain.
Opex	Operating Expenditure
p.a.	Per annum (per year)
PC21	Price Control for NI Water for the years 2021-2026
PLC	Programmable Logic Controllers
PTL	Premier Transmission Limited
Repex	Replacement Expenditure
RIGs	Regulatory Instructions and Guidance





RPEs	Real Price Effects
RPI	Retail Price Index
SCADA	Supervisory Control and Data Acquisition
SEF	Social Enhancement Fund
SGNNG	SGN Natural Gas Limited
Shrinkage	Difference between the amount of gas that was recorded to have entered the distribution system and to have exited it. Includes: • gas loss through theft; • gas loss through leaks/emergencies; • own use.
SNIP	Scotland to Northern Ireland Pipeline
SNP	South-North Pipeline
SONI	System Operator Northern Ireland (electricity network)
Totex	Total expenditure, i.e. the sum of capex and opex.
TSO	GNI (UK), PTL, BGTL and WTL. WTL is not a TSO (Transmission System Operator) as defined by the European Commission but it is referred to as a TSO in this document for simplicity.
UK	United Kingdom
UPS	Universal Power Supply
UR	Utility Regulator
WACC	Weighted Average Cost of Capital
WTL	West Transmission Limited
WTP	West Transmission Pipeline





Executive Summary

This document represents the draft determination for the GT22 price control for the high pressure gas network in Northern Ireland (NI) relating to the period starting 1 October 2022 until 30 September 2027. The network comprises five gas transmission pipelines operated by four gas conveyance licence holders, which we refer to as Transmission System Operators (TSOs):

- GNI (UK) Limited (GNI (UK));
- Premier Transmission Limited (PTL);
- Belfast Gas Transmission Limited (BGTL); and
- West Transmission Limited (WTL).

These gas transmission pipelines transport gas from Scotland to the gas distribution networks (Phoenix Natural Gas, firmus energy Distribution and SGN Natural Gas) and to the gas-fired power stations, Ballylumford and Coolkeeragh.

GT22 also includes the Gas Market Operator for NI (GMO NI), which is a contractual joint venture (CJV) between the TSOs to deliver a single system operator service.

GNI (UK) is subject to a traditional 'revenue cap' incentive framework, while PTL, BGTL and WTL are part of Mutual Energy Limited (MEL) and are subject to a "mutualised" model. In this model, NI gas consumers absorb deviations between forecast and actual operating costs in return for an absence of equity funding/ returns from the business, leading to lower costs for consumers.

We have reviewed the TSOs' business plan forecasts and come to this draft determination to apply from October 2022 until September 2027. After this consultation we will publish our final determination.

NI Energy Strategy

GT22 has been developed in parallel with the preparation of a new Energy Strategy for Northern Ireland. This new strategy will enable new and challenging decarbonisation targets, which move towards a net zero target by 2050. The outcome of the Energy Strategy remains uncertain as it had not been published as we were considering the submissions. For this reason we considered GT22 within our current vires and practice and have indicated that we will need to consider the implications of the Energy Strategy as this becomes clear.

The TSOs provided some thoughts on how future decarbonisation projects should be considered and funded. We will continue to liaise with operators on developments in areas relevant to the Energy Strategy as we progress towards a final determination.



Progress since GT17

GMO NI was established at the start of GT17 and has delivered a number of benefits for users of the NI gas transmission network. It has streamlined a number of transportation activities, forged stronger engagement with parties who use the transmission network and delivered cost efficiency savings.

We have established an annual reporting mechanism for TSOs, known as Regulatory Instructions and Guidance (RIGs). This process is now well established with the TSOs participating fully and will continue throughout GT22. The information provided has deepened our understanding of the cost drivers and unit costs of repex projects particularly. Having access to this historic information has improved the robustness of the price control.

Review of Opex

The forecast costs were generally well justified and provided a high degree of confidence in many of the cost lines. Although we propose to disallow some insufficiently justified cost lines, the companies have an opportunity to provide additional justification during this draft determination stage which could increase their allowances.

We proposed some disallowances for companies' staff costs, including board costs and engineering staff costs. This is more material in respect of MEL's plan than GNI (UK).

For GNI (UK), we had concerns around the cost escalation for SCADA communications, and for GMO NI, we had concerns around the business case for the planned projects on the Delphi IT system. For MEL, there was a lack of evidence for increased drainage cost. In each of these cases, we have proposed adjustments to the forecasts.

We have been encouraged to see that both MEL and GNI (UK) are developing an ISO55000 accredited asset management system. We expect to see the value of this work by the start of the GT27 price control review, as the companies should provide better data to underpin both their projected repex and maintenance expenditure.

Review of Repex

Our recommendations on repex were influenced by the high level of change in MEL's GT17 repex programme and GNI (UK)'s severely delayed repex programme. As with GT17, we propose a category of cost, entitled *'relevant items'*, for which the companies may later seek an allowance once the cost and timing of an identified need are better established. We are proposing relevant items for MEL's pipework





coating, gas chromatograph and site meter replacement, and for meter replacement for GNI (UK).

For GNI (UK), we proposing lower allowances on AGI site instrumentation, AGI site electrical, aerial markers, actuators, gas pre-heating system and cyber security upgrades.

For MEL, we are proposing lower or zero allowances on programmable logic controllers (PLC) panel replacement, transformer rectifier replacement, lagging replacement, UPS and UPS battery replacement, electrical system upgrades, metering consistency, legacy projects and *'other items'*.

We expect to be able to confirm MEL's SCADA refresh costs before the final determination so we have proposed a holding allowance.

We encourage MEL and GNI (UK) to address the detailed points raised in Annex 1 - UR Report on Repex comprehensively in the draft determination consultation phase. This will allow UR to make robust conclusions on the repex programme in the final determination.

Business Plan Assessments

For the first time, we asked the companies to carry out a business plan assessment on how their submissions met the requirements that we had set out and we then carried out an assessment of this process and graded the business plan submissions. We can report that the business plan submissions are "Good".

Each plan had areas that could be improved and required regulatory intervention in the form of a significant number of queries, before we could be sufficiently confident of the forecasts. They all fell short of being an exceptional and stretching plan. However, they were generally very good with some excellent areas.

These high quality business plans reduced the level of regulatory intervention required by UR, compared to GT17, which reduced the staff time required, therefore delivering savings.

Efficiency Analysis – Frontier Shift

We reviewed the rate of frontier shift provided by the companies. We were broadly content with GNI (UK)'s calculations. By contrast, MEL and GMO NI's assumed rate of frontier shift was significantly higher than assumptions made in recent UK price reviews.

We propose to replace the TSOs' frontier shift assumptions with an RPI – 0.8% rate of cost escalation which aligns to recent decisions by UR and Ofgem.





Weighted Average Cost of Capital

For GNI (UK), we propose a vanilla cost of capital of 2.66%, real CPI-stripped.

This is lower than the current rate of return of 3.17%, reflecting the shift downwards in market interest rates since 2017 and the development of wider regulatory thinking in relation to the estimation of the expected market return. However, interest rates have been increasing during 2021 and we will review this calculation ahead of the final determination.

Outputs and Allowances

We are proposing to allow 89% of MEL's submitted amount, post efficiency, 86% of GNI (UK)'s submitted amount and 75% of GMO NI's submitted amount. Note that the GNI (UK) percentage excludes the addition of revenue for provision of capacity at Haynestown which had been excluded from the GNI (UK) forecasts.

	2022-23	2023-24	2024-25	2025-26	2026-27	GT22 Total
GNI (UK) Request (£m)	£9.14	10.12	9.68	10.12	9.44	£48.49m
UR Allowance (£m) ¹	£7.87	8.69	8.16	8.57	8.25	£41.52m
MEL Request (£m)	21.08	18.65	17.31	17.26	17.76	£92.07m
UR Allowance (£m)	18.50	16.52	15.33	15.58	15.59	£81.53m
GMO NI Request (£m)	2.51	1.89	1.80	1.50	1.68	£9.39m
UR Allowance (£m)	1.77	1.43	1.38	1.21	1.27	£7.06m

Table 1 - Total opex and repex cost request and UR proposed allowance (post efficiency)

The following graphs summarise the proposed allowances, post efficiency, compared to submitted amounts and showing trend from GT17.

¹ Excludes Haynestown income adjustment.



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Figure 1 - GMO NI - GT22 proposed allowances, post efficiency



Figure 2 - MEL - GT22 proposed allowances, post efficiency



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Figure 3 - GNI (UK) proposed allowances, post efficiency

Cost and Output Reporting

The outputs and targets associated with the allowances will be agreed ahead of the final determination. UR expects the TSOs and GMO NI to report against these commitments on an ongoing basis, through the RIGs. We are considering adding some additional areas for review as a result of GT22, for example:

- a) Asset Management Systems: We would like to see quantification of the benefits of this investment by the TSOs. We will wish to see how they will track activity through to cost efficiencies from reduced response maintenance.
- b) *Stakeholder Engagement:* We wish to track the TSOs' stakeholder engagement plans and outcomes. We wish to see how stakeholder engagement is shaping a whole-system approach and delivering customer benefits.
- c) *Joint Working*: We will ask the TSOs to report on joint working initiatives including tracking benefits, financial and non-financial.
- d) *Business Carbon Footprint:* We wish to track what the TSOs are doing to reduce their own carbon footprint. Further, we encourage the TSOs





to work together to prepare an environmental action plan to demonstrate what they are doing, as organisations, to contribute to the drive to net zero carbon.

Consumer Impact

Our considerations around the GT22 price control come at a time when energy markets are facing unprecedented rises in international wholesale fuel costs. These increases have driven significant increases in gas and electricity tariffs which is unwelcome news for consumers.

Considering the proposed GT22 allowances, combined with growing annual capacity bookings, we conclude that transmission charges should at least remain stable as a result of GT22.

This is an open consultation paper. We invite stakeholders to express a view on any particular aspect of the paper or any related matter until the consultation closes on 21 February 2021. Following consideration of responses, we will publish our final determination in April / May 2022 to be effective from October 2022.

1. Introduction

Purpose of this Document

- 1.1 This document represents the draft determination for the GT22 price control process.
- GT22 is the name given to the price control for the four high pressure gas networks in Northern Ireland (NI) relating to the period starting 1 October
 2022 until 30 September 2027. The four gas conveyance licence holders for NI high pressure networks are:
 - a) GNI (UK) Limited (GNI (UK));
 - b) Premier Transmission Limited (PTL);
 - c) Belfast Gas Transmission Limited (BGTL); and
 - d) West Transmission Limited (WTL).
- 1.3 GT22 also includes the Gas Market Operator for NI (GMO NI), which is a contractual joint venture (CJV) between the TSOs to deliver a single system operator service.
- 1.4 GNI (UK) is a subsidiary of Gas Networks Ireland, which operates and maintains the natural gas transmission and distribution network in the Republic of Ireland (RoI). Gas Networks Ireland is a subsidiary of Ervia, a utility infrastructure company owned by the government of RoI, which includes Irish Water. The Irish Government has decided that Irish Water will separate from Ervia in 2023 and Ervia will then integrate into Gas Networks Ireland. GNI (UK) will continue to be part of Gas Networks Ireland.
- 1.5 GNI (UK) is subject to a traditional 'revenue cap' incentive framework.
- 1.6 PTL, BGTL and WTL are all part of the Mutual Energy Group (MEL). These companies are subject to a 'mutualised' model. In this model NI gas consumers absorb deviations between forecast and actual operating costs in return for an absence of equity funding / returns from the business.
- 1.7 In this draft determination, we detail our proposals with respect to:
 - a) Operating expenditure (opex) allowances;
 - b) Maintenance / replacement (repex) allowances; and
 - c) Weighted average cost of capital (WACC), where relevant.
- 1.8 In setting out proposals for an efficient level of opex for the review period, we

differentiate between:

- a) Uncontrollable expenditure the level of which is fully outside the control of the licence holder; and
- b) Controllable operating expenditure, i.e. any operating expenditure not classified as uncontrollable.
- 1.9 Allowances for uncontrollable opex are forecast at the time of the price control review and will be adjusted later on to match actual costs. For controllable opex, the potential impact of these allowances for the licence holders will vary, depending on whether they operate a 'revenue cap' or 'mutualised' model.
- 1.10 In the case of GNI (UK), the allowance represents a fixed amount the licence holder will recover from consumers. Any variation between this allowance and actual opex is absorbed by the licence holder. In this instance the consumer is exposed to no operating cost risk. Instead this risk is borne entirely by the shareholders of the licence holder and is reflected in the rate of return. This provides the licence holder with a very clear incentive to effectively manage costs.
- 1.11 In the case of MEL, the allowance represents merely a forecast of future outcomes. Actual allowances that the licence holder will recover from consumers will vary with actual expenditure. The licence holders, in this case PTL, BGTL and WTL, are exposed to none of the potential opex risk. Instead this risk is borne entirely by the NI gas consumer.
- 1.12 However, we continue to determine an efficient level of operating costs as if a 'revenue cap' was in place known as a 'shadow' price control. The licence holders then have a reputational incentive to manage costs effectively in line with the determined 'shadow' allowance.
- 1.13 In addition, management incentives may be set to align with these allowances as a means of effective operating cost control. Performance against the 'shadow' allowances also provides the Utility Regulator (UR) with a metric to judge whether existing licence conditions continue to facilitate our statutory duties.

Regulatory Changes since GT17

1.14 A significant development in the regulatory regime has been the establishment of a single system operator for Northern Ireland on 1 October 2017, known as the Gas Market Operator for Northern Ireland (GMO NI). GMO NI has enabled a single point of contact for shippers and brought efficiencies.

- 1.15 GMO NI was established through a contractual joint venture (CJV) between the licence holders and is not a separate legal entity. The funding for the activities of GMO NI must be provided by the licence holders which are party to the CJV. Therefore, the TSO forecasts include the costs of GMO NI.
- 1.16 The Regulatory Instructions and Guidance (RIGs) process became established during GT17, following licence modifications to formalise the approach and establish the licensees' obligations to maintain adequate systems for reporting of information specified within the RIGs. The business plan reporting templates are consistent with the RIGs format.
- 1.17 The RIGs have provided valuable information on the progress of forecast outputs during the price control period, increasing transparency and allowing for earlier discussions around variances.

Capital Expenditure

- 1.18 This price control review does not set allowances for capital expenditure (capex) to add to the capacity of the existing pipeline network. Two of the licence holders (PTL and BGTL) purchased existing assets, the Scotland Northern Ireland Pipeline and Belfast Gas Transmission Pipeline respectively. They are therefore not required to fund capital formation.
- 1.19 In the case of the other two licence holders: GNI (UK) which built both the North West and South North Pipelines along with their associated spurs, and WTL which operates the Gas to the West network, capital allowances are set in accordance with a completely separate methodology outside the price control process.
- 1.20 However, maintenance / replacement expenditure (repex) to replace or upgrade existing equipment is considered. It will be treated in the same way as controllable opex.

Rate of Return

- 1.21 As with opex and repex, the rate of return / cost of capital has a different treatment depending on the particular licence holder. For GNI (UK), we are required to review the rate of return at each review.
- 1.22 For the MEL licence holders (PTL, BGTL and WTL), the rate of return on capital is excluded from the price control process. These licence holders are entirely funded by debt finance in the form of a long term bond. The repayments on this bond, including principal and interest, will be made in accordance with a predetermined schedule that has previously been agreed by UR. There is therefore no provision in any of these licences to review the rate of return.

1.23 Table 2 summarises the section above and sets out, for each licence holder, the cost categories that will and will not be determined at this price control review as set out in the individual licences.

Price Control Item	GNI (UK)	Premier Transmission	Belfast Gas Transmission	West Transmission	
Controllable operating expenditure (non GMO NI)	Allowance fixed at review	Allowance forecast at review but actual allowance matches actual costs			
Controllable operating expenditure (GMO NI)	Allowance fixed at review	owanceAllowance forecast at review but actual allowanceat reviewmatches actual costs		ctual allowance	
Uncontrollable operating expenditure	Allowance forecast at price control review but actual allowance matches actual costs				
Weighted average cost of capital	Allowance fixed at review	Not applicable	Not applicable	Not applicable	

Table 2 - Output of Price Control by Licence Holder

- 1.24 This draft determination details the proposals of UR with respect to the GT22 price control period on:
 - a) Price control allowances;
 - b) Incentive mechanisms; and
 - c) Outputs.
- 1.25 It also considers the expected impact of these proposals on consumers.
- 1.26 We note that the proposals detailed in this draft determination are provisional in nature. As such, they are subject to change as a result of responses and further information we receive during the consultation period. We will provide our conclusions on the price control in the final determination to be issued next year.

Our Statutory Duties and Regulatory Principles

- 1.27 Our principal objective in carrying out our gas functions is to promote the development and maintenance of an efficient, economic and co-ordinated gas industry in NI. We do so consistently by having regard to a number of matters, as set out more fully in the Energy (Northern Ireland) Order 2003.
- 1.28 High pressure gas networks are natural monopolies. It does not make economic sense for a number of businesses to build, maintain and operate high pressure gas networks in the same geographic area.
- 1.29 Where a monopoly exists, consumers are not able to change their network

operator in order to receive better prices or service levels. In the absence of such competitive pressures, natural monopolies may act against consumer interests by:

- Remaining or becoming inefficient, passing higher costs on to consumers than would otherwise be necessary; and/or
- Delivering poor levels of service rather than seeking innovative or challenging ways to improve performance while reducing costs.
- 1.30 By subjecting monopoly service providers to external challenge, independent economic regulation helps ensure that they act in the consumer interest.
- 1.31 Economic regulators also impose budgetary constraints on the regulated company or companies (while at the same time making sure that they are adequately financed). These constraints are based on direct challenge of the company's proposals, supported by analysis of cost and service to establish the level of performance.
- 1.32 As GNI (UK), PTL, BGTL and WTL, with their respective pipelines, are the only monopoly providers of high pressure gas networks, a regulatory framework has been put in place to protect the consumers who use their services. In our role as economic regulator, we take action if we consider that any of the companies underperforms or operates less efficiently than its peers. We also set targets for improvement.
- 1.33 An important part of this regulatory framework is price controls. A price control is a method of setting the total allowed revenues a licence holder is allowed to earn (revenue cap), or maximum tariffs a licence holder is allowed to charge (price cap), during a given period (the price control period).
- 1.34 As part of a price control, we establish a clearly defined set of outputs that the licence holders must deliver. We also put in place reporting that allows monitoring of actual versus determined target outputs. When selecting these outputs we aim to strike a balance between outputs that are clearly defined while allowing the licence holders the flexibility they need to deliver them in the most effective way.
- 1.35 In addition to the pre-defined outputs, there are other outcomes a price control will have. These will include for example (but are not necessarily limited to) the impact of the price control on transmission charges and consumer tariffs, on the environment and greenhouse gas emissions and on customer service.
- 1.36 We interpret our duties, in the context of carrying out price controls, as a broad mandate to:

- Secure the most cost efficient outcome for the protection of consumers and the promotion of the gas industry in Northern Ireland;
- Ensure the licence holders can continue to finance the activities which are the subject of obligations placed on them; and
- Have due regard to all relevant factors.
- 1.37 It is our aim to do this by:
 - Providing a strong foundation for the continued and long-term operation of the NI high pressure gas networks, delivering value for money to consumers;
 - Challenging the licence holders to improve their efficiency and performance at an achievable and sustainable rate;
 - Promoting long-term planning by the licensees and securing the continuity of necessary and efficient investment; and;
 - Ensuring that revenues are set at the minimum levels that are consistent with efficient operation.
- 1.38 The price controls for each of the companies considered are complex, and comprise different elements. In this context, we interpret our obligation to further our principal objective and fulfil our duties as a requirement to do so taking all of the elements of each price control together. This means, the overall price control needs to be considered in the round.
- 1.39 Certain aspects of each company's price control may make particular contributions to the fulfilment of certain aspects of our objective and duties, but no part of the control should be considered in isolation. We aim to ensure that the balance which we are required to strike, having regard to all of the different elements of our objective and duties, is struck in setting each price control as a totality.
- 1.40 Our approach to price controls is based on best practice regulation of natural monopolies. Our task essentially consists of creating a framework within which, in return for providing monopoly services to an acceptable quality, the company receives a reasonable assurance of a revenue stream in future years that will cover its costs and ensure fairness for the consumer.
- 1.41 We are a non-ministerial government department, accountable to the NI Assembly.

Market Overview

- 1.42 The NI gas transmission network consists of five pipelines operated by the four licence holders, as follows:
- 1.43 The **Scotland to Northern Ireland (SNIP) pipeline** connects to the GNI (UK) system at Twynholm in Scotland and has a maximum operating pressure of 75 barg. The pipeline is almost 135 km long, runs towards the coast near Stranraer and crosses the Irish Sea to terminate at Ballylumford Power Station, Islandmagee. The SNIP is owned and operated by PTL.
- 1.44 The **Belfast Gas Transmission Pipeline (BGTP)** comprises a further 26 km of pipeline with a maximum operating pressure of 75 barg and runs from Ballylumford via Carrickfergus to Belfast, where it supplies the Greater Belfast demand.
- 1.45 The **North-West Pipeline (NWP)** extends a further 112 km of 450 mm pipeline from Carrickfergus to supply the power station at Coolkeeragh. The NWP is owned and operated by GNI (UK) Ltd.
- 1.46 A 450 mm pipeline connecting the Interconnector System to the NWP was built in 2006. This pipeline, called the **South-North Pipeline (SNP)**, is 156 km long and extends from the IC2 (interconnector 2) landfall at Gormanston, Co. Meath in Ireland to Ballyalbanagh on the NWP, approximately 12 km west off the Carrickfergus AGI (above-ground installation). This pipeline facilitates supplies to towns and industries in the corridor from Newry to Belfast.
- 1.47 The **West Transmission Pipeline (WTP)**, operated by West Transmission Limited, comprises 78km of transmission pipeline commissioned in 2019 to transport gas west of the SNP past Dungannon to Derryhale. It connects into towns through the SGN Natural Gas (SGNNG) distribution network.
- 1.48 The towns and industries along the NI gas transmission network are currently supplied by flow which enters NI through the SNIP. The SNP is available to flow gas into NI from Gormanston to meet increasing demand in Northern Ireland.

Structure of this Document

- 1.49 This document is structured in a number of different chapters, each addressing a different aspect of the price control.
 - Executive Summary provides an overview of the key findings and proposed key decisions of this price control process.

- Chapter 1 Introduction provides an overview of the purpose of this GT22 draft determination, our statutory duties and regulatory principles as well as the NI high pressure gas market.
- Chapter 2 Approach provides an overview of the price control process and key aspects of same.
- Chapter 3 Review of GT17 Period provides a look back over GT17 including the Cost and Performance Report and the decision points from the final determination.
- Chapter 4 Business Plan Assessments provides our high level view of the TSOs' assessments of their own business plans.
- Chapter 5 Operating Expenditure (Opex) summarises our proposed pre-efficiency allowances for GT22.
- Chapter 6 Replacement Expenditure (Repex) summarises our proposed pre-efficiency allowances for GT22.
- Chapter 7- Efficiency Analysis shows our proposed frontier shift efficiency challenge.
- Chapter 8 Incentives and Innovation outlines our view with respect to incentive and adjustment mechanisms specifically with regard to the forthcoming NI Energy Strategy.
- Chapter 9 Financial Aspects discusses different issues relating to the finance implications of the price control, including rate of return, financeability and repayments.
- Chapter 10 Outputs and Allowances summarises the proposed post-efficiency allowances, GT22 outputs, impact on consumer bills and environmental impacts. It also highlights some recommendations for the GT22 period.
- Chapter 11 Next Steps and Further Issues sets out the consultation processes, provides an overview of the proposed next steps and summarises consequential changes as well as further issues we propose to address pursuant to the determination.
- 1.50 These chapters are complemented by Annexes, listed in chapter 12.

2. Approach

Stakeholder Engagement

- 2.1 In December 2020 we published an approach document² setting out how we intended to conduct the price control review, inviting responses from stakeholders on our proposals.
- 2.2 We received four responses from MEL, GNI (UK), GMO NI and the Consumer Council for Northern Ireland (CCNI). While all broadly supported the approach we have set out, each raised specific issues for us to consider, which we commented on in the final approach document³, published in March 2021.

Price Control Process

- 2.3 In addressing the key areas of this price control, we have been mindful of the need to keep the regulatory burden to a minimum while addressing the information asymmetry that exists between us and the companies. We adopted and applied a number of principles to ensure that our approach is proportionate. These principles are:
 - A business plan reporting template along with the accompanying instructions was developed with the assistance of the licence holders.
 - Areas of high expenditure received more scrutiny and analysis than low value items, along with operating expenditure which had varied significantly from GT17.
 - We used benchmarking where appropriate to consider if allowances are efficient and that efficiency targets are reasonable but challenging.
 - Where possible, the allowances are aligned to clearly defined outputs and relevant drivers.
 - This price control has been based on a standard RPI-X framework, to incentivise the licence holders to control their costs through the setting of efficiency targets.
 - Allowances will not be given for profit margins to any affiliated

² <u>https://www.uregni.gov.uk/publications/gt22-approach-consultation-document</u>

³ https://www.uregni.gov.uk/publications/gt22-price-control-approach-document

business to which contracts have been awarded.

- Allowances will not be given for contingency elements within budgets.
- 2.4 We have adopted a light touch approach where:
 - There was evidence to show that the licence holder is comparatively efficient.
 - Past costs were a strong indicator of future costs.
- 2.5 We adopted a more detailed approach where:
 - The licence holder may have been comparatively inefficient.
 - Past costs were not indicative of future costs.
 - Cost lines were increasing and were of a material nature.
- 2.6 The licence holders generally provided the data necessary to support a robust assessment of expenditure and outputs. Where there was insufficient data, we asked for more information through the query process. Where that did not provide all the information we wanted, we have either disallowed the forecast pending further information ahead of the final determination, or designated the forecast item as a *"Relevant Item"* which can be allowed later in the price control period on provision of satisfactory information.
- 2.7 For the first time since it was set up in 2017, GMO NI has submitted a business plan, which aligns with the business plans submitted by the TSOs. As GMO NI is not a legal entity, it is unable to enter into a contract with the supplier of any of the resources necessary to deliver single system operation. The contracts are held by the relevant TSO and the allocation of cost to GMO NI has been identified in each of the business plans.
- 2.8 In the approach document we outlined the steps in the price control process as they relate to the activities of GMO NI, repeated here in Figure 4.

Price Control Process

Step 1 – UR will issue a business plan cost template. This will cover all Transmission System Operation (TSO) activities with a separate return for GMO NI costs.

Step 2 – TSOs will discuss what GMO NI activities are required and the estimated cost of each e.g. rent, staff, IT cost, General Manager cost etc.

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Step 3 – TSOs to decide the split of activities and cost between themselves.

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Step 4 – Companies will submit a joint GMO NI cost submission in early July 2021. This will include a five year forecast of total GMO NI costs split by TSO.

Step 5 – UR will consider the joint cost submission and the efficiency factor (if any) to be applied to GMO NI. This may differ from efficiency targets for the rest of the business.

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Step 6 – UR will decide the global allowance for the term of the price control. Revenue for GMO NI will be allocated to licensees based on the determined method.

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Step 7 – The General Manager and TSO governing committee will manage the annual GMO NI budget

Step 8 – The TSOs will be required to submit a report of actual expenditure incurred during the previous gas year in annual Regulatory Instructions and Guidance returns.

Figure 4 - GMO NI Price Control Process

- 2.9 Only the direct costs of delivering the activity of system operation, such as staff and IT systems, will be treated this way. General overheads and allocated cost, such as corporate functions, will be included within the licence holder's non-system operation cost category.
- 2.10 This approach has been adopted in order to facilitate the creation of a clear and transparent distinction between GMO NI system operation and other cost categories. This mitigates the risk of cost shifting within and between licence holders.

Introduction of Business Plan Assessments

- 2.11 One of our aims for GT22 is that the TSOs should produce high quality, well evidenced business plans which can be accepted following limited scrutiny.
- 2.12 Following on from our recent price control for SONI and the GD23 price control process for Gas Distribution Network (GDN's) companies, we introduced a business plan assessment process in GT22 which is structured around three key themes, set out below:
 - Service contribution to good outcomes;
 - Services and costs; and
 - Trust in delivery.

- 2.13 As part of their business plan submissions, the TSOs completed a selfassessment of their submission, which included a statement setting out how they approached the preparation of an exceptional business plan in line with the three key theme areas, backed up by reference to the section of the business plan which provides the supporting evidence.
- 2.14 We indicated that we would not publish our detailed assessment but would engage with each individual company on the areas where improvement could be made for future submissions. A high-level view of our findings is in section 4.
- 2.15 This has been a valuable addition to the price control process, one that has reduced the level of regulatory intervention required by UR, therefore reducing the regulatory cost of this process.

Environmental Impact, Decarbonisation and Energy Efficiency

- 2.16 GT22 is being developed in parallel with the preparation of a new Energy Strategy for Northern Ireland. This new strategy will enable new and challenging decarbonisation targets, which move towards a net zero target by 2050.
- 2.17 We recognise that gas continues to provide a lower carbon alternative to oil and the continued conversion of households and businesses from oil to gas will reduce carbon emissions. Further, work is underway to facilitate the injection of biomethane into the NI gas network to contribute to decarbonisation. In the longer term, hydrogen may also be suitable for injection into the gas network.
- 2.18 The outcome of the Energy Strategy remains uncertain as it had not been published as we were considering the submissions. For this reason we considered GT22 within our current vires and practice and have indicated that we will need to consider the implications of the Energy Strategy as this becomes clear.
- 2.19 We recognise that the TSOs wish to have greater certainty on how the Energy Strategy may affect their operations, and, in particular, the availability of financing to implement changes to their network that may be necessary as a result.
- 2.20 We consider that it is appropriate to liaise with the TSOs as we progress towards the final determination. The TSOs have provided some preliminary thoughts and these are discussed from paragraph 8.7.

Duration of the Price Control

- 2.21 The necessary licence modifications were made at the outset of GT17 to align review dates of Mutual Energy Limited licence holders with the schedule applicable to GNI (UK).
- 2.22 GT22 will apply from 1 October 2022 until 30 September 2027.

Timeline and Stages

- 2.23 This draft determination is the culmination of UR's considerations around the business plan submissions from the TSOs. Following a consultation period and time to consider responses, we intend to publish our final determination in April/ May 2022. The TSOs' cost allowances would form the basis of their submission for the setting of the transmission tariffs to apply from 1 October 2022.
- 2.24 All financial figures throughout this document are expressed in March 2021 prices unless otherwise stated.

3. Review of GT17 Period

Cost and Performance Review of GT17

- 3.1 We reported on progress of the first three years of GT17 in the Cost and Performance Report⁴ in August 2021. We concluded that, in overall terms, the first three years of GT17 can be considered successful. GMO NI has been implemented effectively and has delivered cost savings as well as practical benefits to shippers by way of:
 - One point of contact for all queries/issues.
 - Single transmission code and invoicing system.
 - 24-hour telephone service and website.
- 3.2 The key indicators of GMO NI performance demonstrates good levels of compliance and shipper surveys suggest overall satisfaction with market operation.
- 3.3 For the TSOs, both MEL and GNI (UK) have been effective in delivering below budget and collaborating for the benefit of the industry as a whole. RIGs reporting has been useful in providing clarity on costs and outputs.
- 3.4 MEL has made good progress against its scheduled repex projects as well as undertaking some unscheduled work. GNI (UK) has experienced some problems in terms of asset replacements schemes, but Covid-19 has had an impact on delivery.
- 3.5 The TSOs have undertaken the GT17 requirement to consider the feasibility of a single control room. However, the conclusion is that it is not practical at this time given legal and procurement concerns. This is disappointing, especially given the success of the GMO NI. Otherwise, performance in the first three years of GT17 can be considered good.

Establishment of GMO NI

3.6 GMO NI has delivered a number of benefits for users of the NI gas transmission network. It has streamlined a number of transportation activities, including operating a single Network Code, a single point of contact for shippers, a single IT system interface and a single set of invoicing and credit arrangements. Through its fora, it has forged stronger

⁴ <u>https://www.uregni.gov.uk/publications/gas-transmission-cost-and-performance-report</u>

engagements which has resulted in a greater understanding by all parties of the moving parts of the transmission charging regime.

- 3.7 These improvements have delivered cost efficiency savings, both in the costs of operating the network, as seen through the price control, but also in reducing network code charges to shippers, through increased focus on good nomination behaviour.
- 3.8 GMO NI operates to a set of KPIs to measure their performance in the following areas of:
 - a) Accuracy and timeliness of invoices;
 - b) Debtors adherence to payment terms;
 - c) Metrics on response to shipper queries;
 - d) Shipper satisfaction levels; and
 - e) Budgeting and cost control targets.
- 3.9 GMO NI reports average KPI scoring in the first three years of GT17 at 96%, along with implementing improvements which were suggested in the shipper satisfaction surveys. In its business plan submission, it outlined that it will continue to use KPIs, satisfaction surveys and engagement channels to continuously review and improve NI gas market arrangements in order to deliver more streamlined and efficient resourcing.

Regulatory Instructions and Guidance (RIGs)

- 3.10 In GT17, we stated that we intended to establish a reporting mechanism for the TSOs, which would have three elements:
 - a) TSO cost reporting Financial data to be provided in line with the business plan template. Commentary should be included focusing on areas of spend where costs have risen/fallen or are substantially different from the price control allowance.
 - b) TSO output monitoring This table focuses on the delivery of major repex and maintenance projects (such as sub-sea surveys). It will also record spend associated with such schemes.
 - c) GMO NI Monitoring A report from the GMO NI on its performance, governance, costs, KPIs etc.
- 3.11 This mechanism was implemented following licence modifications which established obligations on the TSOs to report annually on their costs and

outputs⁵, known as Regulatory Instructions and Guidance (RIGs). These are intended to allow UR to monitor performance and, over time, provide a database of performance to inform subsequent price controls.

- 3.12 The TSOs are required to complete a data reporting template, in MS Excel format, which is consistent with the format of price control submissions. The relevant reporting year is the gas year, 1 October to 30 September, with the submission required four months after the end of the reporting year, which is 31 January.
- 3.13 Following analysis and discussion with the TSOs, a summary of the annual returns are published on the UR website⁶.
- 3.14 This process is now well established with the TSOs participating fully and this will continue throughout GT22. The information provided has deepened our understanding of the cost drivers and unit costs of repex projects particularly. Having access to this historic information has improved the robustness of the price control.

Progress on Decision Points in GT17

- 3.15 In GT17, we made further decision points and recommendations, which have since progressed.
- 3.16 We said that *"setting allowances after the Revenue Recovery Period is a significant matter"*, referring to the end of the capital recovery period for GNI UK. The current licence does not make provision for this and the NWP recovery ends 30 September 2029. We still consider this is a significant matter and we intend to consider this further in the GT22 period.
- 3.17 There were a number of items which were designated as *Relevant Items* in GT17 because there was insufficient clarity or justification of the forecast for us to allow them in the final determination. It has transpired that this was a positive move, as the projects generally have not progressed during GT17, but the costs could have been added had they been required.
- 3.18 **Defined outputs** were produced as part of the GT17 allowance and we said they would be monitored. We said that any outputs deferred would impact on further allowances in the next period. The information received through the annual RIGs process has allowed us to carry out this monitoring and we have taken account of actual and deferred outputs in our considerations of proposed allowances.

⁵ Licence condition 1.21 in the gas conveyance licences

⁶ <u>https://www.uregni.gov.uk/tso-gmo-annual-returns</u>

- 3.19 In GT17, we said that we intended to carry out a *Governance Review* of MEL and the GT22 forecasts continue to forecast high salary costs, relative to GNI (UK)⁷. We undertook this review and then engaged with MEL at Board level and with MEL members to deliver more effective governance. Further engagement with MEL members will continue to seek continuous improvement of MEL governance in the future,
- 3.20 We said in GT17 that we consider the value of the **Social Enhancement Fund** (SEF) is unclear and that it should be reviewed as part of the governance review. We also said that no further monies should be allocated to the fund. We subsequently allowed some outperformance to be put into it, as part of the 2020-21 reconciliation, to form a Covid-19 buffer. There are a number of options that could be considered for the SEF, from building on its use as a buffer to absorb large year-end reconciliations, to being used as a fund for Energy Strategy projects. We consider it is appropriate to discuss this once there is more clarity on future Energy Strategy projects.
- 3.21 We said that we expect the TSOs to improve their **Asset Management Information** and we have been encouraged that both MEL and GNI (UK) are developing an ISO55000 accredited asset management system. We expect to see the value of this work by the start of the GT27 price control review, at this point the companies should provide better data to underpin both their projected repex and maintenance expenditure.

⁷ See chapter 5 for more detail.

4. Business Plan Assessments

- 4.1 In our approach document for GT22, we stated that one of our aims is that the TSOs should produce high quality, well evidenced business plans which can be accepted following limited scrutiny. We therefore introduced a business plan assessment into GT22, structured around three themes:
 - Service contribution to good outcomes;
 - Services and costs; and
 - Trust in delivery.
- 4.2 We provided the TSOs with detailed guidance on our expectations, including guidance on the potential features of an exceptional plan.
- 4.3 We asked the TSOs to complete a self-assessment of their business plan submissions, which should include:
 - a) A statement setting out how the TSOs have approached delivering an exceptional business plan in line with the three key themes.
 - b) A reference to the key documentation in the business plan which provides the supporting evidence to these statements.
- 4.4 We said we would assess how each performed against each theme and provide feedback to the company of our assessment of its business plan. As we stated, we will not publish this detailed assessment but we have engaged with each company on the areas where improvements can be made in the future.
- 4.5 We indicated that the TSOs' business role, services and activities should be well aligned with the interests of customers, consumers, other stakeholders and the wider energy system, so this assessment was intended to:
 - a) Allow TSOs to take ownership of their plans.
 - b) Clarify that lesser regulatory intervention can be expected if the TSO's business plan is of higher quality.
 - c) Gives TSOs greater opportunity to shape their role over the price control period, the activities and level of service that are funded through the price control, and aspects of the regulatory framework.
 - d) Clarify that there will be a higher level of trust in the TSOs if its business plan is of higher quality.

- 4.6 We indicated that we would provide a high level view of our findings within the draft determination.
- 4.7 The themes provided a strong basis for us to provide clear regulatory expectations and policy priorities. They helped us to work out how and where to dedicate assessment time to the business plan submissions. This has been important given the time constraints involved in the price control process. This has allowed us to reduce the extent of regulatory intervention and therefore reduce the regulatory cost of carrying out this price control.
- 4.8 We have assessed the TSOs' business plans, based on the categorisation below for each of the theme areas.

Theme 1- Service contribution to good outcomes.

• Area 1: Delivering value for money for consumers.

Theme 2- Services and costs

- Area 2: Delivering services and outcomes.
- Area 3: Aligning risk and return.

Theme 3- Trust in delivery

- Area 4: Engaging customers, consumers and other stakeholders.
- Area 5: Ensuring resilience.
- Area 6: Accounting for past delivery.
- 4.9 We set out our categorisation expectations in the following table.

Category	Features			
A: Exceptional	 Exceptional and stretching business plan. Excellent responses across most test areas. Limited regulatory intervention to translate to price control package. Relatively high degree of trust in company. 			
B: Good	 Good plan but falling short of being an exceptional and stretching plan. Excellent responses in some test areas. Some regulatory intervention and therefore less trust than category A. 			
C: Meeting Basic Expectations	 Plan does not evidence how best to serve customers and stakeholders. Significant concerns and lack of excellent responses across all test areas. Extensive regulatory intervention and therefore less trust than category B. 			
D: Poor	 Self-serving business plan with poor responses in multiple test areas. Extensive regulatory intervention to translate to price control package. Severe concerns about company's ability to deliver outcomes for stakeholders and consumers. Requirement for detailed monitoring of company during the price control period. 			

Table 3 - Business Plan Assessment Categories
TSO Self- Assessment

- 4.10 This section discusses our assessment of the TSO self-assessments. We highlight areas which demonstrate good practice and areas where we feel there is scope for improvement.
- 4.11 The TSOs embraced this approach and their business plans generally reflected the themes. Following the themes has provided us with useful information that has supported our assessment of the business plans. We have taken this into account in our recommendations.
- 4.12 We said in our approach document that we did not intend to publish our detailed assessment but rather to engage with each company on areas where improvements can be made. We have therefore provided a brief, high-level view of our findings.

Assessment of GNI (UK) Business Plan

- 4.13 GNI UK has structured its submission to align to our three themes and that runs throughout the submission and shows significant improvement since the GT17 submission. The submission sets out five strategic objectives:
 - a) Continue to provide safe and reliable gas transportation services;
 - b) Safeguard the security of supply of the gas network;
 - c) Drive efficiencies within GNI (UK);
 - d) Continue to embrace stakeholder insight; and
 - e) Support any emerging NI Energy Strategy initiatives.
- 4.14 We note that these are more like aims than objectives, as they do not all have measurable outputs with timelines. The forecast outputs for objectives 1 and 2 are linked to the asset replacement and asset management plans. The attainment of objective 3 is expected to be met by the frontier shift.
- 4.15 For objectives 4 and 5, although the outcomes are not as easily quantified the submission would have been improved with some measurable, time-bound outputs provided. We considered the stakeholder engagement section good but could also have been improved with some measurable outputs.
- 4.16 The executive summary clearly outlines how GNI (UK) will deliver on those objectives with cross references to the more detailed sections. It is aligned to the UR themes of *Service Contribution to Good Outcomes*, *Services and Costs* and *Trust in Delivery*. In some areas, there is good information on delivery of outputs, for example, the forecast outputs from the asset

replacement plans. However, other sections would have been improved with some outputs to back up the statements being made. For example, the statement of *"world-class levels of safety and service reliability"* in the GNI (UK) business plan would have been improved with some evidence or data to support it.

- 4.17 The business plan submission would have been improved with greater explanation and justification for the key cost items, particularly where cost are increasing, such as insurance and MERC contractor. It would also have benefited from breakdown of the costs, the derivation of assumptions and the options considered for the repex projects, as well as justifications such as cost benefit analyses or risk assessments.
- 4.18 The WACC proposal was clearly and comprehensively explained, particularly in the accompanying annex.
- 4.19 Overall, this is a **GOOD** business plan with excellent responses in some test areas but required some regulatory intervention and therefore falls short of being an exceptional plan.

Assessment of MEL Business Plan

- 4.20 The plan was structured to cover the six areas within UR's three themes. Its approach sets out MEL's GT22 forecast and considers how it will deliver value for money, rather than putting value for money upfront followed by the steps taken to ensure it is delivered.
- 4.21 The plan would have provided greater confidence had the measurable outputs and timescales from the MEL group's revised strategy been provided. We would have expected to see how MEL will measure its own success as well as an indication of how its strategic objectives were drivers for the cost forecast. Nevertheless, the plan provided cost saving examples to demonstrate that cost savings have been sought.
- 4.22 The stakeholder engagement section is weak and does not give confidence that MEL is proactively engaging with its stakeholders in order to shape the direction of the business plan. It outlines specific GT22 engagement which, although positive, we would have expected to be an ongoing process. MEL demonstrated some strong engagement activities at our query meeting, for example with the Department of Finance on cyber security and HSENI on safety matters, which would have strengthened the business plan submission if referenced.
- 4.23 The business plan omitted to explain how repex projects are prioritised and how asset management systems work together. Although there are improvement from past submissions in the form of useful cost breakdowns

the basis of many cost assumptions are missing and it is not clear if other options have been considered. There is scant explanation of material cost increases. An example of this is the submission on pipeline inspection, MEL gives a number of reasons but does not quantify each item or really explain what is changing except for referencing the new compliance requirements. It would have been beneficial to provide examples to back up statements where costs are increasing. Further, we would have welcome greater provision of well-defined outputs from the planned investments.

- 4.24 We considered the submission on GT17 performance explaining how cost differed from forecast as good.
- 4.25 Overall, this is a GOOD business plan with excellent responses in some test areas but required some regulatory intervention and therefore falls short of being an exceptional plan.

Assessment of GMO NI Business Plan

- 4.26 As GMO NI's first price control business plan, this is a good document. There is a clear focus on high quality service provision with clear information on what has been achieved to date and the priorities for GT22 period.
- 4.27 The stakeholder engagement section is good, setting out the clear purpose of the various engagement activities, both structured and unstructured. It could have been improved with more information on the frequency of engagement activities and the outcomes achieved.
- 4.28 By actively seeking the views of shippers, and by actively measuring its own KPI attainment, GMO NI can be confident that its services are meeting the needs of users. This builds UR's confidence in this business plan.
- 4.29 The priorities for GT22 are well defined and lead into the cost forecasts. This would have been improved with increased explanation and justification where costs are increasing materially. We would have welcomed the rationale for time or resource estimates, the influence of historic costs or vendor quotes, where available.
- 4.30 We welcome the information around the *"impact assessment framework"* to identify matters to be addressed through the improvement register process. This section would have been improved with some examples of risks which have been successfully mitigated, to demonstrate the impact of this framework, the cost of non-action and what alternative options were considered.

4.31 The business plan does not refer to the three UR themes and six areas that we had asked for in the guidance document, however they are all covered within the plan. Its top priority is to become more streamlined and minimise external support, demonstrating their focus on doing more, better.

UR Overall Assessment of Business Plans

- 4.32 UR's has assessed the business plans as follows:
 - a) GNI (UK) B: Good
 - b) MEL B: Good
 - c) GMO NI B: Good
- 4.33 Each plan had areas that could be improved and required regulatory intervention in the form of a significant number of queries, before we could be sufficiently confident of the forecasts. They all fell short of being an exceptional and stretching plan. However, they were generally GOOD with some exceptional areas.
- 4.34 We would like to see a more strategic approach to stakeholder engagement across the companies. We outline what we would expect to happen in paragraph 10.36 and we also outline how we will track progress on this through the RIGs.
- 4.35 Overall, these business plan submissions showed significant improvements since GT17 and we commend the TSOs on their progress.
- 4.36 These high quality business plans reduced the level of regulatory intervention required by UR, compared to GT17, which reduced the staff time required, therefore delivering savings.

5. Operating Expenditure (Opex)

Detailed Approach – UR Proposals

- 5.1 When assessing the appropriateness of the opex requests, our starting point is that costs should be in line with past allowances / actual costs observed in the previous price control period. This is particularly true if there has been no material change in the level and type of activities that are required to operate the network.
- 5.2 Opex for GNI (UK) and MEL is grouped into three main areas: Controllable non-GMO NI, GMO NI and uncontrollable. Replacement expenditure (repex) is covered separately in the following chapter.
- 5.3 Uncontrollable expenditure is that which is fully outside the control of the licence holder. In GT17, we indicated that we would consider categorising business rates as controllable in GT22, in recognition that the TSOs have some element of control.. We have decided not to make this change for GT22 but will consider again for GT27.
- 5.4 With regards to the GMO NI costs, we have made our proposed determination on the basis of the jointly agreed business plan. Each licence holder will be allocated a price control allowance in accordance with the pattern of resource contracts set out in the business plan.
- 5.5 Each licence holder would be exposed to the same cost risk mechanism that applies to other categories of controllable operating cost. For GNI (UK) this would be a 'revenue cap' mechanism while for the other three licence holders an 'operating cost pass-through' mechanism would apply.
- 5.6 In determining allowances for GMO NI we have been guided by the principle that we are determining allowances for a single entity and not four separate licence holders.
- 5.7 All costs shown in this section are pre-efficiency and are in £ millions unless otherwise stated.

Bottom-up Assessment

5.8 As indicated in the approach document, we used a bottom-up approach to assess the business plans, due to the lack of effective comparators for a top-down approach. Where comparative data was available, it was used as additional evidence.

- 5.9 For GT22 we used a common cost reporting template for the TSOs. This provided comparability, certainty and an understanding of cost movements over time. This is the same format that we used at GT17 and the same format that we use for the RIGs.
- 5.10 We used specialist consultants to assist our evaluation of the opex submissions.
- 5.11 We reviewed both the narrative plans and underlying costs/forecast costs submitted by the companies and identify issues to discuss with them. We generated questions to be discussed at workshops with the companies followed up by further queries.
- 5.12 We took a proportionate approach, consistent with our approach document. We focused on anomalies in the forecast and on the largest areas of cost in each main cost category.

Overview of Business Plan Submissions

5.13 Viewed as a total forecast, the GT22 business plan forecasts were relatively stable from GT17, as illustrated in the graph below.



Figure 5 - GT22 forecasts for GNI (UK) and MEL (includes GMO NI)

5.14 MEL is forecasting lower uncontrollable costs due to a decrease in Scottish costs as a result of the Transportation Agreement renegotiations. However, even when excluding repex, there is a material upward trend in the controllable opex lines, as illustrated below:



Figure 6 – GNI (UK) and MEL Controllable Opex (including GMO NI)

5.15 This is partly due to the growth of the MEL network during GT17 with the addition of the 76 km WTP which increased its network by 44% and doubled the number of AGIs. However, there is also increasing maintenance activity required as the pipeline get older.

Overview

5.16 The tables below present a summary of the our proposals for each of GNI (UK), MEL and GMO NI respectively. The figures for MEL and GNI (UK) exclude the market operator costs. Our proposals are further discussed in the following paragraphs.

GNI (UK) - Cost area	Submission (£m)	Recommendation (£m)	Rationale for disallowance
Administration costs			
Pipeline insurance	0.74	0.74	
Support staff	2.40	2.40	
Intra-company recharges	1.55	1.24 (80%)	Lack of evidence provided to justify the increase in costs.
Other overheads	0.37	0.37	
Asset replacement	••••		
Repex	6.37	4.00 (63%)	Proposed repex spend is only partly justified and we have concerns about the planning and timing of works.
Planned maintenance			
Asset management	0.82	0.82	
Emergency response	1.01	1.01	
Pipeline inspection	2.14	2.14	
Routine maintenance	12.35	11.62 (94%)	Concerns about the level of predicted cost escalation in the MERC contract which underpins maintenance activities.
Engineering staff	2.54	2.25 (89%)	Inadequate explaination of likely overspend in GT17 and further proposed cost increases for GT22 are not well justified.
Unplanned maintenance			
Drainage	1.09	1.09	
Fault repairs	1.58	1.17(74%)	Lack of evidence provided to justify the increase in costs.
Other	0.36	0.0	Lack of evidence provided and verification digs should be planned maintenance.
System Operation (TSO)			
Grid control	1.88	1.88	
SCADA & Comms	0.98	0.30 (30%)	Lack of evidence provided to justify the short term large increase in cost and unclear how the proposed long term replacement system delivers benefit that is commensurate with the cost uplift.
Uncontrollable opex			
Business rates	3.00	3.00	
Licence fees	5.11	5.11	
Haynestown revenue	0.00	-4.50	The revenue stream from Haynestown is omitted.
Total	44.29	38.13 (88%)	Note the Haynestown revenue is omitted for percentage calculation

Table 4 – Proposals Summary for GNI (UK)

MEL - Cost area	Submission (£m)	Recommendation (£m)	Rationale for disallowance
Administration costs			
Pipeline insurance	4.01	4.01	
Support staff	1.25	1.25	
Intra-company recharges	2.30	2.30	
Other overheads	0.15	0.15	
Mutualisation costs	2.67	2.48 (93%)	Lower allowances set for Chair and NED fees, based on benchmark.
Asset replacement			
Repex	9.17	4.88 (53%)	Concerns about planning and timing of proposed works in GT22 based on the substantial changes to programme in GT17
Planned maintenance			
Asset management	1.61	1.61	
Emergency response	2.18	2.18	
Pipeline inspection	4.61	4.61	
Routine maintenance	9.72	9.85 (101%)	Concerns about the level of cost escalation in the MERC contract is adjusted through frontier shift. £125k of civils work moved to AGI maintenance from repex
Engineering staff	6.14	3.75 (61%)	No supporting narrative to explain increases in GT22 business plan.
Unplanned maintenance			
Drainage	2.09	1.46 (70%)	Lack of evidence provided to justify the increase in costs.
Other	0.63	0.63	
System Operation (TSO)			
Contract and licences	0.86	0.86	
Grid control	4.21	4.21	
SCADA & Comms	0.59	0.59	
Uncontrollable opex			
Business rates	11.12	11.12	
Licence fees	6.00	6.00	
Fuel/Shrinkage	5.52	5.52	
Scottish costs	14.71	14.71	
Stranraer income	-3.52	-3.52	
Total	86.02	78.65 (91%)	

Table 5 – Proposals Summary for MEL

GMO NI- Cost area	Submission (£m)	Recommendation (£m)	Rationale for disallowance
GNI (UK)			
Contracts and Licences	4.50	2.66 (59%)	Lack of evidence provided to justify the increase in costs and concerns regarding value for money of proposed approach.
MEL			
GMO Administration	0.65	0.65	
Contracts and Licences	0.57	0.57	
Network Code Development	0.50	0.50	
European Compliance	0.20	0.20	
GMO NI staff			
Staff costs	2.64	2.64	
Total	9.06	7.22 (80%)	

Table 6 – Proposals Summary for GMO NI

Summary of UR Proposals

- 5.17 Following our review we consider that in large part, the business plans present adequate justification for the proposed controllable costs.
- 5.18 We propose adjustment to the companies' staff costs (including board costs and engineering staff) and/or numbers. This is more material in respect of MEL's plan than for GNI (UK).
- 5.19 We have reduced the *Other Mutualisation* costs in the MEL forecasts by 20% to reflect external benchmarking indicating that lower costs for Chairperson and Non-Executive Directors is appropriate. This figure has been determined using data from similar organisations and MEL's own analysis.
- 5.20 We have proposed significant cuts to the engineering staff costs for both MEL and GNI (UK). With regard to the proposed disallowance of MEL's new energy transition staff, we are willing to include these if adequate justification and forecast outputs are provided.
- 5.21 For GNI (UK)'s costs, we are concerned about cost escalation for SCADA and comms following the withdrawal of the Kilostream system and whether the costs of its replacement offer value for money. Similarly for the GMO (NI) there are concerns about the business case and value for money of planned projects on the Delphi IT system. In both cases we propose an adjustment to the allowances requested in the business plans.

- 5.22 We propose to curtail the forecast cost increase for the MERC renewal in 2024-25, from 10% real price increases to 5%. For GNI (UK), we reduced the *AGI Maintenance* line in *Planned Maintenance* by 10% in years four and five and did not adjust the other cost lines which are delivered through the MERC and are affected by the forecast increase to achieve this outcome..
- 5.23 We have taken a different approach for MEL as we consider the reduction to its forecast will happen through our proposed frontier shift. MEL's real price effects (RPE) forecast⁸ was higher than RPI and we propose not to accept this in favour of an RPI–X approach. We are comfortable that the proposed post-efficiency allowances for MEL already dampen future costs and no further disallowance is proposed.
- 5.24 One of MEL's repex projects, entitled *Civil Works*, will have no allowance in the repex budget, but we consider that the costs may be required as maintenance activities, so £25k per year has been added to the maintenance budget.
- 5.25 We consider it reasonable to see the value of the work that both companies are undertaking in respect of their asset management systems by the start of the GT27 price control review. At that point the companies should provide better data to underpin both their projected repex and maintenance expenditure.
- 5.26 GNI (UK) did not provide a forecast income for the reserved capacity at Haynestown, so we have included a forecast of £0.9m per year under uncontrollable opex. This income has been excluded from the total cost assessment to allow a clearer comparison.
- 5.27 UR proposed allowances, compared to the company submissions are summarised in the following tables. These tables include the TSO forecasts for GMO NI costs and are shown pre efficiency adjustments.

	MEL Request (£m)	UR Allowance (£m)	% Allowance
Controllable Costs	56.19	48.81	86.9%
Uncontrollable Costs	33.83	33.83	100.0%
Grand Total	90.02	82.64	91.8%

Table 7 - MEL total cost (incl. repex) - submission and DD allowance

⁸ See chapter 7 on frontier shift.

	MEL Request (£m)	UR Allowance (£m)	% Allowance	
Administration	10.38	10.19	98.1%	
Asset Replacement	9.17	4.88	53.2%	
Planned Maintenance	24.26	21.99	90.6%	
Unplanned Maintenance	2.72	2.10	77.0%	
System Operation (TSO)	5.67	5.67	100.0%	
System Operation (GMO)	3.99	3.99	100.0%	
Grand Total	56.19	48.81	86.9%	

Table 8 - MEL controllable cost - submission and DD allowance

	GNI (UK) Request (£m)	UR Allowance (£m)	% Allowance
Controllable Costs	41.25	34.25	83.0%
Uncontrollable Costs9	8.11	8.11	100.0%
Grand Total	49.36	42.36	85.8%

Table 9 - GNI (UK) total cost (incl. repex) - submission and DD allowance

	GNI (UK) Request (£m)	UR Allowance (£m)	% Allowance
Administration	5.06	4.75	93.9%
Asset Replacement	6.37	4.00	62.8%
Planned Maintenance	18.86	17.84	94.6%
Unplanned Maintenance	3.03	2.26	74.5%
System Operation (TSO)	2.86	2.18	76.1%
System Operation (GMO)	5.07	3.23	63.7%
Grand Total	41.25	34.25	83.0%

Table 10 - GNI (UK) controllable costs - submission and DD allowance

⁹ UR uncontrollable allowances in this table exclude the Haynestown income adjustment for purpose of reasonable comparison.

	GMO NI Request (£m)	UR Allowance (£m)	% Allowance
GMO Staff Costs	2.64	2.64	100.0%
GMO Administration	0.65	0.65	100.0%
Contracts and Licences	5.07	3.23	63.7%
Network Code Development	0.50	0.50	100.0%
UK Compliance & Engagement	0.20	0.20	100.0%
Total GMO Costs	9.06	7.22	79.7%

Table 11 - GMO NI - submission and DD allowance

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5.28 Overall, we are proposing to allow 92% against MEL's submitted amount (pre efficiency), 86%¹⁰ of GNI (UK)'s submitted amount and 80% of GMO NI's request.

¹⁰ This percentage of GNI (UK) forecast to be allowed excludes the addition of the Haynestown revenue adjustment.

6. Replacement Expenditure (Repex)

Detailed Approach – UR Proposals

- 6.1 Capital expenditure allowances are outside the scope of this price control review process. Although the TSOs carry out work which might be described as capital expenditure in terms of accounting rules, we consider it as being maintenance or replacement expenditure (repex). It does not add to the capacity of the existing pipeline network but rather replaces or upgrades existing equipment. We treat such expenditure in the same way as controllable operating expenditure.
- 6.2 As part of their business plans, the TSOs submitted repex projects for which they sought an allowance. We considered whether each project was justified to be carried out during the price control period and what the appropriate allowance would be.
- 6.3 These projects tend meet a specific need rather than being periodic or ongoing, so they must be individually assessed. We considered the need for the project as well as the forecast cost. We benchmarked with similar work carried out in other transmission networks and we also considered the TSOs' performance over GT17.
- 6.4 We have concerns about the way that both companies are planning and delivering repex. We propose a mix of disallowance and use of the 'relevant item' approach that we introduced in GT17. The relevant item approach is considered where a project has a clearly justified need but the cost or the required timing were not clear and may only become clear during the GT22 period.
- 6.5 A project which is designated as a "relevant item" will have no allowance made at this stage, but costs can be requested during the GT22 period when the scale and timing of spend is better understood.
- 6.6 We have therefore categorised the repex projects as follows:
 - **Category 1** The need, cost and timing are well supported and justified. These projects attract full or majority allowance.
 - **Category 2** While the need is established, either the cost or the timing are not supported. These projects can be subject to partial allowance if UR has a clear view on the reasonable level of spend.
 - **Category 3** The need is established, but the cost or the timing is very uncertain. These projects can be considered as a relevant item, where no ex-ante allowance is given but costs can be requested

during the GT22 period when the scale of spend is better understood.

- **Category 4** The need, cost and timing were unjustified and the projects are subject to full disallowance.
- 6.7 Our full considerations on the repex projects is provided in *Annex 1 Replacement Expenditure*, summarised in the sections below.

MEL – UR Proposals

- 6.8 The PTL and BGTL pipeline networks are around 25 years old so a significant portion of MEL's GT22 repex projects are to mitigate failure of ageing assets.
- 6.9 We consider that the high level of change in the GT17 repex programme raises questions around MEL's business planning processes and ability to forecast expenditure with a reasonable degree of accuracy. MEL has acknowledged this in its business plan submission, when it said:

"The timing of the projects start and end times are hard to predict and inevitably some may well end up being brought forward or delayed within the period. The experience gained over the last number of years has been applied into the assessment, both in terms of costs and timings, and we believe the GT22 period timings are robust."

6.10 The table below sets out, for each of the repex projects, the request included in the business plan and our draft determination for MEL.

Project Name	MEL Request	UR Allowance	DD Proposal
SCADA Refresh	£2.31m	£1.73m	Category 2 - Holding allowance
PLC Panel Replacement	£0.69m	£0.46m	Cat. 2 - £110k per PLC
Transformer Rectifier Replacement	£0.30m	£0.21m	Cat. 2 - £26k per TR allowed
Lagging Replacement	£0.03m	£0.00m	Cat. 4 - No allowance
UPS and UPS Battery Replacement	£0.20m	£0.05m	Cat. 2 - £50k provision for UPS
Pipework Coating	£0.70m	£0.12m	Cat. 2/3 – Relevant Item
Site Meters	£1.49m	£0.74m	Cat. 2 - 50% allowance
Larne Boiler House	£0.39m	£0.39m	Cat. 1 - Full allowance
Larne Inlet	£0.30m	£0.30m	Cat. 1 - Full allowance
Electrical System Upgrades	£0.49m	£0.28m	Cat. 2 - Material disallowance
Actuator Replacement	£0.37m	£0.37m	Cat. 1 - Full allowance
Throttle Flow at Block Valves	£0.12m	£0.12m	Cat. 1 - Full allowance

Gas Chromatograph	£0.26m	£0.00m	Cat. 3 - No allowance
ROVs	£0.06m	£0.06m	Cat. 1 - Full allowance
Civil - Kiosks, Roads & Site General	£0.22m	£0.00m	Cat. 3/4 – Moved to maintenance
Metering Consistency	£0.16m	£0.00m	Cat. 4 - No allowance
Security System Upgrades	£0.06m	£0.06m	Cat. 1 - Full allowance
Legacy Projects	£0.01m	£0.00m	Cat. 4 - No allowance
Other items	£1.01m	£0.00m	Cat. 4 - No allowance
Total Cost	£9.17m	£4.88m	

Table 12 - UR proposed allowances for MEL repex (pre-efficiency)

- 6.11 There is a clear need for the *SCADA refresh* project, however MEL does not yet have a detailed cost breakdown as the project is still at procurement stage. The contracts are expected to be let shortly for mobilisation in October 2022, so we have made a holding allowance pending confirmation of the agreed contract costs and activity.
- 6.12 An increase in the cost of *pipework coating* can be expected with the addition of the WTP, however it appears to be planned to start earlier than similar activity by GNI (UK). We propose to allow costs on PTL assets and designate the work on the other AGIs as a relevant item.
- 6.13 For the *meter replacement* programme, we would need further explanation on the basis and certainty of the cost forecast. We also wish to understand why the costs are more expensive than the GT17 request for the same projects. We recommend 50% allowance.
- 6.14 MEL requested funds for a variety of smaller projects which added up to £1m. Some of these might be expected to be addressed via normal maintenance processes and others had material costs without any associated outputs. We are proposing no allowance.

GNI (UK) – UR Proposals

- 6.15 UR's Cost and Performance Review highlighted that GNI (UK) had experienced some problems in terms of its GT17 asset replacements schemes.
- 6.16 Although we recognise that Covid-19 has had an impact on delivery, the schemes continue to be severely delayed with most not completed, and 93% of spend reforecast to the last two years of GT17.
- 6.17 The table below summarises information provided by GNI (UK) in October 2021 in response to a follow-up query:

Project Name	Forecast GT17 Spend	Complete Y/N	In progress	Construction End Date
Cathodic Protection	£0.22m	N	Y	Q3 2022
Instrumentation Refurbishment	£0.32m	N	Y	Q3 2022
Aerial Markers	£0.12m	N	Y	Q2 2022
Boiler Replacement	£0.52m	N	Y	Q3 2022
Control System Refurbishment	£0.10m	N	Y	Q3 2022
Carrick AGI Operation Mode Change	£0.24m	N	Y	Q4 2021
Emergency Escape Upgrades	£0.41m	N	Y	Q2 2022
Cyber Security	£0.27m	N	Y	Q3 2022
Meter Refurbishment	£0.53m	N	Y	Q3 2022
Other	£0.10m	Y	n/a	n/a
Total Cost	£2.83m			

Table 13 - Progress of GNI (UK) GT17 repex projects at October 2021

- 6.18 Whilst GNI (UK) are forecasting that most of the schemes will be undertaken, the table indicates that nearly all the work will be completed towards the end of the GT17 period. We have concerns about the feasibility of delivery and have taken account of the severely delayed GT17 repex programme when considering the GT22 projects.
- 6.19 We consider that the proposed repex is partly justified on the following basis:
 - a) The repex programme is primarily driven by the requirement to comply with relevant gas industry safety legislation.
 - b) Similarly, cyber security spend is aimed at achieving compliance with the NSI-D Directive and the requirements of the Department of Finance as the Competent Authority on cyber security.
 - c) The asset management approach to identifying and prioritising assets for replacement as described by GNI (UK) in its business plan submission is in accordance with the requirements of ISO 55001 and good industry practice.
 - Additionally, the scope of the assets to be replaced is consistent with what occurs in the repex programmes of National Grid Gas (Transmission) in GB, Gas Networks Ireland in Rol and other TSOs elsewhere.
- 6.20 The table below summarises our proposed allowances.

Project Name	GNI (UK) Request	UR Allowance	DD Proposals
Cathodic Protection	£0.17m	£0.17m	Category 1 - Full allowance
AGI Site Instrumentation	£0.76m	£0.38m	Cat. 2 - 50% allowance
AGI Site Electrical	£1.05m	£0.52m	Cat. 2 - 50% allowance
Security Refurbishments	£0.60m	£0.60m	Cat. 1 - Full allowance
Aerial Markers	£0.21m	£0.16m	Cat. 2 - 806 posts allowed
Actuators	£0.26m	£0.10m	Cat. 2 - Lower unit rate
BM5 Valve Controllers	£0.12m	£0.12m	Cat. 1 - Full allowance
Gas Pre-Heating Systems	£0.83m	£0.59m	Cat. 2 - Removed GT17 underspend
Stabilising Pilot Valves	£0.10m	£0.10m	Cat. 1 - Full allowance
Cyber Security	£1.26m	£1.00m	Cat. 2 - Holding allowance
Meter Replacement / Refurbishment	£1.01m	£0.25m	Cat. 3 - 25% allowance
Total Cost	£6.37m	£4.00m	

Table 14 - UR proposed allowances for GNI (UK) repex projects

- 6.21 The *AGI site instrumentation* project is similar to a project delayed in GT17, and with higher costs in GT22. We are recommending 50% allowance while there is uncertainty over the cost and delivery schedules for this work.
- 6.22 Although the *AGI site electrical* project is new, so is not affected by the GT17 delays, we had concerns over the cost and timing of the activities and propose 50% allowance. For the full allowance, GNI (UK) would need to provide the additional information listed in Annex 1.
- 6.23 The need for the heating system replacement project seems reasonable given the asset life of boilers. Our proposed allowance has been reduced by the estimated GT17 underspend of £0.24m¹¹.
- 6.24 While we have no concern with the need for the cyber security project, we did not receive a clear breakdown of the project costs. We propose to make a holding allowance of £1m until the planned procurement exercise provides greater visibility of costs.
- 6.25 The forecast cost of the meter replacement programme appear reasonable but virtually no spend has occurred in the GT17 meter programme. With GNI (UK) undertaking some in-service testing of the meters, the timing of the programme is uncertain. We propose a limited allowance and to designate

¹¹ Underspend was shown in GNI (UK)'s submission, Annex 2, Table 2.

as a relevant item until GNI (UK) can provide more certainty of need for replacement during GT22 at the proposed sites.

6.26 We have been encouraged to see that both MEL and GNI (UK) are developing an ISO55000 accredited asset management system. We expect to see the value of this work by the start of the GT27 price control review, at this point the companies should provide better data to underpin both their projected repex and maintenance expenditure.

Summary

6.27 The graph below summarises the TSO submissions and the proposed allowances.





6.28 We would encourage both MEL and GNI (UK) to address the detailed points raised in *Annex 1 – Replacement Expenditure* comprehensively in the draft determination consultation phase. This will allow UR to make robust conclusions on the repex programme in the final determination.

7. Efficiency Analysis

Frontier Shift

- 7.1 When assembling the opex and capex allowances for the GT22 period, we need to account for the natural, underlying rate of year-to-year change in an efficient gas transmission network's costs. We term this 'frontier shift' i.e. the rate at which the sector's efficiency frontier shifts over time.
- 7.2 This frontier shift has two main components input price inflation and productivity growth as follows:

=	nominal input price inflation	minus
	productivity growth minus	
	RPI inflation	
	=	 nominal input price inflation productivity growth minus RPI inflation

- 7.3 In our GT22 approach document, we said that we would apply a single frontier shift assumption to all four network licence holders and GMO NI.
- 7.4 The TSOs subsequently set out their views on the rate of frontier shift in their business plans. Table 15 records the figures put forward by GNI (UK), MEL and GMO NI.

	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	Annual average
GNI (UK)	1.2%	-0.7%	-1.3%	-1.4%	-1.2%	-1.1%	-0.7%
MEL	2.1%	0.7%	0.4%	0.4%	0.5%	0.6%	0.8%
GMO NI	2.1%	0.7%	0.4%	0.4%	0.5%	0.6%	0.8%

Table 15 - rates of frontier shift identified in business plans

7.5 There were somewhat diverging views across the licence holders, with GNI (UK) identifying underlying scope for costs to fall in real terms relative to RPI inflation and MEL and GMO NI assuming that a frontier company's costs will increase at a faster rate than RPI inflation.

UR assessment

7.6 Table 16 provides a summary of the assumptions that regulators have made about post-2021 frontier shift in a number of recent reviews.

Review, sector, date	Average annualised frontier shift assumption
UR, PC21 – NI Water, 2021	RPI – 0.5% (opex) RPI – 0.6% (capex)
UR, SONI, 2020	CPIH + 0.1%
Ofgem ¹² , RIIO-2 – gas transmission, 2020 Ofgem, RIIO-2 – gas transmission SO, 2020 Ofgem, RIIO-2 – gas distribution, 2020	CPIH + 0.2% (totex) CPIH + 0% (totex) CPIH + 0.1% (totex)
Ofwat, PR19 – water and sewerage companies, 2019	CPIH – 0.5% (totex)

 Table 16 - frontier shift assumptions in recent periodic reviews

- 7.7 A comparison between Table 15 and Table 16 indicates that GNI (UK)'s assumed rate of frontier shift is within the range of assumptions made recently by UK regulators. It should be noted that frontier shift figures expressed relative to CPIH can be converted to frontier shift relative to RPI by deducting approximately 1 percentage point to account for the RPI-CPIH wedge, e.g. Ofwat's CPIH 0.5% estimate is equivalent to approximately RPI 1.5%.
- 7.8 We are therefore broadly content with GNI (UK)'s calculations.
- 7.9 By contrast, MEL's and GMO NI's assumed rate of frontier shift is significantly higher than any of the assumptions made recently in UK price reviews. It is also markedly higher than GNI (UK)'s assessment. We therefore conducted further investigation to understand the factors that have led MEL and GMO NI to arrive at such an atypically high set of figures. We identified three key factors which we found difficult to reconcile:
 - MEL and GMO NI provided in their plans for a 5% per annum nominal increase in grid maintenance input price inflation. This compares to GNI (UK)'s projected price increases of 2% per annum;
 - MEL and GMO NI provided in their plans for a 3.3% per annum nominal increase in repex / grid construction input price inflation. This compares to GNI (UK)'s projected price increases of 2% per annum; and
 - MEL and GMO NI assumed that RPI inflation in 2021/22 would be only 0.6%, significantly below both the Office for Budget Responsibility's March 2021 inflation forecast and the current rate of

¹² The entries for Ofgem exclude the 0.2% "innovation uplift" that was removed by the CMA in its October 2021 appeal decision

RPI inflation.

7.10 We estimate that these three factors add more than 1 percentage point per annum to MEL's and GMO NI's proposed frontier shift figures.

Summary

- 7.11 Our provisional decision is that there is no basis for factoring the rate of frontier shift that MEL and GMO NI has calculated into gas transmission opex allowances. We consider that it is appropriate to give weight to the lower estimates made by GNI (UK) for the above-mentioned common cost items, as the other licence holder is conducting similar activities in the same sector in a similar geography.
- 7.12 We also consider that there should not be a significant divergence between the frontier shift assumption in this GT22 review and the frontier shift assumptions that regulators have made in other price reviews, particularly Ofgem's RIIO-2 decisions and UR's SONI price control decision.
- 7.13 We therefore propose to replace the TSOs' frontier shift assumptions with an RPI 0.8% rate of cost escalation. This aligns to:
 - a) GNI (UK)'s average annual frontier shift calculation;
 - b) The RIIO-2 frontier shift assumptions; and
 - c) Our recent decision for SONI¹³.
- 7.14 An RPI 0.8% rate of frontier shift also sits appropriately next to the rate of frontier shift used in our recent PC21 decision for NI Water, recognising that there are differences between the sectors and in the timing of our estimates (and associated macroeconomic backdrops).
- 7.15 The different input price inflation approach taken by the TSOs appears to have been a factor in the differing forecasts for similar line items. For example, MEL forecast a lower increase for the renewal of the MERC contracts later in the GT22 period than GNI (UK), but this would have been balanced by higher input price inflation assumptions. We have taken this into account in our considerations.

¹³ The SONI decision was CPIH+0.08% which is equivalent to RPI-0.92%

8. Incentives and Innovation

Detailed Approach – UR Proposals

- 8.1 The TSOs have different incentive mechanisms to deal with uncertainty which arises during the price control period. These incentive mechanisms can also be used to introduce innovation or facilitate implementation of changes as a result of legislative/ regulatory amendments.
- 8.2 GNI (UK) is subject to a revenue cap incentive mechanism, which means it is exposed to the cash flow risk associated with deviations between allowed revenue and actual costs. This risk is then mitigated, to some extent, by two mechanisms:
 - a) The ability to seek allowances for unforeseen operating expenditure.¹⁴
 - b) The ability to seek a forecast expenditure review should actual spend be greater than 15% above the allowance in any gas year.¹⁵
- 8.3 The other three licence holders, PTL, BGTL and WTL, operate under an operating cost pass-through mechanism, whereby gas consumers bear all cost risk in return for an absence of shareholder equity and returns. Governance arrangements are in place to prevent inappropriate behaviour by management against the interests of gas consumers.

Innovation Projects

- 8.4 At present there is no specific mechanism to encourage innovation as there is within other price controls. We have no plans at present to modify the licences and introduce a specific mechanism.
- 8.5 However, we encouraged licence holders to include innovations in their business plans that would lead to improved efficiency and/or improved customer service. We indicated that these will be considered if a robust and appropriate business case has been submitted which sets out clearly the detailed costs and benefits as well as how risks will be allocated.
- 8.6 The TSOs were clear that they anticipate the need for investment to develop projects to meet targets, as yet unknown, in the upcoming Energy Strategy, as outlined in the next few paragraphs. They did not propose alternative innovation projects which were not related to the Energy Strategy.

¹⁴ GNI (UK) Gas Conveyance Licence Condition 2.2.4 (j).

¹⁵ GNI (UK) Gas Conveyance Licence Condition 2.2.4 (i).

Environmental Impact, Decarbonisation and Energy Efficiency

- 8.7 The TSOs provided their thoughts on how future decarbonisation projects should be considered and funded.
- 8.8 GNI (UK) states that it, *"cannot wait for future price controls to initiate the integration of renewable and low carbon gases into the Northern Ireland gas network."* It requests that UR sets out the mechanisms for how funds will be made available.
- 8.9 MEL says that, *"funding is vital to the success of any NI network readiness preparation."* It then outlines the areas of asset integrity and operation which would be impacted by the introduction of hydrogen blending. MEL requested that UR establish a specific mechanism to allow recovery of net zero costs.
- 8.10 MEL then provided additional thoughts on the challenges that it considered a re-opener process would need to address:
 - a) Agility decisions will need to made and implemented quickly.
 - b) Risk managing the risk of investing in incorrect solutions or not adapting to a changing environment.
 - c) Uncertainty the scheduling of works should prioritise the "no regrets" work while still continuing to achieve set goals.
- 8.11 MEL then outlined three potential re-opener methods:
 - Full business plan resubmission although this would be a comprehensive method, it would cause substantial delay and there may not be sufficient clarity in the early stages to allow any certainty.
 - b) Use-it-or-lose-it allowance this would achieve the agile challenge but unlikely to allow significant business reorganisation. MEL indicates that this was the approach taken by Ofgem.
 - c) Net zero innovation funding this could use funds from the SEF to bring in other organisations.
- 8.12 We anticipate that it will take some time to prepare to implement the Energy Strategy, particularly where legislative changes will be required. We do not anticipate that a price control re-opener would be beneficial.
- 8.13 Neither do we consider that it is appropriate, at this stage, to establish a specific innovation fund. We acknowledge the suggestion by MEL that the SEF be used to fund decarbonisation projects and we will consider this at a

later stage.

- 8.14 We consider, at this stage, that the current incentive mechanisms, which allow for consideration of unforeseen cost during the price control period, will be sufficient during GT22.
- 8.15 We will continue to liaise with operators on developments in areas relevant to the Energy Strategy as we progress towards a final determination.
- 8.16 We intend to set a high bar in terms of evidence required for projects to be considered within the GT22 period, particularly where these could lead to increased prices. Our assessment criteria will include, but may not be limited to, the following information which we expect to be provided by the licence holder requesting such funding:
 - Quantified and robust cost benefit analysis;
 - Detailed and robust project plan for the decarbonisation project;
 - Credible and binding commitments from any project partners to participate in/contribute to funding the project, as well as proposed contingency arrangements in case project partners should fall short of their obligations;
 - Explanation of how the licence holder has arrived at this project and how this interacts with other investments planned under the normal price control;
 - Explanation of how the project can be justified in consultation with consumers and other stakeholders;
 - Details on what deliverables / benefits may be expected for local consumers from the project; and
 - Detailed risk assessment as well as details on and justification of proposed treatment of risk and reward.

9. Financial Aspects

Weighted Average Cost of Capital

- 9.1 The MEL companies are excluded from this section as these entities are financed the purchase and construction of their regulated assets through the issuance of long maturity bonds. The schedule of bond payments has been previously accepted by UR and these payments, known as *fixed amounts*¹⁶, are included in the calculation of annual allowed revenue without adjustment.
- 9.2 We set out our approach for considering the weighted average cost of capital (WACC) for GNI (UK) in our approach document.
- 9.3 We intend to set a rate of return that reflects the cost of capital, both debt and equity, that the market will bear given the level of risk associated with the business. There were no responses in relation to this and it remains unchanged.
- 9.4 This section is structured as follows:
 - a) UR proposals with respect to WACC for GNI (UK) and consideration of related issues;
 - b) Capital repayments; and
 - c) Financeability.

GNI (UK) Proposal

- 9.5 In June 2016 we approved a modification to the GNI (UK) licence which amended the parameters within which the rate of return on capital employed by the licence holder over a price control period may be set. As a result, UR may determine the cost of debt, the cost of equity, and the gearing ratio at each price control review taking relevant considerations into account.
- 9.6 Previously the cost of equity and gearing ratio were fixed, but now the rate of return on capital will be determined by UR at each price control period to best reflect prevailing capital market conditions and the level of risk borne by the licence holder.
- 9.7 GNI (UK) proposed that its WACC for GT22 should be in the range of 2.58% to 3.39% with a point estimate of 3.07%. Its submission stated that it drew on the GT17 determination, other regulatory precedent and conditions being

¹⁶ PTL and BGTL Gas Conveyance Licence condition 3.1.4 and WTL Gas Conveyance Licence condition 6.5.1.

faced by GNI (UK) to propose a rate of return that it considers can efficiently and adequately finance its business plan activities.

WACC Approach

- 9.8 The cost of capital that we consider in this paper is a forward-looking estimate of the real, RPI-stripped rate of return that the GNI (UK) pipelines need to provide to investors in order to attract and retain capital within the business. It has been estimated independently from GNI (UK)'s current ownership arrangements so that the return on offer through the price control is capable of supporting any reasonable and efficient investor set.
- 9.9 The cost of capital is the weighted average of the cost of equity (K_e) and the cost of debt (K_d). The relative importance of each is determined by the weighting, or gearing (g), to reflect the relative importance of each type of financing in a firm's capital structure, shown in this formula:

Vanilla WACC = $g \cdot K_d + (1 - g) \cdot K_e$

- 9.10 The prevailing market cost of debt is directly measurable and we can use empirical evidence to see this rate. The cost of equity is modelled on the returns that we would expect a shareholder to demand in exchange for holding shares in the GNI (UK) business.
- 9.11 This uses a standard CAPM (Capital Asset Pricing Model) methodology, which relates the cost of equity to the risk-free rate (R_f), the expected return on the market portfolio (R_m) and a business-specific measure of investors' exposure to systematic risk (beta or β_e:

$$K_{\rm e} = R_{\rm f} + \beta_{\rm e} \ . \ (R_{\rm m} - R_{\rm f})$$

- 9.12 We have drawn on primary market data, as far as possible, and taken account of regulatory precedent, particularly Ofgem's RIIO-2 price control determinations in December 2020 and the views expressed by the Competition and Markets Authority (CMA).
- 9.13 The full analysis is shown in *Annex 2 First Economics Report on Cost of Capital* and is summarised in the following paragraphs.

Inflation Index

9.14 In reaching our estimate of an appropriate rate of return for GNI (UK), we have converted from nominal to real market data by applying the Consumer Prices Index (CPI) to align with the financial model set out in the GNI (UK) licence. Other economic regulators tend to use the Retail Prices Index (RPI) measure of inflation. In order to facilitate comparison with other relevant regulatory decisions, we have presented some comparisons using RPI data.

Riskiness and Beta

- 9.15 A firm's equity beta is a measure of the riskiness of a firm, relative to the market portfolio. As GNI (UK) is not a listed firm, we cannot use market data to estimate this, so we used beta estimates from companies which are similar.
- 9.16 However, the gearing level can influence the equity beta, as a firm with higher gearing will exhibit a higher equity beta comparatively. The equity beta can therefore be considered in two parts the asset beta is a hypothetical measure of the beta if a firm had no debt and were financed entirely by equity, and the debt beta. A firm's debt beta is not directly observable, so we have used a constant of 0.075, which is also used by Ofgem and the CMA for similar companies.
- 9.17 We considered comparator data for the asset beta which indicated that GNI (UK) sits in the range of 0.31 to 0.39. We then considered where GNI (UK) site relative to the comparators. This involved considering the four main determinants of the shareholder risk: demand variability, cost variability, regulatory control and the cost / revenue structure, which is based on the size of asset base compared to ongoing revenues. This comparison is set out in the Annex.
- 9.18 We concluded that GNI (UK) was squarely "in the pack" with the comparative values, so we saw no reason to deviate from the 0.35 figure that Ofgem used in RIIO-T2.

Gearing

- 9.19 We considered regulatory precedent where the regulator sought to select a figure for gearing which is consistent with the regulated company maintaining an A to BBB/Baa credit rating.
- 9.20 This returned a range of 50% to 60%, so we have proposed 60% to align with Ofgem's notional gearing for the GB transmission businesses.

Cost of Debt

9.21 Our task was to use available data to estimate the interest that we would expect an efficiently financed business with an A to BBB credit rating to pay on its borrowings. GNI (UK)'s debt takes the form of loans from its parent company, so its licence suggests that the allowed cost of debt should be benchmarked to the market interest rates that a company with GNI (UK)'s character would expect to pay if it were to borrow directly from the markets.

- 9.22 We used the iBoxx secondary market bond indices as benchmarks for the cost of debt that must be paid by a network company borrower. At the end of September 2021, yields were approximately 2.35% for A rated debt and 2.60% for BBB rated debt. We do not agree with GNI (UK)'s suggestion that UR should take a trailing average of historical rates, as we do not consider that it possesses any embedded fixed rate debt that would need referenced.
- 9.23 We start with the average yield on A and BBB bonds of 2.475% and allow for a small move up in borrowing costs to be consistent with forward gilt rates. The markets are pricing around 15 basis points increase by October 2022 and around 70 basis points increase by September 2027. We consider it is prudent to increase the 2.475% estimate of market interest rates by a flat five-year average uplift of 0.425% to give an average nominal GT22 cost of debt of 2.9%.
- 9.24 This figure needs to be converted into a real, CPI-stripped cost of capital computation. CPI is currently being forecast at an average inflation rate of 2%¹⁷. This means that we convert the nominal cost of debt into a real, CPI-stripped cost of debt of 0.9%. We also add an allowance for fees of 25 basis points, giving a final cost of debt figure of 1.15%.

Cost of Equity – risk-free rate

9.25 An estimate of the risk-free rate is needed solely for the purpose of estimating the cost of equity. The CMA has suggested that readings of the CAPM risk-free rate can be obtained by examining the yields on government gilts and AAA rated corporate bonds. The data, our calculations and comparative data are outlined in the Annex to show how we have arrived at a figure of -1.1%.

Cost of Equity - expected market return

- 9.26 Rather than estimating an equity-risk premium, we have estimated the expected market return directly, like Ofgem and the CMA, to ensure there is no inconsistency in the cost of equity calculation.
- 9.27 We note that the values for expected market return in recent price control calculations have been noticeably lower than the figure of 7.7% (real, CPI stripped terms) that we used in GT17, understood to be a consequence of revisions to the estimates of the real returns that investors have historically taken from UK stock market investments. Looking at the extensive review of the evidence on expected market return as part of the CMA's PR19 review, we have proposed an expected market return of 6.8%.

¹⁷ <u>https://obr.uk/forecasts-in-depth/the-economy-forecast/inflation/#CPI</u>

Overall Cost of Capital Calculation

UR proposed GT22 Cost of Capital	Point Estimate
Gearing	0.6
Cost of debt (%)	1.15
Risk-free rate (%)	-1.1
Market return (%)	6.8
Asset beta	0.35
Equity beta	0.76
Post-tax cost of equity (%)	4.92
Vanilla WACC (%)	2.66

Table 17 - Cost of Capital Calculation

9.29 The calculations give a vanilla cost of capital of 2.66%. These are lower than the current rate of return of 3.17%, reflecting the downwards shift in market interest rates since 2017 and the development of wider regulatory thinking in relation to the estimation of the expected market return. We will review this calculation ahead of the final determination.

Comparisons

9.30 The first comparison is our proposed WACC to the GNI (UK) proposal.

Proposed GT22 Cost of Capital, real, CPI-stripped	UR GT22 proposal	GNI (UK) proposal
Gearing	0.6	0.65
Cost of debt (%)	1.15	1.21
Risk-free rate (%)	-1.1	-1.26 to -0.24
Market return (%)	6.8	6.58 to 7.44
Asset beta	0.35	0.35 to 0.38
Equity beta	0.76	0.81 to 1.00
Post-tax cost of equity (%)	4.92	5.13 to 7.44
Vanilla WACC (%)	2.66	2.58 to 3.39

Table 18 - Comparison to GNI (UK) proposal

9.32 The next comparison looks at what the rate would be if it were viewed in RPI-stripped terms, based on annual RPI inflation rate of 2.9%.

Proposed GT22 Cost of Capital	CPI-stripped	RPI-stripped
Gearing	0.6	0.6
Cost of debt (%)	1.15	0.27
Risk-free rate (%)	-1.1	-1.97
Market return (%)	6.8	5.87
Asset beta	0.35	0.35
Equity beta	0.76	0.76
Post-tax cost of equity (%)	4.92	4.01
Vanilla WACC (%)	2.66	1.76

Table 19 - Comparing CPI-stripped to RPI-stripped

9.34 Finally, this table is a comparison against the GT17 rate, in RPI stripped terms.

RPI-stripped Comparison	GT22 Proposal	GT17 Allowance
Gearing	0.6	0.65
Cost of debt (%)	0.27	0.2
Risk-free rate (%)	-1.97	1.25
Market return (%)	5.87	6.5
Asset beta	0.35	0.34
Equity beta	0.76	0.79
Post-tax cost of equity (%)	4.01	5.38
Vanilla WACC (%)	1.76	2.01

 Table 20 - Comparing GT22 proposal to GT17 allowed return

Capital Repayments

9.36 The GNI (UK) capital repayments being collected in the current postalised tariff are £11.85m, expressed in October 2021 monies. We estimate that this will reduce to £11.70m with the proposed WACC, a reduction of £0.15m per year, a total of £0.75m over GT22, also expressed in October 2021 monies.

Financeability

- 9.37 Article 14 of the Energy (Northern Ireland) Order 2003 requires us to carry out our functions in the manner we consider best calculated to further our principal objective, having regard to the need to secure that licence holders are able to finance their obligations (amongst other things).
- 9.38 This duty is framed similarly to the financing duties of other UK regulators. It can broadly be taken in practice to mean that the price control ought to be set at a level which would allow an efficient network company to finance its licensed activities.
- 9.39 PTL, BGTL and WTL are entirely financed by means of bonds that were issued to fund the purchase of existing transmission assets. It is not envisaged that these licence holders will be required to invest further capital in these networks. UR agreed, by means of the Direction, to fully fund the repayments on these bonds through the postalised transmission tariff.
- 9.40 The three licences include an operating cost pass through mechanism. This means that allowed revenues will always match actual costs. In effect, PTL, BGTL and WTL do not face any cash flow risk and so financeability is not a relevant issue for these licence holders.
- 9.41 We will assess the financeability of GNI (UK) ahead of the final determination.

10. Outputs and Allowances

Overview

10.1 The principal legal duty of UR in relation to gas is:

"to promote the development and maintenance of an efficient, economic and co-ordinated gas industry in Northern Ireland." ¹⁸

- 10.2 This must be done having regard to the interests of gas consumers and ensuring that licence holders are able to finance their activities.
- 10.3 This is demonstrated by setting out the allowances for each company as well as the associated outputs, targets and outcomes. Such an approach provides transparency for the licence holders, network users, consumers, stakeholders and UR.
- 10.4 This chapter outlines the allowances that we propose under GT22, along with the cost reporting processes that will follow. The chapter then considers some other matters, which are not directly cost related but have some impact on the service provided by the TSOs. It finishes by considering the consumer impact of the proposed allowances. The chapter is structured as follows:
 - GMO NI Price control output summary;
 - MEL Price control output summary;
 - GNI (UK) Price control output summary;
 - Cost and output reporting;
 - Recommendations:
 - (i) Stakeholder engagement;
 - (ii) Joint working;
 - (iii) Forecasting accuracy;
 - (iv) Environmental management action plans;
 - Business carbon reporting; and
 - Consumer impact.

¹⁸ The Energy (NI) Order 2003, Article 14 (1) <u>http://www.legislation.gov.uk/nisi/2003/419/contents/made</u>.

GMO NI – Price Control Output Summary

- 10.5 We have proposed allowances on the basis of the GMO NI business plan submission. The relevant licence holder (GNI (UK), PTL, BGTL or WTL) has been allocated a price control allowance in accordance with the pattern of resource contracts set out in their business plans.
- 10.6 Each licence holder is exposed to the same cost risk mechanism that applies to other categories of controllable operating cost. For GNI (UK) this would be a 'revenue cap' mechanism while for the other three licence holders an 'operating cost pass-through' mechanism would apply.
- 10.7 In determining allowances for GMO NI we have been guided by the principle that we are determining allowances for a single entity and not four separate licence holders.
- 10.8 In order to deliver on its KPIs, the following allowance has been proposed for GMO NI. This represents 75% of the requested amounts (post efficiency) with a notable disallowance on Delphi upgrade costs. The draft determination is however a 6% uplift from GT17 allowances.



Figure 8 - GMO NI - GT22 proposed allowance post efficiency

MEL – Price Control Output Summary

10.9 For MEL, the price control allowance is advisory. The company has an opex pass though mechanism, whilst the capital repayments are fixed outside of this price control.

10.10 However, we expect MEL to operate in a responsible and efficient manner. The draft determination represents UR's estimate of anticipated forecast spend of just such a network operator in GT22.



10.11 The proposed total allowances post efficiency are set out below.

Figure 9 - MEL total costs and DD allowance post efficiency







Figure 11 - MEL repex and DD allowance post efficiency

10.12 The price control represents an allowance of 89% of what the company requested. Proportionally this can be viewed as follows:



Figure 12 - MEL cost element split in GT22

10.13 The final determination will set out more definitively the expected outputs from repex projects in the GT22 period for this allowance. UR expects the TSOs and GMO NI to report against these commitments on an ongoing basis, through the RIGs. The table below provides an indication of forecast repex projects and outputs, which will be extended as outputs are aligned to annual forecast cost.
Activity	GT22 Period Outputs	
SCADA Refresh	One site providing normal live service to the main control room with a SCADA / Leakfinder service duplicated in "hot" standby mode.	
Programmable Logic Controllers (PLC) panel replacement	Five PLCs	
Transformer Rectifier	Eight transformer rectifiers	
Meter Replacement	Four ultrasonic meters	

Table 21 - MEL indication of forecast repex outputs

10.14 The following table shows the forecast opex outputs.

Activity	2022-23	2023-24	2024-25	2025-26	2026-27
Online Inspections (OLI)	-	1	-	-	1
Close Interval Protection Surveys	1	9	1	6	3
Metering Asset Inspections	12	11	11	11	11
Aerial Pipeline Inspections	78	78	78	78	78
Sub-Sea Survey	-	2	-	2	-
Emergency Exercise	1	2	1	1	2
Environmental Management System Progress					

Table 22 - MEL Planned Opex Activity

GNI (UK) – Price Control Output Summary

- 10.15 GNI (UK) operates to a revenue cap mechanism, such that it manages its cost uncertainty risk, except for the costs which fall within the cost mitigation measures outlines in paragraph 8.2.
- 10.16 During the GT17 period, GNI (UK) agreed to allow GNI to transport gas through the SNP to a new exit point at Haynestown, outside Dundalk, linking into the GNI network in RoI. This agreement avoided the need for GNI to invest in reinforcements on their network by accessing some spare capacity on the nearby NI network.

- 10.17 While the reserved capacity has been secured and the income will be treated as *supplemental income*¹⁹ to be subtracted from their annual forecast required revenue (FRR), the charging mechanism has not yet been agreed.
- 10.18 GNI (UK) therefore did not forecast any revenue in its business plan. Separately, GNI (UK) included an estimated amount of £893k in the postalised tariff for the current gas year (21/22).
- 10.19 In the absence of a better forecast, we have included a forecast revenue of £0.9m for each year of GT22. There is a mechanism in the licence²⁰ to correct the forecast revenue for the actual revenue, so we are content to use this estimate. We have ignored this Haynestown income when assessing against the GT22 submission for more a more transparent comparison.
- actual / forecast and through to GT22 submission and draft determination.

This table illustrates the movement of total cost from GT17 allowances, to



Figure 13 - GNI (UK) total costs and DD allowance post efficiency

10.21 UR views represent 86% of the amount asked for (76% when forecast Haynestown revenue is included). There are notable reductions in areas of controllable opex and in particular repex, as shown in the following two graphs. These categories will be subject to further scrutiny and review as part of the final determination.

10.20

¹⁹ GNI (UK) conveyance licence condition 2.2.16.

²⁰ GNI (UK) conveyance licence condition 2.2.16e.









10.22 This pie chart illustrates the cost element breakdown.



Figure 16 - Breakdown of GNI (UK) proposed allowances post efficiency (excl. Haynestown)

10.23 Outputs and targets associated with the repex allowance will be provided in detail for the final determinations. UR expects to report against these commitments on an ongoing basis. The table below includes the forecast outputs from three of the projects - this will need to be extended to all projects with outputs aligned with the annual cost forecasts:

Activity	GT22 Period Outputs
Cathodic Protection	2 transformer rectifiers, 40 CP test posts, 9 remote monitoring units
Site Instrumentation	3 Remote Terminal Units (RTU), 16 communication upgrades
Site Electrical	ТВС

Table 23 - GNI (UK) indication of forecast repex outputs

10.24 The following table shows the forecast outputs from the opex forecasts.

Activity	2022-23	2023-24	2024-25	2025-26	2026-27
Online Inspections (OLI)	-	1	-	-	1
Aerial Pipeline Inspections	26	26	26	26	26
Emergency Exercise	2	2	2	2	2

Cyber Security Upgrades	Upgrade to AGIs
AGI Asset Information Programme	19 AGI assets

Table 24 - GNI (UK) Planned Opex Activity

Cost and Output Reporting

- 10.25 A key output of the price control is cost reporting. Licence modifications following GT17 established obligations on the TSOs to report annually on their costs and outputs²¹, known as *Regulatory Instructions and Guidance* (RIGs). These are intended to allow UR to monitor performance and, over time, will provide a database of performance that will inform subsequent price controls. Further information is provided in chapter 3.
- 10.26 Annual reporting provides a number of benefits such as:
 - a) Monitoring against price control targets;
 - b) Developing historic trends;
 - c) Benchmarking network operators; and
 - d) Providing transparency to network users.
- 10.27 This process is now well established with the TSOs participating fully and this will continue throughout GT22. The information provided has deepened our understanding of the cost drivers and unit costs of repex projects particularly. Having access to this historic information has improved the robustness of the price control.
- 10.28 We intend to consider adding some additional areas for review as a result of GT22, for example:
 - a) Asset Management Systems: We would like to see quantification of the benefits of this investment by the TSOs. We will wish to see how they will track activity through to cost efficiencies from reduced response maintenance.
 - b) *Stakeholder Engagement:* We wish to track the TSOs' stakeholder engagement plans and outcomes, see paragraph 10.36.
 - c) *Joint Working:* We will ask the TSOs to report on joint working initiatives including tracking benefits, financial and non-financial, see paragraph 10.45.

²¹ Licence condition 1.21 in the gas conveyance licences.

d) *Business Carbon Footprint:* We wish to track what the TSOs are doing to reduce their own carbon footprint.

Stakeholder Engagement

- 10.29 We said in the approach document that we expected the TSOs to align their business role, services and activities with the interests of customers, consumers, other stakeholders and the wider energy system. We expected to see a structured approach to engagement which outlined the organisations it wishes to engage with, the type and frequency of such engagement and forecast outcomes.
- 10.30 Stakeholder engagement applies across a number of channels, including formal discussions with industry bodies, influencing and preparing for future legislative and compliance matters, ensuring stakeholder representation across its board members and technical links between engineers. The TSOs should be able to demonstrate that they have a planned approach with targeted outcomes across each engagement channel.
- 10.31 While the three business plans highlighted a great deal of stakeholder engagement activities, we were not convinced that the engagement was well planned, nor were we convinced that it was strategically focused.
- 10.32 The upcoming Energy Strategy will bring new organisations into the energy sector, which will be challenging and disrupting. A clear strategy for stakeholder engagement will provide a framework for how these challenging views can be considered and integrated into a changing energy sector.
- 10.33 The gas network prepares to facilitate the injection of biomethane, while the electricity network continue to evolve with more decentralised generation, battery storage and the challenges of responding to variable wind patterns. These changes, amongst others, will need increased interaction between the electricity, heat, gas and transport sectors.
- 10.34 We wish to see evidence of whole system thinking through enhanced liaison with the electricity sector. It should be evident that parties consider the consequences of their actions on the rest of the energy sector. Strategic engagement activities will result in better decision making, improved strategic thinking and identification of cost efficiencies as we seek to implement the future Energy Strategy.
- 10.35 We therefore encourage the TSOs to enhance the gas-electricity engagement channels to ensure that whole system thinking is embedded across the energy sector. A starting point would be for TSOs to engage with

SONI to include greater integration between the long term gas and electricity development plans²².

- 10.36 By GT27, we expect the TSOs to be able to:
 - a) Provide evidence that they have whole-system stakeholder engagement, which could be through new stakeholder groups, or wider representation within their own board.
 - b) Demonstrate how the long term development plans of both electricity and gas take a whole-system approach.
 - c) Map out how stakeholder engagement has shaped their business plans.
 - d) Provide compelling evidence that engagement is delivering customer benefits.
- 10.37 We intend to add a section to the RIGs to track the TSOs' stakeholder engagement plans and outcomes.

Joint Working

- 10.38 We indicated in the approach document that we consider that engagement between the TSOs could deliver additional cost savings, for example, in joint procurement exercises. We indicated that we would look for evidence in the business plan submissions that opportunities had been exploited to the benefit of consumers. This followed our recommendation in GT17 that the TSOs should work together to implement a single control room.
- 10.39 The TSOs have undertaken the GT17 requirement to consider the feasibility of a single control room. However, the conclusion is that it is not practical at this time given legal and procurement concerns. This is disappointing, especially given the success of the GMO NI.
- 10.40 There are a number of examples of excellent joint working between the TSOs. GMO NI has delivered efficiencies through reduced system operation costs and demonstrated the benefits of pooling staff resources and sharing IT systems.
- 10.41 The NI Gas Capacity Statement²³ is another example of effective joint working between the TSOs, with tasks alternating between MEL and GNI (UK) from year to year.

²² <u>http://gmo-ni.com/publications#gas-statement</u> and <u>https://www.soni.ltd.uk/media/documents/SONI-</u> Transmission-Development-Plan-Northern-Ireland-2020-2029.pdf

²³ <u>http://gmo-ni.com/publications#gas-statement</u>

- 10.42 Both GNI (UK) and MEL have upgraded their asset management procedures to attain ISO 55001 standard. It may be possible to explore cost efficiencies through joint activities such as data analysis, or preparing for audits.
- 10.43 The joint procurement of MERC was discussed at GT17 but ruled out due to the need to retain legal responsibility. For GT22, when we asked the TSOs had they considered alternative joint activities for the MERC, there was no evidence that it had been considered.
- 10.44 We accept that there are legal and procurement concerns, but we do not accept that there is no potential for cost savings through efficient procurement activities. For example, savings may be available through seeking shared activities like common procurement documents or sharing resources for a parallel procurement process.
- 10.45 We will add a section to the RIGs for the TSOs to report on the joint working initiatives, including tracking financial and non-financial benefits.

Forecasting Accuracy

- 10.46 We have been disappointed with the GT17 forecasting accuracy shown by both GNI (UK) and MEL. Due to its cost pass-through mechanism, poor forecasting by MEL impacts on the postalised year-end reconciliation amount, meaning that shippers may pay too much during the year, or may need to make up a shortfall after year-end. It is vital that the TSOs use all available information to make the best possible expenditure forecast.
- 10.47 GNI (UK) has very significant delays on its repex projects, with over 90% of forecast cost due to be spent in the last two years of GT17. The delays have been longer than might have been expected due to the Covid-19 pandemic. We therefore have limited confidence that GNI (UK) can subsequently deliver its GT22 forecasts.
- 10.48 As a result, there are a number of GT22 line items which have been listed as relevant items. These relevant items will not be added to GNI (UK)'s allowances until it has demonstrated the projects are justified and ready to commence.
- 10.49 With regards to MEL, we observed some poor forecasting behaviour linked to adjustments to *budgeted controllable opex* (BCO)²⁴ during GT17. Some items of expenditure which were submitted to us in BCO adjustment submissions ought to have been known at the time of GT17 submissions.

²⁴ BCO can be requested, according to licence condition 3.1.6(b)(v), following a submission *"to take into consideration any fact or matter that has arisen following the Authority's determination pursuant to Condition* 3.1.6(b)(iv)".

- 10.50 We indicated in the approach document for GT22 that we are minded to introduce a licence modification to provide some alignment between MEL and GNI (UK) in terms of price control re-openers. This may take the form of a materiality threshold below which budgeted or determined controllable opex would not be subject to review.
- 10.51 Alternatively, we may wish to compare BCO adjustments against actual spend to that point in the year. The latter may be similar to the *"special operating expenditure forecast review"* at condition 2.2.4(i) of the GNI (UK) licence which can only be triggered if actual costs differ from forecast by more than 15%.
- 10.52 We will continue to monitor MEL's BCO submissions. If we consider there are projects which should have been foreseen, we will move to propose a licence modification to introduce a materiality threshold equivalent to GNI (UK)'s.

Treatment of PRISMA costs

- 10.53 GMO NI has requested that the cost of the auction system, PRISMA, should be treated as uncontrollable. PRISMA has introduced a new price methodology which GMO NI considers cannot be influenced by either GNI (UK) or MEL in their respective roles.
- 10.54 While we acknowledge that the TSOs have limited influence in the PRISMA costs, they are relatively small at an average of £172k per annum through GT22. The cost uncertainty risk should be managed under the current arrangements. We therefore will not move the PRISMA costs at this stage, however should the actual costs vary significantly, for example by 50% compared to GT22 forecast, we will reconsider for GT27.

Environmental Action Plans

- 10.55 The TSOs not only have a role to play in the implementation of the future Energy Strategy, but they also can influence the environmental impact of their day-to-day businesses.
- 10.56 MEL's business plan submission states that it has a business environmental policy which commits it to:

"identifying, quantifying, managing, and minimising the adverse impact we make on the environment, directly through our operations, and to prevent unnecessary pollution whilst conducting our operations. Using ISO 14001 as a framework, we have established an annual Environmental Plan to continually improve on our environmental performance."

- 10.57 MEL has established an environmental management committee and has set targets for 2021-22 which it intends to develop further in the coming years.
- 10.58 GNI (UK) reported in its submission that Gas Network Ireland's sustainability department is responsible for maintaining the environmental management system and energy management system, as well as environmental action planning, policy setting and assessing compliance with environmental and energy related legal requirements. It states that this is designed to ensure that GNI (UK) and its contractors have a minimal impact on the environment. It did not provide detail on targets or forecast outcomes.
- These are positive steps which could be improved through a published 10.59 statement outlining the TSOs' commitments to reduce their environmental impact. For example, National Grid has an environmental action plan for electricity transmission²⁵ and NIE Networks has an environmental statement.²⁶ We encourage the TSOs to work together to prepare an environmental action plan to demonstrate what they are doing to contribute to the drive to net zero carbon.

Carbon Reporting – TSO Submissions

- 10.60 For the first time, we asked the TSOs to estimate their carbon emissions. We asked the TSOs to forecast their non-shrinkage business carbon footprint (BCF), in tonnes of CO₂ equivalent, in order for us to assess the environmental impact of operations.
- 10.61 We asked for forecast data for GT22 period and did not request any information prior to the start of the GT22 period. Rather, we requested that the TSOs use the intervening period to put in place appropriate mechanisms to gather and report the required information on an ongoing basis.
- The reporting methodology must be compliant with the principles of the 10.62 Greenhouse Gas Protocol (GHG Protocol).²⁷
- We asked that the BCF reporting be relevant, complete, consistent, 10.63 transparent and accurate and we recognised that there may be some element of estimation required.
- 10.64 GNI (UK) reported that it established its carbon footprint in 2019 to align with global best practice. Its greenhouse gas (GHG) inventory has been

²⁵ https://www.nationalgrid.com/uk/electricity-transmission/document/136551/download

²⁶ https://www.nienetworks.co.uk/documents/environment/environmental-statement.aspx

²⁷ World Business Council for Sustainable Development/World Resource Institute: The Greenhouse Gas Protocol – A Corporate Accounting and Reporting Standard

https://ghgprotocol.org/sites/default/files/standards/ghg-protocol-revised.pdf

independently verified according to ISO 14064-3:2019 specifications with guidance for the validation and verification of greenhouse gas statements. This provides a good degree of confidence that GNI (UK) is recording its BCF going forward into GT22 and beyond.

- 10.65 As it does not have offices or a fleet in Northern Ireland, GNI (UK) said that the sections on building and transport emissions have been shown as zero. It stated that the relevant emissions related to its one staff member who works in GMO NI would be covered in the GMO NI response. However, the GMO NI provided a zero response as it said that its emissions were being reported by the TSO which has responsibility for that activity.
- 10.66 We recognise that this the first time that we have sought this information, but we would request that GNI (UK) puts processes in place to ensure that its emissions due to GMO NI activities are properly accounted for.
- 10.67 GNI (UK)'s forecast for its own emissions therefore relate to the two areas of fugitive emissions and fuel combustion, explained as follows:
 - a) Fugitive emissions. These result from unintentional emissions of natural gas from equipment or components such as pipelines, regulators, valves, flanges, connectors, etc. on the gas network. GNI (UK) uses the MARCOGAZ model to build up its quantification. It states that MARCOGAZ is an international association which represents the gas industry on technical aspects.
 - Fuel combustion. This related to the onsite electricity consumption at AGIs. GNI (UK) explained its assumptions and the emission equivalency conversion factors it used.
- 10.68 With regard to GNI (UK)'s contractor carbon reporting, it reports that it considered environmental management during the selection of contractors and that its main contractor is required to provide monthly data on its environmental performance.
- 10.69 MEL states that it continues to develop its capability in the area of carbon data collection and reporting and has needed to rely on some assumptions at this stage.
- 10.70 For MEL's own business usage and business transport, actual data has been used to generate forecasts. For fuel combustion on their network, for example use of diesel generators and electricity, actual data has also been used. However, no estimate has been provided for fugitive emissions.
- 10.71 MEL has used meter readings and fuel usage data from their main contractor to forecast the contractor emissions.

Carbon Reporting – UR Proposals

10.72 The emissions forecast from GNI (UK) and MEL are summarised in this table:

Description	Units	MEL GT22 Forecast	GNI (UK) GT22 Forecast
Direct Usage by TSO			
Buildings Emissions	tCO2e	58	-
Operational Transport Emissions	tCO2e	-	-
Business Transport Emissions	tCO2e	367	-
Fugitive Emissions	tCO2e	-	4,818
Fuel Combustion Emissions	tCO2e	4,336	409
Usage by Contractor			
Buildings Emissions	tCO2e	234	61
Operational Transport Emissions	tCO2e	855	102
Business Transport Emissions	tCO2e	89	33
Fugitive Emissions	tCO2e	-	-
Fuel Combustion Emissions	tCO2e	-	-

Table 25 - Carbon Reporting Forecast

- 10.73 The figures differ significantly, indicating a difference in the approach taken by the TSOs. Although MEL has not estimated any fugitive emissions, its forecast for its own fuel combustion emissions are ten times higher than that of GNI (UK).
- 10.74 We have not sought to challenge or explain the differences, neither have we sought to establish if the forecasts encompass all of the TSO activities, included contracted-out services such as the MERC.
- 10.75 Rather, we consider that this is an area that the TSOs could work together to share knowledge and develop a joint approach while noting that GNI (UK) appears to have more advanced processes for collecting emissions data..
- 10.76 We intend to begin collecting data on BCF through the RIGs from the start of the GT22 period.

Consumer Impact

10.77 Our considerations around the GT22 price control come at a time when energy markets are facing unprecedented rises in international wholesale fuel costs. These increases have driven significant increases in gas and electricity tariffs which is unwelcome news for consumers.

- 10.78 Gas transmission pipelines are used to transport gas to gas distribution networks and to electricity generation plants. Therefore, the outcome of this price control affects both electricity and gas consumers and we have been conscious of ensuring that this price control does not unnecessarily add to cost pressures.
- 10.79 The transmission charge element generally comprises around 10% of the domestic gas customer tariff. At this time of rising prices, the percentage is lower but remains a key component of the price.
- 10.80 There are two factors which affect the transmission charge element of prices:
 - a) TSO required revenues, comprising operating costs, which are the subject of this price control and the recovery of the capital costs. For the latter, the rate of return for GNI (UK) is part of this price control. Around half of the required revenue is operating costs.
 - Shippers' forecast use of the network, which sets the charges by allocating the required revenue across the across the forecast usage.
- 10.81 The following graph illustrates how the postalised revenues calculated using the GT22 forecasts compare to the actual required revenue in recent years. This assumes the capital recovery figures are stable except for the proposed change to the GNI (UK) WACC.



Figure 17 - Forecast postalised revenue using GT22 submissions

- 10.82 The shippers' use of the network is forecast to continue growing. Forecast annual exit capacity bookings increased from 90.8GWh in 2020-21 to 93.3GWh in 2021-22²⁸ with shipper forecasts indicating further growth through GT22²⁹. Increasing capacity bookings have a downward pressure on the transmission charges.
- 10.83 Combining the forecast revenue figures with the growing capacity bookings, we conclude that transmission charges should at least remain stable as a result of GT22.

²⁸ <u>http://gmo-ni.com/assets/documents/NI-Forecast-Tariff-Publication-GY2122.pdf</u>

²⁹ http://gmo-ni.com/assets/documents/2021-05-25-Annex-1-Forecast-Tariff-Spreadsheet.xlsx

11. Next Steps and Further Issues

Submission of Consultation Responses

11.1 This is an open consultation paper. We invite stakeholders to express a view on any particular aspect of the paper or any related matter. Responses should be received on or before 12 noon on 17 February 2022 and should be addressed to:

Consultation Responses			
Jillian Ferris			
Networks Directorate			
Queens House			
14 Queen Street			
Belfast			
BT1 6ED			
Tel: 028 9031 1575			
Email: <u>Gas_networks_responses@uregni.gov.uk</u> with cc to			
jillian.ferris@uregni.gov.uk			

- 11.2 Our preference would be for responses to be submitted by e-mail.
- 11.3 Your response may be made public by the Utility Regulator. If you do not want all or part of your response or name made public, please state this clearly in the response by marking your response as 'CONFIDENTIAL'
- 11.4 If you want other information that you provide to be treated as confidential, please be aware that, under the FOIA, there is a statutory Code of Practice with which public authorities must comply and which deals, amongst other things, with obligations of confidence. In view of this, it would be helpful if you could explain to us why you regard the information you have provided as confidential
- 11.5 Information provided in response to this consultation, including personal information, may be subject to publication or disclosure in accordance with the access to information regimes (these are primarily the Freedom of Information Act 2000 (FOIA) and the Data Protection Act 2018 (DPA)).
- 11.6 As stated in the GDPR Privacy Statement for consumers and stakeholders, any personal data contained within your response will be deleted once the matter being consulted on has been concluded though the substance of the

response may be retained.

11.7 This document is available in accessible formats. Please contact Jillian Ferris on 028 9031 1575 or email: <u>Gas_networks_responses@uregni.gov.uk</u> with cc to <u>jillian.ferris@uregni.gov.uk</u> to request this.

Next Steps

Key Milestones	Proposed Date
Closure of consultation on draft determination	17 February 2022
Publication of final determination and consultation on licence modifications	April/ May
Lessons learnt review	Summer 2022
Start of GT17 price control period	1 October 2022

 Table 26 - Key Milestones for GT22

Consequential Changes

11.8 We do not anticipate needing to make any licence modifications as a result of this price control.

12. Annexes

Annex 1 – Replacement Expenditure

Annex 2 – First Economics Report on Cost of Capital