Decision

RIIO-2 Sector Specific Methodology Decision - Gas Distribution

Publication date	24 May 2019	**Contact:**	RIIO Team
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In December 2018, we consulted on how the RIIO-2 regulatory framework may be applied to the gas distribution network companies (GDNs). This document sets out our decision on this, including the outputs that the GDNs need to deliver and the regulatory mechanisms to manage uncertainty. It also provides an update on our approach to cost assessment. Network companies will use this information to develop their Business Plans over the remainder of 2019. We will then assess these Business Plans over 2020, with the RIIO-2 price control then starting on 1 April 2021 for the following five years.

This document is an Annex to the RIIO-2 Sector Specific Methodology Decision - Core Document and should be read alongside it.

Contents

1. Introduction and document structure

Purpose of this document

1.1 This document is focused on the application of the RIIO-2 Framework to gas distribution specific issues. It explains the outputs and uncertainty mechanisms that Gas Distribution Networks (GDNs) will need to consider as part of their Business Plans.

1.2 This document also includes:

- a chapter updating stakeholders on our approach to assessing GDNs' costs, on which we will be consulting further in summer 2019
- high-level overviews of stakeholder responses to our RIIO-2 Sector Specific Methodology consultation, which have informed the decisions we've made.

1.3 The structure of this document, and how its content fits within the wider RIIO-2 publications, are described in more detail below. This document should be read alongside the RIIO-2 Sector Specific Methodology Decision - Core Document (Core Document).

Overview of the RIIO-GD2 package

1.4 In our RIIO-GD2 Sector Consultation Annex (December GD Annex), we outlined some of the key challenges for the RIIO-GD2 price control, including:

- the uncertain, but extremely important, role for GDNs in supporting the decarbonisation of heat
- the importance of, and need to build on, GDNs' successes in supporting consumers in vulnerable situations
- using the suite of outputs for RIIO-GD2 both to embed the strong output performance seen in RIIO-GD1 and to enhance what network customers can expect from their GDNs.

1.5 Our sector specific decisions for gas distribution will help to ensure that GDNs can meet and exceed these and other challenges, when developing their Business Plans over the remainder of this year, delivering benefits for existing and future consumers.

1.6 Highlights of our sector specific decisions include:

- ensuring that GDNs meet the needs of consumers and network users by continuing to encourage strong customer service and sharpening our interruptions-related incentives
- increasing support for consumers in vulnerable situations by strengthening minimum standards, providing funding to support innovation in this area, and introducing a dedicated £30m allowance to support GDN vulnerability and carbon monoxide safety initiatives
- supporting the delivery of a sustainable network, including by ensuring that the price control is responsive to future policy and technology developments in the decarbonisation of heat, and by refining GDN outputs related to the

reduction of the amount of gas lost in transportation, making an important contribution to lowering greenhouse gas emissions

- maintaining a safe, resilient and efficient network, including by retaining a focus on the replacement of iron mains to improve the safety of the network, while better linking the costs of delivery to the actual work delivered.

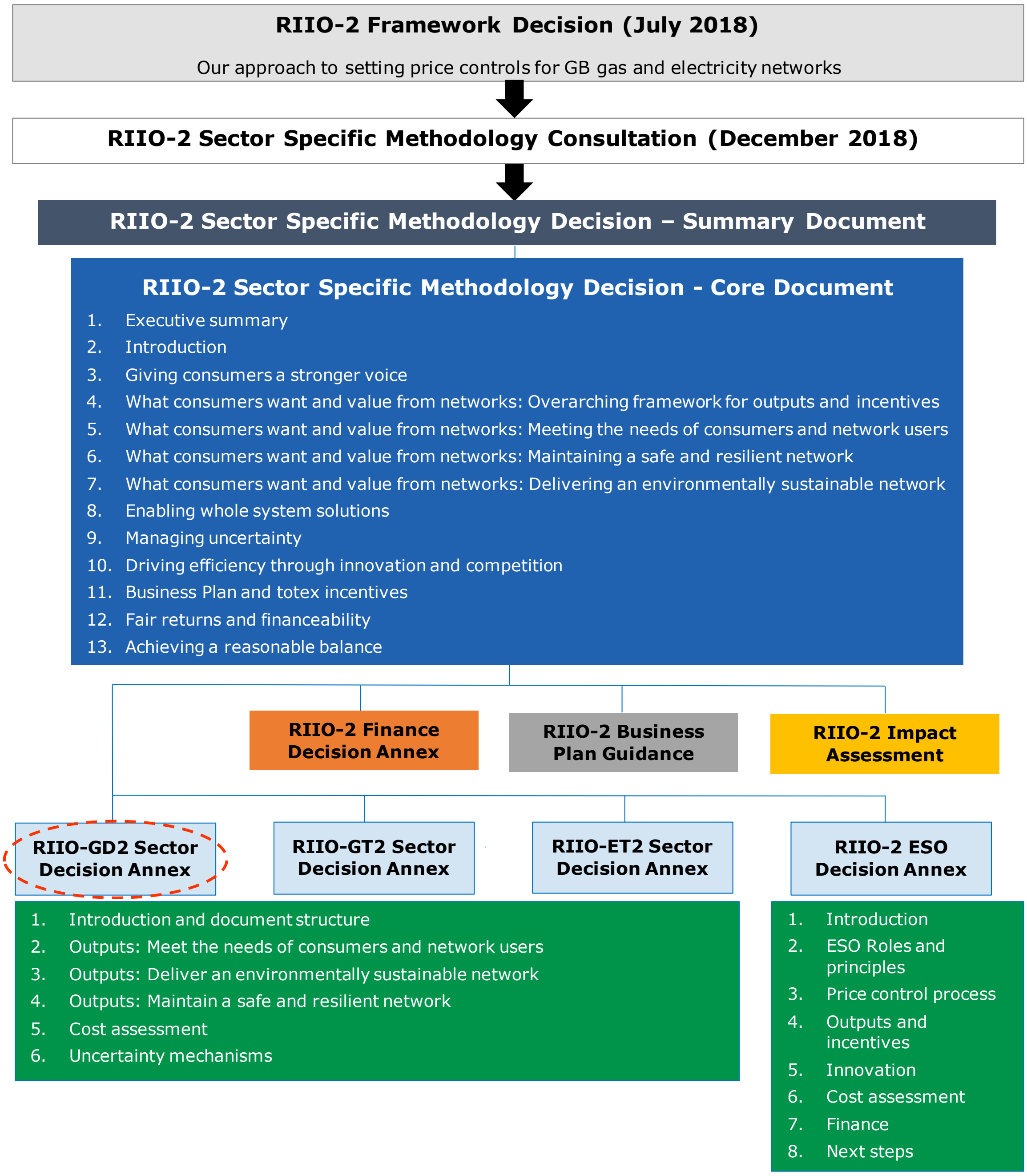
1.7 Our RIIO-2 Sector Specific Methodology Decision – Summary Document also provides a high-level overview of the overall RIIO-2 package and the benefits it is expected to bring.

Structure of this document and associated documents

1.8 In December 2018, we consulted on our proposals for applying the RIIO-2 Framework to the specific network sectors - the RIIO-2 Sector Specific Methodology Consultation (December Consultation). The RIIO-2 Sector Specific Methodology Decision includes a Core Document, a finance annex and sector specific annex documents for gas distribution (GD), gas transmission (GT), electricity transmission (ET), and the electricity system operator (ESO). The sector specific annex documents are intended to be read alongside the Core Document (see Figure 1 for all the documents).

1.9 Our decisions take into account the responses to the December Consultation (including the associated annexes) and ongoing discussions with stakeholders.

Figure 1: RIIO-2 Sector Specific Methodology Decision document map



The Core Document

1.10 The decisions in the Core Document apply across the GD, GT and ET networks, and some elements apply to the ESO. The Core Document also includes response summaries for the cross-sector related decisions.

RIIO-2 Impact Assessment and RIIO-2 Business Plan Guidance

1.11 We will publish a draft impact assessment shortly after this decision document. We intend to publish a full impact assessment at the determinations stage in 2020. We will also shortly publish an update of our RIIO-2 Business Plan Guidance Document (Business Plan Guidance) which networks companies should use to develop their Business Plans over the remainder of this year.

Structure of this document

1.12 This document is structured as follows:

- Chapter 2 - the outputs that we would expect to be delivered in the first output category: Meet the needs of the consumers and network users
- Chapter 3 - the outputs that we would expect to be delivered in the second output category: Deliver an environmentally sustainable network
- Chapter 4 - the outputs that we would expect to be delivered in the third output category: Maintain a safe and resilient network
- Chapter 5 - our approach to cost assessment in RIIO-GD2
- Chapter 6 - the uncertainty mechanisms that will be part of RIIO-GD2
- Appendix 1 - Interruptions: calculations for 'standardised' large events
- Appendix 2- Shrinkage financial ODI calculation and expected BPDT requirements
- Appendix 3 - MOBs record keeping: guidance for Business Plans
- Appendix 4 - Gas holder demolitions: guidance for Business Plans

The role of stakeholders in this price control review

Summary of our stakeholder engagement to date

1.13 Engaging with stakeholders is an important part of developing the RIIO-GD2 price control. In addition to formal consultations, we've also been running events, forums and seminars to get stakeholders' input.

1.14 We received 133 responses to our December Consultation. We have published non-confidential responses on our website.[1] The following chapters include a high level summary of respondent views.

1.15 To date, we have run 17 GD-specific stakeholder engagement groups to input into the development of our initial policy thinking. The three groups are:

- Customer and Social stakeholder group
- Decarbonisation stakeholder group
- Repex stakeholder group.

1.16 We have also run nine GD-specific cost assessment working groups, focusing on the development of the tools for assessing costs within company Business Plans as well as the development of the Business Plan Data Templates.

1.17 For summaries of the meetings and slides see our website.[2]

Next steps

1.18 Additional information on how stakeholder engagement will help to shape companies' Business Plans can be found in Chapter 3 of the Core Document, including:

[1] https://www.ofgem.gov.uk/publications-and-updates/riio-2-sector-specific-methodology-consultation
[2] https://www.ofgem.gov.uk/publications-and-updates/riio-gd2-working-groups

- the role of the GDNs' Consumer Engagement Groups (CEGs) in helping to shape their Business Plans
- the role of the RIIO-2 Challenge Group.

Our further work on RIIO-GD2

1.19 Chapter 5 of this document sets out our approach to cost assessment in RIIO-GD2. It provides an update on our approach by summarising and reflecting on stakeholder responses to our consultation in December 2018. We will be consulting further on our cost assessment approach in summer 2019 and will continue to refine it ahead of the submission of the final Business Plans in December. To support this, the cost assessment working group will continue.[3]

1.20 We will continue to engage on the draft RIIO-GD2 data templates and associated instructions and guidance through the cost assessment working group.[4] In September 2019, we intend to publish the final versions of the templates and guidance. This will be for network companies to use when submitting final Business Plans in December.

1.21 Our Customer and Social, Decarbonisation and Repex stakeholder groups will not continue. We will, however, establish more focused (and in some cases ad hoc) stakeholder meetings, increasingly focused on specific policy issues.

1.22 We will begin the process of developing licence conditions. From this summer we expect to start Licence Drafting Working Groups to begin the process of drafting the legal text needed to implement the RIIO-GD2 policy decisions.

[3] Further information on the group and dates of future meetings can be found here - https://www.ofgem.gov.uk/publications-and-updates/riio-gd2-working-groups
[4] Draft data templates are available here: https://www.ofgem.gov.uk/publications-and-updates/riio-2-draft-data-templates-and-associated-instructions-and-guidance. These include Business Plan Data Templates (BPDT), associated instructions and guidance, investment decision pack guidance, cost benefit analysis (CBA) template and a guidance note on engineering justification.

2. Outputs: Meet the needs of consumers and network users

The outputs and incentives we will apply for RIIO-GD2 aim to improve the service received by customers. This includes service in areas such as consumer vulnerability, supply interruptions, complaints management and new connections.

Introduction

2.1 We want network companies to meet the needs of their customers and to continually improve how they are doing this, whether through emergency response, connections, resolving interruptions, or through how they serve consumers in vulnerable situations.

2.2 For RIIO-GD2 we are placing a greater emphasis on several areas including:

- supporting consumers in vulnerable situations, for example, by enabling GDNs to progress targeted initiatives with specific funding, and by improving the fuel poor network extension scheme
- ensuring that customers are protected against poor service, by increasing the payments they receive if their gas supply is cut off or if their new connection takes too long
- embedding the significant customer satisfaction improvements seen over RIIO-GD1, and rewarding those companies that can drive new levels of exceptional performance over RIIO-GD2
- responding to unplanned supply interruptions, and supporting those worst served customers, who experience outages that are too long.

2.3 This chapter should be read in parallel with:

- Chapters 4, 5 and 11 of the Core Document which describe:
  - our decision to use the output category 'meet the needs of consumers and network users', for RIIO-2 and the broad approach to outputs (eg output types)
  - how network companies may propose additional company specific ('bespoke') output measures within their Business Plans, if required
  - how network companies will be incentivised to set out ambitious plans through our Business Plan Incentive
  - our rationale for providing indicative caps and/or collars on ODIs (where relevant).
- Chapter 3 of the December GD Annex, which provides more detail on the proposals we have summarised in this chapter.

Outputs for RIIO-GD2

Table 1: Our decision on the RIIO-GD2 outputs

Output name	Output type*	Company driven target**
Common outputs (will apply to all companies)		
Consumer vulnerability minimum standards	LO	No
Consumer vulnerability reputational incentive	ODI(R)	Yes
Consumer vulnerability and carbon monoxide safety use-it-or-lose-it allowance	PCD	Yes
Fuel Poor Network Extension Scheme	PCD	Yes
Stakeholder Engagement Incentive	ODI(R) and bespoke outputs	Yes
Customer satisfaction survey	ODI(F)	No
Complaints metric	ODI(F)	No
Guaranteed Standards of Performance (GSOPs)	LO[5]	No
Emergency response time	LO	No
Average restoration time for total unplanned interruptions	ODI(F)	Yes
Bespoke outputs (companies may consider other areas for inclusion in their Business Plans)		

* ODI(R/F) = Output Delivery Incentive (Reputational/Financial), PCD= Price Control Deliverable, LO= Licence Obligation.
** Company driven target signifies an output where we expect to see extensive company-led engagement (including with their Customer Engagement Group (CEG)) to justify performance targets. This could lead to performance targets varying by company.

Additional output suggestions

2.4 In December, we asked for views on whether we should consider any additional outputs to those that we proposed in the consultation. Several stakeholders put forward ideas, which we took into account. Most suggestions came from GDNs and were high-level examples of outputs they are considering for inclusion within their Business Plans. GDNs should work with their stakeholders to justify the need for these outputs and, where there is a strong case, include them in their Business Plans.

Consumer vulnerability

The role of the network companies in supporting consumers in vulnerable situations

2.5 Supporting and protecting consumers in vulnerable situations is a priority for us.[6] We are in the process of updating our Consumer Vulnerability Strategy to set out

[5] GSOPs are set out in statutory instruments due to the requirement for network companies to make direct payments to their customers. Some GSOPs also have accompanying target pass rates (% of times the standard has been met). These are set out in the licence to provide additional protection to customers.
[6] We define vulnerability as when a consumer's personal circumstances and characteristics combine with aspects of the market to create situations where he or she is:
- significantly less able than a typical consumer to protect or represent his or her interests in the energy market, and/or
- significantly more likely than a typical consumer to suffer detriment, or that detriment is likely to be more substantial.

our key priorities until 2025.[7] We also have a regulatory stance that recognises that the government has the primary role in addressing fuel poverty, but that we will consider interventions where consumers in vulnerable situations are at significant risk, the benefits of intervention are significant and the redistributed costs are low.[8]

2.6 We think GDNs and the price control have an important role in helping consumers in vulnerable situations. However, we think it is important to clearly define the boundaries of this role for consumers, stakeholders, and industry.

2.7 In December, we proposed that the GDNs' role in addressing vulnerability should be related to their existing areas of competence, activity and consumer interaction. This could include assisting vulnerable consumers during outages, identifying consumers in vulnerable situations and taking measures to address vulnerability when responding to emergencies and through their customer service functions.

2.8 We proposed that GDNs should not be funded for actions beyond this, for example, for installing boilers, heating systems or energy efficiency measures. We asked for stakeholder views and evidence on whether the boundaries we have proposed are appropriate.

Summary of responses

2.9 Stakeholders who commented on this area broadly agreed with our proposal for the GDNs' role in addressing vulnerability. Several network companies and a consumer representative group suggested some additional areas of focus, such as creating stronger partnership networks and better data sharing to promote the Priority Services Register (PSR).

2.10 There were mixed views on whether installing heating systems, energy efficiency measures and repairing or replacing condemned boilers should be funded through the price control. Some stakeholders said these activities shouldn't receive price control funding as they are outside the GDNs' remit and area of expertise. Other stakeholders thought that RIIO-GD2 should include some support for first time central heating to support the delivery of the Fuel Poor Network Extension Scheme (FPNES). A consumer representative body added that GDNs should have funding for energy efficiency improvements to bridge the funding gap and meet the targets set out in the Department for Business, Energy and Industrial Strategy's (BEIS') fuel poverty strategy.[9] It also suggested we include a reopener on energy efficiency and fuel poverty within the price control in case the roles and responsibilities of network companies change before or during the price control.

Decision

2.11 We are confirming our consultation position that the role of the GDNs in addressing vulnerability should be related to their existing areas of competence, activity and consumer interaction. However, we are planning to consult shortly on our draft Consumer Vulnerability Strategy 2025 (CVS2025), and we will consider any implications for this decision once the consultation is complete.

[7] We will shortly be consulting on our draft Consumer Vulnerability Strategy 2025 (CVS2025). We issued an open letter in December 2018 setting out our next steps: https://www.ofgem.gov.uk/publications-and-updates/updating-ofgem-consumer-vulnerability-strategy-cvs2025
[8] Ofgem's regulatory stances: https://www.ofgem.gov.uk/publications-and-updates/ofgems-regulatory-stances
[9] BEIS, Cutting the cost of keeping warm: https://www.gov.uk/government/publications/cutting-the-cost-of-keeping-warm

2.12 After considering stakeholder views, we have decided not to fund the installation of boilers and heating systems and energy efficiency measures through the price control. We recognise that additional funding for first time central heating could help the GDNs deliver their FPNES targets and that funding for the repair or replacement of boilers could be beneficial when boilers are condemned. However, this would require a material change in networks' roles as well as a substantial re-distribution of costs. There is already a range of national, devolved and local government funding available for the installation of energy efficiency measures, first time central heating and boiler repairs and replacements. We therefore think the GDNs should continue to leverage these funding streams through their partnership networks.

2.13 We also note that the government is actively considering whether networks should have a role in delivering energy efficiency measures to consumers' homes and businesses.[10] We will introduce a re-opener to respond to changes in the role of the networks in energy efficiency. This re-opener could be triggered if the government concludes that networks should deliver energy efficiency measures to fuel poor households.

RIIO-GD2 consumer vulnerability package

Summary of our December proposals

2.14 We consulted on using a number of individual components that could make up a consumer vulnerability package in RIIO-GD2. These components included a mixture of:

- minimum standards to define a baseline level of service that we think the GDNs must provide to consumers in vulnerable situations
- potential funding streams for activities that go above and beyond business as usual
- incentives to encourage the GDNs to develop best practice and collaborative activities.

2.15 We proposed three options for combining the individual components into a package, as shown in Table 2.

[10] For example, in its call for evidence on an Energy Efficiency Scheme for Small and Medium Sized Businesses: https://www.gov.uk/government/consultations/energy-efficiency-scheme-for-small-and-medium-sized-businesses-call-for-evidence

Table 2: Options for the Consumer vulnerability package

	Item	Option 1: Enhanced Minimum	Option 2: Incentive Based	Option 3: Combined Package
Minimum Standards	Licence Obligation to provide priority services for specific customer groups	✓	✓	✓
	Guaranteed Standards of Performance	✓	✓	✓
	Fuel Poor Connections	✓	✓	✓
	Principles-based Licence Obligation on treatment of consumers in vulnerable situations	✓	✓	✓
Supporting Flexibility	Use-it-or-lose-it allowance	X	X	✓
	Innovation Funding	X	X	✓
Incentives supporting ambition and delivery	Business Plan Incentive	X	✓	✓
	Reputational Incentive	X	✓	✓

Summary of responses

2.16 Most stakeholders who commented in this area were supportive of the combined package option, as they thought it would challenge the network companies to provide an appropriate service to consumers in vulnerable situations. One stakeholder also noted that supporting flexibility was key to accommodate different definitions of fuel poverty across devolved governments. A consumer representative group said that Option 1 could result in a lower level of service for consumers in vulnerable situations, while Option 2 wouldn't provide enough financial incentive for GDNs to deliver additional benefits. Some stakeholders said that any vulnerability package needs to be able to cater for small projects and for testing new initiatives. A consumer representative group also highlighted the need to take vulnerability into account in areas beyond this package, including decarbonisation.

Decision

2.17 We will implement the combined package (Option 3). We think this option provides an appropriate level of flexibility to support innovation in this area, but also sets out the minimum service level expected from GDNs. We also think that this option will challenge the companies to focus their service on meeting the wants and needs of their customer bases in the best way.

2.18 Our decision on each component of the package is set out in more detail below.

Consumer vulnerability minimum standards

Purpose	To ensure there are minimum service standards for consumers in vulnerable situations which we expect companies to adhere to.
Decision	Retain the RIIO-GD1 minimum standards (with some improvements) and also consult on introducing a new **Licence Obligation** to ensure GDNs treat consumers in vulnerable situations appropriately.

Summary of issue

2.19 We want to ensure that all consumers in vulnerable situations receive an appropriate minimum level of service from their network company, regardless of where they live.

Summary of our December proposals

2.20 We proposed to retain the current Licence Obligation to provide additional services to specified customer groups,[11] to update the GSOPs, and to retain a fuel poor connections scheme.[12] We also proposed to introduce a new principles-based Licence Obligation which would require the GDNs to support consumers in vulnerable situations as part of their business-as-usual operations.

Summary of responses

2.21 In general, stakeholders were supportive of the proposals. Some stakeholders noted that it can be difficult to monitor compliance with, and enforce against, principles-based licence conditions.

2.22 A few respondents provided examples of principles they think should form part of the new proposed licence condition.

Decision

2.23 We will include in the statutory consultation on the RIIO-2 licence a new principles-based Licence Obligation, similar to Standard Licence Condition 0 of the Electricity Supply Licence. The draft Licence Obligation will require the GDNs to identify consumers in vulnerable situations and to take account of any consumer vulnerability when interacting with these consumers. The draft Licence Obligation will also require the GDNs to set up and maintain partnerships with relevant organisations, such as charities and councils. This will aim to place the responsibility firmly on the GDNs to develop approaches that deliver positive outcomes for consumers in vulnerable situations, while providing scope for innovation.

2.24 We will continue to work with stakeholders through our Licence Drafting Working Group to develop this Licence Obligation, taking on board the feedback received regarding compliance and enforcement.

2.25 We will take a risk-based approach to monitoring compliance with the Licence Obligation. We will monitor any issues that are brought to our attention; for example, through self-reporting, whistleblowing, and the vulnerability reputational incentive.

[11] Standard Special Condition D13: 'Provision of services for specific domestic customer groups' of the Gas Transporter licence.
[12] GSOPs and fuel poor connections are discussed in more detail later in this chapter.

2.26 We will also update the GSOPs, retain the existing Licence Obligation to provide additional services to specified customer groups, and retain a fuel poor connections scheme (as discussed later in this chapter).

Supporting flexibility in service provision for consumers in vulnerable situations

Purpose	To provide the flexibility for the GDNs to deliver ambitious and innovative bespoke initiatives that go beyond business as usual in supporting consumers in vulnerable situations.
Decision	1) We will provide funding through the RIIO-2 Network Innovation Allowance (NIA) for network-related innovation projects which seek to address consumer vulnerability. 2) We will introduce a **PCD** in the form of a use-it-or-lose-it allowance to fund initiatives that support consumers in vulnerable situations.

Summary of issue

2.27 Due to the wide range of circumstances that consumers in vulnerable situations face, it is difficult to prescribe exactly what minimum service level to require. We think that providing flexibility for the companies to develop and implement their own initiatives can encourage creativity and innovation in their approach to consumer vulnerability. We think that direct funding will provide the GDNs with the most flexibility to deliver ambitious, innovative and bespoke activities that go beyond business as usual.

Summary of our December proposals

2.28 We consulted on providing funding through the wider RIIO-2 innovation stimulus package for network-related innovation projects that seek to address consumer vulnerability, if we decided to retain the NIA.

2.29 We also proposed a new GDN use-it-or-lose-it allowance to spend on vulnerability and carbon monoxide (CO) safety initiatives (as discussed later in this chapter) that go beyond business as usual. We proposed setting this allowance at £15-30m over the price control period and consulted on two ways to implement it:

- set an allowance for each GDN to fund initiatives flexibly over RIIO-GD2. Specific initiatives would not be set upfront in the Business Plans
- provide specific funding as part of baseline allowances for initiatives that have been proposed by the GDNs through their Business Plans.

Summary of responses

2.30 Stakeholders who commented on this area were supportive of embedding vulnerability in the innovation funding.

2.31 Respondents were very supportive of including a use-it-or-lose-it allowance to fund initiatives that address consumer vulnerability and CO safety. Stakeholders thought that the allowance should be at least the upper end of the proposed £15-30m range.

2.32 All stakeholders favoured the flexible strategy approach to implementing the use-it-or-lose-it allowance, as this would enable innovation and ensure that the GDNs are able to adapt to the changing needs of their customers. Many respondents also provided their views on the types of projects that could be funded through the use-it-or-lose-it allowance.

Decision

Providing innovation funding for projects addressing consumer vulnerability

2.33 We have decided to retain the opportunity for companies to receive NIA funding in RIIO-2. As explained in Chapter 10 of the Core Document, this will be subject to a number of reforms. This includes focussing primarily on projects related to the longer-term energy system transition and addressing consumer vulnerability, as well as any innovation allowances being set based on the justification set out in company business plan submissions.

Consumer vulnerability and CO safety use-it-or-lose-it allowance

2.34 We have decided to provide a £30m use-it-or-lose-it allowance for programmes addressing consumer vulnerability and CO safety that go beyond business as usual. We will implement this allowance using a flexible approach. We will not require the GDNs to set out specific initiatives in their Business Plans. This flexibility will allow the GDNs to continue to engage with partners, to adopt new ideas and strategies, and to address the changing needs of their customers throughout RIIO-GD2.

2.35 The GDNs will be required to set out overarching strategies in their Business Plans for use of the allowance, which we will assess through the Business Plan Incentive. These strategies will provide confidence that the GDNs have good practices in place to ensure the initiatives funded through the use-it-or-lose-it allowance are best practice. These strategies must be tested with the GDN's stakeholders, fuel poor partners and the CEGs. Each GDN's strategy will need to set out:

- the types of initiatives that the GDN intends to fund and how it will evidence that these are beyond business as usual
- the outcomes the GDN intends to achieve through these initiatives
- particular consumer groups it would support, and how it would ensure it is helping those who are most in need
- how the GDN will engage and collaborate with stakeholders to develop these initiatives
- how the GDN will ensure that the allowance is used effectively and efficiently, including how it will demonstrate that the funded initiatives offer value for money
- how it will assess the success of any initiatives
- how it will split the allowance proportionately between vulnerability and CO safety initiatives, based on stakeholder engagement
- how it has served consumers in vulnerable situations in RIIO-GD1, including how much has been spent on specific initiatives
- how it will work in partnership with other GDNs to develop and deliver collaborative projects, considering each of the points above.

2.36 We think collaboration is key to ensuring that the best service is provided and will therefore ring-fence 25% of this allowance solely for collaborative projects between the GDNs. The remaining 75% of the allowance will be set proportionately to the number of customers each GDN serves.

2.37 Each initiative funded through the use-it-or-lose-it allowance will need to have clear outcomes or deliverables attached to the funding. Any unspent allowances will be automatically returned to consumers, as will allowances for projects that do not meet their deliverables.

Next steps

2.38 We will continue to develop the detailed implementation arrangements for the allowance in collaboration with stakeholders. We will set out the key eligibility requirements for projects to receive funding through the allowance. We will also develop more detail on how the ring-fenced allowance for collaborative projects will be implemented.

Incentives supporting ambition and delivery

Purpose	To encourage the GDNs to deliver ambitious and best practice initiatives to support consumers in vulnerable situations.
Decision	We will evaluate the GDNs' approaches to consumer vulnerability through the wider Business Plan Incentive. We will also introduce a new **reputational ODI** which has two parts: • a requirement for the GDNs to host an annual showcase event to share knowledge and best practice • a requirement to report annually on common vulnerability service metrics.

Summary of issue

2.39 We want to ensure that the consumer vulnerability initiatives that the GDNs propose and deliver are ambitious, effective and delivered to a high standard. We also want to encourage effective partnership networks and for the GDNs to focus on initiatives that consumers in vulnerable situations really want and need. We think that incentives can be an effective tool to encourage the network companies to go beyond the set minimum requirements and to ensure best practice in the delivery of these initiatives.

Summary of our December proposals

2.40 We consulted on evaluating the GDNs' approaches to vulnerability as a minimum requirement within the wider RIIO-2 Business Plan Incentive.

2.41 As part of the use-it-or-lose-it allowance, we proposed to require the GDNs to host a public showcase event annually to share knowledge and best practice.

2.42 We also proposed introducing a reputational ODI to highlight comparative performance during the price control. We consulted on three ways to implement it: an ongoing role for the CEGs to review progress, a review led by a third party with consumer vulnerability expertise, or an Ofgem-led assessment.

Summary of responses

2.43 In general, stakeholders supported a reputational incentive in this area. One GDN did not think a reputational incentive would benefit consumers, but thought that the proposed showcase event would help share best practice and learnings. A DNO and a consumer representative group also had some concerns that a reputational incentive would not be strong enough to incentivise significant action.

2.44 Many stakeholders provided feedback on how a reputational incentive could be implemented. Two respondents agreed that the CEGs should have an ongoing role in assessing the reputational incentive. Other stakeholders thought that while the CEGs could play an ongoing role in this area, they should not be expected to lead the process. Some stakeholders thought that an expert panel, similar to that of the RIIO-1 Stakeholder Engagement Incentive and Discretionary Reward Scheme, should be created to provide a qualitative assessment.

2.45 Including vulnerability within the wider RIIO-2 Business Plan Incentive was supported, though one stakeholder was concerned that the number of areas captured within the Business Plan Incentive could dilute the impact of the incentive in this area. Some stakeholders also noted that more information was required to truly understand how GDNs will address this within their Business Plans.

Decision

Business Plan Incentive

2.46 We have decided to assess the GDNs' approaches to vulnerability through the Business Plan Incentive. It will be a minimum requirement for the GDNs' Business Plans to include clear proposals and strategies on vulnerability which have been tested with stakeholders and the CEGs. If the plan is poor quality, we could apply a penalty through the Business Plan Incentive. We will also reward the GDNs through the Business Plan Incentive for clear commitments on vulnerability, which we think, should be clearly linked to bespoke outputs to ensure delivery. To receive a reward, these commitments must be beneficial to consumers, go beyond business as usual or initiatives delivered through the use-it-or-lose-it allowance, and demonstrate the GDN is taking additional risk it would otherwise not take. Further information on the Business Plan Incentive can be found in Chapter 11 of the Core Document.

Consumer vulnerability reputational incentive

2.47 We will implement a reputational ODI to highlight performance in this area. This will consist of two parts, which will require the GDNs to:

- Hold an annual showcase event to exhibit their vulnerability and CO safety initiatives. We will also require the GDNs to engage with stakeholders, including consumer bodies, when planning the event to ensure it effectively shares best practice and learnings.
- Report annually to us on three or four common vulnerability service metrics. We will work with stakeholders to set appropriate metrics, including exploring the potential for a metric around FPNES targeting. We do not intend to set specific targets around these metrics, but will monitor the GDNs' performance against them.

2.48 We think the showcase event will help stakeholders engage with the GDNs' work. This could allow them to challenge the work the GDNs are currently doing, as well as facilitating new ideas and partnerships.

2.49 The annual reporting requirement will provide a greater focus on specific areas that we think will benefit consumers. Setting common metrics will allow for direct comparison between the GDNs, and will enable us to monitor their performance in these areas.

2.50 We do not think a financial ODI in this area is appropriate as we consider the reputational ODI will be strong enough to influence the GDNs' behaviour. We also think it would be difficult to attribute a financial value to the performance improvements driven by the incentive, as we are also providing funding in this area through the use-it-or-lose-it allowance.

Next steps

2.51 We will work with stakeholders to produce and consult on three or four common vulnerability service metrics for the GDNs to report against annually as part of the vulnerability reputational ODI. We will consult on our proposed metrics.

Carbon Monoxide safety

Purpose	To support the GDNs in their role in preventing CO poisoning and educating on the dangers of CO.
Decision	We will include CO safety as a **PCD** in the use-it-or-lose-it allowance and reputational incentive as part of the larger consumer vulnerability package.

Summary of issue

2.52 CO is a colourless and odourless gas that is produced when burning carbon fuels. It is normally undetectable to the senses and can cause death, acute injury or chronic health problems.

2.53 We think GDNs have a role to play in preventing CO poisoning and educating on its dangers, building upon the good work in this area during RIIO-GD1.

Summary of our December proposals

2.54 We proposed that CO safety should be included within the use-it-or-lose-it allowance and reputational incentive of our vulnerability package (see above).

Summary of responses

2.55 Responses to the consultation proposal were mostly positive and agreed that the GDNs should have a role in this area. A CEG wanted to ensure that CO awareness activities funded through the use-it-or-lose-it allowance did not have to solely support consumers in vulnerable situations.

Decision

2.56 We agree that GDNs are well placed to deliver CO safety activities and awareness programmes, and we will continue to support this role in RIIO-GD2. We will therefore include CO safety and CO awareness programmes within the use-it-or-lose-it allowance, as outlined earlier in this chapter. For the avoidance of doubt, initiatives relating to CO safety funded through the allowance will not have to be solely focused on consumers in vulnerable situations.

Fuel Poor Network Extension Scheme (FPNES)

Purpose	To help tackle fuel poverty by helping off-grid, fuel poor households connect to the gas network.
Decision	We will retain the FPNES as a **PCD**. We will also implement several measures to ensure that the scheme is better targeted and better linked to the delivery of energy efficiency measures through other schemes.

Summary of issue

2.57 The FPNES was created to help off-grid households connect to the gas network by providing funding towards the cost of the connection. In order to qualify for this connection, the household needs to meet the eligibility criteria set by us. These criteria reflect commonly-used proxies of fuel poverty, or criteria employed by other related government (central, devolved, and local) measures and schemes.

Summary of our December proposals

2.58 We proposed to retain the FPNES for RIIO-GD2, but set out options to:

- increase the scheme targeting
- better coordinate the FPNES with other government schemes
- fund the scheme
- set targets for the number of connections delivered through the FPNES
- continue to provide eligible households with an FPNES voucher which underpins the amount of assistance the household can receive.

Summary of responses

2.59 Most respondents who commented on this area supported retaining the FPNES. Two stakeholders were opposed. One noted that it is unclear whether funding fuel poor connections is consistent with our duties and stances to minimise cross-subsidies. One thought that we should stop the scheme and instead use the money spent on FPNES to fund low carbon heating and energy efficiency measures.

2.60 Several stakeholders, while supportive of the FPNES, thought that the scheme needs to be better linked to heat decarbonisation objectives and whole system solutions. Some stakeholders said that the scheme should fund low carbon heating systems such as hybrid heat pumps.

2.61 An FPNES fuel poor partner organisation highlighted that, under the current arrangements, many eligible customers miss out on the FPNES because they can't afford to install an effective heating system. It advocated providing some funding towards first time central heating systems. A consumer representative group also supported this, where the GDNs can evidence that funding is not available from other sources. It suggested allowing the GDNs to fund this through the consumer vulnerability use-it-or-lose-it allowance, subject to a cap.

Increasing targeting and delivery of energy efficiency measures

2.62 Stakeholders were supportive of continuing to link the FPNES to other government schemes and funding sources, as this could facilitate a whole house solution. There was also general support for creating better partnership networks and acknowledgement that a central point of contact and support would benefit fuel poor households.

2.63 Some stakeholders supported using the FPNES to fund energy efficiency measures, whereas others thought this was outside the GDNs' remit. A few stakeholders supported a new requirement to ensure that households receiving an FPNES connection also achieve a target level of energy efficiency. However, three of the GDNs and an industry body did not agree with this proposal. They argued that this could lead to a reduced number of connections, without additional funding for energy efficiency. Additional funding might also be required for Energy

Performance Certificate (EPC) assessments. A few respondents also noted that some properties may require a significant retrofit to achieve a Band C rating, which may be impractical and expensive.

2.64 The respondents broadly supported increasing targeting, including the use of vulnerability mapping tools. However, consumer representative groups did not think mapping tools should be used as an eligibility criterion for the scheme. A GDN suggested that it should be a requirement of the scheme to carry out post-completion surveys to demonstrate how the connection had addressed fuel poverty.

2.65 Several stakeholders suggested using financial incentives to improve targeting and encourage energy efficiency improvements alongside the scheme. A consumer representative group suggested improving targeting by only providing full FPNES funding to GDNs if they can evidence that the householder is living in fuel poverty. One GDN suggested that a financial incentive could be linked to a close out report carried out by fuel poor partners, while another suggested that it could be linked to evidence that the targeting or social return on investment is above a set level.

Funding and setting targets for the FPNES

2.66 Two GDNs thought that a volume driver should be used to fund the FPNES, supported by incentives which are linked to the number of delivered connections. They argued that a fixed allowance with a penalty-only incentive would limit ambition and encourage the GDNs to submit lower targets in their Business Plans. Another GDN thought that a financial ODI for outperformance, as in RIIO-GD1, would encourage more connections.

2.67 There were varied views on the value of the FPNES voucher. Some of the GDNs thought that increased costs relating to better targeting would require an increase in the voucher. A consumer representative group also advocated having a higher voucher for households that the GDNs can evidence are fuel poor. A fuel poor partner organisation stated that the majority of connections are well within the current maximum voucher value.

<u>Decision</u>

2.68 We will retain the FPNES as a PCD in RIIO-GD2. We think that the scheme can continue to provide a cost-effective solution to help fuel poor households, pending wider government decisions on the future of heat. We will develop specific scheme requirements, such as how the GDNs should assess whether gas is the best solution for the household, in collaboration with stakeholders. We will also consider how the scheme can be better linked to decarbonisation objectives, for example by allowing district heat or hybrid heat pump connections.

2.69 In addition to the consultation responses, we have considered the government's announcements in the Chancellor of the Exchequer's Spring Statement.[13] This included a proposal to introduce a Future Homes Standard which would future-proof all new homes with low carbon heating from 2025. We still think it is appropriate to continue the FPNES, given the immediate benefits the scheme can provide to fuel poor households. We note that government policy in this area could change before or during RIIO-GD2. We will therefore put in place a re-opener which will retain the flexibility to stop the scheme, if appropriate, in response to developments in government heat policy.

[13] https://www.gov.uk/government/topical-events/spring-statement-2019

2.70 We recognise that providing some funding for first time central heating would help the GDNs deliver the FPNES. However, as outlined earlier in this chapter, we do not think it is value for money for the price control to fund these measures as it could duplicate government funding. We have taken this into account in our decision on setting targets, as discussed later in this document.

Increasing targeting of fuel poor households and delivery of energy efficiency measures

2.71 We will continue to link the FPNES to other government schemes and funding sources as we agree with stakeholders that this can facilitate a whole house solution. We also want to encourage the GDNs to continue to develop effective and collaborative partnerships. We think effective partnerships are key for the GDNs to improve targeting of fuel poor households and to coordinate with other schemes to maximise the support provided to households in fuel poverty. We think this could be facilitated by the use-it-or-lose-it allowance.

2.72 We will require the GDNs to explore whether energy efficiency measures can be installed at each property receiving an FPNES connection. We will include more details on this requirement in the statutory consultation on the RIIO-2 licence. We will also require the GDNs to report annually on the number and type of energy efficiency measure installations which are associated with FPNES connections. We think this reporting requirement will encourage the GDNs to leverage their partnership networks to deliver energy efficiency measures.

2.73 We will not require the GDNs to ensure that households receiving an FPNES connection also achieve a target level of energy efficiency as it could limit the number of connections made through the scheme, for example where expensive retrofits are required. We also don't think it is appropriate to provide a financial incentive, as it would be difficult to prove the GDNs were responsible for the installation of the associated energy efficiency measures.

2.74 We think it is important to ensure the scheme is well targeted to reach fuel poor households to provide value for money for consumers, and to ensure the scheme benefits those who need it most. As such, in their Business Plans, GDNs must set out how they intend to ensure the scheme is well targeted. We will also explore including a metric around FPNES targeting rates in the consumer vulnerability reputational incentive. We encourage the GDNs to continue to develop and use vulnerability mapping tools to improve the targeting of fuel poor households through the scheme. However, we will not include these mapping tools in the eligibility criteria in response to stakeholder concerns that these tools have not been verified and might not capture the transient nature of vulnerability.

2.75 We have decided not to introduce a financial incentive to improve the targeting of fuel poor households through the FPNES because we think it would be hard to assess whether the reward is proportionate to the benefit consumers receive. However, any processes or initiatives the GDNs use to improve the targeting rate should be presented at the vulnerability showcase event outlined earlier in this chapter.

Funding and setting targets for the FPNES

2.76 We have decided that the FPNES should be a PCD with set targets, rather than a volume driver. We think that a volume driver could lead to fewer connections being delivered through the scheme as the GDNs would not be challenged by stretching targets. We will require GDNs to submit targets for the PCD in their Business Plans, which we will assess. We think these targets, which will be challenged by the CEGs, will ensure there is accountability for the number of connections delivered through the scheme. Additionally, as a PCD, if lower than expected numbers of connections are delivered, any unspent funds will be automatically refunded to consumers.

2.77 We will not set a financial penalty or reward for over or under delivery of the GDNs' FPNES targets. We do not think a reward for over delivery is appropriate as it could discourage the GDNs from focusing on delivering connections to those who most need them, particularly if stretching targets are set. We have also decided not to penalise the GDNs for not achieving their targets as a financial penalty could prevent the GDNs from putting forward ambitious targets in their Business Plans.

2.78 We will monitor the GDNs' performance on their FPNES targets through annual reporting. We think this approach will provide a reputational incentive for the GDNs to meet their targets.

2.79 We have decided to keep the value of the voucher the same, as we have not set specific targets around improving the targeting rate or energy efficiency.

<u>Next steps</u>

2.80 We will develop more specific requirements of the FPNES in collaboration with stakeholders, including more detail on:

- how GDNs should assess whether gas is the best solution for the household
- the requirement for the GDNs to explore whether energy efficiency measures can be installed at each property receiving an FPNES connection.

2.81 We will also consider how the delivery of the scheme can be linked to decarbonisation targets, including how district heat and hybrid heat pump connections should be treated under the scheme.

Stakeholder Engagement Incentive

2.82 The following provides our rationale and decision for the Stakeholder Engagement Incentive, which shall apply to all network companies within the GD, ET and GT sectors for RIIO-2. We have summarised the GD-specific aspects of the proposals and responded to GD-specific stakeholder views where applicable below.

Purpose	To drive network companies to undertake continuous high quality stakeholder engagement in RIIO-2.
Decision	**Business Plan Incentive** 1) Business Plans must include a clear overarching strategy for within-period stakeholder engagement. The quality will be evaluated through the Business Plan Incentive. **Reputational ODI** 2) We encourage network companies to propose bespoke outputs for stakeholder engagement within the period. 3) We will report on network companies' performances, highlighting strong and weak performance.

<u>Summary of issue</u>

2.83 Network companies should undertake continuous high quality engagement with their stakeholders to inform the day-to-day running of their businesses. With this in mind, the RIIO framework emphasises engagement by requiring network companies to engage with their stakeholders to inform their Business Plans. RIIO-1 also introduced the Stakeholder Engagement Incentive (SEI). The SEI financially rewards network companies that undertake high quality stakeholder engagement and use it to inform how they plan and run their businesses.

2.84 Our analysis of RIIO-1 shows that stakeholder engagement has become increasingly embedded, with most network companies demonstrating that a commitment to engagement runs through all levels of the organisation.

Summary of our December proposals

2.85 In our December consultation, we stated that high quality stakeholder engagement should now be a business as usual activity, which should be undertaken by network companies on an ongoing basis. We set out that network companies' RIIO-2 Business Plans would need to be informed and justified by stakeholder engagement and include a plan for ongoing engagement. Failure to do so could mean the company incurs a penalty through the Business Plan Incentive when Ofgem assesses its plans for RIIO-2.

2.86 We considered whether an incentive for stakeholder engagement is required for RIIO-2, and we consulted on three options:

- Option 1: No ODI for stakeholder engagement in RIIO-2.
- Option 2: Reputational ODI – we would report on companies' stakeholder engagement performance.
- Option 3: Financial ODI – we would apply a reward or penalty for companies' stakeholder engagement performance at the end of the price control period.

2.87 We also stated that to effectively operate a reputational or financial ODI, it would be important for network companies to propose clear commitments in their Business Plans. We invited views on the kinds of commitments that would be appropriate for stakeholder engagement in RIIO-2.

2.88 We considered the use of relative rewards and penalties in order to create a degree of competition between companies under a financial incentive. We also stated we could consider an enduring role for the CEGs/User Groups (UGs) in as contributors to our assessment of company performance under an ODI.

Summary of responses

Business Plan Incentive

2.89 Overall, there was support for our proposal to assess network companies' engagement strategies and plans as part of the Business Plan Incentive. It was seen as a way of driving network companies to set out a well-evidenced and stretching programmes of engagement in RIIO-2. One stakeholder, however, expressed concern that the number of areas captured within the Business Plan Incentive could dilute its impact in this area.

Ongoing engagement: Potential ODIs

2.90 Most stakeholders who responded were in favour of an ODI in RIIO-2, with many arguing that it presented an opportunity for network companies to further advance the quality and depth of their engagement with stakeholders. However, there was a mixture of views as to whether it should be financial or reputational.

2.91 Of those respondents in favour of an ODI in RIIO-2, the majority were supportive of retaining a financial ODI. In particular, network companies were in favour of retaining an upside-only financial incentive, arguing that, as engagement activities involve significant effort and expenditure, a financial reward should be retained. One network company suggested that a financial incentive in RIIO-2 should include both rewards and penalties. One stakeholder suggested it should be downside only. In general, respondents cautioned against applying relative rewards and penalties, as competition would discourage collaboration and the sharing of best practice.

2.92 Two stakeholders commented on the difficulty of calibrating a financial ODI that would deliver value for money for consumers. One of these respondents argued that stakeholder engagement has reached a level whereby further improvements would not be cost efficient and suggested that we should instead introduce a Licence Obligation. Others commented that a reputational incentive would ensure value for money for consumers, but also highlighted that a more targeted upside financial incentive could be applied for engagement activities addressing topics that are complex, future looking or controversial. Two further respondents suggested that rather than retain an incentive scheme, sufficient provisions for stakeholder engagement should be made through baseline allowances.

2.93 Some respondents raised concerns about our proposal to move towards a one-off assessment at the end of the price control period. Stakeholders highlighted that the RIIO-1 SEI operates annually and therefore enables companies to change their approach to engagement as their stakeholders' expectations change, new tools of engagement emerge and best practice evolves.

Decision

2.94 We will a take a two-tiered approach to continue to encourage high quality stakeholder engagement by network companies in RIIO-2. We will:

- evaluate network companies' approaches to stakeholder engagement through the wider Business Plan Incentive
- introduce a reputational ODI for stakeholder engagement.

Ongoing engagement: Business Plan Incentive

2.95 As stated in Chapter 3 of the Core Document, we consider stakeholder engagement to be a business-as-usual activity that should be undertaken on an ongoing basis. Through the Business Plan Incentive, we will assess the quality of network companies' proposed approaches to ongoing stakeholder engagement in RIIO-2.

2.96 In their Business Plans, network companies will need to include a clear strategy for engagement in RIIO-2 as well as a set of commitments to deliver that strategy. Network companies' strategies and plans for delivery should clearly set out the scope of their engagement activities during the RIIO-2 period, and provide evidence that the costs associated with the delivery of the plans are efficient and provide value for money.

2.97 Network companies' engagement strategies and commitments for delivery should be well-justified, evidence-based and demonstrate how companies have considered the needs of both existing and future consumers. Network companies' approaches to ongoing engagement should be developed through engagement with their stakeholders and have been tested by the CEGs/UGs.

2.98 If a company fails to meet our expectations, a penalty could be applied through the Business Plan Incentive.

2.99 We will also consider rewarding network companies where, in addition to justifying their core plan, they can demonstrate additional consumer value. Further information on the Business Plan Incentive can be found in Chapter 11 of the Core Document.

Ongoing engagement: Reputational ODI

2.100 In their RIIO-2 Business Plans, we encourage network companies to propose bespoke outputs for ongoing stakeholder engagement, where outputs go beyond business-as-usual activity and are of demonstrable additional benefit to stakeholders. We will report on network companies' progress against their outputs, highlighting strong and weak performance.

2.101 Bespoke outputs proposed by network companies must be informed by engagement with their stakeholders and be tested by the CEGs/UGs. We will take account of the views provided by the CEGs/UGs and the RIIO-2 Challenge Group and other relevant matters in our assessment of proposals. Our expectation is for the bespoke outputs to be reputational only.

2.102 Bespoke outputs as part of a reputational ODI are appropriate because:

- Based on stakeholder responses and our analysis of RIIO-1, we consider that high quality engagement should now be part of the day-to-day business activity of each network company. We therefore do not consider that we should retain the RIIO-1 SEI, which aimed to drive behavioural change.
- The Business Plan Incentive will ensure that RIIO-2 Business Plans are informed by engagement and that network companies' overarching engagement strategies and commitments for delivery are robust and well justified. We recognise that each network company's stakeholders may have different needs. Bespoke outputs will help drive companies to tailor and advance the quality and depth of their stakeholder engagement for the full duration of the period.
- Through the reporting of performance, a reputational ODI will provide clarity on the progress of each network company against their outputs whilst also highlighting strong and weak performance. In this way, a reputational ODI will drive companies to deliver on their outputs.

<u>Next steps</u>

2.103 Our expectations will be set out in the Business Plan Guidance. We will continue to seek input from the enhanced engagement groups. For any bespoke outputs put forward in the Business Plans, we expect network companies to use their CEGs/UGs to challenge their proposed deliverables.

2.104 Network companies should consider the future role of the CEGs/UGs including how they could usefully feed into our assessment of network companies' performance against their outputs in this area. We will consider the extent to which CEGs/UGs could be involved in network companies' engagement activities within the period and will consider updating our Enhanced Stakeholder Engagement guidance to provide guidance on the role of the groups beyond price control settlement process.

Emergency response time

Purpose	To ensure GDNs respond to 97% of reported gas escapes within one hour for uncontrolled escapes and within two hours for controlled escapes.
Decision	We will retain this **Licence Obligation** with an unchanged performance standard for RIIO-GD2.

Summary of issue

2.105 GDNs need to attend unplanned gas escapes quickly to ensure their network is safe. The Gas Safety (Management) Regulations 1996 (GSMR) require the GDNs to attend gas escapes as soon as is reasonably practicable, and prevent the gas escaping within 12 hours.

2.106 In addition to the GSMR, we set a complementary performance standard in the licence that GDNs must respond to 97% of reported gas escapes within one hour for uncontrolled escapes and within two hours for controlled escapes.

Summary of our December proposals

2.107 We proposed to retain this long-standing output and performance target for RIIO-GD2. We also set out that we intend to review the wider licence condition to ensure it remains robust, as the wider obligations have not been assessed for a long time.

Summary of responses

2.108 Stakeholders who commented on this output agreed that it should continue for RIIO-GD2 and that the existing 97% performance target is appropriate. There was no objection to our proposal to review the wider licence condition to ensure that it remains robust.

Decision

2.109 We will retain the emergency response time output for RIIO-GD2 and the 97% performance standard. This standard will be set out in the licence. We think this standard remains appropriate and stakeholders haven't provided evidence of a need for a change, which could carry an associated cost.

2.110 We will review the wider licence condition to ensure that it remains robust and consistent with the GSMR. Specifically, we will ensure that the licence is clear on the minimum conduct requirements for meeting the 97% performance standard (eg the minimum qualifications of staff attending a call out). We intend to use the future Licence Drafting Working Group to develop this. We do not expect GDNs to put forward bespoke targets as part of their Business Plans.

Interaction with other policy areas

2.111 In Chapter 5 we discuss 'loss of metering work' and how we may consider the costs associated with delivering the emergency response service, and its interaction with other services that GDNs might supply through their emergency response teams (eg meter work). It is vital that GDNs consider this as part of their Business Plans to ensure the costs associated with delivering the 97% performance standard are efficient. Further engagement on this will take place through the cost assessment working groups.

Emergency response and enquiry service

Purpose	To ensure customers have a reliable emergency response phone line service in the event of an emergency.
Decision	We will consult on amending the existing licence condition to make it clear that the emergency response phone line should always be operational to receive calls. It will not be a specific output under RIIO-GD2.

Summary of issue

2.112 The GDNs and NGGT have a jointly-established single emergency telephone service for the public to report gas leaks. Cadent is responsible for operating the telephone service to the required standard.[14] The service must be continuously manned, fully available to all persons, and free of charge. In addition, all reports and enquiries to the line must be processed promptly and efficiently.

Summary of our December proposals

2.113 We proposed to amend the GDNs' licences to make it clear that the emergency response phone line should always be operational to receive calls. The changes would align with obligations in the Electricity Distribution licence. We also asked for views on whether the emergency response and enquiry service should be considered as a specific consumer facing output for RIIO-GD2.

Summary of responses

2.114 Two GDNs were concerned that the proposed licence amendment entails an unrealistic tightening of standards. It was highlighted that the phone line operates at over 99% reliability and that tightening the current obligations may carry additional costs for consumers. An energy supplier and a consumer representative group welcomed the proposed licence amendment. The consumer representative group also considered that the emergency response phone line should be seen as an output for RIIO-GD2 and GT2. The Health and Safety Executive (HSE) clarified that, under specific regulations, Cadent is responsible for operating the telephone service.

Decision

2.115 As part of implementing RIIO-GD2 and GT2, we will consult on amending the existing licence condition to make it clear that the emergency response phone line should always be operational to receive calls, aligning obligations in gas to those in electricity distribution.[15] We remain of the view that, given the volume of calls received on the emergency line and their urgency, it is important that the service has sufficient resilience to guarantee constant availability.

2.116 We do not think that aligning the phone line obligations with a similar service in Electricity Distribution will carry any material additional costs. Having a clear process and contingencies to ensure a continued service should be a key element of running an emergency phone line. Consideration of the specific circumstances of an outage would be a necessary precursor to any decision whether or not to pursue enforcement action. If there are material additional costs to aligning

[14] Cadent's responsibilities are subject to specific exemptions on the other gas network companies.
[15] The Electricity Distribution Licence includes an obligation to ensure this happens and we will look to align the two sectors. Specifically, Standard Condition 8 (Safety and Security of Supplies Enquiry Service), paragraph 3, of the Electricity Distribution Licence states that the service must "be available to receive and process telephone reports and enquiries at all times on every day of each year."

obligations with those in Electricity Distribution, then we will expect these to be clearly shown, and evidenced, within the Business Plans.

2.117 We will not include emergency response and enquiry service as a specific RIIO-GD2 and GT2 output. This does not diminish its importance, or network companies' role in delivering the service, which will continue to be set out in the licence.

Interruptions

2.118 When customers lose their gas supply they are without an essential service. Therefore, we think it is important to ensure that particular standards are met and that GDNs continually look for ways to minimise disruption for customers.

2.119 Gas supply interruptions are split into:

- Planned interruptions – caused by planned maintenance or replacement work on the network, with customers knowing when they will happen.
- Unplanned interruptions – a fault/failure on the network (eg a gas escape), with customers given little, or no, warning that their gas supply will be cut off. Unplanned gas interruptions are rare: in 2016-17 there were around 98,000 across GB, compared with 13 million unplanned electricity interruptions.

2.120 Our decisions for RIIO-GD2 place a renewed focus on both planned and unplanned interruptions.

A) Planned interruptions

Purpose	We want to ensure that customers receive a good quality service from GDNs when there is a need for a planned interruption.
Decisions	No specific output for planned interruptions. Other RIIO-GD2 output areas ensure that GDNs deliver a good quality and responsive service to their customers when a planned interruption is required.

Summary of issue

2.121 Planned interruptions occur, for example, when network upgrades are needed. When these types of interruptions happen, it is important that GDNs address the needs of their customers. This could include providing clear information on when an interruption will start and end, as well as offering specific services to different types of customers.

Summary of our December proposals

2.122 We sought stakeholders' views on removing the RIIO-GD1 reputational planned interruptions output for RIIO-GD2 and on reliance on the other outputs to ensure that customers receive a good quality service. We considered it more important to focus on the responsiveness of GDNs to the needs of their customers when a planned interruption occurs, rather than on reducing the number and duration of planned interruptions. We proposed to continue to collect data on planned interruptions to monitor them over the price control period.

Summary of responses

2.123 One DNO disagreed with the proposed removal of this output, noting that a financial incentive could be set based on the value of customer inconvenience caused by planned interruptions. An approach similar to RIIO-ED1 was suggested. No other stakeholders responded explicitly on our proposals.

Decision

2.124 We have decided to remove the RIIO-GD1 reputational output for planned interruptions. We think that the package of other outputs under RIIO-GD2 will focus on the customer experience during planned interruptions, including our customer satisfaction survey, complaints metric and GSOPs.

2.125 We will also continue to monitor both the volume and duration of planned interruptions through our annual reporting of data to ensure that they do not increase unexpectedly without reason.

B) Unplanned interruptions - average restoration time incentive

Purpose	To ensure consumers are protected against any significant deterioration in the length of unplanned interruptions, and that existing performance issues with Multiple Occupancy Buildings (MOBs) are resolved.
Decision	We will introduce **penalty only ODIs**, as follows: 1) A penalty only ODI that covers all unplanned interruptions except those on Cadent's North London network. 2) For Cadent's North London network, a penalty-only ODI that relates to MOB interruptions and a separate penalty-only ODI that relates to other interruptions.

2.126 Our December consultation on unplanned interruptions can be split into two parts:

- Whether there is a need to introduce a new output based on average restoration time for total unplanned interruptions, and whether this should include a specific measure for interruptions in MOBs.
- If there is a need, how the incentive should be designed.

2.127 The following sections discuss each of these separately.

The need for a new output on average restoration time for total unplanned interruptions

Summary of issue

2.128 Through their bills, gas consumers pay GDNs to provide a reliable service. When unplanned interruptions occur, it's important that consumers have clear expectations of the service they'll receive, including how long, on average, they can expect to be off supply.

2.129 While performance in restoring supplies following an unplanned interruption is satisfactory in most GDN regions, we're concerned that the reputational output in place for RIIO-GD1 is not sufficient to protect consumers from any significant deterioration in performance.

2.130 During RIIO-GD1, we have seen a substantial worsening of unplanned restoration times for consumers living in MOBs, concentrated in Cadent's North London network, which serves a large proportion of GB's MOBs. While the nature of these buildings can make interruptions more complex and lengthy to resolve, we think that the standard of service has not been good enough. Cadent acknowledges its poor unplanned interruptions performance in MOBs in its North London network. It is now working hard to rectify this over the remainder of RIIO-GD1 and has put in place an improvement plan.[16]

2.131 We think that it is important that the regulatory framework is strengthened for RIIO-GD2 so that it both maintains existing good performance, and drives improvements where these are required.

Summary of our December proposals

2.132 We proposed a new penalty-only output, with performance measured by reference to the average amount of time it takes a GDN to restore supply in the event of an unplanned interruption (ie average restoration time). In RIIO-GD1, performance is measured as total minutes lost across all interruptions during the year, and the ODI is reputational. We recognise that unplanned interruptions are rare but think that it is important to ensure that, when they do occur, they are dealt with as quickly as possible.

2.133 We also asked for stakeholders' views on the merits of separating interruptions that occur in MOBs into a specific output. We noted that this would be difficult for the start of RIIO-GD2 due to data limitations which would limit the comparability of GDNs' MOB performances.

Summary of responses

2.134 GDNs had differing views on the proposed output: one agreed with it, another supported the use of average restoration time but did not think a financial ODI was appropriate, and two argued that that broader measures of performance would be better, such as using the emergency and repair component of the customer satisfaction survey. Other stakeholders were generally supportive.

2.135 On the question relating to MOB interruptions, Cadent advocated a separate output for these. Other respondents were also generally supportive of this approach in principle, though one GDN stressed that work is still needed to ensure consistency in reporting of MOB interruptions and that adequate time is needed to revise the systems and processes necessary to underpin this approach. Another GDN noted that if there is a separate output for MOBs, then targets will need to be set on a network-specific basis, given the variation in MOB populations across networks. One DNO thought that separating MOBs into an additional output should not be necessary as overall targets can be weighted to account for regional differences in MOB populations.

Decision

2.136 We will implement a new financial penalty-only ODI for unplanned interruptions, based on average restoration time, to ensure that consumers are protected against any significant deterioration in performance. Through RIIO, GDNs are funded by gas consumers to deliver a good service and it's important that this is protected. Using this measure will also provide transparency about the level of service that consumers can expect to receive.

2.137 Given the MOB-related issue described above, we will take a different approach to Cadent's North London network than to all the other networks. It will have two penalty-only ODIs for unplanned interruptions:

[16] See https://www.ofgem.gov.uk/publications-and-updates/cadent-pays-24-million-past-failures-and-establishes-20-million-community-fund for further information.

- Average restoration time for unplanned interruptions in MOBs.
- Average restoration time for unplanned interruptions in non-MOBs.

2.138 All other networks will have a single penalty-only ODI for average restoration time for total unplanned interruptions.

Reasons for differing treatment between GDNs

2.139 In light of the increase in the length of unplanned interruptions in MOBs in Cadent's North London network, we think a separate ODI for MOBs in this region is appropriate because:

- it provides focus on the area of concern, and will support their MOB improvement plan that is now underway
- the problems stem from a combination of regionally-specific issues (due to the disparity in MOB populations between Cadent's North London network and other regions) and Cadent's own performance.

2.140 Both of these factors count in favour of a bespoke ODI for this network.

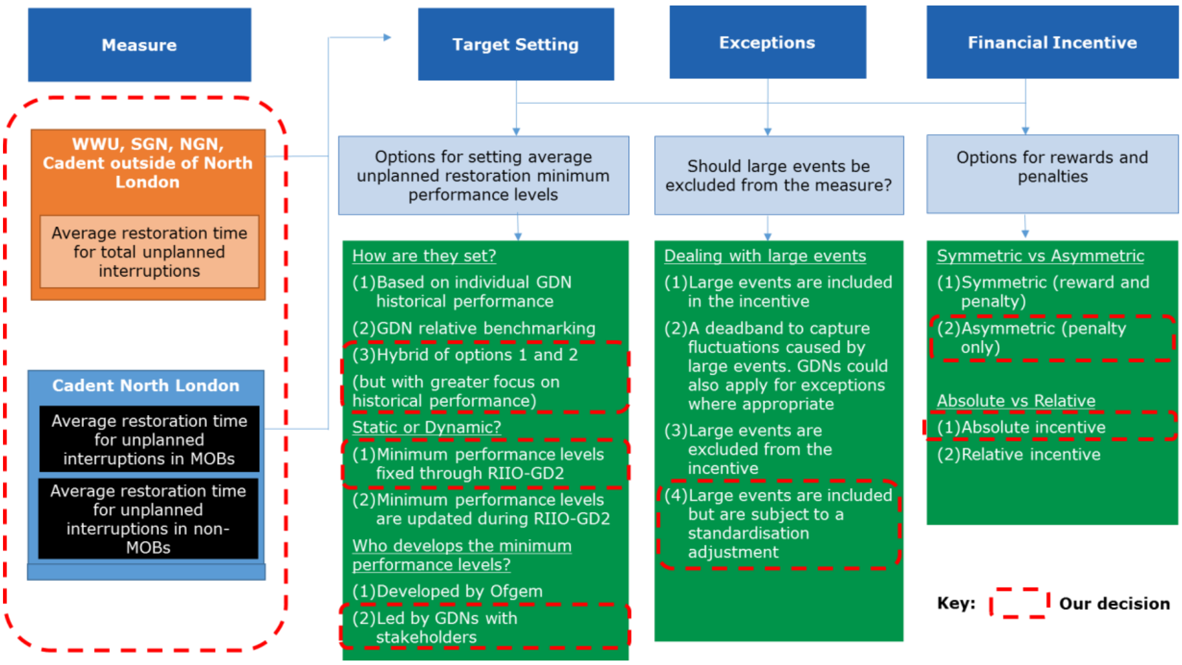
2.141 Cadent's performance on non-MOB interruptions is much better than for MOBs, and appears to be broadly on par with other GDNs, but using the total average restoration time makes it difficult for stakeholders to see this. Individual ODIs for Cadent North London will provide sight of performance in the case of both types of interruption.

2.142 While other GDNs were supportive of a MOB- specific output in principle, their RIIO-GD1 performance has not shown any significant issue with unplanned interruptions as a whole and there is no evidence to suggest deterioration in MOB performance within this. The same points are true of Cadent's other three networks. In addition, we are mindful that for the other GDNs, work is needed on systems and processes before MOB interruptions can be easily separated out in reporting (see 'target setting' section below for further information). It is therefore not appropriate to set a MOB-specific ODI at this time for these networks.

<u>The design of the incentive - applies to all GDNs</u>

2.143 In December, we summarised the key design options for the average restoration time for unplanned interruptions output along with our preferred options. Our decisions on the design are set out below in Figure 2 with the following sections presenting further details on each of the design aspects.

Figure 2: The design of the average restoration time for unplanned interruptions output



Target setting

Summary of issue

2.144 There are significant variations in average restoration time for unplanned interruptions over RIIO-GD1, both between the GDNs and over time. These are due in part to individual performance and in part to regional differences (such as MOB populations). The targets will need to take account of the different circumstances of each GDN.

Summary of our December proposals

2.145 In December our preferred approach for setting targets was for GDNs to lead the target setting, engaging widely with stakeholders and their CEGs. We envisaged GDNs using a hybrid approach to target setting, which is a combination of their own historical performance and relative benchmarking (ie performance relative to their peers) to develop and justify their own specific targets. We would then assess the appropriateness of the GDNs' targets in their Business Plans. We asked whether the targets should be static or dynamic, without expressing a preference between these.

Summary of responses

2.146 There was a wide range of views on target levels. Several GDNs commented that performance in non-MOB interruptions was already good, while an energy supplier and a consumer representative group felt that all companies should be expected to improve on their RIIO-GD1 performance. A CEG argued that Ofgem should not set targets that will lead to increased costs without evidence of consumer willingness to pay for this.

2.147 The hybrid approach to target setting received most support, though some respondents expressed concern about inconsistencies in data reporting between regions and noted that this meant that accurate benchmarking of performance between companies would not be possible.

Decision

2.148 GDNs will be required to propose and justify their own specific targets for average restoration time in their Business Plan, consistent with safety requirements. For Cadent's North London network this would be the case for both ODIs.

2.149 The targets represent a minimum expected performance level. Companies that breach the targets will incur penalties. Regional variations mean that minimum performance levels will not necessarily be the same for every network, and we expect GDNs to use their stakeholder engagement to define the appropriate level for them.

2.150 Through their stakeholder engagement, some networks may consider that their current performance does not need to improve, as it is already better than minimum expectations. In these cases, targets that are at, or more challenging than, the company's current performance may not be necessary, since the purpose of the output is to prevent unacceptable performance levels during the price control period. On the other hand, where there are existing performance issues, such as a clear upward trend in the average restoration times for MOBs, we would expect to see targets for improved performance, to bring average restoration times back to acceptable levels. In all cases, target values will be static rather than dynamic (ie they will be fixed from the outset of RIIO-GD2).

2.151 We expect GDNs to use the hybrid approach to justify their proposed targets. We envisage companies setting targets informed by their historical performance, in the first instance, and then considering what, if any, adjustments may be appropriate in the light of other networks' performance, and their own consumers' appetite for change. We would expect their stakeholders (including CEGs) to be closely involved in this process. GDNs should be able to explain any significant differences between their performance and that of other companies with reference to relevant regional variations.

2.152 Given some of the challenges of data comparability, we have established a working group to consider how data consistency of interruptions reporting between GDNs could be improved. One area of focus for this group will be to ensure that all GDNs put in place the capability to report on MOB interruptions in a clear and consistent manner over RIIO-GD2. This will facilitate comparisons across all GDNs, as well as ensuring more detailed and consistent data that will assist in the design of tailored outputs for all GDNs in the next price control review, if appropriate. We recognise that this may require investment in systems and workforces, and GDNs should include the costs and timescales for doing this as part of their Business Plans.

Exceptions (large events)

Summary of issue

2.153 The RIIO-GD1 targets exclude large events (where more than 250 consumers have their supply interrupted). Exclusions can be appropriate for events that have a material impact on targets, but over which the company has limited control. However, having an exception for large events weakens the incentive to ensure that large-scale interruptions are resolved as quickly as possible.

Summary of our December proposals

2.154 In our December GD Annex, we set out our analysis of large events, which suggests minimal correlation between the number of consumers affected and average restoration time. Based on this evidence, we proposed to have no exclusions for large events. We also asked whether any other types of interruption should be excluded from the new output.

Summary of responses

2.155 All GDNs were against including large events in average restoration time targets, on the basis that their size and unpredictability would skew both target setting and measurement. One GDN argued that our analysis showed the random nature of large events, as opposed to demonstrating that there was no link between the size of the event and the duration of the interruption. Other stakeholders favoured including large events to incentivise good performance in this area as well, though one also expressed concern that inclusion might lead to over-cautious targets.

Decision

2.156 We think it is important to have an incentive to ensure that large events are resolved as quickly as possible, but accept the argument that including the full impact of these could skew performance measurement. Consequently, large events will be included in the minimum performance levels for RIIO-GD2, but will be down-weighted to ensure that they do not have a disproportionate impact on measured performance.

2.157 Should a large event occur, for the purposes of the minimum performance level, the number of consumers affected will be treated as 250, and the total minutes weighted accordingly. This will have the effect of reducing the impact the event has on the overall average restoration time across the year. This recognises the concerns expressed by GDNs, but provides some incentive for good performance during these events. We think this is a more balanced way of treating these events because under the current arrangement, an event affecting 250 consumers is fully counted, but one affecting 251 or more is left out completely. This approach would mean that both have equal weighting. We have set out the detail of how this will work in Appendix 1. Any large events in the Cadent North London network that affects both MOB and non-MOB consumers should be allocated proportionately between the two ODIs.

Next steps

2.158 We will consult on the detailed implementation for separating large events for the Cadent North London network as part of the Draft Determinations.

Financial incentive

Summary of our December proposals

2.159 We proposed a financial incentive worth up to 0.5% of base revenue per annum. This would be penalty only, rather than symmetric, as this may better reflect consumer preferences and drive improvements in performance. We also stated that the incentive should be assessed on the basis of individual company performance, since GDNs will have different targets and so a relative assessment would be impractical.

Summary of responses

2.160 Three GDNs opposed a penalty-only financial incentive, arguing that this would be disproportionate; two of them thought it could risk compromising safety and make GDNs less willing to collaborate during interruptions. Other stakeholders supported the financial incentive, though a consumer representative group suggested that financial penalties should only apply to significant underperformance.

Decision

2.161 A penalty-only ODI will apply to GDNs that breach their target, and the penalty will increase as performance deteriorates beyond this level. Gas consumers pay for, and are entitled to expect, a baseline level of performance for unplanned interruptions, and a penalty only ODI will reduce GDNs' allowances should their consumers not get what they have paid for.

2.162 We also do not think introducing a financial penalty poses any risk to safety. Ensuring safety is a consideration that GDNs take into account in decisions every day in line with their statutory obligations, and their approach to interruptions should be no different.

2.163 Cadent's North London network will have the same overall level of incentive as the other networks, but this will be split between their two ODIs. Cadent should propose, and justify, an appropriate split as part of their Business Plan, testing it with their stakeholders, including the CEG.

2.164 Any penalties under this ODI will be calculated on an individual company basis, rather than against the relative performance of other GDNs. Consequently, we do not expect collaboration between GDNs to be affected in any way because companies will not be competing against one another within this ODI.

Next steps

2.165 We will consult on the calibration and value of the incentive at Draft Determinations. We note the views of some stakeholders that potential penalties of the order of 0.5% of base revenue may be excessive, and we'll consider this further.

2.166 We'll also consider further whether there is a need for any additional measures to address an excessive deterioration in average restoration times. In December, we consulted on whether the licence should be amended to set a target pass rate for GSOP1 (supply restoration). While we have decided against doing so (see below), we are considering instead whether the licence should specify an additional unplanned interruptions performance level beyond which the deterioration in service levels would be so substantially detrimental to consumers that further regulatory attention is required. Another means of addressing this issue could be to not apply a cap to the ODIs, so that the penalty would simply keep increasing in this situation. We will consider whether any such measures are needed at Draft Determinations, once we have reviewed GDNs' Business Plans.

Customer satisfaction survey

Purpose	To incentivise GDNs to improve the quality of their customer service.
Decision	We will retain the output as a **financial ODI** with both rewards and penalties possible against a new target score. We will also update the content and methodology of the surveys.

2.167 For RIIO-2, all sectors of the price control will have a satisfaction survey, with each sector identifying the most appropriate stakeholder groups to target. As with the customer satisfaction survey in RIIO-GD1, the GD survey will continue to target customers in three categories: those that have experienced planned or replacement works; those that have experienced works as a result of an emergency (ie unplanned works), and customers requiring connections work.

2.168 GDNs should provide high-quality customer service. Average customer service scores across all companies have improved over RIIO-GD1, as measured by the customer satisfaction survey. We want to ensure that for RIIO-GD2, with financial rewards available, companies continue to stretch themselves.

The design of the survey

Survey content and methodology

Summary of issue

2.169 The survey has been useful for understanding customer views on the level of service received for planned works (replacement), unplanned works (emergency response and repair) or connections works. We are looking at whether it is possible to improve the methodology and content of surveys to get a better response rate from customers and a more accurate representation of their views for RIIO-GD2.

2.170 The GDNs currently distribute paper surveys on a monthly basis to a prescribed number of customers who have experienced network service in the above-mentioned areas. One high-level key question determines the overall score awarded in each survey.

Summary of our December proposals

2.171 In the December GD Annex, we outlined the GDNs' collaborative work to research potential changes to the methodology and content of the survey, focusing primarily on adjustments to:

- survey population (whether this should be widened to include more or different types of consumers to ensure results are representative)
- survey channels (the different methods at GDNs' disposals to distribute the survey, such as by e-mail or telephone and timings for this)
- survey questions (including the types and wording of questions asked, how many questions asked and the approach to generating a survey score).

2.172 We also outlined that responses to the December GD Annex and our analysis of data gathered by GDNs' research would determine what changes (if any) should be made to the survey.

Summary of responses

2.173 In general, there was support for updating the survey to better capture key consumer interactions with GDNs. Through our Customer and Social stakeholder group we have discussed options for improving the survey, including increasing the volume and types of customers surveyed on a monthly basis, using different methods for surveying such as e-mail or telephone, and using more than one question to feed into the overall performance score.

Decisions

2.174 In regards to the survey methodology (population and channels), we have decided that:

- The survey will continue to target customers in three categories: planned works (replacement works), emergency response and repair works (unplanned works), and connections works. We explored widening the survey to other stakeholders such as neighbours of customers, and to other types of work such as low-volume service work that affects fewer customers. However, we identified issues with doing so, such as accessing customer details and meeting the required volumes needed for representative results in each category. We support the GDNs' recommendation to extend the connections component of the survey to customers that have experienced work relating to paid-for disconnections, as well as non-standard connection work in RIIO-GD2. This will help increase the representation of stakeholders who have experienced connection-related works.

- The current quarterly volumes of customers required to respond to each survey will become monthly volumes to increase the representation of customer views under planned and emergency response and repair work (150 and 200 respectively). For connections work, 100% of customers will be surveyed as the number of customers affected by this type of work are much lower.
- The survey will be distributed through various media, consistent with the results of the GDNs' customer engagement research[17], as follows:
    - Replacement (planned) work: paper, with the option for telephone or a link sent via text.
    - Emergency response and repair (unplanned) work: telephone, with the option for paper or a link sent via text.
    - Connections work: option chosen by customers at point of application (either paper, telephone or link via text).
- The survey will be distributed to customers the week after work has been carried out at a property for all components of the survey.

The design of the incentive

2.175 In December, we consulted on a range of options for retaining the survey as a financial ODI. We summarised the potential options for changing the way that the financial incentive is applied as well as options for setting new target levels.

Financial incentive

Summary of issue

2.176 In many cases, GDNs are outperforming the maximum reward scores and are therefore receiving the maximum reward possible. We want to ensure that the incentive in RIIO-GD2 focuses on rewarding companies' improvements on scores and outstanding performances, as opposed to what is now business as usual.

Summary of our December proposals

2.177 In December, we set out proposals for improving the design of the incentive and the associated level of rewards and penalties. These were:

- Option 1 - retain the current mechanism, where rewards and penalties are available up to 0.5% of base revenue, depending on performance against a target score.

[17] The GDNs conducted customer engagement research following insights from KPMG to understand which methods of distribution attracted the most responses from stakeholders.

- Option 2 - a zero-sum, rank-based option, where rewards and penalties depend on where companies rank in their performance.
- Option 3 - a penalty-only approach.
- Option 4 - a defined 'penalty and pot' approach, where a reward pot would be split between companies exceeding a particular score (eg 9/10) and companies would be penalised for scoring below the target.

Summary of responses

2.178 Respondents who commented supported retaining a financial ODI, but there were differing views on the structure for rewarding or penalising companies. The GDNs argued for retaining the current mechanism, where rewards and penalties worth up to +/-0.5% of base revenue are based on performance against a predetermined static target. Consumer groups considered that rewards and penalties should still feature, but that we should avoid rewarding scores that reflect what is now standard service.

Decision

2.179 We will retain the customer satisfaction survey as a financial ODI and will continue to consider either option 1 or 4 for the incentive design. We recognise that the incentive has worked well over RIIO-GD1 with rewards and penalties applied to companies based on their performance against predetermined targets.

Next Steps

2.180 We think that it is necessary to conduct a trial of the new survey given the changes to the content and methodology being made for RIIO-GD2 before setting out the financial weighting that should be attached to the incentive.

2.181 This is because the results of the survey trial will determine what the initial baseline target will be and which incentive design might be most appropriate.

2.182 We expect the trial to begin later this year. We will consult on fully formulated proposals for the customer satisfaction survey incentive design as part of Draft Determinations. We will continue to work with GDNs to determine how the trial period of the new survey should be managed alongside the existing survey.

Target Setting

Summary of issue

2.183 We want to ensure that the high levels of customer satisfaction from RIIO-GD1 are maintained and that targets for rewards continue to be stretching, to encourage outstanding performance.

Summary of our December proposals

2.184 We consulted on two options for how the target might be set: static (set at the beginning of the price control and fixed throughout) or dynamic (set at the beginning of the price control but updated annually to reflect improvements to industry average performance made over the previous year). In both of these scenarios, the target would be common to all companies rather than set individually.

Summary of responses

2.185 Three GDNs disagreed with the use of dynamic targets, raising concerns over the uncertainty (of reward) and the risk that a competitive incentive would reduce collaboration. Two consumer group respondents were supportive of dynamic targets to increase competition between GDNs and mimic the pressures of competitive markets, with one response suggesting the incentive should only reward continuing performance. One GDN supported the use of dynamic targets. One DNO suggested the incentive should be maintained in its current form and only the survey content and methodology should be modified, as changing both may be too complicated.

2.186 One consumer body suggested that survey scores should be segmented to ensure a particular volume of PSR customers are targeted by the survey to ensure their representation.

Decision

2.187 We will apply common targets to all companies, as consumers should not expect different levels of customer satisfaction purely as a result of where they live. To achieve this, companies should continue to address the specific needs of their individual customer bases to ensure they can deliver outstanding service.

Next steps

2.188 We will decide through Draft and Final Determinations how scores from the survey will translate into a target associated with a financial incentive, and whether they will be static or dynamic. This is because the GDNs will be conducting trials of new survey questions and new survey methods. We will consider the results of that trial before taking any further decisions.

2.189 We are still considering two options for how scores for the survey should be calculated, including:

- Retain the same approach used in RIIO-GD1 where one key question, "Overall, how satisfied are you with the service that you received from (GDN)?", is used to measure customer satisfaction across each of the surveys
- Move to an average of responses to each individual question in the survey to capture satisfaction in relation to specific customer service areas.

2.190 We will continue to explore which of these options is most appropriate and consult on this at Draft Determinations.

2.191 We will continue to consider whether is it appropriate to segment PSR customers within the customer satisfaction survey and will consult on any proposals at Draft Determinations.

Complaints metric

Purpose	To incentivise GDNs to improve their handling of customer complaints.
Decision	We will retain a **penalty-only financial ODI** with a common static target.

Summary of issue

2.192 All GDNs should handle customer complaints quickly and effectively. The complaints metric incentivises this by measuring four weighted indicators of GDNs' response to complaints (please see the December GD Annex for details). So far, over RIIO-GD1, all GDNs have improved their handling of complaints and are consistently performing better than the target.

Summary of our December proposals

2.193 We proposed that the target should be updated to reflect the improved performance over RIIO-GD1 and the new business as usual for the sector.

2.194 We consulted on two options for setting the RIIO-GD2 target. Both would use a common target that would reference the average industry performance across RIIO-GD1, with the option of a target that remains static, or one that is adjusted annually to reflect current performance (a dynamic target).

2.195 We proposed that the penalty would remain worth up to 0.5% of allowed revenue.

Summary of responses

2.196 All respondents who commented on this output agreed with our proposal to retain the complaints metric as a penalty-only incentive.

2.197 Three GDNs disagreed with using dynamic targets, arguing that companies continued to improve their performance in this area despite passing the target level early in RIIO-GD1. One consumer group mirrored this response, and also suggested that if targets become too challenging then companies may revert to solving complaints with 'quick fixes'. Two other consumer groups were generally supportive of introducing dynamic targets though did not explicitly recommend this for the complaints metric.

Decision

2.198 We will retain the complaints metric as a penalty-only incentive. We consider that it has worked well over RIIO-GD1, noting that GDNs have improved their scores year-on-year. We are not proposing to change the calculation of the metric, as we think the current indicators are appropriate to reflect GDNs' complaint handling.

2.199 We will use a common target based on the performance of GDNs under RIIO-GD1. Customers should not expect different standards of performance in relation to complaints due to their regional location.

2.200 We will retain a static target under this incentive, as the complaints metric performance is already very strong for most companies and there is limited capacity for continuous improvement within the price control period.

Next steps

2.201 We currently expect the incentive strength to be similar to RIIO-GD1 and worth up to 0.5% of base revenue, but we will continue to consider this and will consult further at Draft Determinations.

2.202 We will continue to consider the specific method we will use to calculate the new target, and will consult further on this at Draft Determinations. We expect that the RIIO-GD2 target will refer to RIIO-GD1 performance and will be set at a more challenging level than the current target.

Guaranteed Standards of Performance (GSOPs)

Purpose	To ensure a set of common minimum performance standards apply to GDNs with respect to interruptions, connections and customer service.
Decision	We will **retain the current GSOPs** with updated standards and payment levels. We will work with GDNs to establish the need for any new GSOPs.

Revising existing GSOPs

Summary of issue

2.203 GSOPs establish the minimum performance standards of service all customers should expect to receive from their GDN.[18] If a GDN fails to meet the standard, a prescribed sum must be paid to the affected customer.

2.204 The GSOPs for GD have not been reviewed for over 10 years and, therefore, may no longer reflect customer expectations or business as usual for the industry. We want to ensure GSOPs reflect the minimum level of service companies should deliver to meet their customers' needs, and that companies pay customers appropriately when these standards are not met.

2.205 In December, we set out our analysis of the existing GSOPs. This included proposed ranges for the minimum GSOP standards, the associated payment levels, and analysis of the payment cap levels and exemptions.

GSOP standards

Summary of our December proposals

2.206 The standards under the GSOPs generally refer to the time it takes a GDN to do a particular activity. We proposed updates to these reflecting current GDN performance, GDNs' stakeholder engagement feedback and regulatory precedent from other network utilities.

Summary of responses

2.207 Respondents generally favoured tightening the GSOP standards. Some suggested additional evidence may be needed if the tightening leads to additional GDN costs. One respondent noted the importance of consistency in how performance is measured, and to ensure networks are not disadvantaged by regional differences or other aspects beyond their control. One GDN suggested that some of the GSOP standards should be revised to the most stretching extent proposed in our December consultation.

Decision

2.208 We will tighten certain standards where there is strong evidence of consumer demand or where there is a clearly outdated minimum standard. These are summarised in Table 3, Table 4 and Table 5 and described below. Where there is no clear rationale or evidence to suggest a GSOP standard should be tightened, our decision is to make no change.[19]

[18] GSOPs are set out in statutory instruments due to the requirement for network companies to make direct payments to their customers. Some GSOPs also have accompanying target pass rates (% of times the standard has been met). These are set out in the licence to provide additional protection to customers.
[19] The GDNs are undertaking research on whether the GSOPs need to be amended to better support consumers in vulnerable situations. This includes potential changes to existing GSOPs. We aren't deciding on these now, and describe further below our intention to consult further should we want to introduce any changes.

2.209 We will update GSOP4 (Provision of standard quotations ≤275kWh), from 6 working days to 4 working days. We had feedback from our Customer and Social stakeholder group, and consultation responses, that tightening this standard would be welcomed and would benefit customers. In December, we proposed tightening the standard from 6 days to within the range of 1-3 working days. Having further considered GDN performance data, we think 3 working days may be too challenging for some GDNs. Currently, six of the eight GDNs provide standard quotations in 4 days or less in at least 98% of cases. We will tighten the standard from 6 to 4 working days as this is representative of the standard of performance that GDNs are currently achieving.

2.210 We will update GSOP9 (Provision of commencement & substantial completion dates ≤275kWh), from 20 working days to 17 working days. The rationale for tightening the standard is that the current standard of performance is easily met. Tightening the standard to 17 working days is more reflective of current performance levels: currently, five of the eight GDNs provide commencement and substantial completion dates (≤275kWh) in 17 days or less in at least 91% of cases. We do not have evidence to suggest there is customer demand for, or benefit in, tightening the standard beyond 17 working days.

2.211 We will update GSOP12 (Timely payment of GSOP customer payments) from 20 working days, to 10 working days. Evidence from some GDNs suggests that customers expect faster payments and that this tightened standard is achievable.

2.212 We will update GSOP13 (Notification in advance of planned supply interruptions) from 5 to 7 working days. No GDNs indicated in their response that moving to 7 working days would be an issue, or provided evidence that it would lead to a material increase in costs. One GDN recommended the standard should be extended to 7 working days. We consider that 7 working days' advance notice of a supply interruption would be of benefit to customers to help them plan for an interruption. In addition, we may update GSOP13 further to include a separate standard for consumers in vulnerable situations. The GDNs are currently undertaking research on this, as described further below.

2.213 We will update GSOP14 (Timely response to complaints) from 10 working days (or 20 with a site visit) to 5 working days (or 10 with a site visit). This GSOP is complemented by the complaints metric output (see above). Tightening this GSOP better reflects customer expectations, as well as GDNs' business-as-usual performance, and should come at no additional cost to the GDNs.

Payment levels

Summary of our December proposals

2.214 We consulted on a range of payment levels for different GSOPs. The payment level sets the amount of money customers must be paid by GDNs if a standard is not met. As a minimum, we proposed to increase all payment levels in line with CPIH. As a maximum, we considered increasing payment levels in line with any existing regulatory precedent from other sectors, or to reflect the amount GDNs are voluntarily paying above the current standard.

Summary of responses

2.215 Almost all responses on this issue were in favour of increasing payment levels by a minimum of CPIH, with many (including two of the GDNs) suggesting that we should set payment levels at the upper end of our consultation range. Others indicated that increasing the level beyond CPIH would require stronger evidence.

Two GDNs recommended that their voluntary doubling of payments should be used as guidance.

Decision

2.216 We will update GSOP payment levels by at least CPIH for RIIO-GD2. The values have not been increased for over 10 years, and are therefore significantly out of date. The increase in payments using 2018 CPIH levels is in Table 3, Table 4 and Table 5 below.

Next steps

2.217 We will continue to consider whether there should be any additional uplift to GSOP payments beyond CPIH.

2.218 We will also continue to consider indexing payments to future CPIH levels beyond the start of RIIO-GD2, but we recognise the complex practicalities of doing this may not justify the benefits.

Payment caps, exemptions and automatic payments

Summary of our December proposals

2.219 We consulted on whether to change (and in some cases remove) the existing payment caps. We did not propose changes to the payment caps for GSOPs 4 to 8, which appear to work effectively for connection quotations.

2.220 We proposed to retain the current exemptions for GSOPs and not to make any additional changes to these for RIIO-GD2.[20]

2.221 We also proposed to make all GSOPs payments automatic.

Summary of responses

2.222 There was unanimous support for removing or increasing the payment caps. One GDN and one consumer group supported the complete removal of all payment caps, as long as exemptions were retained. Other GDNs and consumer groups supported increasing the payment caps, and only removing the cap for GSOP1. One GDN suggested further research was required to consider whether changes to the caps are needed.

2.223 Respondents generally supported the existing exemptions, but one GDN suggested there should be a new exemption for instances of water ingress. It was also suggested that we should remove the payment timings exemption for GSOP13 if we decide to make all payments automatic.

2.224 Respondents were also generally very supportive of automatic payments although some GDNs flagged that they may have difficulty achieving this by the start of RIIO-GD2, and one suggested that additional funding may be needed to facilitate a move to an automated approach.

Decision

2.225 We will increase all payment caps in line with the associated payment increase. This will be an increase by CPIH as a minimum.

[20] Exemptions are listed in full within: Ofgem (2018), RIIO-GD1 Gas Distribution Price Control - Regulatory Instructions and Guidance: Version 5.0, April 2018, Appendix 10.

2.226 We will remove the cap for GSOP1. Customers face significant disruption to their lives if an unplanned gas interruption occurs and should receive payments for as long as the interruption continues.

2.227 All GSOP payments will be automatic in RIIO-GD2. We believe that this is in the best interest of customers. Citizen's Advice has found that £2.6m was unclaimed by gas consumers between 2015 to 2018.[21] This is money customers are entitled to and we expect the GDNs to put systems in place to be able to process payments automatically.

2.228 Some GDNs have stated that making payments automatic would increase costs. We note that some GDNs are already in the process of doing this without additional allowances. Should a GDN consider that it needs additional allowances to take this forward, it would need to be clearly set out and well justified in its Business Plan for us to consider it.

2.229 In line with making all GSOP payments automatic, we will remove the exemption for GSOP13 which stipulates that payment claims must be made within three months. We will retain all other exemptions for existing GSOPs as we have seen no evidence to justify changing these.

Table 3: Revised existing interruptions GSOPs

GSOP description	Standard		Payment level	
	Current	Updated Standard	Current	Indicative payment estimate (using CPIH 2018 prices)
GSOP1: Gas supply restoration following an unplanned interruption	24 hours	No change	£30 domestic £50 non-domestic	£41 domestic £69 non-domestic
GSOP2: Reinstatement of consumer's premises	5 working days	No change	£50 domestic £100 non-domestic	£69 domestic £138 non-domestic
GSOP3: Alternative heating and cooking facilities for priority domestic customers	4 hours	No change	£24	£33
GSOP13: Notification in advance of planned supply interruptions	5 working days	7 working days	£20 domestic £50 non-domestic	£24 domestic £59 non-domestic

[21] Citizen's Advice (2019), Standard Issue, May 2019, p. 16.

Table 4: Revised existing consumer communication GSOPs

GSOP description	Standard		Payment level	
	Current	Updated Standard	Current	Indicative payment estimate (using CPIH 2018 prices)
GSOP12: Timely payment of GSOP customer payments	20 working days	10 working days	£20	£28
GSOP14: Timely response to complaints	10 working days; 20 working days if site visit required	5 working days; 10 working days if site visit required	£20	£24

Table 5: Revised existing connection GSOPs

GSOP description	Standard		Payment level	
	Current	Updated standard	Current	Indicative payment estimate (using CPIH 2018 prices)
GSOP4: Provision of standard quotations (≤275kWh)	6 working days	4 working days	£10 per working day, up to quotation sum or £250 whichever is lowest	£12 per working day, up to quotation sum or £297 whichever is lowest
GSOP5: Provision of non-standard quotations (≤275kWh)	11 working days	No change	£10 per working day, up to quotation sum or £250 whichever is lowest	£12 per working day, up to quotation sum or £297 whichever is lowest
GSOP6: Provision of non-standard quotations (>275kWh)	21 working days	No change	£20 per working day, up to quotation sum or £500 whichever is lowest	£24 per working day, up to quotation sum or £595 whichever is lowest
GSOP7: Accuracy of quotations	Accurate quotation issued	No change	GSOP4, GSOP5 or GSOP6 payments until an accurate quote is issued	The cap and payments levels will reflect changes in GSOP4, GSOP5 or GSOP6
GSOP8: Responses to land enquiries	5 working days	No change	£40 per working day up to up to £250 (≤275kWh) or £500 (>275kWh)	£48 per working day up to up to £297 (≤275kWh) or £595 (>275kWh)

GSOP9: Provision of commencement and substantial completion dates (≤275kWh)	20 working days	17 working days	£20 per working day, up to quotation sum or £250 whichever is lowest	£24 per working day, up to quotation sum or £297 whichever is lowest
GSOP10: Provision of commencement and substantial completion dates (>275kWh)	20 working days	No change	£40 per working day, up to quotation sum or £500 whichever is lowest	£48 per working day, up to quotation sum or £595 whichever is lowest
GSOP11(i): Substantial completion by agreed date (contract value ≤£1k)	To meet substantial completion by agreed date	No change	Payment: £20 per working day	Payment: £24 per working day
GSOP11(ii): Substantial completion by agreed date (contract value ≤£4k)	To meet substantial completion by agreed date	No change	Payment: Lesser of £100 or 2.5% of contract sum	Payment: Lesser of £119 or 2.5% of contract sum
GSOP11(iii): Substantial completion by agreed date (contract value ≤£20k)	To meet substantial completion by agreed date	No change	Payment: £100 per working day	Payment: £119 per working day
GSOP11(iv): Substantial completion by agreed date (contract value ≤£50k)	To meet substantial completion by agreed date	No change	Payment: £100 per working day	Payment: £119 per working day
GSOP11(v): Substantial completion by agreed date (contract value ≤£100k)	To meet substantial completion by agreed date	No change	Payment: £150 per working day	Payment: £178 per working day

Introducing new GSOPs

Summary of issue

2.230 There could be minimum standards of performance expected of a GDN operating today that are not covered by the existing GSOPs. We have been exploring this with stakeholders through our Customer and Social stakeholder group.

Summary of our December proposals

2.231 In our December consultation we asked what (if any) new GSOPs should be considered for RIIO-GD2. From our stakeholder engagement and initial research, we identified two areas for potential new GSOPs:

- Providing better support to consumers in vulnerable situations (such as in the event of an unplanned interruption).
- Guaranteed appointment times.

Summary of responses

2.232 Respondents were generally opposed to guaranteed appointment times, highlighting no customer demand for this. Concerns were also raised that it would not work well logistically and could waste engineers' time at a significant cost.

2.233 Some respondents noted that timed appointments did seem like best practice, but customers' willingness to pay should be tested before any new GSOP was introduced.

Decision

2.234 We will not introduce a new GSOP enforcing guaranteed appointment times. Consumer research undertaken by the GDNs and discussed at the Customer and Social stakeholder group, suggests limited demand for appointment time standards or any associated financial compensation if they are not met.

Next steps

2.235 The GDNs are still undertaking research to understand the requirements and expectation of consumers in vulnerable situations. This includes whether additional support should be provided either by introducing a new GSOP, or by making changes to the existing GSOPs. We will consider the results of this research, and consult further, before making a decision.

Additional GSOP customer protections through the licence

Summary of issue

2.236 The licence requires the GDNs to comply with the connections GSOP standards in 90% of cases. If a GDN does not meet these obligations, it could be in breach of the licence and subject to potential enforcement action. This provides additional protection to consumers.

Summary of our December proposals

2.237 We proposed to retain the 90% target pass rate for the connections GSOPs because we believe it is working effectively.

2.238 We also proposed not to introduce any new GSOPs-related licence conditions.

Summary of responses

2.239 Almost all respondents who commented felt that no additional protection was necessary through the licence. One consumer group argued that we should consider implementing associated target rates within the licence for all GSOPs.

Decision

2.240 We will not change the GSOP licence condition. We are strengthening the GSOP standards and associated payment caps. We do not think additional GSOP protections through the licence are necessary.

Outputs considered but not included for RIIO-GD2

Outputs related to customer satisfaction/service

2.241 Our above-mentioned decisions take into account the responses to the December consultation and suggestions at our stakeholder groups on additional outputs we should consider. Below we focus on two additional proposals put forward by individual GDNs.

Balanced Scorecard

2.242 A GDN suggested that a 'Balanced Scorecard' on customer satisfaction could be used as an incentive under RIIO-GD2. It would use regionally specific industry insights to monitor areas of improvement for GDNs against specific measures of satisfaction. The results could be published on company websites and consistently reported on.

2.243 We welcome this innovative thinking on measures that could improve the monitoring of customer satisfaction. However, as part of the adaptations to the current customer satisfaction survey, GDNs have explored the areas of most significance to their customers' satisfaction to inform the survey's design for RIIO-GD2. Therefore, we do not think a Balanced Scorecard is required as a common output for all GDNs. However, GDNs may work with their stakeholders to explore the appropriateness of a Balanced Scorecard as a bespoke output, or as a useful internal management tool.

ICS Service Mark

2.244 A GDN suggested that we should benchmark GDN customer satisfaction against wider GB companies, by mandating all GDNs to become members of the UK Institute of Customer Service (ICS) and its ServiceMark accreditation programme. ServiceMark is designed to assist companies develop plans for improvement in identified areas of customer service, and has already been adopted by some GDNs.

2.245 We think that the RIIO-GD2 customer satisfaction survey provides us with sufficient information to understand whether GDNs' customer service strategies are working for their customers. Should companies feel that they would benefit from adopting additional measures, such as ServiceMark, to improve their customer service or to compare their performance against other sectors, we would encourage them to investigate this further, but are not setting any requirements. GDNs may also work with their stakeholders to explore the appropriateness of a bespoke output in this area.

RIIO-GD1 outputs that will be removed for RIIO-GD2

2.246 In our December GD Annex, we proposed to remove two RIIO-GD1 outputs in this area for RIIO-GD2. We are confirming their removal, based on the reasoning below.

Table 6: Summary of RIIO-GD1 outputs that will be removed

Output name
Discretionary Reward Scheme
Planned interruptions

Discretionary Reward Scheme

Summary of our December proposals

2.247 In RIIO-GD1, the Discretionary Reward Scheme (DRS) incentivises the GDNs to deliver social, carbon monoxide (CO) safety and environmental initiatives beyond those funded directly through the price control.

2.248 We proposed to replace the social and CO safety elements of the DRS with the consumer vulnerability package detailed earlier in this chapter. We also proposed to remove the environmental aspects of the DRS, as discussed in Chapter 3.

Summary of responses

2.249 Stakeholders were generally supportive of removing the social and CO safety elements of the DRS as they felt these behaviours were sufficiently incentivised through the proposed consumer vulnerability package. One stakeholder was concerned that removing the DRS would lead to a reduced focus on CO initiatives.

2.250 Stakeholder views on removing the environmental aspects of the DRS are outlined in Chapter 3.

Decision

2.251 We have decided to remove the DRS in RIIO-GD2 because we have replaced the social and CO safety elements with the consumer vulnerability package outlined in this chapter. Chapter 3 outlines our decision on the environmental elements of the DRS.

Planned interruptions

2.252 The RIIO-GD1 output and the reasons for removing it as a specific output for RIIO-GD2 are discussed in paragraph 2.124.

3. Outputs: Deliver an environmentally sustainable network

A high level objective of the RIIO-2 framework is for network companies to efficiently reduce the adverse impact of their networks and business activities on the environment and to support the transition to a low carbon energy future. This section sets out the outputs and wider price control measures that will support this objective in RIIO-GD2.

Introduction

3.1 A key aim of the RIIO-2 framework is that network companies support the transition to a smarter, more flexible, sustainable low-carbon energy system and take the appropriate steps to mitigate their own environmental impact.

3.2 The overall RIIO-2 package provides a comprehensive combination of incentives and other mechanisms to encourage network companies to deliver an environmentally sustainable network. We have listened to stakeholder feedback and want to clarify that we think the GDNs have a vital, and active, role to play over RIIO-GD2.

3.3 Our decision seeks to recognise, and reward, both upfront and ongoing actions by GDNs. Companies will be required to produce Environmental Action Plans and Annual Environmental Reports. This will ensure that stakeholders have a clear understanding of the GDNs' environmental actions and impacts during RIIO-GD2. The Business Plan Incentive will take account of ambitious and well-justified Environmental Action Plans.

3.4 We want the RIIO-GD1 achievements in reducing leakage from the gas network to continue, as methane is a particularly potent greenhouse gas (GHG). Replacing iron mains with plastic pipes under the repex programme will drive down the overall leakage of gas from pipes, cutting GHG emissions on the network. We'll incentivise the GDNs to go beyond pipe replacement and play an active role in further reducing the amount of gas lost from their network.

3.5 One of the biggest environmental challenges facing GB is how best to decarbonise heat. Ongoing uncertainty around the UK's decarbonisation pathway means it would be premature for GDNs to begin making material investments in anticipation of a particular scenario. Our specific framework for decarbonisation of heat, designed for RIIO-GD2, enables GDNs to receive funding under the price control for activities that are low or no regrets across different scenarios, or which generate evidence through innovation that contributes to resolving uncertainties. As and when the uncertainties are resolved, we want the GDNs to play a full role in heat decarbonisation, and we will use uncertainty mechanisms to ensure the price control is responsive to developments.

3.6 We recognise that biomethane has the potential to reduce GHG emissions during RIIO-GD2 and beyond. We want the companies to work with stakeholders to identify opportunities to improve connections procedures and the proactive provision of information to potential and existing biomethane producers. Biomethane reporting will be an essential component of the Annual Environmental Report, sharpening the reputational incentive for companies to facilitate biomethane connections.

3.7 Finally, for RIIO-2, we will retain a strong innovation funding programme, focused primarily on the energy system transition and consumer vulnerability, for both big transformational R&D projects, as well as smaller scale process or technological innovations. This innovation funding may be used on network related projects to support key energy system transition challenges including for heat and transport.

3.8 This chapter should be read in parallel with:

- Chapters 4, 5, 7 and 11 of the Core Document which describe:
  - our decision to use the output category 'Deliver an environmentally sustainable network' for RIIO-2 and the broad approach to outputs (eg output types)
  - the arrangements we are putting in place across sectors to enable the network companies to play an effective role in protecting the environment and the role of the Business Plan Incentive in driving ambitious proposals
  - how network companies may propose additional company specific ('bespoke') output measures within their Business Plans, if required
  - our rationale for providing indicative caps and/or collars on ODIs (where relevant).
- Chapter 4 of the December GD Annex, which provides more detail on the proposals we have summarised in this chapter.

Outputs for RIIO-GD2

Table 7: Our decision on the RIIO-GD2 outputs

Output name	Output type*	Company driven target**
Common outputs (will apply to all companies)		
Shrinkage and environmental emissions	ODI(F) and ODI(R)	Yes
Annual Environmental Report (incl. Business Carbon Footprint (BCF) reporting)	LO	N/A
Bespoke outputs (companies may consider other areas for inclusion in their Business Plans including in their Environmental Action Plan)		
Environmental Action Plan initiatives eg reduce Business Carbon Footprint (BCF) and losses	PCD	Yes

* ODI(R/F) = Output Delivery Incentive (Reputational/Financial), PCD= Price Control Deliverable, LO= Licence Obligation.
** Company driven target signifies an output where we expect to see extensive company-led engagement (including with their CEG) to justify performance targets. This could lead to performance targets varying by company.

<u>Additional output suggestions</u>

3.9 In December, we asked for views on whether we should consider any outputs additional to those that we proposed in the consultation. Several stakeholders put forward ideas, which we took into account. Most suggestions came from GDNs and were high-level examples of outputs they are considering for inclusion within their Business Plans. GDNs should work with their stakeholders to justify the need for these outputs and, where there is a strong case, include them in their Business Plans.

Environmental Action Plan and Annual Environmental Report

3.10 The new Environmental Action Plan and Annual Environmental Report are cross-sector mechanisms covering RIIO-GD2, GT2 and ET2. These mechanisms will support cross-sector consistency and greater ambition from the companies, two issues respondents to our December GD Annex were keen to see improved. Further information on our decision can be found in Chapter 7 of the Core Document.

3.11 In the Core Document we set out our expectations for well-justified Environmental Action Plans. In this chapter we highlight specific areas we expect GDNs to include in their Environmental Action Plan and Annual Environmental Report. These should be read as minimum requirements.

Shrinkage and environmental emissions

Purpose	To ensure that GDNs minimise the financial and environmental costs of gas lost during transportation through the network.
Decision	We will introduce two ODIs: 1) A refined **financial reward and penalty ODI** to encourage GDNs to continue to take action on areas within their control to reduce shrinkage on their networks. 2) A **reputational ODI** to encourage strong, ongoing reduction in overall shrinkage. We also envisage that some GDNs will come forward with bespoke outputs to help further reduce the amount of gas lost from their networks.

Summary of issue

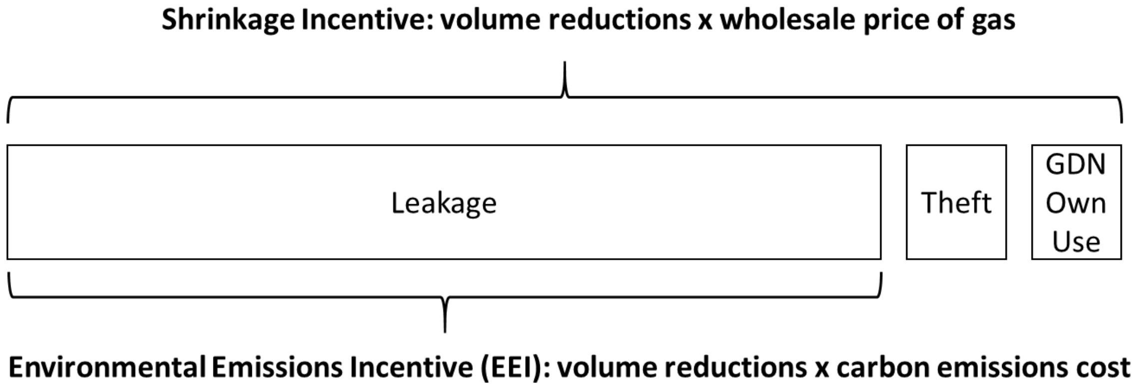
3.12 Shrinkage is gas lost during transportation through the network, which occurs through leakage (95% of total), theft (3%) and GDN own use (2%). It is by far the largest element of the GDNs' Business Carbon Footprint (approximately 95%).

3.13 This loss results in two costs:

- The purchase of replacement volumes of gas.
- Increased greenhouse gas (GHG) emissions due to methane escaping into the atmosphere (which relates to leakage only).

3.14 In RIIO-GD1, there are two separate incentive mechanisms to reduce shrinkage and environmental emissions. The diagram below shows what the RIIO-GD1 incentives cover:

Figure 3: RIIO-GD1 shrinkage and environmental emissions incentive design



3.15 Each GDN has separate annual target volumes for the shrinkage incentive and for the EEI. Where the GDNs reduce their target volumes by more than expected, they receive a financial reward. If GDNs don't meet their targets, they are penalised.

3.16 We have seen a significant reduction in shrinkage in RIIO-GD1. To date, it is 24% lower than at the start of the period. All the GDNs have outperformed their targets in each year, earning £103m[22] in rewards over the five years to date.

3.17 We think it's important to continue to reduce shrinkage. However, we think we can improve the financial incentives in RIIO-GD2 to ensure that any incentive:

- takes account of the inherent uncertainties in measurement. Shrinkage is not measured directly; instead, it is calculated using a mathematical model (the Shrinkage and Leakage Model (SLM)), which is maintained by the GDNs and approved by us
- excludes the impact of repex work. Repex is the primary driver of shrinkage reductions, but it is already funded through the price control. We set the RIIO-GD1 targets to factor in the amount of funded repex, but data provided by the GDNs suggests that we may have underestimated the repex impact.

Summary of our December proposals

3.18 We asked for views on three options, and favoured either options 2 or 3:

- Option 1: Retention of the incentives used during RIIO-GD1.
- Option 2: A more targeted financial ODI, only applying to shrinkage reductions not resulting from the core repex programme, with a cap and collar.
- Option 3: A reputational ODI linked to a clear target.

Summary of responses

3.19 All GDNs considered that the existing incentive has been successful in reducing emissions during RIIO-GD1, but views differed on how an output should be designed for RIIO-GD2. Two GDNs were in favour of retaining the existing structure, one GDN recommended that it should be redesigned to focus on specific deliverables rather than overall volumes, and the fourth GDN said that it should become reputational only. While the GDNs considered that the repex programme

[22] In 2017/18 prices.

will continue to drive reductions in shrinkage over RIIO-GD2, three of them thought that limited further progress could be made through the non-repex related drivers of leakage, such as pressure management and gas conditioning. This is because they have reached the economically efficient level of managing these through balancing the cost of delivering further reductions against the resulting savings in carbon emissions and gas purchases.

3.20 Other stakeholders emphasised the importance of a strong message from us across all areas of GDNs' environmental impact, and saw leakage reduction as a central component of this, given methane's high global warming potential. They thought the incentive should ensure that GDNs employ all means available to reduce leakage, and wanted to see carbon costs appropriately factored into all asset management decision making.

3.21 Two DNOs noted that electricity distribution has similar challenges in measuring network losses accurately, and consequently has moved towards a more strategic approach, backed by a licence condition to minimise losses.

Decision

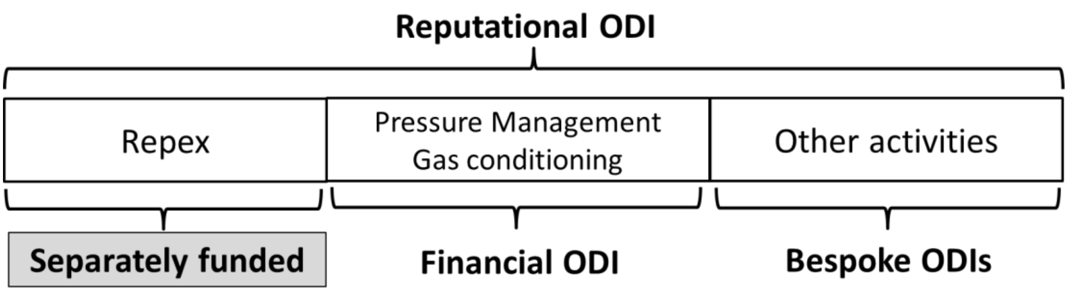
3.22 We have decided to replace the existing incentives with a new, three-part approach that applies different forms of ODI to the various activities that contribute to shrinkage reductions.

i) We will have a financial ODI to reward, or penalise, companies' performance on reducing shrinkage through pressure management or gas conditioning. These are areas of shrinkage that are within the GDNs' control, can be individually quantified, and aren't directly funded through the price control.

ii) We will have a reputational ODI that assesses the GDNs' performance on overall shrinkage, and on leakage from mains and service pipes. The latter will provide transparency on the pace of leakage reductions delivered through funded repex work.

iii) For shrinkage mitigation activities that are not factored into the SLM, GDNs should propose their own bespoke outputs where they are able to demonstrate a robust alternative means of assessing the impact these have on shrinkage.

Figure 4: RIIO-GD2 Incentive Design



3.23 We think that this three-part approach represents the best means of ensuring that the costs of shrinkage (both environmental and financial) are fully reflected in the GDNs' decision making, where appropriate, while also limiting any unwarranted financial rewards. The reputational ODI will show GDNs' ongoing progress in reducing shrinkage through repex, and reinforce the importance of the GDNs' role in reducing emissions. The financial ODI will be targeted on specific discretionary activities where it can influence GDN decision-making. Finally, well-justified bespoke ODIs in this area will also support ambitious GDNs seeking to target further environmental benefits. These are described in more detail below.

3.24 We also note several stakeholders' comments about the significance of shrinkage's environmental impact and the need for the RIIO-GD2 decisions to reflect this. These ODIs are not the only way in which the value of emissions reductions is built into GDN decisions. For example, the cost-benefit analysis (CBA) used to justify funding for repex work or any other kind of investment includes the environmental costs of methane emissions, and so provides a strong incentive for GDNs to focus on projects that deliver the greatest environmental benefit.

Financial ODI

3.25 We will introduce a financial ODI focused specifically on shrinkage and leakage activities that meet the following criteria:

- They are within the GDNs’ control.
- They are not funded elsewhere in the price control.
- An incentive could influence GDNs' decision-making.
- Their impact can be quantified through the SLM.

3.26 This is broadly in line with option 2 in our December GD Annex.

3.27 From a review of the evidence we believe there are two activities that meet the above-mentioned criteria:

- Management of network pressure. Since the leakage rates from mains increases in line with system pressure, GDNs can reduce leakage volumes through optimising pressure levels.
- The level of gas conditioning. Adding conditioning agents such as monoethylene glycol (MEG) to gas helps to seal the joints in iron pipes by swelling the yarn in these, reducing leakage.

3.28 The RIIO-GD1 incentive has already driven a marked reduction in shrinkage through these activities, and some GDNs have told us that there is limited potential for further reductions by means of these. For example, they have noted that networks require a minimum pressure level in order to maintain supply, and that gas conditioning is only effective on iron mains so its usage will reduce as these are replaced with plastic pipes.

3.29 Given this, we think it is important that the RIIO-GD2 financial ODI incentivises further reduction in shrinkage where this is possible, but where not, that it ensures that progress achieved (and rewarded) in RIIO-GD1 is not subsequently lost. The incentive will, therefore, be based on the impact of GDN management of network pressure and gas conditioning in each year, in comparison to the value recorded in the final year of RIIO-GD1. It will be calculated as a separate amount each year, against this static target. This is in contrast to the rolling incentive mechanism used in RIIO-GD1, which provides 8 years' worth of rewards for enduring reductions in shrinkage

3.30 The potential rewards and penalties attached to the financial ODI will be lower than for RIIO-GD1, partly because its scope will be limited to these two activities, and partly because it will not apply the rolling incentive mechanism. We are considering whether a cap and collar on the incentive would be appropriate and will consult further at Draft Determinations.

3.31 While the total rewards and penalties will be lower, the incentive will still ensure that the costs of carbon emissions and lost gas are fully factored into decisions around the operation of the network, in line with stakeholder responses on the importance of this. As was the case in RIIO-GD1, we will price replacement gas at the gas price reference cost for the year in question, and we will determine the cost of carbon emissions using BEIS guidance on the CO2 equivalence of methane and the appropriate price of carbon.

Reputational ODI

3.32 We will introduce a clear reputational ODI linked to overall shrinkage targets specific to each GDN. As highlighted above, shrinkage far outweighs any other contributor to the GDNs' business carbon footprints. The RIIO-GD2 pipe replacement work means that consumers are paying for work that will drive continued, and substantial, reductions in leakage over the RIIO-GD2 price control period. The reputational ODI will ensure that stakeholders have full visibility of how pipe replacement, as well as the GDNs' wider work, contributes to lower environmental emissions, and that delivery of these remains on track.

3.33 GDNs' Business Plans should include proposed reputational targets for:

- the overall expected amount of shrinkage over RIIO-GD2
- the amount of leakage through mains and service pipes, which will show the expected reduction in leakage resulting from planned repex work.

3.34 In addition, we expect the new Annual Environmental Report to include a section on shrinkage (see Chapter 7 of the Core Document for more information on this report).

Bespoke ODIs

3.35 The constraints of the SLM mean that some mitigation activities (such as using robotics to repair metallic mains joints or focusing on reducing the gas lost from operating above ground assets such as pressure reduction stations) are not reflected in the shrinkage volumes it calculates. Consequently, we invite GDNs to propose bespoke targets for any such activities, where they can demonstrate an alternative means of quantifying the benefits of these activities. These can include activities that are under consideration for future inclusion in the SLM, and GDNs may wish to make joint proposals if they are in agreement about what form an ODI could take.

3.36 In discussions at our Decarbonisation stakeholder group, we've heard some concerns that tightening the scope of the RIIO-GD1 financial ODI risks losing the incentive for GDNs to prioritise their pipe replacement work, for example by replacing the leakiest pipes first. On the other hand, we're concerned about the potential for errors in forecasting that could lead to windfall gains. To date, we've not seen any robust evidence to demonstrate that these could be avoided. However, should GDNs make a compelling and evidence based case in their Business Plans that there is a viable mechanism that precludes forecasting errors, we will consider it at Draft Determinations.

Next steps

3.37 Appendix 2 sets out the detail of how we currently expect the financial ODI to work, along with the expected Business Plan Data Templates requirements needed to support this and the reputational ODI. However, we will work with GDNs to refine these as necessary.

3.38 For all of the ODIs above we expect GDNs to use their CEGs to challenge them to be ambitious and to challenge proposed targets, in particular for any bespoke ODIs

Additional mechanisms to support decarbonisation in RIIO-GD2

Decarbonisation of heat framework

Purpose	To ensure GDNs engage proactively with heat decarbonisation within the constraints of uncertainty about the future of heat.
Decision	We will support GDN activity on heat decarbonisation through four complementary mechanisms: low and no regret projects proposed in GDN Business Plans, innovative projects supported by the RIIO-2 innovation stimulus, bespoke uncertainty mechanisms to respond to new investment needs driven by heat decarbonisation, and a 'Heat Policy re-opener'.

Summary of issue

3.39 The pathway GB will follow to decarbonise heat is uncertain. Different options have different implications for GDNs. It is important that the price control enables a transition to decarbonised heat at lowest cost while minimising the risk of stranded investment, particularly if GB follows a low-gas pathway.

Summary of our December proposals

3.40 Given the uncertainties in heat decarbonisation, we did not propose a specific output. However, we did propose four complementary mechanisms:

- low and no regret projects proposed in GDN Business Plans
- innovative projects supported by the RIIO-2 innovation stimulus
- bespoke uncertainty mechanisms to respond to changes in gas demand driven by heat decarbonisation
- a 'Heat Policy Re-opener' to respond to central government heat policy.

Summary of responses

3.41 Most stakeholders who commented on this area agreed that outputs which anticipate particular heat decarbonisation pathways would be inappropriate. They also agreed that the mechanisms we proposed were broadly appropriate. Different groups of stakeholders were, however, concerned that the framework would not adequately incentivise companies to develop ambitious proposals to contribute to heat decarbonisation. Some argued that RIIO-GD2 matters for heat decarbonisation and that failure to take action now would impact future consumers. Several stakeholders suggested the framework should make clearer links to other areas of the regulatory framework, including our approach to consumers in vulnerable situations.

Decision

3.42 We will implement the four mechanisms identified in the consultation, taking account of the consultation responses and any further development needs identified below. We will not create a specific heat decarbonisation output. This is because the role of gas distribution in heat decarbonisation is too uncertain to specify an output at this time.

3.43 We do want the companies to be ambitious on heat decarbonisation in their Business Plans, and will ask the CEGs to challenge the companies on this issue. Companies' proposals on heat decarbonisation should form part of their Environmental Action Plan. We will reward the GDNs through the Business Plan Incentive for ambitious Environmental Action Plans that contain clear commitments to deliver low and no regrets heat decarbonisation. To receive a reward, these commitments must contribute to heat decarbonisation, go beyond business as usual, be low/no regrets, and demonstrate the GDN is taking additional risk it would otherwise not take. Further information can be found in the Core Document on the Environmental Action Plan (Chapter 7) and on the Business Plan Incentive (Chapter 11).

<u>Low and no regrets heat decarbonisation projects</u>

Summary of responses

3.44 Respondents generally agreed that companies should be able to propose low and no regrets investments in their Business Plans. However, the RIIO-2 Challenge Group, and some environmental representatives, responded that there was little incentive for GDNs to do so. These stakeholders suggested GDNs should either be required, or incentivised, to include low and no regrets heat decarbonisation proposals in their Business Plans.

3.45 GDNs suggested that their proposals for projects should be separated out in the Business Plan Data Templates to avoid ambitious proposals appearing to inflate a company's costs relative to less ambitious companies.

3.46 Several consumer and environmental representatives commented that low and no regrets heat decarbonisation activities extend beyond the gas networks, including heat networks, energy efficiency and low carbon buildings, and this should be supported. Some stakeholders also argued biomethane is a low or no regrets approach to heat decarbonisation. We discuss biomethane in more detail below. One respondent argued that companies should consider whether critical path investments are needed to keep options open in advance of uncertainties being resolved. We also received suggestions that GDNs should develop a strategic approach to heat decarbonisation, including consumer-facing annual reports, in which companies would set out their understanding of the future as the evidence base develops.

Decision

3.47 We encourage GDNs to include stretching and ambitious proposals for heat decarbonisation in their Business Plans that can be shown to be low or no regrets. These proposals should form part of companies' Environmental Action Plans (see Chapter 7 of the Core Document). As we set out in December, low and no regrets projects are those with low stranding risk across all plausible decarbonisation pathways, or low materiality (eg selecting a slightly higher cost option when replacing an asset to help future-proof the network). We do not intend to dictate a specific low and no regrets pathway, but we expect companies' proposals to be backed by clear justification and appropriate evidence. These projects should focus on activities directly related to the gas network. While there is considerable scope for projects beyond gas networks to deliver low and no regrets heat decarbonisation across society, we do not see a strong rationale for these to be funded by the gas distribution price control.

3.48 Some stakeholders expressed concern about the more general potential for regret arising from the stranding of investments in general, not just those supporting heat decarbonisation. In our upcoming update of the Business Plan Guidance we will set out that we expect companies to demonstrate the need for proposed investments, including by comparison with alternative deferral options. As we develop the RIIO-2 innovation stimulus, we will consider the value of asking GDNs to regularly report on the implications the emerging heat decarbonisation evidence has for their expenditure and activities.

3.49 Some stakeholders expressed concern about the more general potential for regret arising from the stranding of investments in general, not just those supporting heat decarbonisation. In our upcoming update of the Business Plan Guidance we will set out that we expect companies to demonstrate the need for proposed investments, including by comparison with alternative deferral options. As we develop the RIIO-2 innovation stimulus, we will consider the value of asking GDNs to regularly report on the implications of the emerging heat decarbonisation evidence base for their expenditure and activities.

3.50 We have not seen clear evidence that critical path investments are needed over RIIO-GD2 beyond those that contribute to the evidence base on the future of gas. This latter category is supported by our innovation stimulus. Should GDNs and stakeholders identify critical path investments for inclusion in their Business Plans, we would expect these to be backed by clear justification and appropriate evidence.

Network-related innovation projects for heat decarbonisation

Summary of responses

3.51 Those who commented on our proposals for innovation in relation to heat decarbonisation generally agreed the price control should support projects which contribute to the evidence base on the future of gas. The Scottish Government emphasised that our approach should include evidence on near-term decarbonisation as well as the long-term future of heat. We summarise more general responses to the role of the innovation stimulus in Chapter 10 of the Core Document.

3.52 Two respondents involved in the development of Cadent's HyNet project argued the RIIO-2 innovation stimulus would be too small to accommodate early deployment of such a large scale hydrogen initiative. We discuss HyNet below.

Decision

3.53 In Chapter 10 of the Core Document, we set out our decisions on the RIIO-2 innovation stimulus. These include the replacement of the Network Innovation Competition with a new innovation funding pot for strategic innovation challenges, and retaining the opportunity for additional Network Innovation Allowances. These mechanisms will primarily focus on innovation projects relating to the energy system transition and consumer vulnerability. GDNs should work with their stakeholders and CEGs to explore opportunities to use both the RIIO-2 and RIIO-1 innovation funding to contribute to the evidence base on heat decarbonisation.

3.54 We have not yet decided on the scale of the RIIO-2 innovation funding pot. As set out in the Core Document, we will take into consideration responses we have received when we consult on this.

3.55 The innovative elements of some large scale projects may represent a minority of costs. This could be the case if a large share of a project's costs relate to well-established products such as standard gas distribution pipework. In this case, companies could consider whether such projects are suited to inclusion in Business Plans (ie for baseline funding) or, if dependent on uncertain developments, bespoke uncertainty mechanisms (see decision below). We respond below to suggestions we received for mechanisms that could fund projects like HyNet outside the innovation stimulus.

<u>Responding to changing investment needs driven by heat decarbonisation</u>

Summary of responses

3.56 We received limited responses addressing this proposal directly. Some GDNs noted possible bespoke uncertainty mechanisms relating to heat decarbonisation. These focus both on potential new network connections and on projects and activities where a robust proposal emerges mid-period.

Decision

3.57 We will consider proposals in the GDNs' Business Plans for bespoke uncertainty mechanisms to ensure heat decarbonisation projects are not locked-out due to uncertainties at the time of Business Plan submission. Bespoke mechanisms could aim at changes in gas demand arising from policy and heat planning across local, regional and devolved government. They could also aim at investment to support heat decarbonisation where specific uncertainties are resolved during RIIO-GD2.

3.58 In our upcoming update of the Business Plan Guidance we will set out the type of justification that we might expect to see for additional uncertainty mechanisms, including evidence that other routes to achieving the same outcome have been considered. These include:

- the RIIO-2 innovation stimulus where projects focus on innovative developments or knowledge about decarbonisation that will be shared
- alternative funding routes and government subsidies, where proposed uncertainty mechanisms are designed to socialise costs
- the 'Heat Policy re-opener' (described below).

3.59 Cadent noted that for some heat projects, such as HyNet, it sees a case for socialising costs across all gas consumers, not just those in the project's network area (along the lines adopted for the purposes of the RIIO-1 NIC). Our approach to bespoke uncertainty mechanisms does not necessarily preclude such ideas. However, we would need to see a strong justification for socialisation, given the potential complexity. Such justification might include, for example, strong stakeholder support outside of the company's geographical area, and details on how socialisation of costs would be implemented. Were we to accept a bespoke re-opener for such projects, this would not mean we had reached a decision on either the justification for cost socialisation, the needs case for the project or whether the project should be opened to competition. These issues would all be examined in the event the re-opener were triggered.

'Heat Policy re-opener' uncertainty mechanism - responding to significant development in government heat policy

Summary of responses

3.60 Respondents broadly agreed that a re-opener is an appropriate mechanism to handle developments in government policy during the price control. Several respondents highlighted the government's announcements in the Chancellor of the Exchequer's Spring Statement.[23] These included a proposal to introduce a Future Homes Standard which would future-proof all new homes with low carbon heating from 2025, and an intention to consult on accelerating the decarbonisation of gas supplies.

3.61 Respondents commenting on our proposed trigger design suggested the trigger event should be broadened beyond the passage of legislation by central government. This reflected views that a variety of heat policy decisions, not all implemented by central government primary legislation, could impact GDN expenditure needs. Examples include devolved government policy and policy not requiring primary legislation, such as changes to building standards. One GDN argued the materiality threshold (1% of base revenues after application of the sharing factor) would be inappropriate if it led to the same policy development triggering the re-opener for companies with a high sharing factor but not those with a low sharing factor.

Decision

3.62 We will create a symmetrical 'Heat Policy re-opener' uncertainty mechanism to respond to policy-driven requirements for some, or all, GDNs to change their spending significantly during RIIO-GD2 to support a transition to low carbon heat.

3.63 We recognise there are a variety of potential heat decarbonisation policy developments that may warrant re-opening certain cost allowances in the price control. Some government policies have the potential to create new roles for GDNs. For example, in its call for evidence on an Energy Efficiency Scheme for Small and Medium Sized Businesses,[24] BEIS suggests one option would be an obligation on network companies. We do not comment on this proposal here, but note it as an example of a potential government policy that could mean we need to use a re-opener to reconsider the outputs we set for companies in addition to cost allowances.

3.64 Due to the range of heat decarbonisation policy impacts on GDNs' activities we want to work with the companies and policy makers at central and devolved levels to design the scope and trigger conditions for the 'Heat Policy re-opener'.

Next steps

3.65 We will work with GDNs and stakeholders to determine the scope and trigger conditions for the 'Heat Policy re-opener'. Our objective will be for the re-opener to ensure the price control can respond to significant developments across a suitably broad range of heat decarbonisation policy options. Working with stakeholders, we will specify as precisely as possible the activities and expenditures that will be in the scope of the re-opener. Through this process we

[23] https://www.gov.uk/government/topical-events/spring-statement-2019
[24] https://www.gov.uk/government/consultations/energy-efficiency-scheme-for-small-and-medium-sized-businesses-call-for-evidence

will also consider the appropriate level of the materiality threshold. We will consult on these areas as part of Draft Determinations.

Biomethane

Purpose	To ensure the GDNs seek opportunities to improve connections processes and increase visibility of biomethane outcomes.
Decision	1) We will require GDNs to report on biomethane metrics and outcomes as part of the new Annual Environmental Report output. 2) We expect GDNs to consider biomethane stakeholders as part of their ongoing approach to stakeholder engagement in RIIO-2. 3) We will consider GDNs' to proposals for bespoke biomethane outputs. These mechanisms will be supported by the licence condition for distributed gas connection guidance and information strategies.

Summary of issue

3.66 Injection of biomethane to the gas network can contribute to greenhouse gas reduction and diversification of gas supplies.

Summary of our December proposals

3.67 We proposed not to introduce an output for biomethane connections. This was because much of what determines the number and capacity of biomethane connections lies beyond GDNs' control. In addition, we considered the subsidising, or sharing, of connection costs as being outside the scope of RIIO-GD2, because it is for government to determine whether biomethane should be subsidised.

3.68 We highlighted that if GDNs, and their stakeholders, consider bespoke outputs to be appropriate, these should be included as well-justified proposals in Business Plans.

3.69 We also proposed that GDNs should continue to provide information to potential and existing biomethane producers, and that we would continue to report on biomethane outcomes (connection studies, connection requests and connections). We proposed to no longer consider these as outputs for RIIO-GD2.

Summary of responses

3.70 Environmental representatives expressed disappointment in our proposal not to include any biomethane outputs in RIIO-GD2, arguing that biomethane injection has near-term environmental benefits and is a low regrets form of decarbonisation. Some argued that the absence of an output would represent a barrier to investment in new green gas. A renewables industry representative suggested that a reputational incentive should be introduced to improve connection times. However, others acknowledged that the dependence of biomethane development on factors beyond GDNs' control meant an output based on connections or biomethane volumes would not be appropriate. Stakeholders who commented on reporting of biomethane outcomes data supported our proposal that this should continue. Environmental representatives suggested additional data would also be useful, including monthly biomethane flow rates and rate of gas quality incidents.

3.71 We received mixed views on our proposals to not continue treating biomethane outcomes reporting as an output under RIIO-GD2. Some were concerned this would send "a poor signal" to the biomethane sector, while others agreed that reporting in itself should not constitute an output.

3.72 Stakeholders generally agreed that GDNs should continue to provide information to potential and existing biomethane producers, such as distributed gas connection guides. GDNs generally regarded the guides as valuable, and two expect to develop them further in RIIO-GD2. However, some respondents suggested the guides should be improved, particularly around connections processes and requirements. Some renewables industry respondents highlighted a lack of standardisation across GDNs' guidance (and connections processes more generally) which causes difficulty for biomethane producers seeking a grid connection.

3.73 We received suggestions for improvements to the GDNs' provision of information, with respondents pointing to DNO practices such as the publication of "heat maps" showing opportunities and constraints for connecting to the existing network. Other suggestions included regular customer surgeries, greater transparency in connection costs and the provision of tailored guidance and support.

3.74 A GDN indicated it intends to initiate a review of entry pricing through the Uniform Network Code (UNC) governance process.

Decision

3.75 We agree that biomethane injection has the potential to be a low regrets approach to decarbonisation. In RIIO-GD2, we want the GDNs to engage with biomethane stakeholders to identify ways in which connections processes can be improved, being proactive and responsive to their customers and wider stakeholders' needs as the distributed gas production sector develops. To facilitate this, we will:

- require the GDNs to report on biomethane outcomes data as part of the **new Annual Environmental Report output**
- expect the GDNs to consider biomethane stakeholders when developing proposals under the **SEI output**
- carry forward the **licence condition for distributed gas connection guides and information strategies**, though we will not treat this as a specific RIIO-GD2 output (see below)
- consider GDN proposals for **bespoke outputs for biomethane** beyond those under the SEI output.

3.76 We do not see a role for the price control (including bespoke outputs) in socialising the costs of biomethane connections. The current charging arrangements allow the costs of biomethane connections to be charged to connectees, and any socialisation is achieved through the biomethane subsidy regime determined by government.

Annual Environmental Report

3.77 Reporting biomethane outcomes data in the Annual Environmental Report will enhance the visibility of biomethane development. GDNs should explore with biomethane stakeholders what additional data can be made available in the Annual Environmental Report beyond the information reported under RIIO-GD1. See Chapter 7 of the Core Document for further information on the Annual Environmental Report.

Stakeholder Engagement Incentive (SEI)

3.78 We see a strong case for engagement with biomethane stakeholders to form a clear part of the GDNs' overarching engagement strategy. When developing proposals under the SEI (see Chapter 2), GDNs should consider:

- biomethane stakeholders explicitly when developing their engagement strategies, which set out their approach to engaging with stakeholders over the RIIO-GD2 period
- whether any bespoke outputs proposed under the SEI should focus specifically on biomethane stakeholders or be part of a broader stakeholder measure.

3.79 We expect the CEGs to consider biomethane stakeholders when assessing companies' approach to stakeholder engagement when reviewing the Business Plans. Ideas put forward by stakeholders in response to our consultation included:

- extending GDNs' distributed gas information strategies, potentially drawing on the electricity DNOs' strategies[25]
- activities that better facilitate biomethane connections including the standardisation of requirements
- the publication of capacity heat maps.

Licence condition for distributed gas connection guides and information strategies

3.80 Inclusion of biomethane in the Annual Environmental Report and companies' approaches to stakeholder engagement will enhance the reputational incentive for GDNs to facilitate biomethane connections. However, to support these, we will retain the option of using the existing licence condition for Distributed Gas Connection Guides and distributed gas information strategies[26] to direct specific reporting requirements and ensure consistency (if this necessary). We will review this licence condition in the Licence Drafting Working Group to ensure it supports the objectives described above and will consult on any revised drafting in due course. We set out in the outputs that will be removed section below why we do not see this as a specific output for RIIO-GD2.

Bespoke outputs for biomethane

3.81 GDNs should consider whether bespoke outputs related to biomethane beyond those proposed under the SEI would be appropriate. Proposals should not seek to socialise the costs of biomethane connections. Any well-justified proposals should be included in their Business Plans within their Environmental Action Plans (see Chapter 7 of the Core Document for further information).

<u>Next steps</u>

3.82 We will monitor proposals for UNC modifications affecting distributed gas entry charges and we will engage with government as it consults on the appropriate mechanism to support green gas later this year. We will consider how the price control should respond to these developments when we consult on our Draft Determinations.

[25] https://www.ofgem.gov.uk/publications-and-updates/direction-issue-incentive-connections-engagement-guidance-document
[26] Standard Special Condition D20

New connections for power generation and transport

Purpose	Stakeholders raised concerns on the demands created by connection requests for power generation and gas-fuelled transport.
Decision	We will not introduce an output or incentive mechanism. We have not seen evidence of a need for such mechanisms.

Summary of issue

3.83 GDNs have suggested that connection requests for power generation and gas-fuelled transport may create a need to invest in network capacity.

Summary of our December proposals

3.84 We proposed not to introduce a common output. This is both because it is unclear what such an output would measure, and because of uncertainty in the role of gas in the transition to low carbon power and transport.

3.85 We did not anticipate specific funding mechanisms to support power generation or transport connections as these are covered by the existing connection charging arrangements. We noted it is unlikely to be appropriate for the generality of gas consumers to contribute to funding these connections, particularly if that funding runs counter to the cost reflective charging methodology.

Summary of responses

3.86 Two GDNs argued that gas distribution may play a key role in facilitating flexible power generation and gas-fuelled transport in RIIO-GD2. However, we did not receive evidence of a need for new mechanisms to support these connections.

Decision

3.87 We will not introduce an output related to power generation or gas-fuelled transport. We have not seen evidence that such an output would be in the interests of gas consumers. We reiterate that, if stakeholders have suggestions for reform of connection charging arrangements these should be directed to the appropriate forums, such as the UNC modification process.

3.88 Should GDNs and their stakeholders consider bespoke outputs to be appropriate, they should include well-justified proposals in their Business Plans.

3.89 We do not intend to include power generation and gas-fuelled transport connections as a specific category under the Business Plan Incentive. This is because the role of gas networks in the transition to low carbon transport and power is uncertain and because we have not seen evidence that additional ambition from GDNs is required.

Business Carbon Footprint reporting

Purpose	To increase the transparency of GDNs' GHG emissions and to encourage GDNs to monitor and reduce them at a business level over the price control.
Decision	Include Business Carbon Footprint (BCF) reporting as part of the new Annual Environmental Report output.

Summary of issue

3.90 In RIIO-1, BCF reporting is a cross-sector incentive designed to increase the transparency of network operators' GHG emissions and to encourage them to reduce their levels of GHG emissions at a business level.

December proposal

3.91 In December we sought views from stakeholders on whether the existing RIIO-GD1 output for BCF needs to be retained to help address the main challenges in the sector. As part of this, we noted that approximately 95% of GDNs' BCF is due to shrinkage. This is monitored and incentivised under RIIO through other outputs and regulatory mechanisms.

Summary of responses

3.92 Stakeholders (including the three GDNs who commented on BCF reporting) were generally in favour of GDNs publishing their BCF annually. The three GDNs commenting on BCF supported a common approach across sectors. Consumer representatives emphasised the importance consumers attach to the issue of BCF.

Decision

3.93 We believe that it is important for network companies to be transparent in reporting the environmental impact of their business operations. BCF reporting is an internationally recognised approach to measuring GHG emissions at a company level that allows some degree of comparability across network companies and across sectors. We believe BCF reporting continues to be an important tool in acting as a reputational incentive by making companies aware that their GHG emissions at a business level will be open to public and stakeholder scrutiny.

3.94 We want to see GDNs continue to report annually on their BCF, however BCF reporting will no longer be a standalone reputational incentive as it is in RIIO-GD1. Instead we will require GDNs to publish their BCF as part of their Annual Environmental Report. This will support cross-sector consistency, transparency and comparability. See Chapter 7 in the Core Document for further details.

RIIO-GD1 outputs that will be removed for RIIO-GD2

3.95 In our December GD Annex, we proposed to remove several outputs for RIIO-GD2. In some cases, this is because the output is being replaced with a new regulatory mechanism; in other cases, it may be because the output is seen as being of limited value in RIIO-GD2. We confirm the outputs we will remove below. Removing these supports our aim to simplify the RIIO-2 price controls.

Table 8: Summary of RIIO-GD1 outputs that will be removed

Output name
Reporting biomethane connections and connection studies
Distributed Gas Connections Guide and distributed gas information strategies
Discretionary Reward Scheme

Reporting biomethane connections and connection studies

Summary of our December proposals

3.96 We proposed that in RIIO-GD2 we would no longer treat this reporting as an output given the limited influence GDNs have over the number and capacity of biomethane connections. However, we think that GDNs should continue to report annually on the number and capacity of biomethane connections and connection studies in RIIO-GD2.

Summary of responses

3.97 We have summarised responses in the Biomethane section earlier in this chapter.

Decision

3.98 We will no longer treat this reporting as an output. Data on biomethane outcomes will form part of the new Annual Environmental Report. Please refer to the Biomethane section earlier in this chapter and Chapter 7 of the Core Document on the Annual Environmental Report for further detail.

Distributed Gas Connections Guides and distributed gas information strategies

Summary of our December proposals

3.99 We proposed that GDNs should continue to publish Distributed Gas Connections Guides and to maintain distributed gas information strategies, but we proposed not to treat this as an output in RIIO-GD2. We also asked for views on the helpfulness and effectiveness of these guides and strategies.

Summary of responses

3.100 We have summarised responses in the Biomethane section earlier in this chapter.

Decision

3.101 We have decided to remove this as an explicit output for RIIO-GD2, however the requirement to produce the guide will remain. We will use the annual environmental report and licence condition to incentivise improvements, and expect GDNs to consider biomethane stakeholders as part of their ongoing approach to stakeholder engagement in RIIO-2. Please refer to the Biomethane section earlier in this chapter for further detail.

Discretionary Reward Scheme

Summary of our December proposals

3.102 In RIIO-GD1, the Discretionary Reward Scheme (DRS) incentivises the GDNs to deliver social, carbon monoxide (CO) safety and environmental initiatives beyond those funded directly through the price control.

3.103 We proposed to remove the DRS in RIIO-GD2. We also proposed to replace the social and CO safety elements of the DRS, as discussed in Chapter 2.

Summary of responses

3.104 Stakeholders broadly agreed with the proposed removal of the DRS, but there was some concern that its removal would lead to a reduced focus on decarbonisation and the environment. Respondents thought it was important to replace the DRS with other outputs to reflect the need to support decarbonisation.

Decision

3.105 We have decided to remove the DRS in RIIO-GD2. We think our proposals outlined earlier in this chapter and the annual environmental report sufficiently incentivise the GDNs to focus on supporting decarbonisation and the environment. More detail on the annual environmental report is outlined in Chapter 7 of the Core Document.

3.106 Chapter 2 explains how we will replace the social and CO safety elements of the DRS.

4. Outputs: Maintain a safe and resilient network

Our package of outputs and incentives for RIIO-GD2 is designed to ensure the GDNs efficiently deliver a safe and resilient network that is also responsive to change.

Introduction

4.1 Network companies need to provide a safe and resilient network that is also efficient and responsive to change. The actions that they take in RIIO-2 should deliver these services for existing consumers, and safeguard the reliability of the network infrastructure and systems for future consumers.

4.2 In RIIO-GD2, compliance with HSE safety standards remains paramount and we'll ensure GDNs are efficiently funded to continue to comply. In particular, the HSE's Iron Mains Replacement Programme (IMRP) remains a key driver of replacement expenditure (repex) that not only improves safety and resilience, but also supports other objectives such as reducing leakage of greenhouse gases. For RIIO-GD2, we will introduce a new output and uncertainty mechanisms to help ensure the GDNs' repex spend represents value for money for consumers.

4.3 We will also introduce the Network Asset Risk Metric (NARM), to ensure the network companies undertake targeted, risk-based interventions that will enhance the overall resilience of the network. To further support this, there are also additional outputs to ensure GDNs' cyber and physical site security are robust.

4.4 In Business Plans, we expect to see a clear picture of GDNs' work over RIIO-GD2 for both Multiple Occupancy Buildings (MOBs) and gas holder decommissioning. The latter will also be an output to ensure that decommissioning occurs in a timely and cost efficient manner.

4.5 This chapter should be read in parallel with:

- Chapters 4, 5, 6 and 11 of the Core Document which describe:
  - our decision to use the output category 'Maintain a safe and resilient network', for RIIO-2 and the broad approach to outputs (eg output types)
  - the decisions on how RIIO-2 will support asset and workforce planning and ensure the networks can improve their cyber resilience and the physical security of key sites
  - how network companies may propose additional company specific ('bespoke') output measures within their Business Plans, if required
  - how network companies will be incentivised to set out ambitious plans through our Business Plan Incentive
  - our rationale for providing indicative caps and/or collars on ODIs (where relevant).
- Chapter 5 of the December GD Annex, which provides more detail on the proposals we have summarised in this chapter.

Outputs for RIIO-GD2

Table 9: Our decision on the RIIO-GD2 outputs

Output name	Output type*	Company driven target**
Common outputs (will apply to all companies)		
Repex - tier 1 mains replacement	PCD	Yes
Repex - replacement of services	tbd	tbd
National transmission (NTS) exit capacity	tbd	tbd
Gas holder demolitions	PCD	Yes
Network Asset Risk Metric	PCD/ODI	Yes
Cyber resilience	PCD	Yes
Physical security	PCD	No
Bespoke outputs (companies may consider other areas for inclusion in their Business Plans)		

* ODI(R/F) = Output Delivery Incentive (Reputational/Financial), PCD= Price Control Deliverable, LO= Licence Obligation. 'tbd' indicates that we have not yet made a decision.
** Company driven target signifies an output where we expect to see extensive company-led engagement (including with their CEG) to justify performance targets. This could lead to performance targets varying by company.

4.6 The Network Asset Risk Metric (NARM), cyber resilience and physical security are outputs that are cross-sector covering RIIO-GD2, GT2 and ET2. Further information on our decision for these outputs can be found in Chapter 6 of the Core Document.

Additional output suggestions

4.7 In December, we asked for views on whether we should consider any additional outputs to those that we proposed in the consultation. Several stakeholders put forward ideas, which we took into account. Most suggestions came from GDNs and were high-level examples of outputs they are considering for inclusion within their Business Plans. GDNs should work with their stakeholders to justify the need for these outputs and, where there is a strong case, include them in their Business Plans.

Repex

Background

4.8 Repex is the term we use to describe the long term programme of work to replace old and deteriorating mains and services with plastic pipes.[27] The repex programme will drive a substantial amount of GDNs' costs for RIIO-GD2 and we expect it to be the largest area of gas distribution underspend over RIIO-GD1.

4.9 Compliance with health and safety legislation is the primary driver of repex.[28] Around three quarters of repex spend is for activity either directly mandated by the Iron Mains Risk Reduction Programme or linked to that activity (eg service replacements). The HSE requires the GDNs to manage the safety risk on their iron mains populations. Those iron mains that are within 30 metres of a building

[27] Repex also covers the replacement of risers, which may be replaced with either plastic or steel pipes.
[28] Information on the HSE's Pipeline Safety Regulations can be found here: http://www.hse.gov.uk/pUbns/priced/l82.pdf and here: http://www.hse.gov.uk/gas/supply/13a.pdf

present the highest risk. Depending on their size, these iron mains must be managed either through decommissioning, remediation[29] or ongoing monitoring, as summarised below.

Table 10: Overview of iron mains categories

Tier	Description
Tier 1	Less than or equal to 8 inches in diameter and within 30 metres of a building. Must be decommissioned under a 30 year programme concluding in 2032.
Tier 2A	Greater than 8 inches to less than 18 inches in diameter, within 30 metres of a building and which breach a risk threshold.[30] Must be decommissioned or remediated.
Tier 2B	Greater than 8 inches to less than 18 inches in diameter, within 30 metres of a building and which are below a risk threshold. Mains can remain operational, but decommissioning funded if supported by CBA.
Tier 3	Greater than 18 inches in diameter and within 30 metres of a building. Mains can remain operational, but decommissioning funded if supported by CBA.

4.10 For RIIO-GD2, a regulatory framework for repex is needed to ensure alignment between workloads delivered and cost allowances, while maintaining the incentive for GDNs to minimise their costs.

4.11 GDNs must also manage the risk on their assets that are not included within the HSE's replacement programme. These include services, risers and mains of other materials, through ongoing monitoring and replacement, as required.

4.12 We need to ensure consumers are protected from under delivery, or delivery to a different specification[31], than funded. While we are maintaining the incentive properties of the ex ante price control framework, we also think that using limited ex post adjustments in some areas ensures clearer alignment of allowances and workloads. Our aim is to design a structure that encourages the GDNs to deliver genuine innovations and effectively manage network risk, but limits the scope for benefitting from simply re-profiling workloads.

4.13 As such, there is a direct link between the structure of repex outputs and our approach to cost assessment. Our ability to confidently assess costs for repex is an important factor in determining our decisions on the structure of outputs.

[29] For larger diameter mains, it may be possible for GDNs to undertake remediation action (ie internally sealing pipe joints) that prolongs the operating life of a pipe over the medium-term (ie 10-20 years). Typically, these remediation actions are less costly than full replacement, but offer shorter operating lives.

[30] The risk action threshold is agreed between the HSE and each GDN individually. It is a risk score for an individual main, above which the GDNs are expected to take appropriate action to make the pipe safe, either through remediation or decommissioning and/or replacement. The score is measured by the Mains Risk Prioritisation System (MRPS) methodology and estimates the probability of the mains pipe causing an explosion incident, per kilometre, per annum. The MRPS takes into account factors such as the fracture history of the pipe, the fracture history of other mains within the same area, the likelihood that gas will enter a building, the operating pressure of the pipe and the diameter of the main.

[31] In this context, specification refers to the mix of workloads being delivered, rather than detailed aspects of specific projects.

Overview of our December proposals and our decision for the RIIO-GD2 repex framework

The new RIIO-2 repex outputs package

4.14 The December GD Annex sets out a range of options for new RIIO-2 outputs in three areas:

- Tier 1 mains replacement - which is the replacement of iron mains below 8" in diameter and within 30m of a building.
- Services replacement - which is the replacement of non-PE[32] services.
- Asset management repex activities - which includes other mains and riser replacement activities.

4.15 A summary of the options we consulted on under each of these areas is included in the specific sub-sections below.

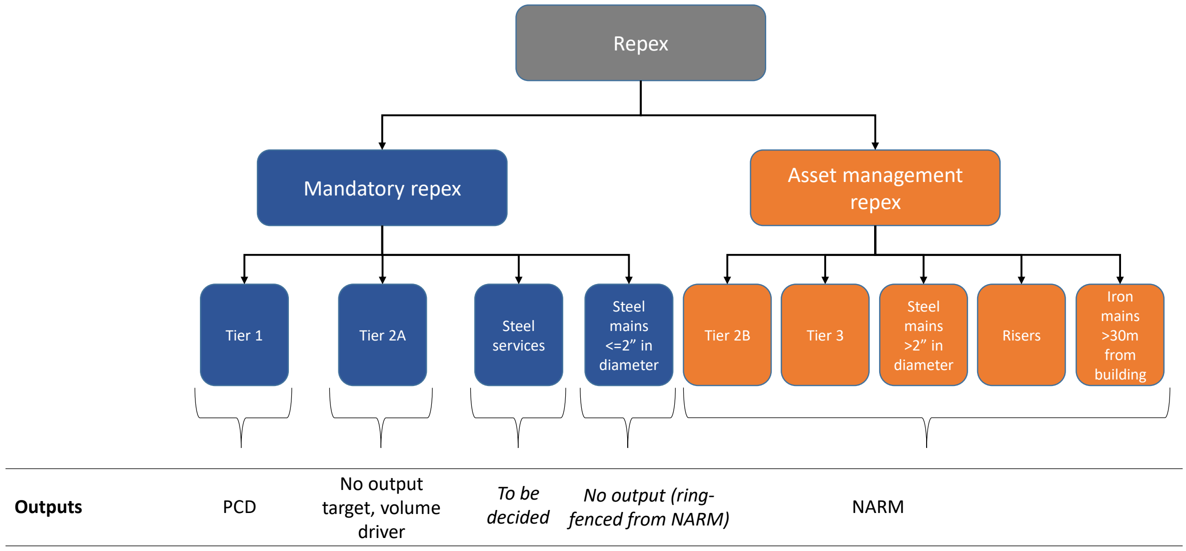
4.16 To reflect the difference in underlying drivers for different types of asset replacement we proposed to categorise repex into two sub-categories:

- **Mandatory repex:** includes the replacement of Tier 1 and Tier 2A iron mains, which the HSE mandates under the Pipelines Safety Regulations 1996. We also consider the replacement of non-PE services and steel pipe less than 2" in diameter to be mandatory, since the HSE[33] expects that GDNs will replace these assets when they encounter them, whether through undertaking mains replacement activity or for other reasons, such as after a reported gas escape. The replacement of medium pressure ductile iron (MPDI) mains is also mandatory, with GDNs having 12 months to remove any remaining MPDI mains they encounter. However, the vast majority of MPDI on the network has already been decommissioned.
- **Asset management repex activities:** covers a range of interventions on mains and risers which do not fall under the mandatory repex category above. The choice on intervention is generally supported by a CBA.[34]

4.17 Our decisions on the outputs package for repex are summarised in Figure 5 below. Sections A and B below provide further details on our decisions and positions on outputs for mandatory repex and asset management repex activities in RIIO-GD2.

[32] PE stands for polyethylene, which is the approved material for transmitting gas through lower pressure mains pipes and services.
[33] See, for example: http://www.hse.gov.uk/foi/internalops/og/og-00019.htm
[34] Under Pipeline Safety Regulation 13, the GDNs are required to ensure that they keep pipelines in a safe and efficient working order and in good repair. This means that from time-to-time GDNs may need to replace certain mains if they no longer comply with this regulation (ie the condition of the main falls below a minimum acceptable level). While this activity is effectively mandatory in nature, we include it within the definition of asset management repex (for all pipeline assets excluding Tier 1, Tier 2A and replacement of non-PE services), as it is part of the ongoing risk- and condition-based approach to intervention, rather than being a defined replacement programme based on specific pipeline characteristics (eg pipeline diameter).

Figure 5: Summary of repex outputs



4.18 In December we also set out proposals for two uncertainty mechanisms to support the efficient delivery of repex. We proposed to maintain the volume driver for Tier 2A iron mains replacement and to include a reopener mechanism covering any changes to HSE policy affecting repex during RIIO-GD2. Our decision to include these mechanisms for RIIO-GD2 is set out in the RIIO-GD2: Uncertainty mechanisms section below.

A) RIIO-GD2 Outputs: Mandatory repex activities

Purpose	To ensure GDNs deliver workloads to the volume and specification they are funded for and ensure a mechanism is in place to clawback in case of under delivery.
Decision	We will create a **PCD** for Tier 1 iron mains replacement which includes a tolerance band around the target for each diameter band within the tier.

Tier 1 mains replacement

Summary of our December proposals

4.19 We proposed to create a PCD for Tier 1 iron mains abandoned (in total kilometres over RIIO-GD2). We said that in our view this mechanism would help to ensure a minimum level of consumer benefit and enable us to recover costs for any workloads not delivered.

4.20 Under this PCD, cost allowances would be adjusted for any undelivered workloads relative to the RIIO-GD2 target. Any over delivery would not be subject to additional funding under this PCD.

4.21 We also outlined an option requiring the GDNs to deliver the diameter band mix within Tier 1 workloads[35] as outlined in their Business Plans, subject to a +/-% threshold, as a condition of meeting the PCD.

[35] Within Tier 1, GDNs report abandonment for four different diameter bands (<=3", 4" to 5", 6" to 7" and 8").

Summary of responses

4.22 There was strong support for our proposal to set a PCD output for Tier 1 mains replacement. Respondents were also supportive of placing restrictions on the diameter band mix that each GDN is required to deliver. The main concerns were:

- Potential difficulties in hitting the planned diameter mix exactly over the price control period - though some GDNs suggested a funded deadband around the target could be introduced to account for this.
- As a result of the cap on allowances through the PCD, GDNs were concerned that if stakeholder or other requirements change it could result in unfunded work for the GDNs.
- Queries as to how we will calculate any clawback for under-delivery and whether this will be specific to the diameter band sizes, or be a weighted average unit cost for Tier 1.

Decision

4.23 In line with stakeholder feedback, we will introduce a PCD for Tier 1 iron mains abandoned. We think that a PCD achieves a clear link between workloads, outputs and costs and provides a transparent mechanism for clawing back cost allowances, should a GDN fail to meet its target.

4.24 We will not include a funded deadband around the overall target for Tier 1 volumes, as suggested by some consultation respondents. We don't think the costs of ensuring the target is met are sufficiently material to warrant this.

4.25 For each GDN, we will set a target for the total kilometres of Tier 1 iron mains abandoned over RIIO-GD2. This will include qualifying cast iron, ductile iron and spun iron mains, but will not include steel pipe less than or equal to 2" in diameter. Our intention is to set the target based on each network's agreed HSE volumes plus an annual adjustment for dynamic growth.[36] We will seek to base the dynamic growth forecast on historical trends for each network. We will consult on the targets at Draft Determinations.

4.26 Under this PCD, cost allowances will be adjusted for any undelivered workloads relative to the RIIO-GD2 target. Any over delivery will not be subject to additional funding under the PCD mechanism. We think that this protects consumers from paying for any workloads that are not delivered, as well as against additional costs from over delivery. We will not apply any additional financial penalty or reward for under or over delivery respectively.

4.27 We will put in place a requirement for networks to deliver a specific diameter band mix within Tier 1, as a condition of the Tier 1 PCD. This mix will be based on each networks forecast of workload volumes. We will allow a tolerance band around each diameter band target. We think this will ensure that GDNs are incentivised to deliver well justified Business Plans and it will restrict the ability of GDNs to benefit from re-profiling of workloads within period. The exact form of the diameter band restriction, including whether we apply it to mains abandoned or mains laid, will be dependent on our approach to cost assessment in RIIO-GD2.

[36] The dynamic growth component accounts for the migration of mains into the Tier 1 category during the RIIO-GD2 period. Specifically, those iron mains which are 8" or less in diameter and are initially greater than 30 metres from a building, but due to new construction activity nearby, end up 30 metres or less from a building within the RIIO-GD2 period, and thus become part of the Tier 1 population.

We will continue to develop the structure and methodology of the diameter band condition over the coming months and will consult on this at Draft Determinations.

4.28 We intend to ring-fence the monetised risk scores of Tier 1 mains and steel mains greater than or equal to 2" in diameter within the NARM, up to the level consistent with the target volumes for RIIO-GD2 for each GDN. Beyond this level, we are proposing to allow a trade-in only option for monetised risk from Tier 1 mains. This would mean that any additional Tier 1 mains replacement work undertaken by the GDNs in RIIO-GD2, beyond the PCD target level, would contribute to the GDN's overall monetised risk target under the NARM. We think this provides the GDNs flexibility to undertake additional Tier 1 replacement work during RIIO-GD2, if there is a strong operational reason for doing so. Given the mandatory nature of the Tier 1 mains replacement programme, it is not appropriate to allow GDNs to trade-out monetised risk from this activity.

Services replacement

Summary of our December proposals

4.29 We proposed three possible options for setting an output for the replacement of non-PE services:

- Option 1: set a PCD with a fixed target for the total number of non-PE service replacements over RIIO-GD2.
- Option 2: set a PCD for non-PE service replacements with a deadband threshold of +/-X% around the target. Delivery outside of the deadband would need to be justified by the GDN.
- Option 3: not set a PCD output. Replacement of non-PE services would be included as part of the Network Asset Risk Metric (NARM) which would be the main mechanism for ensuring the efficient delivery of non-PE service replacements over RIIO-GD2.

4.30 We did not set out a preference for any of these options.

Summary of responses

4.31 There were mixed responses to the different options. One stakeholder considered option 2 to be a fair compromise because it could provide companies with workload flexibility as well as consumers with assurance that service replacements are being progressed at a predictable rate. Some respondents were generally in favour of setting a PCD target for replacement of non-PE services, but did not indicate a preferred option between having a fixed target or a target with a tolerance around it.

4.32 Network companies were generally opposed to setting a PCD target (either fixed or deadband). They highlighted uncertainty around workload volumes as an important challenge in establishing a target. Some respondents suggested that it would be simpler to use the NARM framework to address the uncertainty of workloads. One respondent suggested that we should consider a volume driver in this area.

Decision

4.33 The outputs we proposed for repex were defined in terms of volume (ie number of replacements). Given the uncertainty around workload volumes for non-PE service replacements, which was flagged by all of the GDNs in their responses, we think there is financial risk in setting a fixed target for RIIO-GD2. In addition, we consider that before setting the approach to the services output, it is important that we have an idea of our approach to services cost assessment. We will only be in a position to set this cost assessment approach once we have seen and analysed the BPDT data.

Next steps

4.34 The approach we determine will also influence how we treat non-PE services within the NARM. Therefore, we will consult further on our approach to services at Draft Determinations.

B) RIIO-GD2 Outputs: Asset management repex activities

Purpose	To incentivise GDNs to deliver, at least, a minimum level of consumer benefit through their asset management repex programme
Decision	We will not put in place any specific outputs for asset management repex activities in RIIO-GD2.

Summary of our December proposals

4.35 We proposed three output options for asset management repex activities[37]:

- Option 1: set a PCD with a fixed target, defined as the total length of mains replacement for each asset type or number of riser replacements over RIIO-GD2.
- Option 2: set a PCD for each asset management repex activity, with a deadband threshold of +/-X% around the target. Delivery outside of the deadband would need to be justified by the GDN.
- Option 3: not set a PCD output. Asset management repex activities would be part of the Network Asset Risk Metric (NARM) and this would act as the main mechanism for ensuring the efficient delivery of asset maintenance repex over RIIO-GD2.

4.36 We did not set out a preference for any of these options.

Summary of responses

4.37 All respondents who commented on this output, except one GDN, opposed setting a PCD output for asset management repex activities. Most respondents highlighted that the NARM provides a mechanism to hold GDNs to account and suggested that introducing a separate PCD would be an unnecessary duplication.

4.38 Respondents suggested that the NARM framework offers GDNs greater flexibility in their asset management strategy, and allows for innovative asset management techniques to be used as they are developed.

Decision

4.39 We are not introducing any specific outputs for asset management repex activities. We expect the monetised risk scores associated with interventions on these assets to be included within the NARM target for each GDN. Therefore, the NARM will be the primary mechanism that incentivises the GDNs to deliver asset management repex activities in RIIO-GD2.

[37] Includes replacement of Tier 2B, Tier 3, steel mains >2" in diameter, risers and iron mains >30m from a building.

4.40 We think that asset management repex workloads should be incentivised in the same way as other capex investments (eg governor replacements) and that the NARM provides an appropriate mechanism to incentivise the GDNs to undertake the investments proposed in their Business Plans. We expect asset management repex workloads to be justified through Investment Decision Packs[38], which incorporate both an Engineering Justification Paper and a CBA. GDNs will be expected to demonstrate that their proposed investment programmes offer value to the consumer and that they have sufficiently taken into account potential risks around each investment or programme of works.

4.41 We have provided additional detail on the NARM methodology for RIIO-2 in Chapter 6 of the Core Document. We will continue to develop our sector-specific approach to NARM over the coming months, including through discussion in working groups, and will consult on this at Draft Determinations.

RIIO-GD2: Uncertainty mechanisms

Repex - Tier 2A iron mains

Summary of issue and December proposals

4.42 In RIIO-GD1, there is a volume driver to fund mains replacement for Tier 2A iron mains.

4.43 In the GD December Annex we proposed to keep this mechanism in place to adjust cost allowances for outturn workloads, on the basis that the volumes of these workloads are relatively small but uncertain. We also proposed that this mechanism could cover ductile iron.

Summary of responses

4.44 There was broad support to continue the volume driver approach from RIIO-GD1. Some respondents suggested widening the scope of the volume driver approach to include pipes of other materials and diameters.

Decision

4.45 We have decided to maintain our current approach of adjusting cost allowances using a volume driver for Tier 2A replacement work. The current approach is transparent, simple to operate and is supported by stakeholders. This volume driver will take effect through annual adjustments to the GDNs allowances as part of the annual iteration process (AIP), reflecting the actual workloads they have undertaken in the previous year.

4.46 We will consult on whether to widen the scope of the volume driver to include mains replacement of other materials (including ductile iron) at Draft Determinations. This will be informed by our approach to cost assessment for repex and will be based on the volumes proposed by GDNs in their Business Plans, and the sufficient availability of robust unit cost data.

[38] Draft Investment Decision Pack Guidance document and CBA template can be found here: https://www.ofgem.gov.uk/publications-and-updates/riio-2-draft-data-templates-and-associated-instructions-and-guidance

HSE policy changes

Summary of issue

4.47 Repex is heavily driven by HSE policy, both in terms of volume of work, but also the sequencing and approach that GDNs take. In the event of a change in HSE regulations, there could be a material change in associated costs.

Summary of our December proposals

4.48 We proposed a specific re-opener mechanism for changes to HSE policy and set out some thinking on the possible design of the mechanism:

- Trigger event - any change by the HSE to the Pipeline Safety Regulations (1996) or Iron Mains Risk Reduction programme[39] that results in a fundamental change to the work that GDNs are mandated to carry out to remain compliant.
- Trigger window - any time during RIIO-GD2.
- Materiality threshold - one per cent (following the application of the sharing factor).[40]
- Symmetry - Could increase or decrease GDNs' allowances.

4.49 We sought views on our proposed approach.

Summary of responses

4.50 Stakeholders who commented on this area were supportive of the proposed re-opener to enable allowances and outputs adjustments in response to changes in HSE policy.

4.51 There were some comments on the design of the re-opener. A stakeholder suggested that the re-opener should be included within an annual regulatory window rather than at any time during RIIO-GD2. Another stakeholder suggested that the scope of the re-opener should be extended to cover the close out assessment for repex after the end of the RIIO-GD2 price control.

Decision

4.52 We will put in place a re-opener mechanism covering changes to HSE policy affecting repex for RIIO-GD2. This reflects strong support for our December proposals from respondents.

4.53 We will continue to work with the GDNs and other stakeholders through working groups to consider the scope and structure of the re-opener, including which regulations it will relate to and which asset types will be covered. We intend to make the re-opener symmetrical in nature and will put in place a materiality threshold. These areas will be consulted on as part of Draft Determinations.

[39] http://www.hse.gov.uk/gas/supply/mainsreplacement/enforcement-policy-2013-2021.htm
[40] For example, if the sharing factor is 50 per cent then in effect the materiality threshold is two per cent of base revenue.

National Transmission System (NTS) exit capacity

Purpose	To encourage efficient booking of NTS exit capacity in order to ensure reduced costs and accurate demand signals.
Decision	Pending the conclusion of UNC678, we intend to consult on NTS Exit Capacity further as part of our Draft Determinations.

Summary of issue

4.54 For GDNs to offtake gas from the NTS, they need to purchase exit capacity, which gives them the right to access gas in the future. Under RIIO-GD1, GDNs pass these costs onto consumers, so the NTS exit capacity incentive aims to ensure capacity bookings are efficient and that:

- costs are kept to a minimum
- accurate demand signals are sent to the NTS so it can plan the right level of capacity required on the network.

4.55 GDNs are financially rewarded, or penalised, for booking less or more flat capacity and since capacity prices vary by location on the NTS, they are also incentivised to reduce the amount of capacity from more expensive exit points.

4.56 We think the incentive is leading to the behaviours we intended as evidenced by:

- total booked capacity decreasing year-on-year
- all GDNs increasing their use of flexible capacity
- most GDNs allocating capacity to cheaper offtake points on the network.

4.57 However, rewards have been substantial through this incentive (£108m[41] in the first five years of RIIO-GD1). We think that some of the benefit GDNs are receiving from the incentive are outside of their control and more to do with the current incentive design than GDN action (eg a decline in peak demand will lead to a reward if a GDN reduces their exit capacity bookings accordingly).

Summary of our December proposals

4.58 We proposed to amend the RIIO-GD1 incentive by:

- replacing advance capacity price estimates with final offtake capacity prices when calculating rewards and penalties
- introducing a mechanism that enables a within-period adjustment of offtake capacity targets, to ensure ongoing alignment between targets and peak demand forecasts.

Summary of responses

4.59 Most respondents were supportive of retaining an incentive to encourage efficient booking of NTS exit capacity thereby driving consumer benefits. However, one energy supplier challenged the perceived benefit to consumers from this incentive, noting that any cost savings achieved by GDNs booking less exit capacity is ultimately recovered through an increase in exit commodity charges.

[41] In 2017-18 prices.

4.60 There was mixed support for basing rewards/penalties on final exit capacity prices rather than three-year advance (T-3) exit capacity price estimates. Whilst there was general agreement among respondents that T-3 price estimates were potentially outdated, a number of GDNs noted that final exit capacity prices are published after the GDNs book their capacity rights for the ensuing gas year. One GDN suggested that indicative exit capacity charges would be a more relevant metric; these are published approximately six months in advance.

4.61 One GDN supported using an uncertainty mechanism to guard against material changes in peak demand, but highlighted the importance of allowing a sufficient lead time on baseline adjustments to avoid undermining existing booking strategies. There was general agreement among respondents that peak-demand forecasting is becoming increasingly challenging.

4.62 There was limited support for expanding the incentive to include flexible capacity. One GDN acknowledged the potential whole-system benefit that this could drive, whilst highlighting a couple of factors that could undermine its effectiveness such as future changes to the NTS charging regime and the influence of non-GDN users of the NTS.

Decision

4.63 In our December consultation, we highlighted the interaction between the NTS Exit Capacity incentive mechanism and Uniform Network Code (UNC) Modification 621, which set out a number of proposed amendments to the gas transmission charging regime. We have since rejected the modifications proposed under UNC621, and industry has responded by raising UNC678.

4.64 Due to the remaining uncertainty surrounding the gas transmission charging regime, we consider it appropriate to defer the decision on whether to include an NTS Exit Capacity incentive until UNC678 has concluded. This is because the modifications could lead to changes in how NTS exit charges are recovered, which could in turn impact the design of this incentive.

Next steps

4.65 We intend to consult on NTS Exit Capacity again as part of our Draft Determinations.

GDN record keeping

Purpose	To ensure a clear understanding of GDNs' record keeping processes and systems, including how they will evolve over RIIO-GD2 with an additional specific focus on Multiple Occupancy Buildings (MOBs).
Decision	1. Companies must include a specific section on MOBs record keeping in their Business Plan. This will not be a specific RIIO-GD2 output. 2.We will explore further whether a new licence condition on record keeping is needed to ensure our minimum expectations are met. This will not be a specific RIIO-GD2 output.

Summary of issue

4.66 We continue to consider that it is fundamental, and a business as usual activity, for GDNs to know where their assets are, what's connected to their network and the condition of their assets. In December we noted the important role of the NARM in this area. We also identified that GDN record keeping and understanding of MOBs and the network assets within them should be strengthened for RIIO-GD2.

Summary of our December proposals

4.67 Our proposals can be broken down into two areas:

1) MOBs record keeping:

- We proposed that GDNs' Business Plans should include specific proposals to ensure that there is a clear picture of their current record keeping processes and systems, and how they will evolve over RIIO-GD2. We also included guidance on the information we expect to see.
- We asked for views on whether GDNs should also include a bespoke PCD to embed and monitor any specific deliverables set out in their Business Plans.

2) Other record keeping outputs for RIIO-GD2:

- We asked for views on whether other outputs are needed to cover other areas of GDN record keeping or GDN record keeping requirements as a whole.

Summary of responses

MOBs record keeping

4.68 In general, those who commented noted the importance of understanding MOB assets. However, stakeholders' views were mixed on whether to introduce a new output.

4.69 Several non-GDN responses were broadly supportive of including an output, although a consumer representative group was unclear on what potential consumer detriment an output would address.

4.70 On the question of a bespoke PCD output:

- one DNO noted the difficulties of being able to link costs with specific deliverables, while a GDN questioned whether a PCD delivers any extra value beyond work that is happening already in this area
- one DNO considered that the objectives of the output are better suited to a Licence Obligation, coupled with strong incentives to submit a good Business Plan. They thought that including a PCD would be excessive micro-management
- some GDNs, and an industry body, noted possible challenges around data comparability (including the definition of a MOB).
- two GDNs suggested that if we introduce an output, then it should be bespoke.

4.71 A CEG and a GDN noted the importance of the availability of data on MOB assets to other parties (for example Local Authorities).

Other record keeping outputs

4.72 Most GDNs noted the importance of having good data on their assets to help improve their performance. However, respondents noted that defining performance as an output is difficult and comparability is challenging. One GDN supported introducing a common financial ODI to encourage companies to maintain a high-quality asset register, while another GDN noted that it would explore further whether a bespoke output is necessary.

Decision - MOBs record keeping

4.73 We will require all GDNs to include a section in their Business Plan on MOBs record keeping to ensure that we have clear understanding of the work that is going on in this area and to ensure that all GDNs are placing sufficient weight on this area for RIIO-GD2. We maintain the position that, given the materiality of allowances associated with maintenance and replacement works related to MOB pipes, it is essential that GDNs have an accurate record of their MOB assets in order to develop and maintain an economical and efficient system.

4.74 There was no specific feedback on the guidance for GDNs to use for their Business Plans, that we set out in our consultation. Nevertheless, we've amended it to make it clear that GDNs should consider how they share the information between themselves and wider stakeholders. For Business Plans, GDNs should use the guidance in Appendix 3.

4.75 At this time, we will not require GDNs to include an output (eg a PCD) in this area in their Business Plans. Instead, individual GDNs should explore this area further as part of their stakeholder engagement, including with their CEGs, and decide whether to propose a bespoke output, which we will consider at Draft Determinations. We think this decision is appropriate because each GDN has markedly different MOBs populations and challenges and, as such, a 'one size fits all' approach is not appropriate.

Next steps

4.76 We will look to establish common definitions (eg for different types of MOBs) to support the Business Plan submissions in this area. However, even without this move to ensure greater consistency, we do not think there is a material impact on what we've asked for as part of the Business Plan, which is focused on the processes and systems.

Decision - Other record keeping outputs

4.77 We don't think a specific common output is required for record keeping for RIIO-GD2, and note the potential difficulties of designing a meaningful output in this area. We note a suggestion by one GDN that a common financial reward ODI on asset record quality may be appropriate. We're currently not convinced that consumers would place value on it being a financial reward and think this is an area that should be seen as a core activity for GDNs, and will be supported by other outputs such as the NARM.[42] However, GDNs may explore the case for a bespoke output as part of their stakeholder engagement.

Next steps

4.78 We want to ensure that GDNs are clear on our minimum expectations regarding record keeping in general (including MOBs). We will explore whether further licence conditions and/or guidance in this area is required to ensure our minimum expectations (and the consequences of non-delivery) are clear. If we think changes are required, this will be consulted on as part Draft Determinations.

[42] The NARM is intended to play a central role in ensuring that GDNs have a record of the location and condition of their network assets, to ensure that they maintain and operate them efficiently, and plan and invest appropriately. As part of the NARM, we will continue to seek to improve the accuracy, coverage and consistency of network asset data.

Gas holder demolitions

Purpose	To ensure that gas holders are decommissioned in a timely and cost efficient manner. Demolition removes the ongoing cost of maintenance of these structures.
Decision	We will require GDNs to include a Gas Holder Strategy in their Business Plans which we will then link to a **Price Control Deliverable**.

Summary of issue

4.79 Gas holders were historically used for storage of town gas from nearby gasworks. Their use dropped with the discovery of gas in the North Sea and the preference of storing gas within the pipelines (line pack). They are no longer used by GDNs.

4.80 In RIIO-GD1 we provided GDN funding, and set targets, for a phased demolition of gas holders. We anticipated that by 2029 all gas holders would be demolished. Demolition removes the ongoing maintenance costs for these structures, and reduces the safety risk.

Summary of our December proposals

4.81 We proposed that all GDNs include a Gas Holder Strategy in their Business Plans. This strategy, alongside the cost information submitted as part of the company's Business Plan, would then be used to set a PCD. Should any gas holders not be demolished, the associated unit cost allowance would be returned to customers.

Summary of responses

4.82 All respondents that commented on this area supported our proposals. Some GDNs suggested that we should also focus on GDN's asset disposal and land remediation beyond just gas holders.

Decision

4.83 We will require GDNs to include a Gas Holder Strategy within their Business Plans. We will use these strategies to create a PCD for each company. Appendix 4 sets out the information that GDNs should provide as part of their Business Plan.

4.84 We do not have enough information to make a decision on the need for a mechanism to cover the wider issue of asset disposal and land remediation beyond the demolition of gas holders. However, GDNs should consider this as part of their Business Plans and provide evidence of a proactive land remediation strategy, and of an asset disposal strategy that delivers strong consumer benefit. Chapter 7 of our Finance Annex provides further detail about the amounts recovered from the disposal of assets.

RIIO-GD1 outputs that will be removed for RIIO-GD2

4.85 In our December GD Annex we proposed to remove several RIIO-GD1 outputs for RIIO-GD2. In some cases, this is because the output will be replaced with a new regulatory mechanism; in other cases it may be because the output has limited value in RIIO-GD2. We confirm the outputs we will remove below. Removing these supports our aim to simplify the RIIO-2 price controls.

Table 11: Summary of RIIO-GD1 outputs that will be removed

Output name
Repair risk
Sub-deducts off-risk
Maintaining operational performance (MOP): • Number and value of offtake meter errors – annual commitment • Duration of telemetry faults – annual commitment • Pressure Systems Safety Regulations (PSSR) fault rate – annual commitment
Major accident hazard prevention (MAHP)
Repex: Mains replacement level of risk removed
Repex: Gas-in-buildings (GIBs) and/or fractures

Repair risk

Summary of our December proposals

4.86 We introduced the RIIO-GD1 reputational repair risk output to encourage GDNs to efficiently repair non-emergency faults in order of risk (proximity to buildings) and time (days since fault was reported). We think that the behaviour this output is incentivising is business as usual and does not require a stand-alone output to drive this outcome. GDNs are incentivised to operate efficiency through the sharing factor. We were unable to identify any significant consumer benefits from it being a RIIO output.

Summary of responses

4.87 Stakeholders who discussed this output agreed with our proposals to remove it. The HSE made a general point that having an output acting in both the safety and commercial sphere can be a good thing, but had no specific preference on whether the output should be retained.

Decision

4.88 We will remove repair risk as a specific output for RIIO-GD2. The responses support this decision. The general incentive properties of the RIIO framework, specifically the sharing factor, will drive GDNs to manage and operate their resources efficiently, without the need for a specific output measure.

Sub-deducts off risk

Summary of our December proposals

4.89 A sub-deduct network is a gas pipe network arrangement that is beyond the GDN's main gas meter. By the end of RIIO-GD1, the GDNs need to ensure that all sub-deduct networks are evidenced as 'off-risk' (ie have an owner responsible for them). RIIO-GD1 will see this work completed and it doesn't need to be repeated in RIIO-GD2. Therefore, we proposed to remove the output.

Summary of responses

4.90 All stakeholders who commented on this output supported our proposal to remove it for RIIO-GD2, agreeing that the work doesn't need to be repeated.

Decision

4.91 We have decided to remove this output for RIIO-GD2 on the basis that the latest evidence suggests this programme of work will be completed by the end of RIIO-GD1.

Next steps

4.92 In conjunction with closing out RIIO-GD1, we will consider what (if any) revenue adjustments or specific deliverables may be required during RIIO-GD2 if the work has not been completed.

Maintaining operational performance (MOP) outputs

Summary of our December proposals

4.93 MOP outputs are a set of network reliability focused measures introduced in RIIO-GD1. The purpose of the MOP outputs is to ensure that the GDNs are maintaining their assets and can demonstrate a sufficient standard of performance in each of the areas of focus.

4.94 The MOP outputs are measured as follows:

- The number and value of offtake meter errors.
- The duration of telemetry faults.
- Pressure System Safety Regulations (PSSR) fault rate.
- Gas holder demolitions.

4.95 We explain our position on gas holder demolitions above. For the other parts of MOP, we proposed to remove them for RIIO-GD2. We do not consider that these areas provide substantial benefits to consumers over and above the current reporting arrangements, which include our annual regulatory reporting and the NOMs (replaced by the NARM at RIIO-GD2).

Summary of responses

4.96 All respondents who commented on this area were supportive of removing MOPs as an output for RIIO-GD2.

Decision

4.97 We have decided to remove MOPs as an output for RIIO-GD2. The responses support our decision. We consider that the current reporting arrangements provide sufficient benefits to customers.

4.98 We will continue to collect this data through our annual reporting.

Major accident hazard prevention (MAHP)

Summary of our December proposals

4.99 The HSE requires GDNs to prepare a MAHP policy document.[43] The broad purpose of this document is to set out the company's policy for preventing major accidents. We proposed to continue to give GDNs efficient funding to remain compliant with the HSE's MAHP requirements, but we do not see this as an output for RIIO-GD2.

[43] Major Accident Prevention Policy (MAPP) under the Control of Major Accident Hazards Regulations 1999 (COMAH).

Summary of responses

4.100 Stakeholders did not comment on the removal of this output explicitly, but did note overall agreement with our proposals to remove outputs.

Decision

4.101 We have decided to remove this output for RIIO-GD2, as compliance with the Control of Major Accident Hazards Regulations (COMAH) and specifically sections regarding MAHP is for the HSE to determine and enforce. We will however ensure that the GDNs are still appropriately funded to enable them to remain compliant with the HSE's MAHP requirements.

Repex: Mains replacement level of risk removed

Summary of our December proposals

4.102 The purpose of this output is to incentivise the GDNs to prioritise the replacement of the highest-risk iron mains during RIIO-GD1.

4.103 We set out two main reasons why we thought this output could be removed for RIIO-GD2:

- It may be possible for GDNs to plan more cost efficient projects by focusing on a larger geographical area within a single project.
- There may be more effective ways align workloads, consumer benefits and cost allowances in RIIO-GD2, while ensuring network risk continues to be effectively managed.

Summary of responses

4.104 Stakeholders who commented on this area agreed with our proposals to remove it as an output for RIIO-GD2.

Decision

4.105 We will remove the mains replacement level of risk removed output for RIIO-GD2. Our wider RIIO-GD2 repex framework (in the section above) provides a more effective way to link repex workloads with cost allowances in RIIO-GD2 and will replace this RIIO-GD1 output. We will continue to ask for iron mains risk removed data to be reported in RIIO-GD2 annual submissions, as it provides a useful indicator of network safety risk.

Repex: Gas-in-buildings (GIBs) and/or fractures

Summary of our December proposals

4.106 In RIIO-GD1, we set output targets for the occurrences of GIBs and the number of fractures on the distribution network. These outputs are a useful indicator of possible safety issues on the gas networks and, as such, we proposed to continue to collect this data under RIIO-GD2. However, we asked for views on whether they needed to be retained as specific GDN outputs for RIIO-GD2.

Summary of responses

4.107 Stakeholders who commented on this area agreed with our proposals to remove it as an output for RIIO-GD2. It was noted that safety is regulated by the HSE who effectively hold companies to account against these measures. Some stakeholders agreed that we should continue to collect the data as part of our annual reporting.

Decision

4.108 We will not include these measures as outputs for RIIO-GD2. In line with stakeholders' feedback, we will continue to collect this data through our annual regulatory reporting.

5. Cost assessment

Cost assessment aims to determine the efficient level of costs that will enable GDNs to carry out their activities and deliver an appropriate level of service. This chapter sets out our approach and next steps for assessing network companies' costs having considered responses received to date. Our cost assessment approach will continue to be refined and we will consult on some of its aspects in summer 2019, ahead of the submission of the final Business Plans in December 2019.

Introduction

5.1 In Chapter 6 of the December GD Annex we set out our initial thinking, and asked for feedback, on how we intended to approach cost assessment for RIIO-GD2. We noted that our approach would continue to evolve over the coming months and can only be finalised after the assessment of GDNs' Business Plans.

5.2 This chapter:

- summarises the consultation responses on our cost assessment approach proposals
- sets out the next steps for the development of our cost assessment approach, including the scope of our summer consultation
- outlines how we will consult with stakeholders over the rest of this year.

Approach to cost assessment

5.3 In Chapter 6 of the December GD Annex we asked for stakeholders' views on our initial thinking on RIIO-GD2 cost assessment. This included our overall approach (ie to evolve RIIO-GD1 approach for RIIO-GD2), choosing cost categories and cost drivers, the analysis toolkit, and how we combine the analyses and the adjustments that make costs comparable across GDNs.

Evolve RIIO-GD1 approach for RIIO-GD2

Summary of our December proposals

5.4 In RIIO-GD1, we used regression and non-regression analysis to assess both historical and forecast costs. The analysis was run at an aggregated (top-down) and a disaggregated (bottom-up) level, and the focus was on controllable costs. We made normalisations and adjustments to ensure comparability across GDNs. Our view of the level of efficient costs (and thus the final cost allowance) derived from the unweighted average of our top-down (historical and forecast) and bottom-up (historical and forecast) approaches.

5.5 In the December GD Annex, we expressed our proposal to evolve the RIIO-GD1 cost assessment approach for RIIO-GD2, rather than establish a whole new methodology.

Summary of responses

5.6 Overall, most stakeholders who commented on this supported our proposal to evolve the RIIO-GD1 cost assessment approach for RIIO-GD2. One DNO did not agree that RIIO-1 should be the default template for RIIO-2 cost assessment. Two DNOs highlighted that they do not expect RIIO-GD2 to be the precedent for RIIO-ED2.

5.7 A GDN pointed out the constructive role of the cost assessment working groups in identifying the areas of potential improvements and recognised that it is too early to finalise the methodology.

Next steps

5.8 Having considered stakeholder responses, we intend to use the RIIO-GD1 cost assessment approach as a starting point to develop the RIIO-GD2 cost assessment approach. We recognise that there are areas with scope for improvement and opportunities to explore alternative approaches. We will consult on this in summer 2019 (further details are at the end of this chapter), while keeping in mind that we can only provide a more comprehensive view of our cost assessment methodology at the Draft Determination stage, after Business Plans have been submitted.

5.9 We agree with the respondents on the importance of continuing engagement through cost assessment working groups. As such, these will continue for the remainder of the year.

Appropriate cost categories, cost drivers, analysis toolkit and how we combine the analysis

Summary of our December proposals

Cost categories

5.10 In defining cost categories, we suggested the need to consider end to end processes, combining activities where trade-offs exist (ie emergency and repairs, governors, Local Transmission System (LTS) and storage, IT capex and opex), and ensuring consistency in reporting between companies.

Cost drivers

5.11 We outlined the principles we propose to use for assessing appropriate cost drivers in RIIO-GD2. Our view is that a good cost driver should make economic and/or engineering sense, be accurately and consistently measurable, have a stable relationship with costs over time, be informative, and be beyond a network company's control.

5.12 We suggested some alternative cost drivers for regression models, highlighted potential issues around some of the cost drivers used in RIIO-GD1, noted that we will consider the use of composite scale variables, and set out our concerns with the suggestion that we should include quality within regression analyses.

Analysis toolkit and how we combine the analyses

5.13 We stated our proposal to use both regression and non-regression techniques for RIIO-GD2. For regression analysis, we proposed to exploit the opportunities linked to the availability of more historical data and consider the case for using forecast data. We also expressed interest in exploring alternative benchmarking techniques, whilst recognising the potential challenges and constraints.

5.14 For non-regression analysis, we outlined the principles and scope for using technical, engineering and qualitative techniques for cost assessment, as well as their potential to complement regression analysis by providing a different perspective.

5.15 We clarified that, as in RIIO-GD1, we will only be in a position to decide how to combine our analyses once they are complete. We noted the need to set allowances at the efficient level of costs that will enable GDNs to deliver their outputs.

5.16 Finally, we invited views on the need for Real Price Effects (RPEs) allowances and appropriate input price indices. The responses we received on RPEs are addressed in Chapter 9 of the Core Document.

Summary of responses

Cost categories

5.17 Most GDNs noted the relative merits of assessing costs at both a top-down and bottom-up level: a bottom-up view enables better understanding of cost drivers and regional factors, whereas a top-down view overcomes differences in structure and cost allocation between GDNs. A DNO highlighted the potential challenges of bottom-up analysis when work straddles two or more areas.

5.18 Most stakeholders who commented on the scope for revising the cost categories used in RIIO-GD1, agreed that this should happen.

5.19 Respondents' specific comments included:

- that merging emergency and repairs or governors and LTS is not appropriate, as this would undermine the clarity regarding cost drivers and regional factors
- that moving non-routine maintenance costs to capex would not solve the existing reporting inconsistencies, or the capitalisation and solution choice issues[44]
- that we should assess IT opex and capex jointly, as they reflect one activity
- that we should reconsider the middle-up analysis (ie capex and opex level) to have an additional view on efficiency.

Cost drivers

5.20 All those who commented on this topic agreed on our proposed principles for a good cost driver, although one DNO pointed out the need to consider how the principles are applied in practice. Another DNO stated that many cost drivers used in RIIO-GD1 are actually within the control of the GDNs to some extent and thus need to be re-evaluated (although no examples were provided).

5.21 Overall, responses in this area highlighted the importance of reviewing existing cost drivers and in some cases provided specific suggestions on how this should be done.

5.22 The table below summarises the suggestions made by respondents regarding specific cost drivers.

[44] As highlighted by a GDN, capitalisation issues relate to whether some types of maintenance costs are treated as opex or capex (eg asset remediation), while solution choice refers to the way different solutions (eg moving a pipeline) are classed (ie opex or capex).

Table 12: Stakeholders suggestions on cost drivers

Cost driver	Suggestions from stakeholders
The use of network deliverables (eg health indices) in regression models	To not use network deliverables as condition assessment is heavily influenced by companies' judgement.
The use of the number of repairs for the repairs regression model	To consider instead the number of reports and to account for the interactions with the repex programme and the diameter bands.
The use of the number of external condition reports for the emergency regression model	To consider instead the number of public reported escapes (PREs), for instance the maximum number of PREs over 5 years.
The use of workload driver for the mains reinforcement regression	To split into diameter bands.
The use of a workload driver for the connections regression model	To include fuel poor connections with their own synthetic unit costs, although only after checking for comparability issues following the changes in the vulnerability eligibility criteria.
The use of a workload driver for the repex regression model	To update synthetic unit costs for all repex categories.
The use of Modern Equivalent Asset Value (MEAV) as a scale driver	To consider alternatives only if they perform better than MEAV against the proposed principles. One GDN provided evidence that GDNs have very limited control on MEAV, thus making it an appropriate cost driver. To include MOBs and embedded entry points, and to update weightings based on industry spend for maintenance MEAV with expert review of any data anomalies.

Analysis toolkit and how we combine the analyses

5.23 Overall, responses in this area supported the proposed use of a mix of regression and non-regression techniques. Responses highlighted the importance of combining multiple analyses (eg bottom-up and top-down, historical and forecast) to overcome flaws in individual approaches, data limitations and risk of "cherry picking" (ie selecting efficient benchmarks for each disaggregated cost category, rather than recognising a GDN may trade off efficiency between categories). There was no agreement over the value of exploring alternative benchmarking techniques to regression analysis.

5.24 Other suggestions included:

- to consider that the upper quartile may not always be appropriate as an efficiency benchmark. For example, when comparability is undermined or there is uncertainty around the models, a median or average approach could be useful. It was also proposed to employ the RIIO-ED1 approach in setting the upper quartile for slow-track companies as a solution to "cherry picking"[45]
- to give a more prominent role to totex benchmarking for RIIO-GD2 to mitigate distortions at the bottom-up level (eg structural and reporting differences) and focus more on long-term value for money. Any change to the

[45] In RIIO-ED1 cost assessment, two totex models and one activity-based disaggregated model were used to set the efficiency benchmark. For slow-track companies, the results from the three models were combined before setting the upper quartile, acknowledging that combining three separate upper quartile benchmarks could result in a tougher benchmark than any of the companies' forecasts.

current weighting (ie 50% weighting on top-down and 50% weighting on bottom-up) should be properly justified

- to consider the interaction between historical and forecast models in order to understand variations over time. Respondents did not fully agree on the use of historical and forecast data. On the one hand, using forecasts would allow us to account for potential future changes, including relevant efficiency assumptions. On the other hand, the available historical information is a good reference and could also be used to double check the validity of forecasts
- to choose an approach for assessing business support costs dependent on scope. If the analysis considers multiple sectors, the RIIO-GD1 approach should be retained. Should we look at network utilities only, the use of MEAV as a cost driver (as in RIIO-ED1) was recommended instead
- to consider quality in the wider cost assessment approach, despite the difficulties in including quality in the regression analysis.

Next steps

5.25 We will continue to use the cost assessment working groups to develop and test stakeholders' suggestions, as well as to explore other options. We intend to outline some of our initial views and to consult on them in summer 2019.

Cost adjustments and normalisations - regional factors

Summary of our December proposals

5.26 We proposed adjusting companies' cost data to ensure our comparison of GDNs is conducted on a like-for-like basis. These adjustments would be for one, or both, of the following reasons:

- to ensure consistency of data reported
- to remove costs unsuitable for benchmarking and to remove the impact of regional and company specific factors.

5.27 Regional and company specific factors are cost drivers beyond a GDN's control that affect its costs disproportionately as compared to other GDNs. In RIIO-GD1, these factors comprised regional labour costs, sparsity and urbanity, and the corresponding adjustments were either unidirectional (ie upward only) or opposing (ie upward and downward).

5.28 We outlined our proposal for a high evidential bar for accepting any regional and company specific factor claims. We proposed considering, where appropriate, a symmetrical approach to regional factors (ie upward and downward adjustments fully offsetting each other) in order to prevent the incentive to only submit claims for costs higher than the average. We also proposed a timeline for the GDNs to share their regional and company specific factor claims.

Summary of responses

5.29 Those who commented on our proposed approach to regional factors generally agreed on the appropriateness of a high evidential bar for cost claims, with only one GDN noting that minor claims summed up could be material. It was noted that any approach to regional factors will have to interact with the assumptions made on the analysis at the disaggregated level and will need further consideration following the Business Plan submission. A GDN welcomed collaborative work on regional factors and expected Ofgem to engage with the networks on evidencing and methodology.

5.30 Most stakeholders who commented in this area expressed concerns on the proposed symmetrical approach to regional factors. One GDN noted that symmetrical adjustments could be appropriate once baseline costs and regional factors are properly understood and company specific. One supplier supported the proposed approach highlighting its potential to reduce the risk of consumer detriment. Stakeholders noted the following issues with the proposed symmetrical approach:

- although GDNs will likely claim only that their costs are above the average, this is not in itself justification for a symmetrical approach
- there are potential difficulties for stand-alone GDNs (ie not part of a group) in identifying factors that could decrease costs
- symmetrical adjustments could result in arbitrary cost allowance increases or decreases
- using the overall average could risk not reflecting the potential U-shaped behaviours of the factors (ie both positive and negative relationship with costs)
- a symmetrical approach would work for post-regression adjustments, not ex ante adjustments as was the case in RIIO-GD1.[46]

Next steps

5.31 Given their importance in cost benchmarking, we will continue our work to develop a robust approach to regional factors and other cost adjustments. Specifically, we intend to carry out further analysis to identify the regional factors relevant to the gas industry and potential materiality thresholds, as well as to test the appropriateness of a symmetrical approach. We will provide an update on the ongoing work and consult on any new proposals in summer 2019.

Loss of metering work

Summary of our December proposals

5.32 GDNs traditionally used metering work contracts to maximise the utilisation of resources allocated to the emergency service and thus subsidise the corresponding baseline allowance. In RIIO-GD1, we provided a specific baseline allowance to ensure the efficient provision of the emergency service despite the loss of metering work contracts. For RIIO-GD2, we proposed to either remove the allowance or to provide transitional funding based on evidence that the alleviation of stranded emergency resources is out of GDNs' control.

Summary of responses

5.33 Most GDNs did not favour the proposal for removing the allowance for the loss of metering work, claiming that the emergency service needs to be properly funded. One DNO noted that if the associated ongoing costs are efficient, Ofgem should

[46] Post-regression adjustments, like those employed by Ofwat, mean that regional factors are not removed before regressing costs. Instead, allowances for regional factors are made after regressions. Ex ante adjustments, like those employed by Ofgem, mean that regional factors are removed before regressing costs, and added back in to allowances after regressions.

fund them while providing incentives to submit lower forecasts and pursue cost minimisation in the long term.

5.34 Three GDNs explicitly supported our proposal for evidence-based (transitional) funding. A GDN highlighted that the delays in the smart meter rollout did not allow the achievement of a stable position on emergency costs and staff utilisation, making the impact of the loss of metering work in RIIO-GD2 a complex issue. Another GDN suggested we continue to make sensible adjustments before benchmarking in order to account for genuine differences in historical costs linked to metering contracts.

Next steps

5.35 We will continue our work to identify the most appropriate approach to loss of metering work within cost assessment. We will not decide on our approach until we have received Business Plans and can better understand the levels of materiality and uncertainty. Further engagement on this will happen through the cost assessment working groups.

Next steps for cost assessment

Developing our cost assessment approach

5.36 Over the next few months, we intend to publish a consultation that sets out more of our thinking on the tools and approaches we might use in assessing efficient costs for RIIO-GD2. This would include a proposed set of criteria to select and evaluate different models. We intend to use this consultation to provide an update on our ongoing work to identify the options for our econometric approach, and to collect additional views from stakeholders. Within this consultation, we also aim to explore the use of econometrics to assess business support costs, as well as the use of alternative benchmarking approaches.

5.37 We will continue to engage on the draft versions of RIIO-GD2 data templates and associated guidance (including Business Plan Data Templates - BPDTs and cost benefit analysis - CBA) through the cost assessment working groups. In September 2019, we intend to publish the final versions of these templates and guidance.

5.38 We will not finalise our approach to RIIO-GD2 cost assessment before we have consulted on our potential econometric approach (summer 2019) and have received Business Plans (December 2019), which will be used to inform the Draft Determinations. Any modelling we do in advance of Business Plan submission has to assume that historical data is an accurate indicator of the future; but Business Plan forecasts may warrant a different approach.

5.39 We will consult on some aspects of non-regression analysis in summer 2019, while other aspects will be covered at Draft Determinations. We will use cost assessment working groups to continue engagement.

Stakeholder engagement

5.40 We intend to continue the cost assessment working groups. Details of these meetings and how to engage are available online.[47] We intend to use the working groups to:

[47] https://www.ofgem.gov.uk/publications-and-updates/riio-gd2-working-groups/

- help finalise data templates and associated instructions and guidance for companies to use when submitting Business Plans
- continue to receive input as we develop our cost assessment approach for RIIO-GD2.

6. Uncertainty mechanisms

We will include uncertainty mechanisms within the RIIO-GD2 price control framework and have set out the specific mechanisms. Additional uncertainty mechanisms can also be proposed by network companies as part of their Business Plans.

Introduction

6.1 Forecasting all costs and outputs with confidence for the duration of a price control is challenging. Uncertainty mechanisms allow us to change a network company's revenues in light of what happens during the price control period. We use the term uncertainty mechanisms to cover a range of regulatory approaches.[48] Using uncertainty mechanisms is important so that we don't damage incentives on companies to be efficient, don't unnecessarily expose companies to risks outside of their control, or expose consumers to material forecasting risks at price control review.

6.2 The suite of uncertainty mechanisms we will include for RIIO-GD2 cover several uncertain areas that we identified in our December GD Annex:

- uncertainty mechanisms to support substantial changes in external policy
- uncertainty mechanisms to align allowances with delivery
- uncertainty mechanisms for risks outside of network companies' control.

6.3 Table 13 below sets out the uncertainty mechanisms for RIIO-GD2 that will apply to all the GDNs. Information on the uncertainty mechanisms that will apply in the same way across RIIO-GD2, GT2 and ET2 controls are described as 'Cross-sector'.

6.4 This chapter should be read in parallel with:

- Chapter 9 of the Core Document, which provides further information on:
  - our overall approach to managing uncertainty under RIIO-2
  - our current view on the level of materiality thresholds that will apply to each re-opener mechanism
- the RIIO-2 Finance Decision Annex and Chapter 9 of the Core Document, which provide information on the specific 'cross-sector' uncertainty mechanisms that will be implemented
- the upcoming update of the Business Plan Guidance, which will provide information on what network companies need to provide in order to propose additional uncertainty mechanisms (if required) as part of their Business Plan
- Chapter 7 of the December GD Annex that provides more detail on the GD2 specific proposals we put forward and have summarised in this chapter.

[48] Mechanisms include: indexation, volume drivers, specific re-openers, and pass-through costs.

Table 13: Our decision on the RIIO-GD2 uncertainty mechanisms

Name	Type of mechanism
Cross-sector	
Ofgem licence fee	Pass-through
Business rates	Pass-through
Inflation indexation of RAV and allowed return	Indexation
Cost of debt indexation	Indexation
Tax liability allowance	Re-opener
Pensions (pension scheme established deficits)	Re-opener[49]
Physical security	Baseline allowance and re-opener
Cost of equity indexation	Indexation
Real Price Effects	Indexation
Cyber resilience	Use-it-or-lose-it allowance and re-opener
Whole systems 'Coordinated Adjustment Mechanism'	Re-opener
GD2 specific	
Pension deficit charge adjustment	Pass-through
Third party damage and water ingress	Pass-through
Miscellaneous pass-through	Pass-through
Cost related to gas theft	Pass-through
Gas Transporters share of Xoserve costs	Pass-through
Smart meters rollout costs	GDNs to propose mechanism (otherwise baseline allowance)
Repex – Tier 2A iron mains	Volume driver
Repex – HSE policy changes	Re-opener
Heat policy	Re-opener
Specified street works	GDNs to propose mechanism (otherwise baseline allowance)
Fuel Poor Network Extension Scheme (FPNES)	Re-opener

Additional uncertainty mechanism suggestions

6.5 In December, we asked for views on whether we should consider any additional uncertainty mechanisms to those that we put forward in the consultation. Several stakeholders put forward ideas. Where sufficient detail was provided in the response, we have considered them as part of our decision making process. Most suggestions came from GDNs and were high-level examples of mechanisms being considered for inclusion within their Business Plan. GDNs should clearly justify the need for any additional uncertainty mechanisms (if required) as part of their Business Plans.

RIIO-GD2 specific uncertainty mechanisms

Uncertainty mechanisms to support substantial changes in external policy

6.6 The following uncertainty mechanisms are designed to address the risk that there may be material changes in government policy which may lead to large changes in

[49] Triennial review

the level of network companies' allowed revenue and/or requirements eg outputs during the price control period.

Repex - HSE policy changes

6.7 The HSE mandates the need for a large proportion of the repex programme, including its scope and timeline. In the event that the HSE makes changes to its policy during RIIO-GD2, there could be significant changes to output targets and substantive cost implications. Given the importance of the repex programme to overall costs in RIIO-GD2, we have decided to introduce a re-opener. Our decision can be found in Chapter 4.

Heat policy

6.8 The impact of long-term heat decarbonisation on the gas networks is uncertain and the pathway GB will take is dependent on government decisions. We think the price control should be responsive to this and have decided to introduce a re-opener to respond to significant policy developments during RIIO-GD2. Our decision can be found in Chapter 3.

Fuel Poor Network Extension Scheme (FPNES)

6.9 The FPNES helps off-grid households connect to the gas network by providing funding towards the cost of the connection. Government policy in this area could change, so we will introduce a re-opener to retain the flexibility to stop the scheme, if appropriate, in response to developments in government policy. Our decision can be found in Chapter 2.

Uncertainty mechanism to align allowances with delivery

Smart meters rollout costs

Summary of issue

6.10 The government's Smart Metering Implementation Programme requires energy suppliers to install smart meters for their domestic and small business customers. Whilst smart meter installation occurs beyond the gas distribution network, it occasionally reveals faults on the network that require GDN intervention. For RIIO-GD2, where these interventions carry a cost, we need to decide how these costs will be treated by the regulatory framework.

6.11 When setting RIIO-GD1, GDNs' costs associated with smart meter rollout were uncertain, so we included a re-opener mechanism for GDNs to claim additional efficient costs incurred as a result of the rollout. To date, no GDN has applied to use this mechanism.

Summary of our December proposals

6.12 For RIIO-GD2 we asked for views on three options and we did not set out a specific preference:

- Having no uncertainty mechanism - because smart meter rollout costs incurred will be immaterial over RIIO-GD2.
- Having no uncertainty mechanism - and looking to set a baseline allowance for smart meter rollout costs.
- Having a volume driver - to provide an efficient level of costs per call out, based on the actual number of call outs received.

Summary of responses

6.13 Only one GDN provided a view on the options we proposed for the treatment of smart meter costs associated with the government's Smart Meters Implementation Programme, favouring a volume driver. An energy supplier also supported this proposed approach. A DNO noted that an uncertainty mechanism is only needed if the costs are material and uncertain.

6.14 Two GDNs also considered that uncertainty mechanisms may be needed for wider costs associated with smart meters, for example, full Data Communications Company membership costs and any potential costs associated with faster switching. One GDN suggested that system integration costs relating to smart meter rollout should be treated as pass-through costs.

Decision

6.15 For network intervention costs incurred on a faster timeline in the context of the government's Smart Meters Implementation Programme, we think that treating these costs as part of GDN's baseline allowance may be appropriate as we currently have no strong evidence that these costs are material or highly uncertain. However, GDNs may propose an uncertainty mechanism as part of their Business Plans if they can demonstrate that this is appropriate. If an uncertainty mechanism is used, we currently favour a volume driver as we think efficient unit costs for different types of interventions can be established. We will consult on our view of the appropriate regulatory treatment as part of our Draft Determinations.

6.16 In terms of wider smart meter costs, including passing through any smart meter system integration costs, we are not aware of any material costs in this area and why a pass-through would be appropriate. A clear case for inclusion as an uncertainty mechanism will need to be made as part of the Business Plan. To support this, we'll work with GDNs to understand how, and whether, these costs need to be captured within the Business Plan Data Templates.

Next steps

6.17 To help demonstrate that the costs are efficient, for Business Plans, we:

- will ensure the Business Plan Data Templates sufficiently capture the types of interventions that take place in the context of smart meter installations, so that unit costs can be benchmarked
- expect GDNs to demonstrate proactive engagement with industry in an effort to reduce faulty installations resulting from smart meter installations
- expect GDNs to demonstrate how any potential additional costs associated with the smart meter rollout interact with other cost areas, such as loss of meter work and repex.

Specified street works

Summary of issue

6.18 In RIIO-GD1 we included a re-opener mechanism for the GDNs' costs associated with complying with permit schemes or lane rental schemes.[50] At the time of setting allowances for RIIO-GD1 there was uncertainty around street work costs,

[50] Permit schemes or lane rental schemes are introduced by Highway Authorities (HAs) via the Traffic Management Act (TMA) 2004 (or in Scotland, the Transport (Scotland) Act 2005).

especially where permit schemes had not been introduced by Highway Authorities (HAs) prior to the start of RIIO-GD1. The re-opener has only been used by Cadent and we allowed a total of £17.3m[51].

6.19 For RIIO-GD2 we need to decide how the costs will be treated by the regulatory framework.

Summary of our December proposals

6.20 We proposed that a specific re-opener for all GDNs, similar to RIIO-GD1, would not be required for RIIO-GD2.

6.21 For permit schemes we proposed to include the costs associated with compliance in GDNs' baseline allowances. This is because, relative to RIIO-GD1, our ability to forecast costs upfront has increased as the uncertainty has reduced, due to:

- a larger proportion of HAs having permit schemes in place
- a shorter price control period of five years for RIIO-GD2.

6.22 We outlined that for lane rental schemes GDNs should consider proposing a bespoke uncertainty mechanism as part of their Business Plan if there is significant volume and/or cost uncertainty that cannot be managed as part of network companies' baseline allowances.

Summary of responses

6.23 One GDN did not support the complete removal of uncertainty mechanisms in this area. It provided some evidence that there is uncertainty in government policy around how lane rental schemes will operate - supporting our consultation position that a mechanism in this area would be appropriate. A re-opener was its preference. Two other GDNs noted that there was uncertainty, but provided limited evidence to support this, and it was not clear what type of regulatory treatment they favoured for permit schemes and lane rental schemes. One DNO suggested that uncertainty is limited in this area, therefore including these costs in baseline allowances may be appropriate.

Decision

6.24 We recognise that for some GDNs there may be some uncertainty in this area. We need more evidence of the costs and materiality of this (split between the lane rental scheme and permit schemes) before deciding on the appropriate regulatory treatment, which could differ by scheme and by GDN. We will consult on our view of the appropriate regulatory treatment as part our Draft Determinations.

6.25 In the absence of more detailed information, we remain of the view that permit schemes should be part of GDNs' baseline allowance. For the recent RIIO-GD1 re-opener in this area, we established allowances for the remainder of the price control period and we think this can be done for RIIO-GD2.

6.26 For lane rental schemes, we remain of the view that GDNs should come forward with bespoke proposals for an uncertainty mechanism in this area as part of their Business Plan. However, if this is an issue affecting GDNs in similar ways, we would encourage GDNs to consider whether a common uncertainty mechanism would be appropriate, eg a continuation of the current re-opener but focused on

[51] 2009-10 prices.

lane rental costs only. We will encourage further discussions on this as part of our Cost Assessment working group.

Next steps

6.27 Before the final Business Plans, we intend to work with the GDNs to continue to develop the Business Plan Data Templates to capture the appropriate data.

Repex - Tier 2A iron mains

6.28 Repex drives a substantial amount of GDNs' costs. For RIIO-GD2 we will ensure GDNs' allowances are better aligned with the workloads delivered. We have decided to retain the current volume driver that is in place for RIIO-GD1 to support this. Further information can be found in Chapter 4.

Uncertainty mechanisms for risks outside of network companies' control

6.29 Where network companies have costs that are substantially outside of their control we use pass-through mechanisms. For these specific items, any change in the network companies' costs is recovered fully from customers.

Pension deficit charge adjustment

Summary of issue

6.30 Following the sale by National Grid Gas of four of its gas distribution networks in 2005, pension deficit costs relating to the deferred and pensioner liabilities of all its former gas distribution employees remained with National Grid Gas Transmission (NGGT).

6.31 This pass-through mechanism (sometimes referred to as the NTS recharge mechanism) ensures that the pension deficit costs incurred by NGGT relating to its former employees are appropriately recharged to the GDN customers that these employees serve.

Summary of our December proposals

6.32 We proposed to retain the NTS recharge mechanism for RIIO-GD2 for all the GDNs apart from Cadent. In RIIO-GD2, Cadent will have no NTS recharges.

Summary of responses

6.33 Responses on this mechanism supported its retention as a pass-through.

Decision

6.34 We will retain the NTS recharge mechanism for RIIO-GD2 for all the GDNs apart from Cadent.

Third party damage and water ingress

Summary of issue

6.35 Gas supply interruptions can be caused by third party damage to the network, such as heavy machinery damaging a section of the network, or water entering the gas network from burst or damaged water mains.

6.36 Interruptions caused by third party damage or water ingress can lead to payments under both GSOP1 (Supply restoration)[52] and Section J of the Network Code.[53] This pass-through mechanism allows the GDNs to recover 95% of the cost of these, should the sum be above 1.5% of allowed revenue. It has not been used to date in RIIO-GD1.

Summary of our December proposals

6.37 We proposed to retain this pass-through mechanism in RIIO-GD2 as we think the current arrangements provide a cap on the overall exposure to situations that are usually beyond GDNs' control.

Summary of responses

6.38 Stakeholders who commented supported retaining this mechanism for RIIO-GD2.

Decision

6.39 We will retain this mechanism for RIIO-GD2.We believe the experience of RIIO-GD1, where the mechanism has yet to be used, demonstrates that this protection will only be used in the event of exceptional incidents.

Next steps

6.40 We will consider whether the licence needs to clarify that any costs put through this mechanism should be net of costs successfully recovered from the third party and/or any successful insurance claims that the GDN may have made in relation to the incident.

Miscellaneous pass-through

Summary of issue

6.41 The miscellaneous pass-through can be used to recover minor costs incurred by the GDNs that are not reflected elsewhere in the pass-through licence condition. These costs must be authorised by Ofgem. So far during RIIO-GD1 this mechanism has been used for the costs associated with investigating the theft of gas and for supplier of last resort situations.

Summary of our December proposals

6.42 We proposed to retain the miscellaneous pass-through mechanism. We also proposed to make changes to the costs relating to gas theft pass-through to ensure there is a more appropriate mechanism for these costs (see below).

Summary of responses

6.43 Responses about the pass-through mechanism were in favour of retaining it. There was also support for moving the costs associated with investigating the theft of gas into an amended theft pass-through (see below).

Decision

6.44 We will retain the miscellaneous pass-through mechanism for RIIO-GD2. This mechanism is useful to account for small uncontrollable costs that are unknown to

[52] GDNs may be liable to make payments to customers under GSOP1 (Supply Restoration) in an event in which customer's gas supply is not restored following unplanned interruptions on their network.
[53] GDNs are liable to make payments to customers who are connected to the Local Distribution Zone if they are unable to comply with the exit requirements set out in Section J of the Network Code.

both the GDNs and to us, at the time of setting the price control. This view was echoed by stakeholders.

Costs relating to gas theft

Summary of issue

6.45 This mechanism allows the GDNs to pass-through the costs related to information requested and received from shippers and/or suppliers (via Xoserve) for the purpose of investigating gas illegally taken. However, the mechanism does not allow for the GDNs to pass-through their costs associated with the investigation of gas theft. Our current policy (reflected in the licence) is that GDNs must not suffer any financial detriment or make any financial benefit as a result of the investigation of gas theft. To put this policy into effect, we have had to use the miscellaneous pass-through mechanism (see above) in RIIO-GD1. This requires explicit sign-off by us, rather than the more automatic mechanisms that most pass-through terms allow.

Summary of our December proposals

6.46 We proposed to retain the existing mechanism but widen its scope to allow GDNs to automatically recover their net costs associated with investigating gas theft without our explicit sign off each time.

Summary of responses

6.47 Stakeholders who commented were in favour of retaining this pass-through. Stakeholders were also supportive of widening the scope of this mechanism to allow for the pass-through associated with investigating gas theft.

Decision

6.48 We will retain this mechanism for RIIO-GD2 and widen its scope to allow for the recovery of the costs associated with the investigation of gas theft. This will streamline the process.

The Gas Transporters' share of Xoserve costs

Summary of issue

6.49 Xoserve is a data services company which provides a range of essential services to support the GB gas industry. At the start of RIIO-1, we provided Gas Transporters[54] with baseline allowances to cover their share of Xoserve's costs. During RIIO-1, we also committed to reviewing Xoserve's funding, governance and ownership (FGO) arrangements to ensure they were fit for purpose.

6.50 Following our review, Xoserve's new FGO arrangements were implemented from 1 April 2017.[55] Under the new arrangements, Xoserve's cost are directly funded by Gas Transporters, shippers and Independent Gas Transporters (IGTs).

6.51 In our decision on the new Xoserve funding arrangements for Gas Transporters in September 2016, we decided to provide an allowance for the Gas Transporters' share of Xoserve costs for the remainder of RIIO-GD1 and GT1.[56] We did not opt

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[54] The GDNs and National Grid Gas Transmission are collectively known as Gas Transporters.
[55] Our letter confirming the completion of the Xoserve FGO implementation phase: https://www.ofgem.gov.uk/publications-and-updates/completion-xoserve-funding-governance-and-ownership-fgo-implementation-phase
[56] Our September 2016 decision on Gas Transporter Agency costs for the remainder of RIIO-GD1 and T1: https://www.ofgem.gov.uk/publications-and-updates/decision-our-review-gas-transporter-agency-xoserve-costs-riio-gd1-and-t1

for a pass-through arrangement for these costs because delays to the FGO and Project Nexus programmes reduced our confidence in the industry's ability to carry out an effective co-operative governance model for Xoserve's costs. We committed to reconsidering our approach for RIIO-2.

Summary of our December proposals

6.52 We consulted on two options for funding the Gas Transporters' share of Xoserve's costs, and did not express a preference between them:

1) provide baseline allowances for Gas Transporters to cover their share of Xoserve's costs
2) treat the Gas Transporters' share of Xoserve's costs as a pass-through mechanism in RIIO-GD2 and GT2.

Summary of responses

6.53 For Gas Transporters' share of Xoserve's costs, respondents who commented on this area supported creating a new pass-through item in RIIO-GD2 and GT2. They argued that this approach would give Xoserve more flexibility to deliver new services which could benefit the GB gas industry and consumers. Some stakeholders said that the current baseline allowance funding arrangements mean that the Gas Transporters are more risk averse and concerned about funding sources than shippers, potentially making it difficult to change service requirements. Some stakeholders also thought that it would be difficult to set an accurate baseline allowance for Xoserve due to changing technology costs and industry requirements, which are outside of the Gas Transporters' control.

6.54 A DNO supported providing baseline allowances for the Gas Transporters' share of Xoserve's costs because it would provide a greater incentive to control these costs. It also noted the approach is comparable to the funding mechanism for Electralink, which is owned by the DNOs.[57]

6.55 Two stakeholders supported continuing a baseline allowance for NGGTs' costs relating to the Gemini suite of online applications, because this IT asset is fully funded by NGGT and it has direct control over these costs.

Decision

6.56 We will use a pass-through mechanism for Gas Transporters' share of Xoserve costs. The pass-through will only relate to the share of costs for Central Data Service Provider (CDSP) services that are used by the Gas Transporters,[58] with the exception of Gemini costs. We think that this approach is consistent with the principles of FGO and will give the industry more flexibility to provide new services which could benefit consumers. The governance arrangements put in place as part of FGO require industry to fully engage in setting Xoserve's costs, which provides oversight. We expect industry to continue to engage fully in the Xoserve budget setting process and work collaboratively to ensure these costs are efficient and fit for purpose.

6.57 We will continue to provide a baseline allowance in RIIO-GT2 for NGGT's costs relating to the Gemini System as NGGT fully funds and has direct control over these costs.

[57] Electralink runs the Data Transfer Service (DTS) for the UK electricity industry, and provides analytics and governance services to the wider GB energy market.
[58] As apportioned within the CDSP Data Services Contract documents.

RIIO-GD1 uncertainty mechanisms that will be removed and how associated costs will be treated for RIIO-GD2

Table 14: Uncertainty mechanisms that will be removed for RIIO-GD2

Name	Type of mechanism at GD1	Treatment of costs for GD2	RIIO1 licence condition
Review of Agency (Xoserve) costs (also in GT2)	Re-opener	Pass-through (see above)	Special condition 3F
Review of the Non Gas Fuel Poor Network Extension Scheme	Re-opener	NA	Special Condition 3F
Changes to charging boundary	Re-opener	NA	Special Condition 3F
Large load connection costs	Re-opener	NA	Special Condition 3F
Innovation Rollout Mechanism	Re-opener	NA	Special Condition 3D

Review of Agency (Xoserve) costs

Summary of issue

6.58 We included an uncertainty mechanism in RIIO-GD1 and GT1 to adjust the Gas Transporters' allowances if Xoserve's costs were to change materially following the conclusion of our review of its funding, governance and ownership (FGO) arrangements.

Summary of our December proposals

6.59 In our December GD Annex, we proposed to remove this uncertainty mechanism for RIIO-GD2 and GT2 because the implementation phase of FGO is complete and we do not expect further changes to Xoserve's funding model during RIIO-2.

Summary of responses

6.60 Stakeholders who commented on this area, agreed that the uncertainty mechanism is no longer required because FGO has been implemented.

Decision

6.61 We have decided to remove the current re-opener for the review of Agency (Xoserve) costs because the Gas Transporters' share of these costs will be a pass-through mechanism, as outlined earlier in this chapter. We also do not expect there to be significant changes in Xoserve's funding model in RIIO-2.

Changes to charging boundary

Summary of issue

6.62 This re-opener was put in place in the event of a substantial change to the connection charging boundary, for example to promote biomethane connections.[59] A change of this nature could have led to GDNs needing an additional allowance to support the costs this could have created.

[59] The need for this mechanism was driven particularly by the uncertain effects of a UNC charging modification (391) that was being discussed at the time of setting RIIO-GD1.

Summary of our December proposals

6.63 We're not aware of material proposals to change the charging boundary during RIIO-GD2 and, as such we proposed to remove this mechanism. It was not used during RIIO-GD1; nor was there any request by GDNs to trigger it.

Summary of responses

6.64 Stakeholders did not raise any concerns with our proposals to remove this output for RIIO-GD2.

Decision

6.65 We will remove this mechanism for RIIO-GD2.

Large Load Connection Costs

Summary of issue

6.66 This re-opener was put in place to allow the recovery of costs related to network re-enforcement as a result of the connection of abnormally large loads such as power stations and distilleries.

Summary of our December proposals

6.67 We proposed to remove this mechanism for RIIO-GD2. It was not used during RIIO-GD1; nor was there any request by GDNs to trigger it.

Summary of responses

6.68 Stakeholders did not raise any concerns with our proposals to remove this output for RIIO-GD2.

Decision

6.69 We will remove this mechanism for RIIO-GD2.

Review of the Non Gas Fuel Poor Network Extension Scheme (FPNES)

Summary of issue

6.70 Over RIIO-GD1, we committed to reviewing the FPNES to ensure it remained efficient, cost effective and consistent with wider government energy and fuel poverty strategies. We included a re-opener to allow for any necessary adjustments to the scheme's funding following the review.

Summary of our December proposals

6.71 We proposed to remove this uncertainty mechanism, as we are not intending to review the FPNES during the RIIO-GD2 price control period.

Summary of responses

6.72 One stakeholder thought we should retain this uncertainty mechanism because government decisions on the future of heat are due in RIIO-GD2. The stakeholder thought that the re-opener would allow us to review the scheme during RIIO-GD2 to ensure it remains compatible with government policy objectives. There were no other specific responses, but the GDNs that commented generally on the uncertainty mechanisms for removal were supportive of our proposals.

Decision

6.73 We have decided to remove this uncertainty mechanism as we are not intending to review the FPNES during the RIIO-GD2 period.

6.74 However, we have decided to include the FPNES within the scope of the Heat Policy re-opener (see Chapter 3). This will enable us to adjust the GDNs' allowances and associated fuel poor connections target in response to a change in government policy on connecting houses to the gas network.

Innovation Rollout Mechanism

6.75 This re-opener mechanism applies to RIIO-GD1, GT1 and ET1. Its purpose is to provide network companies with additional funding to rollout proven innovation. We have decided to remove this mechanism for RIIO-GD2, GT2 and ET2 and have set out our reasons for this decision in Chapter 10 of the Core Document.

Appendices

Appendix 1 - Interruptions: calculations for 'standardised' large events

For the purposes of calculating measured performance against the overall average unplanned restoration time targets, each large event (ie one involving more than 250 individual interruptions) will be treated as though it consisted of 250 individual interruptions.

The calculations below show how this would work for a GDN that experiences one large event in a year.

Table 15: Illustrative example of calculations to include 'standardised' large events

	Total number of individual interruptions	Total minutes lost	Average restoration time (total mins lost/total number)
Actual large event	600	660,000	1,100
For average unplanned restoration time target and measured performance under the ODI			
A2) 'Standardised' large event	250 (for all)	275,000 (250 x 1,100)	1,100 (ie same as for actual above)
B) All other interruptions for the year	2,000	1,000,000	500
C) Measured performance for the ODI for the year (Standardised large event + all other interruptions for the year)	2,250 (A2+B)	1,275,000 (A2+B)	567

GDNs can also calculate their historical performance using this approach, for the purposes of developing appropriate minimum performance levels.

We will consult at Draft Determinations on how the Cadent North London network should apportion any large events that affect both MOB and non-MOB consumers (though it should be noted that there have been no large events recorded in this network in RIIO-GD1 to date).

Appendix 2 - Shrinkage financial ODI calculation and expected BPDT requirements

This appendix gives an illustrative example of how we envisage the ODI working, along with the expected BPDT requirements.

The Shrinkage & Leakage Model produces a figure for leakage from mains and service pipes by aggregating the volumes attributable to each individual Network Identification Polygon (NIP). These are calculated using 3 input categories:

- The total lengths of each different pipe material within the NIP.
- The average pressure recorded within the low pressure mains in the NIP.
- The proportion of the NIP where the gas is conditioned with MEG, and the level of this conditioning.

The RIIO-GD2 shrinkage incentive will be based on the specific impact (in GWh volumes) of input categories 2 and 3, in comparison to what would have been recorded if average pressure and MEG had remained at the same levels as in the final year of RIIO-GD1. Our expectation is that at the end of each year in RIIO-GD2, GDNs would assess this annual impact by calculating two different volumes (A and B in Table 16 below) for each NIP, by treating each input category as follows:

Table 16: Shrinkage ODI input categories

	Volume A	Volume B
Pipe material/length	Current year values	Current year values
Average Pressure	Year 8 of GD1 value	Current year values
MEG conditioning	Year 8 of GD1 value	Current year values

The impact of average pressure and MEG conditioning could then be calculated as Volume B- Volume A. The values for all NIPs would be added up to give a single aggregate volume for pressure and MEG management in the year.

The value of the incentive would then be calculated by adding the average day-ahead price of gas during the year in question to the traded price of carbon (as set by BEIS in its latest "Updated Short-Term Traded Carbon Values" publication), and multiplying this by the aggregate volume.

Table 17 below sets out the data that we intend to request through the BPDTs, which will cover both the financial and reputational ODIs. Line 4 will provide both the pathway for repex-related reductions in leakage (to support the reputational ODI), as well as the expected baseline for calculating the impact of pressure and MEG management. Table 18 demonstrates how this would then translate into the financial ODI values. All numbers are purely indicative.

Table 17: BPDT requirements	RIIO-GD1	RIIO-GD2				
	Year 8	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5
1. Total shrinkage (GWh)	375	349	318	286	268	255
2. Average pressure (mbar)	32	30	28	28	34	30
3. Average MEG	30%	30%	29%	28%	28%	28%
4. Modelled mains/services leakage at Year 8 pressure and MEG	300	284	264	239	214	199
5. Mains/services leakage at in-year pressure	300	279	256	233	223	198

Table 18: Financial ODI calculations						
Pressure/MEG-related leakage reduction (GWh) (line 5 minus line 4 from Table 17)	0	-5	-8	-6	+9	-1
Carbon cost per GWh (£000s) (as published by BEIS)		72	74	76	78	80
Gas cost per GWh (£000s) (actual prices for year)		20	18	19	23	22
Incentive value per GWh (£000s)		92	92	95	101	102
Total incentive (£000s)		460	736	570	-90	102

Appendix 3 - MOBs record keeping: guidance for Business Plans

In our December GD Annex we proposed that GDNs should include a specific section on MOBs record keeping in their Business Plans and we provided guidance on what should be included. This guidance is set out below (along with any substantial changes relative to the December GD Annex underlined) and should be used by GDNs in their Business Plans.

Guidance for Business Plans

In the section on MOBs record keeping GDNs should set out:

- their expectations of any significant developments, or issues, affecting their record keeping relating to MOB assets by the end of RIIO-GD2
- any specific steps that would be taken to enhance existing MOBs record keeping (eg new systems that will be developed) and the associated timings
- any new processes that would be in place to ensure GDNs' understanding of MOB assets remains up-to-date
- how the above points may vary by MOB type ie low, medium and high rise buildings and riser length.
- how information and learning is, or will be, shared across GDNs and, where relevant, wider stakeholders such as the HSE and Local Authorities.

Appendix 4 - Gas holder demolitions: guidance for Business Plans

In our December GD Annex we proposed that GDNs should include a Gas Holder Strategy in their Business Plans. This guidance is set out below, and should be used by GDNs in their Business Plans.

Guidance for Business Plans

This strategy should state:

- the exact number of gas holders that still remain on their network
- the exact number of gas holders that are expected for demolition during the RIIO-GD2 prince control
- the exact number of gas holders that will not be demolished during RIIO-GD2 and:
    - why the holder won't be demolished (eg listed buildings)
    - when the holder will be expected to be demolished (if at all)
    - what the GDN envisages happening to the holder if it is not demolished (eg maintained to meet health and safety requirements or repurposed for alternative use) and the costs associated with this
    - why is the chosen approach for not demolishing the holder in the consumer interest
    - what the GDN plans to with the holder site post demolition. This should consider any potential land disposal, at an arm's length fair market value, and how consumers will benefit through sharing of any proceeds from the disposal.

Chapter 7 of our Finance Annex provides further detail about the amounts recovered from the disposal of assets.