



GD23 - Gas Distribution Price Control 2023-2028

Draft Determination Annex H
Incentives and Innovation
March 2022



About the Utility Regulator

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.



Our mission

To protect the short- and long-term interests of consumers of electricity, gas and water.



Our vision

To ensure value and sustainability in energy and water.



Our values

- Be a best practice regulator: transparent, consistent, proportionate, accountable and targeted.
- Be professional – listening, explaining and acting with integrity.
- Be a collaborative, co-operative and learning team.
- Be motivated and empowered to make a difference.



Abstract

This annex forms part of the Draft Determination for the GD23 Gas Distribution Price Control. It provides a review of incentives and innovation and how best the Utility Regulator (UR) can support innovation within its current vires. It also details the related approach, business plan requests, and UR assessment of these requests as well as the resulting UR proposals for GD23.

Audience

Industry, consumers and statutory bodies.

Consumer impact

Innovation is currently in a pre-developmental phase and as such it is difficult to say with certainty the consumer impact. From a non-monetary perspective it is hoped that innovation will provide the opportunity to phase out fossil fuels and reduce carbon emissions, which can benefit the consumer monetarily through less volatility of fossil fuel prices and non-monetarily through the health of the population with carbon emissions being reduced.



Contents

Executive Summary	2
1. Introduction	3
Purpose of this document.....	3
Structure of this document.....	3
2. The Approach used in GD17	4
Incentives	4
Innovation.....	4
3. GDNs Submissions	6
FE.....	6
PNGL.....	6
SGN.....	7
4. UR proposals	8
FE.....	8
PNGL.....	8
SGN.....	9
Overview.....	9
Incentives	9
Innovation	10

Executive Summary

This Annex summarises the key considerations around innovation and incentives and how best the Utility Regulator can support innovation for the gas distribution network operators (GDNs) within its current vires. Based on our current statutory duties, we emphasise that any new innovation funding must comply with the innovation funding principles outlined in the approach document to GD23 and in this Annex.

It is our view that successful innovation is best driven by the GDNs operating under an appropriate price control framework. Such a framework should allow them to make decisions on what innovation investments to make taking into account the impact these investments will have on reducing costs and improving outputs. The GDNs will then be rewarded through the price control framework for resulting outperformance to the end of the GD23 price control period, and consumers will benefit in the long run from improved services, lower prices and reduced carbon emissions.

We consider that this approach should remain the principal mechanism for delivering innovation. It provides maximum flexibility to the GDNs to make innovation decisions, aligns the benefits for consumers and GDNs and avoids the risk of a regulator being asked to pick winners from a list of potential innovation projects.

The assessment of these innovation projects will include a pain gain mechanism to ensure that there is sufficient alignment between the objectives of the innovation project and how the costs associated will impact the consumers of Northern Ireland.

It is important to note that the innovation principles set out in the GD23 approach document and this Annex are necessary for any innovation submission to ensure proper consideration is given to the risks and rewards around innovation projects. We however encourage all submissions and if there are valid explanations around any of the principles, these will be taken into consideration.

For incentives we are keeping the free gas connection to the majority of customers and then changing the connection incentive, to a cost to serve with a glide path down from current levels to costs necessary for this area. Fixed allowances will be in place for market and development activity for FE, PNGL and SGN. The properties passed incentive will remain to encourage extensions within the already developed areas in the network. The cost of debt mechanism will remain and will not change from the GD17 incentive set. SGN will also remain on a price cap for GD23 as it continues to offer strong incentives to outperform on gas volumes set, when network is still in a developing stage.

1. Introduction

Purpose of this document

- 1.1 This document forms part of the draft determination (DD) for the GD23 price control. This is the price control for the three gas distribution network operators (GDNs) in Northern Ireland (NI):
- Firmus energy (Distribution) Ltd (FE)
 - Phoenix Natural Gas Ltd (PNGL)
 - SGN Natural Gas Ltd (SGN)
- 1.2 The price control covers the 6-year period from 1 January 2023 onwards.
- 1.3 More specifically, this document is an annex to the main GD23 draft determination document. It provides a background to the development of Innovations and Incentives approach for the last price control GD17 and makes reference to the GD23 Approach document. It also details the business plan requests made by the GDN's and key comments, and Utility Regulator (UR) assessment of these as well as the resulting UR proposals for GD23.
- 1.4 Any Incentives in relation to the energy strategy are dealt with in Annex G.

Structure of this document

- 1.5 This document is structured in a number of chapters as follows:
- a) Chapter 1, Introduction, provides an overview of the purpose and structure of the document.
 - b) Chapter 2, The Approach used in GD17, provides background information on how this area has previously been developed, with a forward look on the approach for the next price control.
 - c) Chapter 3, GDNs Submissions, summarises each of the requests and key comments made by the GDNs in their business plan submissions.
 - d) Chapter 4, UR proposals, sets out our assessment of the requests and the approach to be taken for the Draft Determination.

2. The Approach used in GD17

Incentives

- 2.1 Incentives are an important part of the Regulatory framework.
- 2.2 A number of incentives were used in GD17 to aid and promote efficient and economic development of the gas industry. The GD17 price control included the following main/key incentives:
- a) Connection Incentive including a "new areas allowance" to maximise the number of connections added to the network, which recognises that a lot properties that are readily connectable have yet to convert over to natural gas.
 - b) Properties Passed Incentive, which sets a framework to focus the laying of pipes in the most densely populated areas or where major gas loads exist.
 - c) Debt Mechanism as referred in the Rate of Return, to secure the most cost effective financing possible.
 - d) Price Caps, which only applies to SGN, to incentivise out performance on the gas volume targets set, which is appropriate at the early development stage of the network.
- 2.3 These incentives will be reviewed and are discussed further in the appropriate areas of the price control, which follows Opex, Capital Investment or Rate of Return areas.

Innovation

- 2.4 One of our key statutory objectives is to "Promote the development and maintenance of an economic and coordinated natural gas industry."¹
- 2.5 As such our approach to innovation will follow the innovation principles outlined in GD17.
- 2.6 In our GD17 Final Determination we indicated "we welcome innovation initiatives from the GDNs, where reasonable and economically efficient."²

¹ <https://www.uregni.gov.uk/what-we-do>

² https://www.uregni.gov.uk/files/uregni/media-files/2016-09-15_GD17_Final_Determination_-_final_0.pdf

2.7 To date we have not received any submissions from any of the GDNs with regard to innovation during GD17. We would like to reiterate that we welcome innovation initiatives from the GDNs, where reasonable and economically viable.

3. GDNs Submissions

FE

- 3.1 FE submitted a detailed innovation business plan to us. Within this business plan 5 decarbonisation projects were presented.
- 3.2 In their business plan FE cited concerns around the current funding process for innovation including the potential for creating a funding gap for innovation development activities and project facilitation, and around a lack of funding for specific policies arising from the DfE's energy strategy. FE also highlighted that, of the 5 decarbonisation projects, only 1 is at a level of maturity to access current funding.
- 3.3 FE suggested that we maintain the existing GD17 innovation funding principles but provide clearer guidance on their application and also suggested including a new specific use-it-or-lose-it innovation allowance to fund early stage innovation activities.
- 3.4 Firmus proposed that the new use-it-or-lose-it innovation allowance be set at 1% of baseline allowances noting that this would align with the recent RIIO-GD2 decision where GDNs received a Network Innovation Allowance of up to 0.97% of baseline allowances.
- 3.5 In reference to the energy strategy FE recommended including specific innovation re-openers in GD23 to ensure any policy decisions coming from the energy strategy are adequately funded. FE also highlighted that re-openers should be focused on innovation, ensuring appropriate funding is available at the correct times.
- 3.6 FE also stated that low funding in the initial stages of a project means it is difficult to get to a level of maturity where investment/funding is attractive.
- 3.7 FE is also a member of the Biomethane working group along with us to help address challenges around the Biomethane transition.

PNGL

- 3.8 PNGL suggested that under the current regulatory framework a Gas Networks Innovation Fund is established.
- 3.9 PNGL highlighted the desire for a review of our legislative remit to provide a better gauge for the innovation submission.

- 3.10 PNGL in their innovation business plan mention that the injection of biomethane and the use of hydrogen are the 2 most likely replacements for heat in the quest for net zero by 2050.
- 3.11 PNGL is also a member of the Biomethane working group along with us to help address challenges around the Biomethane transition.
- 3.12 In PNGL's innovation business plan, the potential of a closed gas network to bring gas to rural housing that is not connected to the main gas network was cited. In time, and depending on innovative developments, hydrogen could be used to feed this system.
- 3.13 PNGL believes investment of circa £2million per year to assist with the heating energy transition is required and proposed that £12million be included in the GD23 Gas innovation Fund.

SGN

- 3.14 SGN suggested that if the Traffic Management Act (TMA) did not come into force in the GD23 price control period that some or all of the allowances here could potentially be allocated to an innovation fund.
- 3.15 SGN believes there are 2 distinct strands to innovation being operational innovation and addressing decarbonisation.
- 3.16 SGN is also part of the industry working group along with us to help address the challenges of Biomethane.
- 3.17 The experience gained from SGN GB has helped provide valuable insights to the biomethane industry working group.
- 3.18 SGN GB is also involved in developing the worlds-first hydrogen network, the experience and learnings taken from this will be beneficial for Northern Ireland.
- 3.19 Specific funding amounts were not presented in the paper as SGN cited they were aware of our vires but welcomed opportunities to discuss further.
- 3.20 SGN requested funding for a Full Time Equivalent Decarbonisation Analyst.

4. UR proposals

FE

- 4.1 FE cited providing clearer guidance on how the funding principles will be applied. It is difficult for us to suggest how each of the funding principles will be applied to each individual project before seeing any projects. We would expect to see all of the funding principles addressed in each individual submission and, if there are any of the principles that cannot be addressed, reasons why this is the case.
- 4.2 We noted the suggestion of the innovation allowance to fund early stage innovation activities. We note that Innovations and the Energy Strategy, are closely linked, but we make a distinction between the projects which relate to the:
- a) Energy Strategy (i.e. focus on a reduction in carbon emissions and a phasing out of fossil fuels.)
 - b) Innovation (i.e. Projects not related to the energy Strategy that require investment in the business, over and above normal activities e.g. Metering Issues).
- 4.3 We therefore propose that the funding principles outlined in GD17 for innovation remain the same for GD23.
- 4.4 We also agree that the energy strategy will present challenges and that re-openers should be in place to address any policy decisions that need funding. We are proposing the use of the ring-fenced uncertainty mechanism which is discussed in more detail in Annex G.

PNGL

- 4.5 We are aware that the energy strategy may eventually lead to a change in our legislative remit but currently in this draft determination we must act within its vires with regard to innovation funding.
- 4.6 We noted the innovative thinking around the possibilities of a closed gas network, however this is still being developed.
- 4.7 We recognise that some level of future funding will be necessary, as the future direction of travel becomes clearer. We are proposing to make use of the ring-fenced uncertainty mechanism for these unknown costs and further information on this is contained in Annex G.

SGN

- 4.8 SGN suggested allocating a proportion of the Traffic Management Act (TMA) allowance on the assumption that it didn't come into force. The TMA principles were clearly identified in GD17 in how it would work and it is inappropriate to allocate funds from this area to another area without clear signalling. Whilst SGNs suggestion may have merit, a separate standalone allowance as identified in the UM is more appropriate in GD23 for innovation.
- 4.9 SGN indicate that innovation should be 2 strands: operational and decarbonisation. SGN suggest operational would include methods of working, support functions, tools, equipment, IT systems and approach to digitisation. We consider that these costs can be claimed through the uncertainty mechanism process described in more detail in Annex G.

Overview

Incentives

- 4.10 We are removing the connection incentive and replacing it with a 'cost to serve' allowance which will be glide pathed down by 2028. The concept of cost to serve is to cover the GDNs reasonable costs of responding to contacts and supporting consumers through the connection process, including the cost of Energy Advisers. In principle, this would exclude any promotional activities by the GDNs to secure connections such as marketing and advertising and incentive payments to consumers. Further detail on the replacement for connection incentive is contained in Annex D.
- 4.11 It is worth noting that consumers who wish to connect to the gas network will continue to be offered a free connection (subject to additional charges for reinstatement of high cost surfacing or particular requests in respect of location). We believe this offers a strong incentive for customers to connect as in most case these costs are approximately in the region of £1,500.
- 4.12 In the GD23 query process it was cited that the marketing and development activity funded from the connection incentive helps to inform key stakeholders of the gas industry. We therefore are proposing a fixed allowance for all GDNS for the wider promotion and awareness of the gas industry which may prompt connection requests but would not be linked to connection targets.
- 4.13 All GDNs will be subject to a properties passed mechanism to incentivise them to continue to extend the network as proposed in the draft determination. We believe this continues to encourage development of

areas within the existing network. More detail on this is contained in Annex F.

- 4.14 We will continue to apply the cost of debt mechanism developed for GD17 under which GDNs take 20% of the difference in determined cost of debt relative to selected iBoxx indices and the whole of the out-performance against the selected iBoxx indices. We are not proposing to make any changes to this mechanism in GD23. More information on cost of debt is contained within Chapter 10 of the main document.
- 4.15 For GD23 we will continue to apply a price cap to SGN, as it continues to offer strong incentives to outperform on gas volumes set, when network is still in a developing stage. This will be reviewed at the next price control

Innovation

- 4.16 Based on our current statutory duties, we would again emphasise that any new innovation funding must comply with the innovation funding principles outlined in this section.
- 4.17 It is our view that successful innovation is best driven by the GDNs operating under an appropriate price control framework. Such a framework should allow them to make decisions on what innovation investments to make taking into account the impact these investments will have on reducing costs and improving outputs. The GDNs will then be rewarded through the price control framework for resulting outperformance to the end of the GD23 price control period, and consumers will benefit in the long run from improved services, lower prices and reduced carbon emissions.
- 4.18 We consider that this approach should remain the principal mechanism for delivering innovation. It provides maximum flexibility to the GDNs to make innovation decisions, aligns the benefits for consumers and GDNs and avoids the risk of a regulator being asked to pick winners from a list of potential innovation projects.
- 4.19 Also, with this price control being for duration of six years, the GDNs have the opportunity to make innovation early in GD23 and benefit from the outperformance to the end of GD23.
- 4.20 Generally, the purpose of innovation is to reduce costs and/or achieve an improvement of outputs that generates more revenue. Therefore, we would normally expect that any innovation costs will be funded from the overall price control package, and not from specific innovation allowances and increased prices. That said, we are conscious that in some cases funding of innovations through increased prices may be appropriate, e.g. in the case of

major innovation projects that require significant upfront investment and where the payback period for the project is relatively long, perhaps spanning future price control periods for example.

4.21 As indicated in GD17, and more recently in the approach document to GD23, any new innovation projects would be expected to comply with the "Innovation Funding Principles", as described below:

- a) Quantified and robust cost benefit analysis.
- b) Detailed and robust project plan for the innovation project.
- c) Credible and binding commitments from any project partners to participate in/contribute to funding the project, as well as proposed contingency arrangements in case any of the project partners should fall short of their obligations.
- d) Justification of why funding through the overall price control package is considered not appropriate/sufficient and why funding through specific innovation allowances and increased prices is requested.
- e) Explanation of how the GDN has arrived at its chosen bid for innovation and how this interacts with other innovation investments planned under the normal price control regime.
- f) Explanation of how the innovation bid was identified/prioritised and justified in consultation with consumers and other stakeholders.
- g) Explanation of why there exists a barrier towards innovation which requires some form of regulator action to progress, and the consequences of the innovation not happening.
- h) Details on what deliverables/benefits may be expected for local consumers from the research/development/trials.
- i) Detailed risk assessment as well as details on and justification of proposed treatment of risk and reward.
- j) Description of how the innovation, if successful, could be efficiently rolled out within the GDN and/or other Northern Ireland or Great Britain GDNs.
- k) Justification of how the proposed innovation is different to anything that has occurred previously, whether within the GDN, another Northern Ireland or Great Britain GDN or within the wider industry.

- 4.22 We are conscious that robust assessment criteria for funding of innovation projects may impact on the time and resource GDNs need to invest if they wish to request funding. However, we consider that this is appropriate, proportionate and necessary to provide protection to consumers who would bear risk and cost of such innovation projects. We also note that our assessment criteria do not exclude or restrict innovation measures to address problems specific to Northern Ireland's network areas or to create opportunities for natural gas connections. Nor do they preclude the submission and consideration of higher risk projects with higher cost saving potentials. That said, we consider that the riskier a proposed innovation project is and the higher the associated costs consumers will be asked to bear, the more diligent and detailed the upfront assessment needs to be. The assessment of these projects will therefore include a pain gain mechanism to ensure that there is sufficient alignment between the objectives of the innovation project and how the costs associated will impact the consumers of Northern Ireland.
- 4.23 It is important to note that the innovation principles set out in GD23 are necessary for any innovation submission to ensure proper consideration is given to the risks and rewards around innovation projects. We however encourage all submissions and if there is valid explanations around any of the principles these will be taken into consideration.