

# Decision

## **RIIO-2 Sector Specific Methodology Decision - Gas Transmission**

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In December 2018, we consulted on how the RIIO-2 regulatory framework may be applied to the gas transmission sector. This document sets out our decision on this, including the outputs that NGGT needs to deliver and the regulatory mechanisms to manage uncertainty. It also provides an update on our approach to cost assessment and a summary of responses so far. NGGT will use this information to develop its Business Plan over the remainder of 2019. We will then assess this Business Plan, 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 Methodology Decision and should be read alongside it.

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## 1. Introduction

### Purpose of this document

- 1.1 This document is focussed on the application of the RIIO-2 Framework to the gas transmission (GT) sector. It explains the outputs and uncertainty mechanisms that National Grid Gas plc (NGGT) will need to consider in developing its Business Plan submission. This document also includes:
- A chapter updating stakeholders on our approach to assessing NGGT cost assessment.
  - high-level overviews of stakeholder responses to our RIIO-2 Sector Specific Methodology consultation, which have informed the decisions we've made.
- 1.2 The structure of this document and how its content fits within the wider RIIO-2 publications is described in more detail below. This document is intended to be read alongside the RIIO-2 Sector Specific Methodology Decision (Core Document).

### Overview of the RIIO-GT2 package

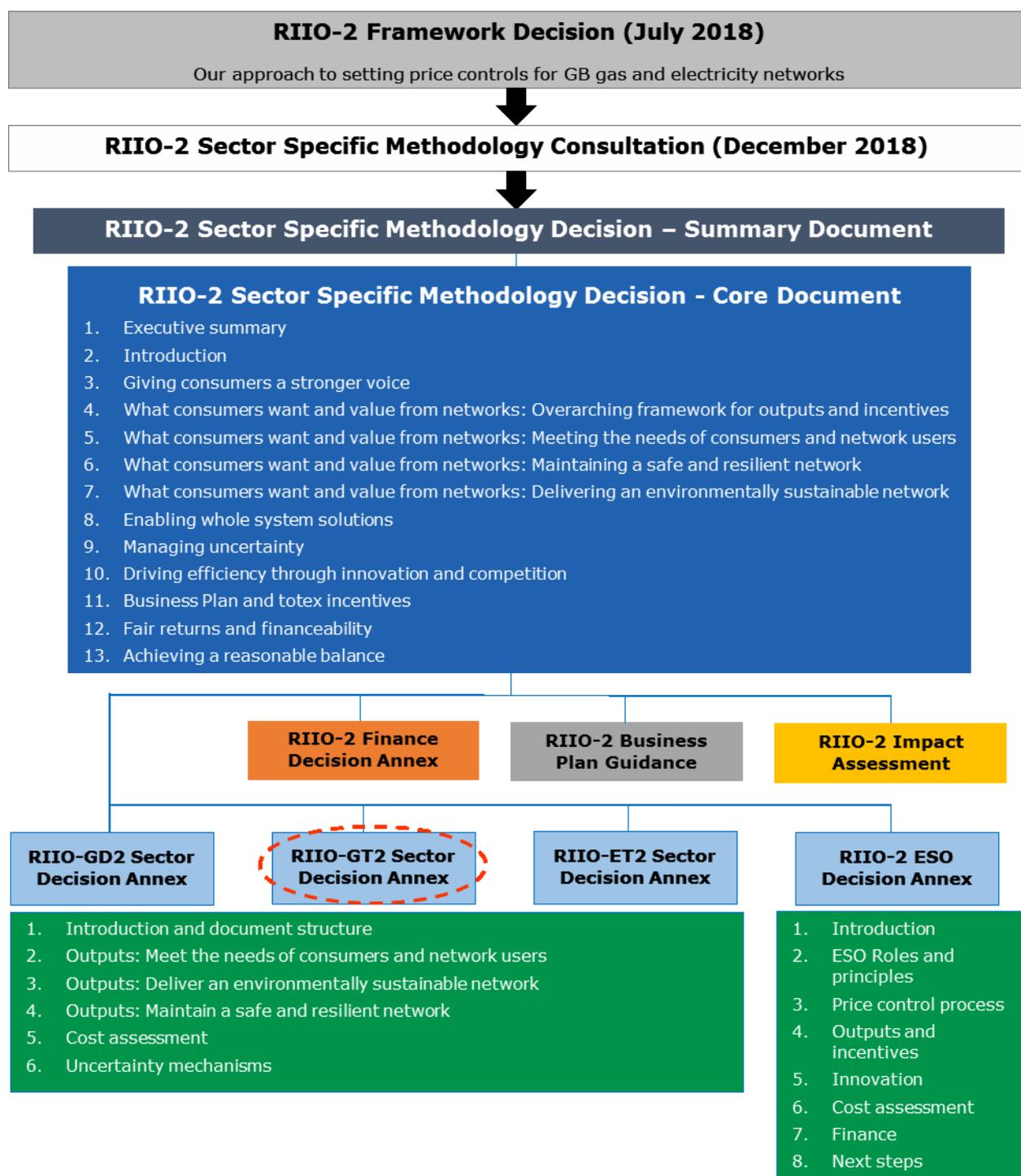
- 1.3 In December, we outlined the context in which we will set the RIIO-GT2 price control, and the key challenges facing the sector, including:
- The importance, and need, to continue to develop and adapt to new prevailing norms in the changing gas landscape which can impact NGGT's operations, most notably the increasingly variable use of the national transmission system (NTS) due to changing patterns of demand.
  - The future asset management challenges that NGGT faces in its capacity as the Gas Transmission Operator (GTO). For example, the need to ensure that NTS has the capability to meet future supply and demand needs.
  - The future operability challenges that NGGT faces in its capacity as the Gas System Operator (GSO). For example, the need to manage potential increase in diverse and decentralised gas supplies.
- 1.4 We think that our sector specific decisions for GT will help to ensure NGGT can rise to these challenges (and more) when developing its Business Plan over the remainder of this year. As was the case with RIIO-1, we expect NGGT to do so with the utmost consideration to delivering benefits for existing and future consumers.
- 1.5 Some highlights of our sector specific decision are:
- Meeting the needs of consumers and network users, including through stronger emphasis on the importance of stakeholder engagement and customer satisfaction as well as tightening the package of GSO incentives designed to deliver customer service improvements (eg maintenance and demand forecasting).
  - Delivering an environmentally sustainable network, including through strengthened incentives to reduce greenhouse gas emissions and the amount of shrinkage on the NTS, introducing a more consistent cross-sectoral approach to environmental reporting, and implementing a coherent strategy to ensure compressor emissions are compliant with environmental legislation.

- Maintaining a safe and resilient network, including through improved understanding of the future needs of network users with regard to the physical capability of the NTS.
- 1.6 Following our consideration of the consultation responses, we have made clear in our decisions on the individual incentives that we expect NGGT's Business Plan to: (i) provide evidence that the incentives deliver benefits to consumers, and (ii) set out any relevant interactions between the incentives. We will consider the redesign or removal of incentives as appropriate. Should the positions on incentives significantly change in the light of evidence provided in the Business Plan, we will consider how best to reach a robust, evidenced final decision which takes appropriate account of stakeholder views.
- 1.7 In December, we set out our view that, for now, we do not consider there is a need to change our approach to setting allowances for the GSO internal costs or incentives. In the future, it is possible that system operation arrangements may need to change more significantly, for example from changing government policy or new legislation, Ofgem's review of the ESO separation arrangements, or other developments affecting the energy systems. If material policy changes arise, we will work with NGGT and other relevant stakeholders to explore how they would impact the RIIO-2 price control framework, and develop revised arrangements if they are needed.

## **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 is comprised of a Core Document and sector specific annex documents for gas transmission (GT), gas distribution (GD), 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 documents).
- 1.9 Our decisions take into account the responses to the December consultation (including the annexes associated with it), 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 Our GT sector specific decisions, as set out in this document, take into account the responses to the December Consultation (including the annexes associated with it) and ongoing discussions with stakeholders.

1.13 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-2
- Chapter 6 - the uncertainty mechanisms that will be part of RIIO-GT2

## **The role of stakeholders in this price control review**

### **Summary of our stakeholder engagement to date**

1.14 Engaging with stakeholders is an important part of developing the RIIO-GT2 price control. In addition to formal consultations we've also been running events, forums and seminars to get stakeholders' input.

1.15 We received 19 direct responses to our December Consultation. Responses were received from the network companies, energy suppliers, industry bodies, environmental groups, consumer groups and other stakeholders. Not all respondents answered each of the questions set out in the consultation documents. We have published non-confidential responses on our website.<sup>1</sup> In each of the following chapters we provide a high level summary of stakeholders' views.

1.16 To date, we have run three specific stakeholder policy working groups to input into the development of our initial policy thinking.

1.17 We have also run four gas transmission 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.

1.18 For summaries of the meetings and slides see our website.<sup>2</sup>

### **Next steps**

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

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<sup>1</sup> See our website- <https://www.ofgem.gov.uk/publications-and-updates/riio-2-sector-specific-methodology-consultation>

<sup>2</sup> See our website - <https://www.ofgem.gov.uk/publications-and-updates/riio-gt2-working-groups>

- the role of the NGGT's User Group (UG) in helping to shape their Business Plan;
- the role of the RIIO-2 Challenge Group.

### **Our further work on RIIO-GT2**

- 1.20 Chapter 5 of this document sets out our approach to cost assessment in RIIO-GT2. It provides an update on our approach by summarising and reflecting on stakeholder responses to our consultation in December 2018. We expect to provide further information 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.
- 1.21 We will continue to engage on the draft RIIO-GT2 data template and associated instructions and guidance through the cost assessment working group.<sup>3</sup> In September 2019, we intend to publish the final versions of the template and guidance. This will be for NGGT to use when submitting its final Business Plans in December.
- 1.22 In addition, our Policy working groups will continue. We will, however, establish more focused (and in some cases ad hoc) stakeholder meetings, increasingly focused on specific policy issues.
- 1.23 We will begin the process of developing licence conditions later in the year. From this summer we expect to start licence drafting working groups to begin the process of drafting the legal text needed to implement RIIO-GT2 policy decisions. We will subsequently consult on the draft legal text.

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<sup>3</sup> 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: Meeting the needs of consumers and network users

The outputs and incentives we will apply for RIIO-GT2 aim to improve the service received by users of the NTS. This includes services in areas such as minimising interruptions due to routine maintenance, balancing of supply and demand whilst minimising the impact of actions on market prices, stakeholder engagement and new connections.

### Introduction

- 2.1 For most consumers and transmission network users, a good service from NGGT means the ability to reliably put gas onto and take gas out of the NTS at a time and location that suits them. We want to ensure that through stretching targets and commitments, NGGT delivers to its customers' expectations.
- 2.2 Our RIIO-GT2 package continues to place obligations on NGGT to provide network users with access to the NTS, and encourages NGGT to minimise the overall cost of system operation, whilst supporting the efficient operation of the wholesale gas market.
- 2.3 For RIIO-GT2 we are seeking to:
  - embed the significant improvements we have observed in customer satisfaction over RIIO-GT1 and rewarding NGGT where it can drive new levels of exceptional performance over RIIO-GT2.
  - review whether existing incentives are appropriately set and provide sufficient, quantifiable benefits to consumers. We will also consider any relevant interactions between incentives.
- 2.4 This chapter should be read in parallel with Chapters 4, 9 and 10 of the Core Document, which describes:
  - 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/collars on output delivery incentives (ODIs) (where relevant).
- 2.5 Chapter 3 of our December consultation provides more detail on the proposals we have summarised in this document.

## Outputs for RIIO-GT2

**Table 1: Summary of RIIO-2 output decisions**

Output name	Output type*	Company driven target**
Stakeholder engagement incentive	ODI (Reputational) and bespoke outputs	Yes
Customer satisfaction survey	ODI (Financial)	Yes
Emergency response and enquiry service	Licence Obligation	No
Connections	Licence Obligation	No
Quality of demand forecast – day ahead & 2-5 day schemes (D1/D2-5)	ODI (Financial)/(Reputational)	Yes
Maintenance—use of days & changes schemes	ODI (Financial)	Yes
Entry and Exit Capacity Constraint Management (CCM)	Subject to further consideration	Yes
Residual Balancing	Minded to retain ODI (Financial)	Yes
Bespoke outputs (NGGT may consider other areas for inclusion in their Business Plan) ODI, Reputational or Financial		

\* ODI(Reputational/Financial) = Output Delivery Incentive (Reputational/Financial) \*\* Company driven target signifies an output where we expect to see extensive company-led engagement (including with their User Group) to justify a stretching performance target.

### Additional output suggestions

- 2.6 In December, we asked for views on whether we should consider any additional outputs to those that we proposed in the consultation. NGGT should continue to work with its stakeholders to justify the need for any additional outputs and, where there is a strong case, include them in its Business Plan.

### Stakeholder Engagement Incentive

- 2.7 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 GT-specific aspects of the proposals and responded to GT-specific stakeholder views where applicable below.

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

### Summary of issue

- 2.8 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.
- 2.9 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

- 2.10 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.
- 2.11 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.
- 2.12 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.
- 2.13 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<sup>4</sup>/UGs in as contributors to our assessment of company performance under an ODI.

### Summary of responses

#### *Business Plan Incentive*

- 2.14 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.

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<sup>4</sup> Customer Engagement Group – for distribution network companies only. Each transmission network company has a User Group.

*Ongoing engagement: Potential ODIs*

- 2.15 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.
- 2.16 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.
- 2.17 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.
- 2.18 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.
- 2.19 In order to operate a financial or reputational ODI in RIIO-2 effectively, we said that it would be important for network companies to propose clear commitments upfront in their Business Plans. These commitments could take the form of KPIs and wider deliverables that network companies would be evaluated against during the period. The majority of respondents who commented on this area said that it would be possible to establish appropriate commitments for stakeholder engagement in RIIO-2. A number of network companies stated that they would seek input from their CEGs and UGs to help formulate these. Many respondents also expressed support for an enduring role for CEGs and UGs to feed into our assessment of network companies' progress against their commitments during the price control.

Decision

- 2.20 We will 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*

- 2.21 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.
- 2.22 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.
- 2.23 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.
- 2.24 If a company fails to meet our expectations, a penalty could be applied through the Business Plan Incentive.
- 2.25 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*

- 2.26 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.
- 2.27 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.
- 2.28 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.

### Next steps

- 2.29 Our expectations will be set out in the Business Plan Guidance. We will continue to seek input from the enhanced engagement groups.
- 2.30 For any bespoke outputs put forward in the Business Plans, we expect network companies to use their CEGs/UGs to challenge their proposed deliverables.
- 2.31 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.

### **Satisfaction Surveys**

Purpose	Customer satisfaction survey to drive improvements in the quality of customer service.
Decision	Retain as a symmetrical financial Output Delivery Incentive

### Summary of issue

- 2.32 In RIIO-1, the survey-based element of the Stakeholder Satisfaction Output (SSO) includes a financial reward and penalty mechanism and requires NGGT to seek customer and stakeholder feedback on its performance through surveys. NGGT's performance is gauged by customers and stakeholders answering one key question that rates overall levels of satisfaction with NGGT's service. The satisfaction surveys aim to encourage NGGT to become more outwardly focused, and drive improvements in the quality of its customer services.
- 2.33 We believe the incentive has driven improvements in service quality in RIIO-1 and want NGGT to provide a consistently high quality of service to its customers. However, we recognise from our stakeholder engagement that there is an element of 'survey fatigue' with the stakeholder surveys and, due to the nature of the output, there may be interactions with other policy areas that are already incentivised.

### Summary of our December proposals

- 2.34 In December, we consulted on two options for revising the stakeholder surveys:
- Option 1: Include the survey results as a component of the stakeholder engagement incentive (SEI) outlined above.
  - Option 2: Retain as a stand-alone incentive with more challenging targets.
- 2.35 We proposed moving away from a wider stakeholder and customer survey-based incentive, to an incentive based on a customer survey targeted at those customers that NGGT interacts with as part of its business activities.

- 2.36 We stated our intention to retain a single key question that rates overall levels of satisfaction, with NGGT having the flexibility to tailor the remainder of the survey to the needs of its customers.
- 2.37 We also proposed that NGGT engage with its User Group to identify the range of customers that could be surveyed, and that targets are established using NGGT's outturn performance data from RIIO-GT1.

#### Summary of responses

- 2.38 Eleven stakeholders responded to our consultation regarding the Customer Satisfaction Survey with the majority of stakeholders supporting the retention of the surveys in RIIO-GT2. However, some industry bodies noted that surveying customers should be considered a business as usual function and that the financial incentive could be removed.
- 2.39 An industry body and consumer representative group both stated that a financial incentive with rewards and penalties is appropriate in order to mimic competitive market conditions.
- 2.40 Stakeholders that responded were supportive of our proposal to focus the surveys on NGGT's customers only, rather than both customers and stakeholders. Some stakeholders suggested that the User Group could play a role in determining who the surveys should be focused on.

#### Decision

- 2.41 We consider the surveys are a useful tool for NGGT to gain valuable insights from its customers that will enable it to improve its business practices. As such, we have decided to retain the satisfaction surveys in RIIO-GT2.
- 2.42 NGGT will be required to survey its customers as part of its licence, with a symmetrical financial ODI based on the survey results. We believe the incentive has driven customer service improvements throughout the current price control, and wish to see these improvements continue throughout RIIO-GT2.
- 2.43 We will continue to allow NGGT to determine the content of the surveys and tailor them to its customers, with performance against the incentive continuing to be based on one key question gauging overall satisfaction with NGGT's performance.
- 2.44 We acknowledge that some stakeholders have experienced 'survey fatigue' during RIIO-GT1 due to the frequency of surveys, and following stakeholder responses in support of our proposal in the December Consultation are directing the focus of the surveys away from both customers and stakeholders, and towards those who have direct interactions with NGGT's business.
- 2.45 When this incentive was introduced in RIIO-GT1 very little data was available from which to benchmark appropriate performance targets. For RIIO-GT2, we expect to use actual performance data from RIIO-GT1 as the basis for setting performance targets.
- 2.46 We have decided to narrow the scope of the incentive, focusing only on NGGT's direct customers rather than customers and wider stakeholders. For this reason, we are minded to reduce the strength of the incentive from 1 per cent of base revenue to 0.5 per cent of base revenue.

Next steps

2.47 We expect NGGT to work with its User Group to determine exactly which customers should be the focus of the surveys, and seek input on the design and content of the surveys. We will consider the appropriate strength of the incentive as part of our assessment of NGGT's Business Plan.

**Quality of demand forecasts**

Purpose	To encourage NGGT to make improvements to the accuracy of its gas demand forecasts.
Decision	Retain the quality of demand forecasting incentive with tougher targets and a lower cap.  However, if NGGT cannot show evidence of consumer benefits we may make this a reputational incentive.

Summary of issue

- 2.48 NGGT produces forecasts of gas demand to help users of the gas transmission system make efficient decisions to put gas on and take gas off the NTS. NGGT forecasts demand on a day-ahead basis and is currently incentivised based on the accuracy of this forecast ('D1 demand forecasting incentive'). NGGT also publishes demand forecasts each day from two to five days ahead of the day ('D2 to D5 demand forecasting incentive'), and the incentive seeks to improve the accuracy of these forecasts too.
- 2.49 To date, NGGT has outperformed on both incentives, which possibly indicates improved service levels throughout RIIO-1. From our engagement with stakeholders during our working groups, we are mindful that not all NTS users attach value to NGGT's demand forecasts. This is partly attributed to the types of forecasting information included in the incentive<sup>5</sup> and that some users produce their own forecasts or buy them from third parties. We have been told that the forecasts are more valued by smaller shippers.<sup>6</sup>
- 2.50 We think it is important to consider whether it would be appropriate for end-consumers to pay for a service that is not valued by all NTS users.

Summary of our December proposals

- 2.51 In the December GT Annex, we proposed that if we were to retain the Quality of Demand Forecast incentive as a financial ODI, it would need changes to the targets to make them more challenging and encourage improvements. We would also need to adjust the cap so that any rewards earned are proportionate to the consumer benefits and efforts NGGT make to improve forecasts.
- 2.52 We stated that we wanted the scheme to encourage NGGT to make ongoing improvements. We proposed that NGGT put forward its proposals for revised targets as part of its Business Plan submission, which we would consider carefully before setting targets for the incentive and the cap. We stated that at a minimum, we would expect NGGT to set targets that build on its current level of

<sup>5</sup> Day Ahead (D-1), two to five day ahead forecast (D2-5)

<sup>6</sup> [https://www.ofgem.gov.uk/system/files/docs/2018/11/riioqt2\\_policy\\_121118.zip](https://www.ofgem.gov.uk/system/files/docs/2018/11/riioqt2_policy_121118.zip)

performance, and proportionate caps on rewards. In addition, we welcomed the views of stakeholders whether the scope of the incentive should be widened to cover other forecasts or data products.

#### Summary of responses

- 2.53 Seven stakeholders commented on the Quality of Demand Forecast incentive. Respondents agreed that NGGT should provide timely and accurate demand forecasts.
- 2.54 NGGT stated that demand forecast accuracy has improved as a direct result of this incentive and stakeholders of all sizes gain value from this incentive. NGGT said that universally available good quality demand forecasts reduce the barriers to entry for smaller parties. NGGT are mindful of the importance of whole system considerations, in particular of universal 'benchmark' demand forecasts, which will become increasingly important for better whole-system coordination. NGGT stated that as a network system operator it is well-placed to provide market demand forecasts.
- 2.55 Three stakeholders expressed views that forecasting should be considered business as usual and should not be incentivised. One stakeholder stated that they rely on their own forecasts, another stated the incentive should be discontinued if the NTS users see no value in NGGT's forecasts. One stakeholder noted that NGGT's forecasts are important for shippers and suppliers to manage risk, and that better forecasting supports the functioning of the market, which benefits all parties including end users. An industry body supported the retention of incentives for D-1 forecast accuracy, but sees little value in the D-2 to D-5 forecasts.
- 2.56 One stakeholder said that the value of this incentive should be proportionate to the benefits to consumers. It is appropriate for consumers to fund improvements in the accuracy of the demand forecasts if the improvements generate at least equivalent consumer benefit. NGGT said they think demand forecasting modelling will be more challenging in the RIIO-2 period due to a volatile and more uncertain future.

#### Decision

- 2.57 We have decided to retain the quality of demand forecasting incentive with tougher targets and a lower cap. This will encourage improved forecasts and better reflect benefits to consumers and NGGT's efforts in improving forecasts. We expect NGGT to show evidence of consumer benefits for all gas consumers in its proposals and to provide evidence on what needs to be done to improve forecasts. If NGGT cannot show evidence of consumer benefits we may make this a reputational incentive.
- 2.58 We considered stakeholders' views that the service could be considered business as usual and agreed the targets and incentive caps (the maximum that can be earned) should reflect the value to consumers and the efforts taken by NGGT to improve forecasts.
- 2.59 We have decided not to expand the scope of this incentive to include other forecasts or data products, as there is no compelling evidence for doing so.

#### Next steps

- 2.60 We expect NGGT to show, in its Business Plan, the consumer benefits of the incentive to all gas consumers, and to propose revised, tougher targets. If NGGT cannot show consumer benefits we may make this a reputational, instead of a

financial, incentive. NGGT should also propose revised, and lower, caps that reflect the benefits for consumers and the efforts necessary to improve performance.

## Maintenance

Purpose	To incentivise efficient planning of network maintenance at direct exit connections from the NTS
Decision	Retain both schemes of the maintenance incentive and make the incentive downside-only.

### Summary of issue

- 2.61 In order to ensure the ongoing reliability of the NTS, NGGT is required to undertake maintenance of the pipeline system. Customers at direct exit connections from the NTS may receive a reduced level of service during maintenance to allow work to go ahead. Where maintenance requires an outage, or reduction in the flexibility available at one or more direct exit connections, NGGT may 'call' one or more 'Maintenance Days' in accordance with the Uniform Network Code (UNC).
- 2.62 We want to encourage the efficient planning and execution of network maintenance, and minimise the impact of maintenance work by incentivising NGGT to plan its maintenance activities to align with periods which minimise disruption to customer operations.
- 2.63 The RIIO-GT1 price control includes a Maintenance Incentive that is split into two scheme components incentivising:
- Minimisation of the use of Maintenance Days ('Use of Days Scheme') to perform Remote Valve Operations maintenance; and
  - Minimisation of changes ('Changes Scheme') initiated by NGGT to the agreed maintenance plan.

### Summary of our December proposals

- 2.64 In the December GT Annex, we said that NGGT's performance against this incentive is a positive development for NTS users, and that the incentive appears to have been successful in driving the kind of behaviour that users want. However, we also noted our view that NGGT's recent performance has become business as usual.
- 2.65 We proposed retaining modified versions of both the Use of Days Scheme and Changes Scheme, by implementing downside-only ODIs with more challenging targets that reflect the improved performance that NGGT has delivered over the RIIO-GT1 period.
- 2.66 We also consulted on whether the incentive could be removed, or whether the financial element could be removed and a reputational incentive put in place instead. However, we are mindful of the risk that service level could deteriorate if there are no financial penalties. We also noted that most new connections are designed so that remote valve operations can be carried out without disruptions to supply.

### Summary of responses

- 2.67 Six stakeholders commented on our maintenance incentive proposals. The majority agreed that the maintenance incentive has been an effective scheme and

- has delivered benefits to NTS users during RIIO-GT1. Most stakeholders also agreed that the incentive targets should be revised for RIIO-GT2.
- 2.68 NGGT suggested that more maintenance will be required in RIIO-GT2 due to deteriorating health of assets and that the incentive target should reflect this. NGGT considered that the Maintenance Use of Days incentive could be expanded in scope to include maintenance activities in addition to Routine Valve Operations.
- 2.69 One supplier thought the Changes Scheme should be retained, however considering the level of NGGT's performance in RIIO-GT1, it would preferably be a penalty-only scheme. It was noted that Advice Notices (advance agreements between consumers and the System Operator), which can be used to better coordinate maintenance planning are an additional reason to implement a penalty-only arrangement for the Changes Scheme.
- 2.70 An industry body welcomed retaining the maintenance incentives as a financial incentive. However, it considered that the transparency of target-setting remains an issue.
- 2.71 A number of stakeholders expressed a preference to retain the Use of Days Scheme. The Health and Safety Executive (HSE) suggested that the incentive should be evaluated in the context of overdue maintenance and asset health works on the network. An energy supplier suggested that the scheme should focus only on remote valve operations that cannot be carried out without disruption. One stakeholder could not comment on this as there was no information provided with regards to the relevant dates and number of offtakes for which remote valve operations could be carried out. We expect NGGT to include this data in its Business Plan and justification of targets.

#### Decision

- 2.72 We have decided to retain both schemes within the maintenance incentive, and make the financial incentive downside only.
- 2.73 Stakeholders strongly agreed that the incentive provides benefit to gas consumers. Throughout RIIO-GT1 stakeholders noted a significant improvement in the service level provided by NGGT, and we want this to continue. We agree with stakeholders that removing the financial element of the incentive (and making it reputational only) could result in a deterioration of service levels.
- 2.74 During the first five years of RIIO-GT1, NGGT did not make a single change to agreed maintenance plans, partly due to the use of Advice Notices. Stakeholders acknowledged NGGT's level of performance.
- 2.75 NGGT's level of maintenance performance has improved since this scheme was introduced.<sup>7</sup> However, stakeholders also noted NGGT's outperformance. If there is limited room for further improvement, implementing a penalty-only arrangement, with more challenging targets that take account of current performance is more appropriate for the overall maintenance incentive.

#### Next steps

- 2.76 NGGT to propose revised, tougher, targets for the RIIO-GT2 period. We expect that the new downside-only schemes of this incentive would have floors the same

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<sup>7</sup> Paragraph 3.47, December GT (Annex [https://www.ofgem.gov.uk/system/files/docs/2018/12/riio-gt2\\_sector\\_annex\\_0.pdf](https://www.ofgem.gov.uk/system/files/docs/2018/12/riio-gt2_sector_annex_0.pdf))

or lower as those in place for the current incentives and any proposed changes to these floors need to be fully justified.

### Connections

Purpose	To incentivise NGGT to make connection offers in a timely manner.
Decision	Retain a connections output as a licence obligation.

#### Summary of issue

2.77 NGGT must comply with any request for connection that falls within the Gas Act 1986. The current connections output requires NGGT to follow the process set out in the UNC (as implemented by UNC modification 373<sup>8</sup>). This requires that the connections offer process is governed by clear, transparent arrangements that ensure all parties are treated equally by NGGT and user requests are managed within a fixed timeframe.

#### December proposal

2.78 We proposed to retain the existing connections licence condition and monitor NGGT's performance against this output by reviewing the information published by NGGT on a quarterly basis in line with its obligations under the UNC.

#### Summary of our December proposals

2.79 Three stakeholders commented on our proposal to retain an output relating to connections. All three of these stakeholders were supportive of our proposal. NGGT stated that its obligations are clearly set out in the UNC and are working well. NGGT therefore felt it was not necessary to introduce or replicate these requirements into a licence obligation. NGGT agreed that performance can be monitored through the information it publishes in line with its obligations under the UNC.

2.80 One industry body also stated that since then there have been further developments as part of the CLoCC (Customer Low Cost Connections<sup>9</sup>) project, including shorter timescales for 'simple' connections, there could be merit in further linking timescales to the PARCA (Planning and Advanced Reservation of Capacity Agreement) process.

#### Decision

2.81 We recognise NGGT's concerns about introducing new or replicating requirements into a licence obligation. To clarify, we are not introducing any new requirements into existing licence obligations or proposing any new licence obligations.

2.82 We will retain the existing output relating to connections as a licence obligation. The current licence condition requires NGGT to follow those processes set out under the UNC. This includes paragraph 13 of "Section V - General" of the Transport Principal Document (TPD) that outlines the modification process that may be made under the UNC governance processes.

2.83 We think this licence obligation remains appropriate and is non-duplicative, and holds NGGT to account for meeting those standards set out by the UNC.

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<sup>8</sup> Uniform Network Code (UNC) 0373: Governance of NTS connection processes

<sup>9</sup> <https://www.nationalgridgas.com/insight-and-innovation/transmission-innovation/project-clocc>

2.84 We intend to monitor NGGT's performance against this output by reviewing the information published by NGGT on a quarterly basis in line with its obligations under the UNC as well as information provided as part of the annual monitoring process.

### Entry and Exit Capacity Constraint Management (CCM)

Purpose	To incentivise an efficient overall cost of constraint management actions through efficient system operation and optimisation of strategies, and encourage balanced risk versus reward decisions in the release of additional capacity.
Decision	We have decided to defer our decision on this incentive. NGGT is asked to provide further evidence to demonstrate that the incentive provides value for money to consumers. We expect NGGT to clearly set out how this incentive could be better designed to drive consumer benefits, including challenging targets which are reflective of constraint risks and costs, without resulting in unjustified rewards for NGGT.

#### Summary of issue

2.85 The CCM incentive encourages NGGT to minimise its constraint management costs through a range of mechanisms. NGGT uses constraint management tools in various circumstances, for example when insufficient capacity is available to meet its obligations and (for incremental capacity) where no alternative capacity is available through substitution, or where investments are delivered late.

2.86 The current regulatory and commercial framework requires NGGT to release 'obligated' levels of capacity significantly in excess of peak demand at both entry and exit points on the network. However, flows of gas at these levels of capacity cannot occur simultaneously. In the instances where NGGT believes that Shippers' flow requirements associated with booked capacity cannot be accommodated, constraint management actions are undertaken. These actions fall into two categories:

- Operational constraint management – actions taken by NGGT to manage day-to-day issues on the network.
- Investment constraint management – actions taken by NGGT to manage longer-term issues associated with the provision of additional capacity on the network.

2.87 When constraints occur, there are numerous commercial tools available to manage Operational and Investment constraints. These include:

- Capacity Buybacks – buying back Firm Entry or Exit Capacity previously sold to system users;
- Locational Energy Trades – buying gas into NTS linepack or selling gas out of NTS linepack at specific locations on the network; and
- Turn Up/Turn Down Contracts – contracts entered into to manage specific planned outages or where specific flow requirements need to be confirmed in advance.

2.88 It is in the interests of consumers for NGGT to use the most efficient solution to meet customer capacity needs. Feedback we have received through our stakeholder working groups indicated that stakeholders see this as a vital service provided by NGGT for consumers. However, the approach taken by NGGT to

manage constraints is not transparent enough to determine whether the decision to use an operational management tool compared to an investment tool was in the best interest of consumers. In our view there is not enough granularity in the information provided to Ofgem to understand the interactions between the SO and TO with regards to constraint management actions, particularly given NGGT's level of outperformance against this incentive. This lack of transparency makes it unclear whether the incentive is appropriately calibrated.

#### Summary of our December proposals

- 2.89 In December, we proposed to retain an output for NGGT to manage the NTS so that constraint management costs are efficiently incurred, taking account of the physical capability of the NTS and the cost of building new capacity.
- 2.90 We stated that we are concerned that the CCM targets during the RIIO-GT1 period may not have reflected the actual risks to NGGT of taking constraint management actions.
- 2.91 In our proposals<sup>10</sup> we expected NGGT to put forward in its Business Plan, appropriate targets that take into account:
- the results of its network capability review;
  - the risk of incurring constraint management costs;
  - expected costs of constraint management action.
- 2.92 We also stated we would expect the targets to be informed by actual performance against this incentive during the TPCR4 and RIIO-GT1 price control periods. Targets should also be informed by expected maximum flows through each entry and exit point, rather than the obligated levels of capacity.

#### Summary of responses

- 2.93 Six stakeholders commented on the CCM incentive. Some of these six stakeholders, including energy suppliers and industry bodies, supported our proposal to retain the CCM incentive as a financial ODI, whilst others did not say whether the incentive should be retained. Some stakeholders expressed concerns regarding NGGT's level of outperformance during RIIO-GT1, and suggested that careful consideration be given to the calibration and strength of the incentive for RIIO-GT2.
- 2.94 Given the lack of high impact constraint events during RIIO-GT1, one stakeholder questioned whether the incentive has actually rewarded improved performance. NGGT commented that outperformance did not necessarily represent a 'windfall' gain, but rather represented the culmination of concerted effort and expenditure to manage constraints efficiently. Furthermore, NGGT commented that, although it has not incurred significant constraint management costs during RIIO-GT1, it has been exposed to downside risk.
- 2.95 NGGT highlighted additional costs that it has incurred; costs that are not formally constraint management costs, but that are still incurred to manage constraints to avoid more substantial costs. On the subject of buyback costs, NGGT noted that these costs have not been incurred since 2006/07 because this is one of the costlier constraint management actions, and NGGT has optimised its actions to avoid incurring buyback costs. NGGT also commented that it has been able to

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<sup>10</sup> Paragraph 3.72 of the December GT (Annex [https://www.ofgem.gov.uk/system/files/docs/2018/12/riio-gt2\\_sector\\_annex\\_0.pdf](https://www.ofgem.gov.uk/system/files/docs/2018/12/riio-gt2_sector_annex_0.pdf))

substitute capacity to meet customer needs without resorting to asset investment. It suggests that this imposes additional system management costs and introduces additional risk.

- 2.96 The HSE asked whether changes to the CCM incentive would have implications for network emergency resilience. One industry body raised concerns about the lack of transparency surrounding how the incentive targets are set and how constraint management decisions are made. NGGT also acknowledged this lack of transparency.
- 2.97 Four stakeholders agreed with our view on the interrelationship between the CCM incentive and the review of network capability. All four respondents agreed with our proposal to require NGGT to review the physical capability of the NTS. Two of these respondents raised concerns that the outcome of the network capability review, and any subsequent proposals from this could, whilst reducing constraint costs, lead to increased costs elsewhere. In addition to the interrelationship between CCM and network capability, one respondent highlighted further relationships with other policy areas, including the approach to selling unused capacity, and the gas transmission charging review.

#### Decision

- 2.98 We have noted stakeholders' concerns surrounding NGGT's outperformance on this incentive during RIIO-GT1, as well as concerns regarding the lack of transparency in how the incentive impacts NGGT's decision making processes. We agree that there is a lack of transparency in how this incentive impacts NGGT's management of the network and that NGGT has earned significant sums during RIIO-GT1. The significant and consistent out-performance against the incentive so far during RIIO-GT1, and the lack of evidence to demonstrate how it has driven behavioural changes, suggests the incentive needs significant redesign.
- 2.99 NGGT said that outperformance does not necessarily represent a mis-calibration of the incentive. However, we have not seen evidence that properly supports this statement. NGGT also noted that it incurs additional, non-commercial, costs for managing constraints which are not included in the CCM incentive mechanism. However, it does not clearly state what these costs are, nor how much they are. We note that NGGT has continually outperformed its targets on this incentive, with very few commercial constraint management actions undertaken, including during times of very high demand.
- 2.100 Given this lack of transparency, we are currently unable to determine whether this incentive provides value for money for consumers. It is also unclear whether the current incentive mechanism is encouraging improved performance. We have therefore decided to defer our decision on whether to retain this incentive, and if so in what form, until NGGT can demonstrate that this incentive provides value for money to consumers. If NGGT can demonstrate this, we are minded to retain this incentive. However, it will need tighter targets and appropriate penalties and rewards. It may need to be redesigned to better reflect the costs and revenues associated with managing constraints. We think that the management of constraints is likely to be an appropriate area to incentivise, but if NGGT cannot demonstrate consumer benefits, we will consider removing the incentive for RIIO-GT2.
- 2.101 We require NGGT to provide further clarity in its Business Plan on:
- the decisions that are in its control to manage constraints;

- all revenues and costs it incurs and specific actions it takes to manage constraints on the system and the control it has over the level of costs and revenues incurred/earned;
- evidence to demonstrate that this incentive provides value for money to consumers, or whether a redesigned incentive could better achieve this outcome.

2.102 We expect NGGT to put forward appropriate targets that are informed by detailed evidence of performance during the TPCR4 and RIIO-GT1 price control periods. We expect targets to take account of expected maximum flows through each entry and exit point, rather than obligated levels of capacity (ie take account of the outputs of the network capability review). The forecasts that NGGT uses to inform proposed targets must be transparent and properly quality assured. If clearly evidenced, we will also consider whether the incentive could be redesigned so as to provide better value for money for consumers. In making any further decisions on the retention, design, or scale of the incentive, we will consider whether it is necessary to consult further with stakeholders.

#### Interaction with other policy areas

2.103 The CCM incentive is designed to avoid constraints happening and to mitigate their impact if they do occur. In December, we proposed a Network Capability output for RIIO-2. The proposal would require NGGT to review the physical capability and future capability requirements of the NTS and the forecast flows at each entry and exit point.

2.104 Our proposal would also require NGGT to consider whether the current levels of baseline obligated entry and exit capacities are set at appropriate levels, taking account of the expected costs of network investment and the risks of incurring constraint management costs. We expect that, in proposing appropriate targets for the CCM incentive, NGGT takes account of potential changes driven by the Network Capability review.

#### Next steps

2.105 We expect NGGT to submit evidence in its Business Plan, *taking into account the specific points we raise in our decision above*, to demonstrate that this incentive provides value for money to consumers and propose appropriate targets. Proposals could include redesign of the incentive, backed up by strong evidence on how the redesign will deliver value for consumers. As part of its Business Plan, we expect NGGT to provide greater clarity on how this incentive impacts the decisions they take to manage constraints.

### **Residual Balancing**

Purpose	To incentivise the daily balancing of supply and demand whilst minimising the impact of any actions on market prices.
Decision	Our minded-to decision is to retain the incentive with revised targets. We note that <i>if</i> NGGT proposes a new bespoke residual balancing incentive we will reconsider the current residual balancing incentive if necessary.

### Summary of issue

- 2.106 NGGT is required to balance the system and to operate within safe operational limits. NGGT has some choice regarding how it fulfils these requirements. We have set financial incentives to encourage NGGT to do this in the way that causes least disruption to the gas market.
- 2.107 The incentive contains two elements: the Price Performance Measure (PPM) and the Linepack Performance Measure (LPM). The PPM element incentivises NGGT to execute any Residual Balancing trades at prices that are within a small range compared to the System Average Price (SAP) for the day. The LPM element incentivises NGGT to minimise any changes between starting and closing NTS linepack over a gas day (i.e. to achieve a balance between the supply and demand of gas on the gas day).
- 2.108 Stakeholders have said that the LPM element of the incentive may not be driving the most efficient behaviour from NGGT. In particular, stakeholders have told us that it may not be desirable to provide an incentive for NGGT to return linepack at the end of the gas day to the level it was at the start of the gas day since this could lead to perverse outcomes if there is a genuine need for linepack to evolve over time.

### Summary of our December proposals

- 2.109 In the December GT Annex, we proposed to maintain the current incentives on residual balancing as a financial ODI. However, we noted that this needed to be considered against the concerns set out above on the potential loss of flexibility in linepack. We said, if the incentive was retained, the targets should be reviewed in light of NGGT's performance during RIIO-GT1.

### Summary of responses

- 2.110 Five stakeholders commented on the Residual Balancing incentive. The majority of them agreed with the principles of the residual balancing incentive and considered both elements of the incentive should be retained. One stakeholder suggested that the incentive should become a licence obligation.
- 2.111 A stakeholder noted NGGT's continued outperformance on this incentive. NGGT said that increasing volatility of network flows is likely to make the target more challenging in the future.
- 2.112 Some of the five stakeholders suggested an alternative approach to target setting for LPM, for example taking into consideration weekdays, weekends or seasons. Stakeholders also mentioned that the nature of the availability of linepack varies across the transmission network and it may therefore be appropriate to consider the geographical dispersion of linepack. NGGT agreed that the LPM element of the incentive does not always drive the most efficient behaviour and is a rigid incentive that does not reflect the operational need to change linepack levels between summer and winter periods.
- 2.113 NGGT has indicated it may propose a new bespoke incentive to formally recognise linepack as a valuable commodity to NTS users, but no further details were provided. It is up to NGGT to demonstrate clearly how this would work and deliver consumer value without being unnecessarily complex or opaque.

### Decision

- 2.114 We are minded to retain the incentive but expect NGGT to propose revised targets. Specifically, we are minded to retain both elements, PPM and LPM, and expect NGGT to propose tighter targets against which performance will be measured. This is in line with the majority of stakeholder views. We have not seen any evidence or argument that shows the benefits of weekday, weekend or geographic linepack targets.
- 2.115 NGGT has indicated it may propose a new bespoke incentive to formally recognise linepack as a valuable commodity to NTS users. While very little detail has been provided, there is the potential for such an incentive to interact with the current incentive. We expect NGGT to set out its view of any possible interactions if and when it has worked out the detail of the new proposed incentive and provide clear evidence on how this new incentive would work and relate to other incentives. We may reconsider our minded-to decision on the current residual balancing incentive if, and when, NGGT provides this further information.

### Interaction with other policy areas

- 2.116 Under 'decision', above, we set out the possible interaction with a new bespoke incentive to formally recognise linepack as a valuable commodity to NTS users that NGGT has indicated it may propose.

### Next steps

- 2.117 NGGT should propose appropriate revised targets for LPM and PPM, including seasonality as appropriate. It should clearly reflect its rationale for these targets in the Business Plan. It should provide detail on any new incentive it proposes associated with linepack and demonstrate how this interacts with the current incentives.

### **Emergency response and enquiry service**

Purpose	To ensure customers have a reliable emergency response phone line service in the event of an emergency.
Decision	Retain licence obligation. Consult on amending it to clarify that the emergency response phone line should always be operational to receive calls.

### Summary of issue

- 2.118 All gas networks have a jointly established single emergency telephone service for customers to report gas leaks. 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. The service is managed by Cadent, with the other GDNs and NGGT (which is also covered by the service) contributing their share of the overall funding.

### Summary of our December proposals

- 2.119 In December, we proposed to maintain but amend NGGTs' licence obligation to make it clear that the emergency response phone line should always be operational to receive calls.
- 2.120 Our proposal also included provisions to ensure that the service has sufficient resilience to guarantee constant availability.

### Summary of responses

- 2.121 Stakeholders agreed with our proposal to maintain and amend NGGTs' licence to make it clear that the emergency response phone line should always be operational to receive calls.
- 2.122 The HSE have provided further clarity regarding NGGT's and Cadent's duties regarding the emergency response and enquiry service. The HSE stated that provided Cadent are operating the telephone service to the required standard, NGGT do not have any duties to operate the emergency telephone service. However, in the event that Cadent is unable to provide the service, then the duty would fall back on NGGT.

### Decision

- 2.123 We have decided not to include Emergency response and enquiry service as a specific RIIIO-GT2 output. This does not diminish its importance, or NGGT's role in supporting the service, which will continue to be set out in its licence.
- 2.124 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. This means ensuring that NGGT works closely with Cadent to ensure there is always an operational phone line.
- 2.125 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. We have decided to include provisions to ensure that the emergency telephone service, for customers to report gas leaks service, has sufficient resilience to guarantee constant availability.
- 2.126 We do not think that providing sufficient level of resilience 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 obligations with those in Electricity Distribution, then we will expect these to be clearly shown, and evidenced, within the Business Plan.

### 3. Deliver an environmentally sustainable network

A high-level objective of the RIIO-2 framework is for network owners 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, where appropriate. This section sets out the outputs and wider price control measures that will be part of RIIO-GT2.

#### Introduction

- 3.1 The electricity and gas networks and their related business activities can be harmful to the environment. A key aim of the RIIO-2 Framework is that network companies support the transition to a smarter, more flexible, and 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 NGGT has a vital, and active, role to play over RIIO-GT2.
- 3.3 Our decision seeks to recognise, and reward, both upfront and ongoing actions by NGGT. As part of the wider output framework, NGGT will be required to produce an Environmental Action Plan and Annual Environmental Reports. This will ensure that stakeholders have a clear understanding of NGGT's environmental actions and impacts during RIIO-GT2. The Business Plan Incentive will take account of ambitious and well-justified Environmental Action Plans.
- 3.4 In this chapter, we set out our decisions on the following areas:
  - to adopt the cross-sector environmental framework set out in the Core Document to ensure that stakeholders have a clear understanding of NGGT's environmental actions and impacts during RIIO-GT2 and NGGT is more transparent on what it is doing to mitigate these;
  - specific environmental outputs, to target improvements in areas that NGGT is directly responsible for, such as greenhouse gas emissions from venting, and compressor emissions;
  - the opportunity for NGGT to propose bespoke output measures, developed with stakeholders, that focus on NGGT's contribution to the low carbon energy transition where not captured elsewhere in the price control.
- 3.5 Finally, for RIIO-2, we will retain a strong innovation funding programme, focused primarily on the energy system transition, 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.
- 3.6 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 '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 GT Annex, which provides more detail on the proposals we have summarised in this chapter.

### Outputs for RIIO-GT2 Table 2: Summary of RIIO-2 decisions

Output name	Output type*	Company driven target**
Environmental Action Plan (incl. low carbon energy systems and decarbonisation of heat)	Potential ODI (Financial/Reputational) or Price Control Deliverables	Yes
Annual Environmental Report (incl. Business Carbon Footprint reporting (BCF))	Licence Obligation	N/A
Compressor emissions	Price Control Deliverables	No
GHG Emissions (Venting)	ODI (Financial)	No
NTS shrinkage	ODI (Financial) - subject to further consideration of how two components of the incentive should be treated	No
<b>Bespoke outputs</b> - NGGT may consider other areas for inclusion in its Business Plan ODI (Financial/Reputational)		
Environmental Action Plan initiatives (eg reduce BCF)	Price Control Deliverables	Yes

\* ODI = Output Delivery Incentive (Financial/Reputational)

\*\* Company driven target signifies an output where we expect to see extensive company-led engagement (including with their User Group) to justify a stretching performance target.

### Environmental Action Plan and Annual Environmental Report

3.7 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 GT Annex were keen to see improved. Further information on our decision can be found in Chapter 4 of the Core Document.

3.8 In the Core Document we set out our expectations for well-justified Environmental Action Plans. In this chapter we highlight specific areas we expect NGGT to include

in its Environmental Action Plan and Annual Environmental Report. These should be read as minimum requirements.

### **Low carbon energy systems and decarbonisation of heat**

Purpose	To ensure NGGT actively engages with the issues in the decarbonisation of heat and low carbon energy system.
Decision	NGGT to submit an Environmental Action Plan as part of Business Plan submission, and publish performance as part of its Annual Environmental Report.

#### Summary of issue

- 3.9 For RIIO-2, we consider it is important that network companies make a full contribution to the low carbon transition. This includes taking responsibility for the direct environmental impacts of their networks as well as playing their role in the energy system transition.
- 3.10 We consider that different arrangements may be needed in RIIO-2 to incentivise NGGT to utilise the opportunities presented by new technologies, new ways of operating, new market participants, whole system thinking, and innovative commercial arrangements.

#### Summary of our December proposals

- 3.11 In December, we proposed requiring NGGT to develop a robust plan to support the transition to low carbon energy systems and the decarbonisation of heat that should be submitted to us as part of its Business Plan.
- 3.12 We proposed that NGGT should work with its stakeholders and User Group to develop this plan. We also proposed to encourage bespoke initiatives that involve collaboration with other network owners and, where appropriate, third parties.

#### Summary of responses – low carbon energy system

- 3.13 Six stakeholders directly commented upon our proposal for NGGT to submit a detailed low carbon energy systems plan as part of its Business Plan. While stakeholders generally welcomed our proposal, many viewed that the proposals did not go far enough in encouraging the low carbon transition and decarbonisation of the energy sector. Several commented that there was a lack of focus on sustainability and decarbonisation, with one environmental body stating concern that the proposed incentives may not deliver a sustainable energy sector in the round.
- 3.14 One stakeholder proposed adopting the approach outlined in the ET Annex, requiring NGGT to make a statement of principle on the environment, sustainability and low carbon facilitation, as well as requiring NGGT to produce an annual environmental impact report including NGGT's BCF as a licence obligation. This approach was also supported by stakeholders from consumer groups, industry bodies and the RIIO-2 Challenge Group.
- 3.15 Several stakeholders proposed areas that NGGT should consider as part of its proposals, including the use of hydrogen in the decarbonisation of heat, providing better quality gas information, and running the UK bio-methane certification scheme in order to incentivise investment in bio-methane solutions.

- 3.16 One industry body stated that the low carbon transition is the responsibility of the government rather than the industry and that NGGT should only focus on the direct environmental impacts of its business activities.
- 3.17 NGGT welcomed the opportunity to consider bespoke proposals for addressing the environmental impact of its activities. NGGT also suggested introducing a fund similar to the Network Innovation Competition<sup>11</sup> to support driving down energy use and using low carbon methods, and highlighted the importance of having a framework in place to enable cross-sector working and collaboration.

Summary of responses - decarbonisation of heat

- 3.18 The majority of stakeholders stated that the future pathway for the decarbonisation of heat remains uncertain and that it is important that NTS capability is maintained at an appropriate level to meet the needs of present and future consumers, whilst also keeping options open for a variety of future pathways.
- 3.19 However, several stakeholders acknowledged that in the absence of a clear government policy on heat, NGGT should work with the wider industry, in particular the GDNs, to establish low-regret options to progress throughout RIIO-2 and beyond.

Decision - Low Carbon Energy System

- 3.20 Following feedback from environmental and other stakeholders we have developed a cross-sectoral environment framework through which we expect NGGT to develop an ambitious Environmental Action Plan. Instead of requiring a separate low carbon energy systems and heat decarbonisation plan, we expect NGGT's Action Plan to detail the actions it will take to support the low carbon energy transition and promote environmental sustainability. NGGT will also be required to report annually on its performance against its action plan. See Chapter 5 in the Core Document for further details.
- 3.21 We continue to welcome NGGT to work closely with its stakeholder to develop proposals for bespoke ODIs that facilitate the low carbon transition. Any proposed bespoke ODIs must meet the criteria set out in Chapter 4 of the Core Document.

Decision - decarbonisation of heat

- 3.22 We have decided not to introduce a heat policy re-opener into the RIIO-GT2 price control framework. We have not received sufficient evidence to suggest there is an expected change in policy related to the decarbonisation of heat that would impact NGGT's allowances during RIIO-2.
- 3.23 We recognise that we have decided to include a 'heat policy re-opener' uncertainty mechanism in the RIIO-GD2 price control 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, if the need arises. However, we have not received evidence indicating there is a need for a comparable uncertainty mechanism for the RIIO-GT2 price control at this time.

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<sup>11</sup> <https://www.ofgem.gov.uk/network-regulation-riio-model/current-network-price-controls-riio-1/network-innovation/gas-network-innovation-competition>

## Business Carbon Footprint reporting

Purpose	To increase the transparency of NGGT’s GHG emissions and to encourage NGGT to monitor and reduce them at a business level over the price control.
Decision	Include Business Carbon Footprint reporting as part of the new Annual Environmental Report.

### Summary of issue

- 3.24 In RIIO-1, Business Carbon Footprint (BCF) reporting is a cross-sector incentive designed to increase the transparency of network operators' GHG emissions and to encourage network companies to monitor and reduce their levels of GHG emissions at a business level. The measure was introduced to ensure the network companies play their part in meeting the government's climate change target to reduce carbon emissions by 80 percent by 2050, based on 1990 levels.
- 3.25 Under the current arrangements, there is limited transparency about the impact of NGGT’s activities on the environment with limited opportunity for comparability of performance through time or across sectors. Furthermore, it is clear much of NGGT's BCF arises out of compressor running and venting, both of which are incentivised via separate output and incentive arrangements.

### Summary of our December proposals

- 3.26 In December, we said that we saw merit in requiring NGGT to be more transparent about the impact of its activities on the environment as measured through its BCF.
- 3.27 We invited stakeholders' views on whether they believe there is value in requiring NGGT to be more transparent about the impact of its overall business on the environment. We proposed that if the reporting requirement were to be retained, we would expect NGGT to propose a transparent, comparable and consistent metric for its BCF reporting as part of its Business Plan.

### Summary of responses

- 3.28 Seven stakeholders responded to the BCF reporting incentive. Stakeholders were generally in favour of NGGT publishing its BCF annually. However, they were mixed on whether or not it was necessary to include this reporting as part of the environmental incentive package.
- 3.29 Most stakeholders who responded recognised that BCF reporting is useful as a measure of how a company tackles its own emissions and that it increases transparency around NGGT’s environmental impact.
- 3.30 Whilst some stakeholders stated that BCF reporting should be retained as a reputational incentive, or be a licence condition, others stated that reporting should be considered a business as usual activity without the need for an incentive. Industry stakeholders noted that BCF reporting is already covered by existing government requirements and that two major contributors to NGGT’s BCF – compressor usage and venting – are already separately incentivised.

Decision

- 3.31 We believe 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 comparability across network companies and across sectors. We believe BCF reporting continues to act as a reputational incentive by making companies aware that their level of emissions will be open to public and stakeholder scrutiny.
- 3.32 Although we proposed that NGGT develop a BCF reporting metric as part of its business plan, in order to ensure cross-sector consistency, transparency and comparability a reporting framework will be developed that is applicable to all network companies across all sectors.
- 3.33 We wish to see NGGT continue to report annually on its BCF, however BCF reporting will no longer be a standalone reputational incentive as per RIIO-GT1. Instead, we will require NGGT to publish its BCF as part of its annual environmental reporting – see Chapter 5 in the Core Document for further details.

## Compressor Emissions

Purpose	To ensure NGGT complies with its statutory obligations on compressor emissions by delivering a programme of work agreed with Ofgem and the environmental regulators.
Decision	Ofgem to continue work on guidance for NGGT's Compressor Emissions Compliance Strategy. Ofgem to set flexible PCDs for compressor works where the needs case for works is certain, and set uncertain allowances where needs case is ambiguous.

Summary of issue

- 3.34 NGGT relies upon a fleet of compressors to meet supply and demand requirements across the NTS. The majority of these compressors are gas-fired and as such produce harmful exhaust emissions.
- 3.35 Emissions levels of Nitrous Oxides (NOx) and Carbon Monoxide (CO) from combustion plants must be brought within defined Emission Limit Value (ELV) standards. For large compressors (greater than 50MW thermal) this is set out in the Industrial Emissions Directive (IED). For medium sized compressors (greater than 1MW thermal but less than 50MW) this is set out in the Medium Combustion Plant (MCP) Directive. Plant affected by the MCP Directive will be required to cease operation by 1 January 2030 or otherwise restrict their operating hours in a similar manner to Plant on Emergency Use Derogation (EUD).
- 3.36 The deadline for Large Combustion Plant (LCP) compliance (31 December 2023) falls within the middle of the RIIO-2 price control period. A number of compressors within NGGT's fleet are currently running on Limited Lifetime Derogation (LLD). Plant on EUD will only be able to operate for a maximum of 500 hours per year.
- 3.37 NGGT expects to undertake significant works during both RIIO-2 and the subsequent price control to ensure that its compressor fleet is compliant with relevant emissions legislation. We want to ensure that NGGT's investment plans are underpinned by a clear demonstration of the need for investment, and

evidence that its proposed solutions deliver against its statutory obligations in a manner that offers good value for consumers.

- 3.38 Following the Mid-Period Review of the RIIO-GT1 price control and our assessment of NGGT's submissions under the RIIO-GT1 price control re-opener mechanism, we identified significant gaps in the RIIO-GT1 arrangements. In particular, the lack of sufficient clarity on NGGT's outputs and deliverables created significant challenges in holding NGGT to account for outputs and investments funded as part of the price control.

#### Summary of our December proposals

- 3.39 In December, we proposed that NGGT be required to develop a Compressor Emissions Compliance Strategy (CECS). Ofgem would produce guidance for this document, in cooperation with GB Environmental Regulators (ERs) (the Environment Agency (EA), Scottish Environment Protection Agency (SEPA) and Natural Resources Wales (NRW)).
- 3.40 We proposed that the CECS should set out NGGT's long-term strategy for meeting the requirements of the IED and MCP Directives and be submitted alongside NGGT's Business Plan for the RIIO-2 price control.
- 3.41 We proposed to hold NGGT to account for the successful delivery of compressor works via the use of PCDs. If PCDs are not delivered by the end of the RIIO-2 period, we would consider whether to claw back the funding. In our December consultation, we proposed two types of PCDs that could be set for compressor works:
- **Option 1:** PCDs may be specified as specific asset solutions, eg two new 15MW gas turbine compressor units at site X, or one existing 30MW gas unit at site Y fitted with Selective Catalytic Reduction technology.
  - **Option 2:** PCDs may be specified by reference to specific asset solutions (as in Option 1) but with an explicit option to deliver a different solution that provides equivalent long term network capability, eg a long term bi-directional flow capability at site X of 50 mcm/day or higher.
- 3.42 Under option 2, when assessing whether the different solution met the requirement of the PCD, we would also consider the likely impact of the change on long-term costs to consumers. For instance, we would not consider a solution to be equivalent if it is likely to require higher costs in the future without countervailing benefits, or earlier replacement of assets.
- 3.43 We also considered two approaches for assessing compliance against PCDs under option 2:
- **Option 2A:** We would accept any solution that provides equivalent long-term network capability; or,
  - **Option 2B:** We would accept any solution that provides equivalent long-term network capability as long as the change of solution is demonstrated by NGGT to be driven by genuine innovation.
- 3.44 In December, we proposed to include a re-opener mechanism by which NGGT or Ofgem could put forward changes to PCDs and associated allowances. A single window for this mechanism which would be in year 2 of the price control period, with any changes to take effect from year 3. We proposed to put in place a

materiality threshold of 1% of annual revenues, consistent with the threshold for the IED re-opener in the current RIIO-1 price control.

- 3.45 We also proposed allowing a further opportunity by which NGGT or Ofgem could propose changes to PCDs and allowances as part of the close out process for the RIIO-2 price control.

#### Summary of responses

- 3.46 Six stakeholders commented on our proposals for NGGT to develop a CECS. They generally supported our proposals and stated that the CECS and PCDs would provide the certainty which was missing within the RIIO-1 outputs for compressor emissions works.
- 3.47 Industry bodies and suppliers stated it was important that for RIIO-GT2, lessons are learned from the re-opener and mid period review processes during RIIO-GT1. In particular, the need for greater flexibility during the price control period regarding how compliance is achieved. As such, all stakeholders who commented on the nature of PCDs for compressor works stated a preference for some flexibility in the outputs that are set.
- 3.48 One industry body expressed concerns that there may be a disconnect between environmental compliance and providing enough flexibility on the network to meet customers' needs.
- 3.49 Stakeholders highlighted that any proposed investment should be fully justified with supporting CBAs, and innovative approaches such as changes to operational practices and new technology should be considered as an alternative to replacement works.
- 3.50 NGGT noted that for compressor works being undertaken in RIIO-2, they expect their Business Plan to set out the compliance strategy, preferred solution, funding requirements, and scope of long-term network capability that would be delivered by the preferred solution. As such, NGGT noted that it did not perceive a need for a re-opener for compressor works to be completed during the RIIO-2 period.
- 3.51 NGGT proposed that for compressor works to be completed after RIIO-2 (but where some costs would be incurred during RIIO-2), an ex-ante allowance subject to an uncertainty mechanism should be provided. They considered this allowance should be tied to PCDs to achieve fixed deliverables on a site by site basis by the end of RIIO-2.

#### Decision

- 3.52 We have decided to progress with our proposal that NGGT produce a CECS.
- 3.53 We consider that outcome based PCDs as described above (option 2A) would ensure that NGGT are held to account for delivering compressor works, whilst allowing NGGT some flexibility in how they deliver. We are therefore likely to consider this type of PCD for compressor works, where applicable, based on the information provided in NGGT's Business Plan.
- 3.54 We expect NGGT to propose PCDs for any investment associated with compressor works in its Business Plan, including the most appropriate measure to assess the outputs against. We will consider the design of proposed PCDs as part of our assessment of the Business Plan. Where we are unable to agree on a suitable measure we may revert to input based PCDs (option 1).

- 3.55 Where there is uncertainty around the needs case for retaining compression capability at a site, or around the costs of replacement work for non-compliant units, we expect to provide an allowance subject to a reopener within year 2 of the RIIO-2 price control period. This would be subject to our assessment of the Business Plan. If a solution is changed such that it no longer delivers the agreed PCD, we expect to claw back the associated funding.
- 3.56 We have decided not to determine a materiality threshold for the re-opener at this time. We will determine this based on our assessment of the Business Plan, consistent with our approach set out in the Core Document.

Interaction with other policy areas

- 3.57 Any compressor replacement, refurbishment and/or decommissioning work NGGT propose should be clearly supported by the targets set as part of the Network Capability Review.

Next steps

- 3.58 We will issue guidance to inform a draft of the strategy to be submitted alongside NGGT's Business Plan. We will continue to work with the ERs on producing the CECS guidance.
- 3.59 We expect to publish our guidance for the CECS shortly after the sector specific decision document is published. We expect NGGT to use their CECS to inform their Business Plan proposals.

## Greenhouse Gas (GHG) Emissions (venting)

Purpose	To encourage NGGT to consider environmental impacts when making decisions about venting from NTS compressors.
Decision	Retain the current downside-only incentive.

Summary of issue

- 3.60 The GHG emissions incentive was introduced in RIIO-GT1 to incentivise consideration of the environment when venting from NTS compressors. The incentive aims to benefit consumers (and others) by contributing to GB's carbon reduction commitments.
- 3.61 Specifically, the scheme incentivises NGGT to take the cost of GHG emissions into account when deciding whether to depressurise compressor units (venting the gas within them), which results in GHG emissions, or keep them on standby, which incurs costs associated with ancillary electrical equipment.

Summary of our December proposals

- 3.62 In December, we consulted on four options for the GHG emissions incentive for RIIO-2:
- Option 1: Retain the current downside-only incentive
  - Option 2: Make the incentive symmetrical with financial rewards available
  - Option 3: Make the incentive reputational only
  - Option 4: Remove the incentive

- 3.63 We were also open to considering options for reducing the 'strength' of the incentive by reducing the penalty per tonne of carbon equivalent vented to reflect the extent to which NGGT can influence the amount of gas vented.

Summary of responses

- 3.64 Seven stakeholders commented on our options and most stakeholders agreed with our proposed Option 1, to retain this incentive as downside-only to encourage NGGT to achieve an efficient level of emissions reduction.
- 3.65 Some stakeholders stated that since methane is such a potent greenhouse gas it is important that venting is minimised, and this is an activity that NGGT should be undertaking as a business as usual activity. Furthermore, stakeholders agreed that flow patterns on the network, over which NGGT has no control, influence compressor operations and hence venting decisions. However, NGGT stated that it does have control over when it chooses to vent.
- 3.66 An energy supplier believed that a target that reflects an efficient level of GHG venting should be supported by stakeholders and should be agreed by the User Group and the independent Challenge Group. The supplier acknowledged concerns about the ability to set robust targets, however, reducing the strength of the incentive or applying a floor could mitigate those concerns.
- 3.67 NGGT noted its underperformance against this incentive and suggested this shows how challenging the target is. NGGT considered there may be opportunities to improve the incentive, including how best to set targets. NGGT stated that a symmetrical incentive with financial reward would align their interests better with customers.

Decision

- 3.68 We have decided to retain the current downside-only incentive in the same format as in RIIO-GT1 (Option 1 of the four we set out in December), with targets to encourage improvements. Stakeholders favoured this option to encourage NGGT to achieve an efficient level of emissions reduction. We think that retaining the financial penalty should adequately incentivise NGGT to achieve an efficient level of emissions reduction. Our decision on the business plan will also take into account any interaction between this incentive and other incentives (including CCM). We would expect NGGT to set out any interactions between incentives in its Business Plan.
- 3.69 In our view, the improved performance in the initial years of the incentive show efforts are being made by NGGT to reduce venting. Whilst we recognise stakeholder views that NGGT may have limited influence on venting compressors, the actions of NGGT during RIIO-GT1 to improve venting procedures demonstrate that this activity should be incentivised.
- 3.70 We have decided to retain financial penalties in the GHG incentive. Our view is that removing the financial penalties may reduce the strength of the incentive for NGGT to achieve efficient levels of emission reduction.

Interaction with other policy areas

- 3.71 The actions NGGT takes to manage constraint under the CCM incentive may affect the expected level of compressor usage and venting.

Next steps

3.72 We expect NGGT to propose revised targets for this incentive. As noted we expect NGGT to set out any interactions between incentives in its Business Plan.

**NTS Shrinkage**

Purpose	To incentivise the efficient procurement and management of own use gas and electricity for the operation of NTS compressor, and energy that cannot be billed.
Decision	Remove the Compressor Fuel Use (CFU) component of the Shrinkage incentive.  NGGT to provide sufficient evidence that the remaining two elements of the incentive are under its control, provide value for money for consumers, and are worth continuing to incentivise given the low materiality in the absence of the CFU portion of the incentive.

Summary of issue

3.73 Shrinkage is a term used to describe the gas and electrical energy which is used in operating NTS compressors, and the gas that cannot be accounted for and billed in the measurement and allocation process. The incentive aims to reduce both the cost and amount of shrinkage on the NTS. The incentive is comprised of three components:

- Compressor Fuel Use (CFU): The energy used to run compressors to transport gas through the NTS;
- Calorific Value (CV) shrinkage: The energy which cannot be billed due to the provisions of the Gas (Calculation of Thermal Energy) Regulations 1996 (amended in 1997), and;
- Unaccounted for Gas (UAG): The quantity of gas which is primarily attributable to leakage from the NTS.

Summary of our December proposals

3.74 In December, we proposed retaining the NTS shrinkage incentive in RIIIO-GT2 as a symmetrical ODI to encourage NGGT to take reasonable steps to minimise the costs of shrinkage.

3.75 We noted the feedback from stakeholders that the shrinkage target-setting process is not transparent and may be producing targets that are not challenging enough. Acknowledging this, we stated our proposal to require NGGT to review the NTS Shrinkage Incentive Methodology<sup>12</sup> with a view to making it more transparent and to ensure targets are appropriately challenging and verifiable.

3.76 We also consulted on whether the CFU element of the shrinkage incentive should be removed and instead included within NGGT's baseline totex allowance. We sought stakeholders' views on the extent to which shrinkage is under control of the GSO, and what actions the GSO can take to manage shrinkage.

<sup>12</sup> <https://www.nationalgrid.com/sites/default/files/documents/45650-Shrinkage%20Incentive%20Methodology%20Review.pdf>

Summary of responses

- 3.77 Seven stakeholders commented on the NTS Shrinkage incentive. In general, they welcomed our overall proposal to retain a symmetrical ODI. However, there were differing views regarding the elements that contribute towards the incentive as well as the calibration of the incentive.
- 3.78 Overall, stakeholders agreed with the intent of the ODI and supported NGGT being encouraged to minimise the cost of shrinkage. A consumer group argued that rewards for reducing shrinkage must not come at an unreasonable cost to consumers.
- 3.79 Some stakeholders noted that NGGT has outperformed on this incentive during RIIO-GT1, and expressed the need to review the NTS Shrinkage Incentive Methodology Statement. One stakeholder referred to concerns regarding the extent to which shrinkage is under NGGT's control and suggested that the incentive should only be retained if there is greater confidence in the target-setting process and if it can be confirmed that all aspects of the incentive components are within NGGT's control.
- 3.80 NGGT has stated that it would welcome dialogue with regard to the target-setting methodology, in particular whether there are suitable alternatives to the reference prices currently used in the target-setting methodology.
- 3.81 Two stakeholders supported our proposal to stop incentivising the CFU element of the shrinkage incentive. One energy supplier argued that NGGT's focus on environmental impact should not be incentivised and instead should be business as usual. The supplier noted CFU is gas that is directly related to the usage and efficiency of NGGT's compressors and should be treated as part of NGGT's business as usual activities. By removing CFU from the incentive, the supplier argued that NGGT would be able to focus on the other components of the incentive and would expect NGGT to develop initiatives to address these.
- 3.82 NGGT did not support our proposal to include the CFU element of shrinkage in its baseline totex allowance. NGGT argued that this could result in cost exposure, relating to uncertainty in volume and price during the price control. NGGT stated that the CFU element is largely influenced by the supply and demand patterns on the network. NGGT also said that if CFU costs are included within its baseline totex allowance, the gain/loss on shrinkage would be absorbed into a much larger gain/loss within totex and would therefore be a less powerful incentive.
- 3.83 One energy network noted that once the ongoing gas charging review (UNC0678<sup>13</sup>) is completed, charges may not be cost-reflective in terms of specific locations and will therefore not reflect that exit capacity at one location requires more use of a compressor than capacity at another location. They also said a decision to remove CFU from the shrinkage incentive should not be dependent on the potential removal of locational charges.

Decision

- 3.84 We have decided to remove the CFU element from the Shrinkage incentive. In reaching our decision, we have considered the extent to which CFU is under NGGT's control and the dependency of the CFU costs on NGGT's constraint management actions, compressor running hours and energy market prices. We

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<sup>13</sup> UNC Modification proposal UNC0678/A/B/C/D/E/F/G/H/I/J (Urgent) - Amendments to Gas Transmission Charging Regime. <http://www.gasgovernance.co.uk/0678>

have also considered the arguments expressed by some stakeholders that managing CFU is business as usual. We agree with stakeholders that CFU should not be included in totex as this would also incentivise CFU. Therefore, making CFU a pass-through cost is more appropriate. We consider it appropriate to maintain the existing forecasting and reporting requirements for CFU to ensure that we can continue to monitor these costs in RIIO-2.

- 3.85 In our view, NGGT should not continue to be incentivised for the two smaller components of this incentive<sup>14</sup> - UAG and CV shrinkage - unless it is able to demonstrate that the two elements are within its control and have provided value for money to consumers during RIIO-GT1. In light of our decision to remove the CFU element from the incentive, we also need to be convinced that it is worthwhile continuing to incentivise the other two elements given their considerably lower materiality.

Next steps

- 3.86 We expect NGGT to provide evidence in their Business Plan to demonstrate that the UAG and CV Shrinkage elements of the incentive are under its control and provide value for money for consumers. Depending on the evidence provided we will consider the discontinuation or redesign of UAG and CV Shrinkage elements of the shrinkage incentive.

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<sup>14</sup> In 2017/18, CFU, UAG and CV shrinkage represented 79%, 20% and 1% of the total NTS shrinkage cost (around £69m) respectively.

## 4. Outputs: Maintain a safe and resilient network

Our package of outputs and incentives for RIIO-GT2 is designed to ensure the efficient delivery of a safe and resilient network that is also responsive to change.

### Introduction

- 4.1 Network companies have to provide a safe and resilient network for existing and future consumers. Actions that they take in RIIO-2 should deliver a network that is efficient and responsive to change.
- 4.2 Whilst there are existing RIIO-1 mechanisms that were designed to facilitate a safe and resilient network, these are now insufficient to fully capture the impacts of the changes in gas flows<sup>15</sup> on the capacity and capability needs of the NTS and its users. As a result, there is a risk that customers are exposed to the cost of maintaining a level of resilience of the physical assets that is, perhaps, no longer required.
- 4.3 Our RIIO-GT2 package seeks to provide a combination of incentives and other mechanisms to help NGGT make the most efficient investment decisions for the benefits of all consumers and NTS users.
- 4.4 In this chapter, we set out our decisions on the following areas:
  - understanding the future capability needs of the network: NGGT will be required to review the physical capability of the NTS. The purpose of this review is to understand the future capability requirements of the network, and develop an appropriate target level of network capability that will be delivered during the RIIO-GT2 period
  - arrangements for unsold capacity: NGGT will be required to conduct a systematic review of the current arrangements for unsold capacity. We expect this work to be done outside of the RIIO-2 process, and we do not expect it will not form part of the RIIO-GT2 framework.
  - other outputs relating to ensuring a safe and resilient network, including the 1:20 peak day demand capability output and safety output.
- 4.5 We will also introduce the Network Asset Risk Metric (NARM), to ensure NGGT undertake targeted, risk-based interventions that will enhance the overall resilience of its network. To further support this, there are also additional outputs to ensure NGGT's cyber and physical site security are robust. Further information on the output(s) related to these areas can be found in the Core Document, Chapter 5 on Enabling Future Resilience
- 4.6 This chapter should be read in parallel with:
  - Chapters 4, 5 and 9 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)

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<sup>15</sup> Changes to the amount and patterns of gas flows.

- 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-GT2

Table 3: Summary of RIIO-2 output decisions

Output name	Output type	Company driven target**
Annual Network Capability Assessment	Licence Obligation	No
Maintain 1:20 peak day demand capability	Licence Obligation	No
Network Asset Risk Metric	PCD/ODI	Yes
Cyber resilience	PCD	Yes
Physical security	PCD	No
<b>Bespoke outputs</b> (NGGT may consider other areas for inclusion in its Business Plan)		

\*\* Company driven target signifies an output where we expect to see extensive company-led engagement (including with their User Group) to justify a stretching performance target.

### Network Capability Review

Purpose	To ensure NGGT delivers an NTS that has the physical capability to efficiently meet the needs of NTS users now and in the future.
Decision	<ul style="list-style-type: none"> <li>• NGGT will deliver a network capability review as part of its Business Plan submission (including draft versions in its July and October Business Plan submissions). The review will incorporate:                             <ul style="list-style-type: none"> <li>- an Initial Network Capability Report</li> <li>- a Network Capability Target Report</li> <li>- a Baseline Obligated Capacities Report</li> </ul> </li> <li>• Ofgem will introduce an obligation on NGGT to review network capability annually.</li> <li>• Where provided, expenditure for delivery of network capability targets will be subject to PCDs, as appropriate.</li> </ul>

### Summary of issue

- 4.7 The Gas Transporters licence defines the level of physical capability of the NTS that NGGT is required to maintain.<sup>16</sup> This is done with reference to a set of obligated entry/exit capacity baselines,<sup>17</sup> which set out the level of capacity that can be booked by shippers at entry and exit points on the network.
- 4.8 The obligated entry/exit capacity baselines are unchanged since they were put in place over a decade ago. Given substantial changes in demand and flow patterns on the NTS, there is a risk that the obligated levels of capacity no longer reflect the needs of NTS users.
- 4.9 Rolling forward the current levels of obligated capacity without considering whether they remain appropriate could lead to substantial consumer detriment due to inefficient network investment.<sup>18</sup> While NGGT is also able to use various commercial tools to manage gas flows (ie where the obligated capacity exceeds the physical capability of the NTS), consumers are exposed to the costs associated with the use of these tools.
- 4.10 We want to establish a framework for the ongoing management of network capability that adheres to the following principles:
- NGGT's proposed network investments are driven by the actual and forecast needs of NTS users now and in the future
  - to the extent that funding is provided through the price control for expenditure on the NTS, NGGT are held to account for the delivery of appropriate levels (informed by user requirements) of actual physical capability
  - NGGT effectively manage the trade-off between investing in physical assets versus utilising commercial tools for meeting existing and future demands.

### Summary of our December proposals

- 4.11 In our December consultation, we proposed that NGGT should review the physical capability of the NTS for RIIO-GT2 to consider whether current levels of baseline obligated capacities at each entry and exit point remain appropriate in light of changing user needs ('the network capability review').
- 4.12 We proposed that the network capability review should be divided into: assessments required by NGGT to be submitted as part of its Business Plan; and, ongoing outputs for the RIIO-GT2 price control. These are summarised below.
- 4.13 We proposed NGGT share the outputs its network capability review via three reports that it would include as part of its Business Plan submissions (including submissions in July and October) including an Initial Network Capability Report, a Network Capability Target Report and a Baseline Obligated Capacities Report. We set our expectation was that NGGT would consult extensively with stakeholders in

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<sup>16</sup> Special Condition 5F [https://epr.ofgem.gov.uk//Content/Documents/National%20Grid%20Gas%20Plc%20-%20Special%20Conditions%20Consolidated%20-%20Current%20Version.pdf?utm\\_source=ofgem&utm\\_medium=&utm\\_term=&utm\\_content=licencecondition&utm\\_campaign=epr](https://epr.ofgem.gov.uk//Content/Documents/National%20Grid%20Gas%20Plc%20-%20Special%20Conditions%20Consolidated%20-%20Current%20Version.pdf?utm_source=ofgem&utm_medium=&utm_term=&utm_content=licencecondition&utm_campaign=epr)

<sup>17</sup> Baselines define the levels of capacity that NGGT is obligated to release in GWh/d. Baselines also determine the levels above which incremental capacity is defined.

<sup>18</sup> As discussed in chapter 5 of the Sector Specific Methodology Annex: Gas Transmission [https://www.ofgem.gov.uk/system/files/docs/2018/12/riio-gt2\\_sector\\_annex\\_0.pdf](https://www.ofgem.gov.uk/system/files/docs/2018/12/riio-gt2_sector_annex_0.pdf)

developing these reports, particularly with a view to understanding the future needs of different NTS users.

- 4.14 We proposed that, following our assessment of NGGT's Business Plan (including the supplementary network capability review reports), we may propose revisions to the baseline obligated capacity levels at one or more entry or exit points.
- 4.15 We also proposed to create two new licence obligations for NGGT related to network capability, these included:
- an Annual Network Capability Assessment: NGGT would be required by its licence to develop annual reports setting out the physical capability of the network at a specific point in each year of the price control period. We would use these reports to assess the progress made by NGGT in meeting its network capability output (below)
  - a Network Capability Output: NGGT would be required by its licence to deliver a target level of physical capability by the end of the RIIO-GT2 price control period. The target would be based on its network capability target report.
- 4.16 We proposed a capacity review uncertainty mechanism in the form of a price control re-opener which we suggested would enable either NGGT or Ofgem to propose changes to the Network Capability Output to reflect changes to the network capability target that may be necessary or appropriate in light of unforeseen changes to demand, supply or network conditions.

#### Summary of responses

- 4.17 Eight stakeholders responded to our proposals on Network Capability. All broadly agreed with our proposals for NGGT to undertake a review of the physical capability of the NTS. Some stakeholders expressed concerns about reviewing baselines and the impact this may have on the market.
- 4.18 Some suppliers stated that NGGT should carry out their Network Capability assessment as part of their BAU activities and that the review should consider whole system impacts.<sup>19</sup>
- 4.19 Some stakeholders highlighted that flexibility within the network is important and that steps need to be taken to ensure the Network Capability review does not distort gas capacity bookings or create artificial constraints.
- 4.20 One industry group stated that the outcome of the Network Capability Assessment will only be as good as the input data and that an overly simplistic approach could fail to represent the capability of the network.
- 4.21 NGGT disagreed with our proposal to make the delivery of a target level of capability a Licence Obligation and suggested it should instead be a PCD. NGGT also disagreed that lower demand and lower supply has led to abundant spare capacity on the network. With regard to reviewing the capacity baselines, NGGT stated that a 'baselines only' assessment would be too narrow and that it may be inappropriate to link a review of baselines to the price control due to its complexity.

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<sup>19</sup> For example, whether GDNs should be expected to provide flexibility, as well as interactions with the electricity market

Decision

- 4.22 We will require NGGT to undertake a network capability review, which will be delivered as part of its Business Plan. This will be comprised of:
- an **initial network capability report** setting out the physical capability requirements of the NTS on 1 April 2021 based on user needs
  - a **network capability target report** setting out user requirements for network capability that NGGT will deliver by the end of the RIIO-GT2 price control period. It should also set out NGGT's longer-term forecast of the levels of physical capability the NTS must provide to efficiently service user needs
  - a **baseline obligated capacities report** setting out the results of its assessment of the appropriateness of the current levels of baseline obligated entry and exit capacities including any proposals for revisions to baseline capacities.
- 4.23 We expect NGGT's Business Plan for RIIO-GT2 to incorporate the outcomes of its network capability review such that the Plan sets out a level of investment that is efficient to deliver user capability needs over the RIIO-GT2 period.
- 4.24 We acknowledge stakeholder views that there may be other metrics in addition to the baseline obligated capacities that could provide a more holistic measure of network capability and better reflect user requirements of the network. We welcome proposals for additional network capability metrics, where appropriate, that are informed by extensive stakeholder consultation.
- 4.25 We will assess the baseline obligated capacities report and proposals for other metrics and we may decide to revise the baseline obligated capacity levels at one or more entry or exit points, or introduce alternative metrics as a measure of physical capability.
- 4.26 The network capability report should inform NGGT's Business Plan, and NGGT should show detail how it will deliver user requirements efficiently through physical network capability and/or commercial tools.
- 4.27 We will put in place an obligation on NGGT to produce an **Annual Network Capability Assessment**. This should:
- provide an annual review of the progress NGGT is making in delivering the capability identified in the Network Capability Target Report
  - monitor changing user needs and update Ofgem on how NGGT are planning and developing the network to deliver against these needs, and
  - review how changes in flows across the NTS may impact user needs and levels of capability required beyond RIIO-2.
- 4.28 After considering stakeholder responses, and given the current lack of clarity regarding what any capability targets should be, we have decided not to introduce an obligation requiring NGGT to deliver a target level of capability at this time. We will continue to consider whether additional outputs are required to ensure there are meaningful targets in place to deliver the network capability review and ensure the network is managed efficiently to meet user needs.
- 4.29 Following further consideration, we have decided that there is no need for an uncertainty mechanism that would enable NGGT or Ofgem to propose changes to the Network Capability Targets during RIIO-GT2. Should the need to make

changes to the Network Capability Targets arise,<sup>20</sup> we expect to make appropriate changes to the licence conditions through the licence modification process.

- 4.30 Where investment is required to achieve a level of network capability by the end of RIIO-2,<sup>21</sup> we expect to set PCDs to hold NGGT to account for the successful delivery of those projects.
- 4.31 We acknowledge stakeholder concerns regarding potential revisions to the existing capacity baselines. We note that it is accepted that levels of demand, and patterns of gas flows have changed considerably. However, the current capacity baselines have not been reviewed for over 10 years. Given we will shortly be reviewing proposals for network investment for RIIO-GT2, we consider this is an appropriate time to review the level of physical capability NTS users require now and in the future. Nonetheless, as part of our assessment of NGGT's network capability review we will consider alternative metric(s), where proposed, that could provide a more holistic measure of network capability where NGGT can justify that the metric(s) better reflects user requirements of the network. Alternative metrics must be informed by extensive stakeholder consultation.

#### Interaction with other policy areas

- 4.32 We expect NGGT's Business Plan to be informed by the outcomes of its network capability review, including submissions in July and October. Our assessment of NGGT's Business Plan will carefully consider the quality of NGGT's network capability review, both in terms of the methodology and quality of information used. As such, we expect NGGT's approach to the network capability review to align with its ambition to provide a high quality Business Plan.
- 4.33 We note in the discussion of the CCM incentive that NGGT would need to consider whether the current levels of baseline obligated entry and exit capacities are set at appropriate levels, taking account of the expected costs of network investment and the risks of incurring constraint management costs. We expect that, in proposing appropriate targets for the CCM incentive, NGGT takes account of potential changes driven by the network capability review.

#### Next steps

- 4.34 Following our assessment of NGGT's Business Plan, we may decide to revise the baseline obligated capacity levels, or introduce alternative metrics as a measure of physical capability. If we were to do so, we would consult on these proposed revisions as part of our broader consultation on our Draft Determinations for the RIIO-2 price control in 2020.
- 4.35 We will work closely with NGGT to develop an appropriate methodology for the network capability review. However, it will be NGGT's responsibility to ensure that the results of the network capability review underpin its expenditure proposed in its Business Plan.

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<sup>20</sup>For example, this can come as a result of NGGT's Annual Network Capability Assessment

<sup>21</sup> We expect all investment within NGGT's Business Plan to be clearly underpinned by the outputs of the network capability review.

### Arrangements for accessing unsold capacities

Decision	NGGT to review current arrangements for accessing unsold capacities systematically. We do not expect this work to form part of the RIIO-2 framework and will not take place as part of the RIIO-2 process.
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### Summary of issue

- 4.36 Entry and exit capacity depends on the capability of the wider network. It is therefore possible to 'substitute' network capacity between entry points and between exit points. The arrangements for accessing unsold capacity govern how NGGT can re-allocate ('substitute') unsold network capacity to where it is needed.
- 4.37 Since its introduction, capacity substitution has been used to satisfy all new incremental capacity requests without additional investment in the network. As NGGT receives no additional funding for substituting capacity, substitution delivers real benefits and lower costs for consumers.
- 4.38 However, we believe there is room for improvement within the current arrangements, particularly regarding the case for the rules around capacity substitution. We think the procedures could be improved to make the process simpler, faster and more predictable.

### Summary of our December proposals

- 4.39 In December we proposed that NGGT should review the current arrangements for accessing unsold capacity and develop new arrangements where appropriate to ensure simpler, faster and more predictable access to unsold capacities. We set out what we thought, at a minimum, such a review should cover.
- 4.40 We proposed to require NGGT to submit, as part of its Business Plan, a 'report on revised arrangements for accessing unsold capacities on entry and exit'. The proposal was that the report should include a description of the assumptions made and an estimate of the impact the proposed changes would have on different users of the network. It should also include an implementation plan to introduce the new arrangements that would operate from April 2021 at the latest.

### Summary of responses

- 4.41 The majority of the eight respondents who commented agreed with our December proposal.
- 4.42 Several respondents, however, expressed concerns over the amount of work associated with the proposed review and the interactions with other initiatives that are currently underway.
- 4.43 One energy supplier expressed their concerns that the introduction of entry zones during the next price control period could generate tariff uncertainty, contract risk and cost, and potentially have an unintended impact on wholesale prices.
- 4.44 NGGT supported the review of arrangements for accessing unsold capacities. However, it noted that the scope of the review would be wide and the process could take years to complete in full. Furthermore, NGGT considered that any changes to the obligated baseline capacities would need to be mindful of reduced capacity for substitution processes, charging impacts and the availability of capacity products for customers.

- 4.45 Several respondents, including NGGT, disagreed with our proposal to require NGGT to submit a 'report on revised arrangements for accessing unsold capacities on entry and exit' as part of its RIIO-2 Business Plan. One respondent agreed with our proposal that there should be a licence obligation on NGGT to review the current arrangements for accessing unsold capacities.
- 4.46 NGGT said that linking the review of access arrangements with the RIIO-2 process could result in limited scope, delayed progress of some elements, or a rushed review of some elements of access arrangements.
- 4.47 Two respondents noted that some initiatives to change arrangements for accessing unsold capacities were already happening elsewhere. One respondent proposed that the review of access arrangements should include the following:
- a review of the substitution process which applies to capacity above baseline
  - a review of the process of moving capacity below baseline which is the subject of UNC modification proposal UNC0671<sup>22</sup>
  - a review of the User Commitment requirements for both entry and exit (modification proposals UNC0667<sup>23</sup> and UNC0671).
- 4.48 An industry body expressed their concerns that Ofgem may be suggesting a solution for the future arrangements of accessing unsold capacities rather than identifying issues to be considered. It also stated that reduced baselines as a result of the Network Capability Assessment could limit opportunities for substitution and potentially lead to increased prices for capacity.

#### Decision

- 4.49 We have decided to invite NGGT to review current arrangements for accessing unsold capacities systematically. We now want this to be done outside of the RIIO-2 framework.
- 4.50 The majority of stakeholders who responded agreed that the current access arrangements should be revisited. However, they expressed concerns about whether such a review should follow the RIIO-2 timeline. NGGT argued that such a review, particularly regarding the consideration of new access arrangements on a zonal basis, would be comprehensive and lengthy.

#### Next Steps

- 4.51 We acknowledge that some elements of the review of arrangements for accessing unsold capacities are already taking place elsewhere.<sup>24</sup> We also acknowledge that the RIIO-2 timelines might not allow for a thorough and timely review of future arrangements on a zonal basis. However, we expect NGGT to continue to simplify the user commitment requirements, lead times and other aspects of arrangements for accessing unsold capacities on entry and exit. We also expect NGGT to consider new, simpler, faster and cheaper arrangements, as soon as possible.

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<sup>22</sup> Modification Proposal UNC0671 - New Capacity Exchange process at NTS exit points for capacity below baseline. <http://www.gasgovernance.co.uk/index.php/0671>

<sup>23</sup> Modification Proposal UNC0667 - Inclusion and Amendment of Entry Incremental Capacity Release NPV test in UNC. <http://www.gasgovernance.co.uk/index.php/0667>

<sup>24</sup> As part of the current ongoing review of the capacity and capacity release methodology statements, as well as a part of the UNC modification proposal process

- 4.52 We expect NGGT to consult extensively with stakeholders in developing new arrangements for accessing unsold capacities, particularly with a view to understanding the future needs of different NTS users.

**Maintain 1 in 20 peak day demand capability**

Purpose	Ensure NGGT efficiently manages the network to be able to meet a 1-in-20 peak demand severe weather event.
Decision	Retain licence obligation for NGGT to meet the 1-in-20 peak day gas demand.

Summary of issue

- 4.53 The 1-in-20 peak day demand output provides a minimum security of supply standard to protect GB gas consumers. NGGT is obliged by its licence to ensure that the transmission system is capable of meeting a level of gas demand which is only likely to be exceeded (whether on one or more days) 1 year within 20 years. NGGT is responsible for developing a view of what the 1 in 20 peak day demand should be.
- 4.54 This requirement represents the primary security of supply standard that NGGT must meet as the operator of the NTS. We supported this requirement by including it as a formal price control output in the RIIO-GT1.

Summary of our December proposals

- 4.55 In our December consultation, we proposed to retain the existing RIIO-GT1 output for NGGT to maintain sufficient capability on the network to meet 1-in-20 gas demand.

Summary of responses

- 4.56 Three stakeholders commented on our proposal. All were in support of maintaining the output. However, one stakeholder highlighted that to develop its view of 1-in-20 requirements, NGGT use the Future of Energy Scenarios (FES). The stakeholder noted this presents the risk that our assessment of the Business Plan and appropriate level for 1-in-20 peak demand is therefore solely reliant upon NGGT’s assumptions of future network needs. It was suggested that this would also be a key input into NGGT’s assessment of network capability.
- 4.57 NGGT stated that the requirement to plan the network to meet 1-in-20 conditions does not address the increased operability challenges they now face given changes in use of and flow patterns across the network. However, NGGT considered that its ongoing work to review network capability may better inform its stakeholders of these challenges.

Decision

- 4.58 We have decided to retain the current output for NGGT to maintain sufficient capability on the NTS to meet the 1-in-20 peak day gas demand. The output will remain as a Licence Obligation.
- 4.59 We recognise the importance of this output in ensuring security of supply on the network. However, we also recognise that it would not be economically efficient or beneficial to consumers for NGGT to invest in providing physical capability to meet the 1-in-20 peak day demand all year (when peak demand is limited to a few days in a year) and that the 1-in-20 peak demand does not reflect the operability challenges faced by NGGT.

4.60 We expect 1-in-20 peak day demand output to be informed by NGGT’s network capability review. This will ensure that NGGT’s investment is economically efficient in meeting 1-in-20 peak day demand conditions.

## RIIO-GT1 outputs that will be removed for RIIO-GT2

4.61 We have considered whether any outputs that currently exist in RIIO-GT1 should be removed for RIIO-GT2, either because the output will be replaced with a new regulatory mechanism, or because the output no longer provides value to consumers in RIIO-GT2. We confirm the outputs we will remove below. Removing these supports our aim to simplify the RIIO-2 price controls.

**Table 4: Summary of RIIO-GT1 outputs that will be removed**

### Safety

Purpose	To ensure that NGGT complies with applicable health and safety legislation.
Decision	We have decided to remove the output for RIIO-GT2.

### Summary of issue

4.62 In RIIO-1 we introduced the safety output which requires NGGT to comply with applicable health and safety legislation. This was done to ensure that NGGT continues to design and operate its network to ensure the safety of the public and its employees as per its statutory obligations. The HSE, further to applicable legislation, monitors and enforces performance in this area.

### Summary of our December proposals

4.63 In our December consultation, we proposed to retain the current approach under RIIO-GT1 and continue to require NGGT to design and operate its network in a manner that ensures compliance with relevant health and safety regulations.<sup>25</sup>

4.64 However, we proposed not to attach a formal price control output or delivery incentive to this requirement as NGGT's performance against its statutory obligations is monitored and enforced by the HSE. Our approach was designed to complement, rather than duplicate, the HSE's role in this area.

### Summary of responses

4.65 We received five responses to our proposals. In general, respondents supported the overarching objective to ensure that NGGT complies with health and safety legislation. Most stakeholders stated that gas transportation safety is within the HSE's remit and it is unclear as to the benefits of an output within the price control requiring NGGT to meet HSE requirements.

4.66 One stakeholder also raised concerns that the existing health and safety output does not sufficiently incentivise companies to improve safety performance and create healthier working environments. This stakeholder proposed supplementing the existing health output with a requirement to report on and set targets for improvements on working hours lost due to work-related accidents or illness.

<sup>25</sup> Including the Pipeline Safety Regulations 1996, the Pressure Systems Safety Regulations 2000 and the Gas Safety (Management) Regulations 1996.

Decision

- 4.67 We have decided to remove the safety output for RIIO-GT2.
- 4.68 We recognise that stakeholders generally support the need to ensure that NGGT complies with health and safety legislation. However, we also recognise that the HSE has sole responsibility for enforcing health and safety law for gas supply management and transportation. We do not believe that placing an additional output on NGGT to comply with HSE requirements creates any additional value.
- 4.69 The RIIO-2 package complements the requirements set out by the HSE. The Asset Resilience output along with the Network Asset Risk Metrics (NARMs) will provide sufficient incentive for NGGT to deliver an economically efficient, safe and resilient network. For this reason, we have decided that there is no need for a separate safety output RIIO-GT2.
- 4.70 We will not be placing an output on NGGT to report on improvements in working hours lost due to work-related accidents or illness because the HSE is responsible for enforcing the Health and Safety at Work Act which places specific responsibilities on the employer (NGGT) for minimising the health risk to its employees.

## 5. Cost Assessment

Cost assessment aims to determine the efficient level of costs that will enable NGGT 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 summarising and considering responses received to date. Our cost assessment approach will continue to be refined and we will publish further detail on our approach ahead of the submission of the final Business Plans in December 2019.

### Introduction

- 5.1 In Chapter 6 of the December GT Annex we set out our initial thinking, and asked for feedback, on how we intended to approach cost assessment for RIIO-GT2. We noted that our approach would continue to evolve over the coming months and could only be finalised after the assessment of NGGT's Business Plan.
- 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
  - outlines how we will engage with stakeholders over the rest of this year.

### Evolve RIIO-GT1 approach for RIIO-GT2

#### Summary of our December proposals

- 5.3 We proposed to adapt the RIIO-GT1 cost assessment approach for RIIO-GT2, as appropriate, rather than establish a new methodology.
- 5.4 We set out our intention to utilise a range of approaches to come to a view on the efficient level of totex. We noted that due to the bespoke nature of many transmission projects, a bottom-up assessment approach supported by engineering judgement would be key for many assessments.
- 5.5 We stated that we would look to use historic data from a range of sources to inform our assessments, and that we expected NGGT to provide evidence on why its submitted costs should be considered as efficient. For activities that are common across companies or sectors, we would look to use these wider data sets to establish a more robust assessment of costs.
- 5.6 Where there is uncertainty around a project's needs case or timing, but the cost data is firm, we proposed to either defer the cost assessment until the needs case is more certain, or to incorporate our view of efficient costs alongside an uncertainty mechanism. In instances where we have insufficient information to assess cost efficiency, eg for a unique activity, we said that we may also undertake bespoke assessment by subject matter experts.
- 5.7 As part of the Business Plan Data Templates (BPDTs) we proposed simplifying the categorisation of costs and increasing the level of granularity of cost reporting, as well as ensuring a clear distinction between costs incurred by the GSO and GTO.

### Summary of responses

- 5.8 Three stakeholders commented on our proposed approach to RIIO-GT2 Cost Assessment. All stakeholders who responded agreed with our proposal to build upon the RIIO-GT1 cost assessment approach for RIIO-GT2.
- 5.9 NGGT commented that Ofgem's cost assessment approach should balance between absolute accuracy and being pragmatic. NGGT stated that Ofgem's toolkit is appropriate for the assessment of NGGT's costs, with historical analysis being an important base of evidence. However, NGGT stated that Ofgem should exercise caution if applying benchmarking to activities that are unique to the Gas Transmission sector, as expenditure is less homogenous than in other sectors.
- 5.10 One supplier agreed with our approach to cost categorisation. NGGT commented that cost categories should be closely linked to outputs that the cost contributes towards delivering, by doing so this would make the monitoring of performance simpler.
- 5.11 NGGT support our proposed change to Load Related, Non-Load Related and Indirect and Non-Operational expenditure, as this aligns with totex principles and allows for linking of outputs, allowance and cost.
- 5.12 A supplier agreed with our view of a need for increased granularity and transparency in cost reporting. NGGT acknowledged our views but believe an appropriate level of granularity should be considered against defined principles of cost reporting. Greater levels of transparency and granularity may not be available in the short term due to NGGT's systems being designed to deliver RIIO-GT1 reporting requirements.
- 5.13 Additionally, NGGT expressed uncertainty around the value and availability of high granularity data for project expenditure within the Business Plan submission when projects are currently in an immature stage of development. This granularity will be possible once projects are in progress or complete.

### Decision

- 5.14 We confirm our intention to use RIIO-GT1 as a starting point to develop RIIO-GT2 cost assessment. The RIIO-1 framework has proved to be successful in driving NGGT's performance and thus we do not think it is necessary to build a completely new approach.
- 5.15 As part of our cost assessment we will determine the most appropriate techniques for each cost category, including benchmarking. We will also expect NGGT to clearly set out why its own cost assessment is appropriate as part of the Business Plan.
- 5.16 For immature projects we note that NGGT may not have the granularity required but, for us to consider baseline allowances, we expect NGGT to provide sufficient detail to give us confidence both in the need for the investment and efficient costs. We will also consider the use of PCDs and uncertainty mechanisms, including revenue drivers and re-openers as part of our Business Plan assessment.
- 5.17 We note NGGT's view that there will be a transition period when it comes to any additional reporting requirements and we expect NGGT to clearly highlight where it can't provide data, explaining why and what it is doing to address the issue.

5.18 We have reflected our proposals for increased granularity and transparency in the draft BPDTs and investment decision pack which were published in March.<sup>26</sup> We will continue to work with NGGT to develop the final BPDT and investment pack prior to publication of the final template in September.

Next steps

5.19 We will publish further detail on specific elements of our approach to cost assessment during summer 2019.

5.20 We will continue to engage on the draft versions of the RIIO-GT2 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.

5.21 We may use cost assessment working groups to discuss potential approaches and relevant considerations for certain cost activities.

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<sup>26</sup> <https://www.ofgem.gov.uk/publications-and-updates/riio-2-draft-data-templates-and-associated-instructions-and-guidance>

## 6. Uncertainty Mechanisms

We will include uncertainty mechanisms within the RIIO-GT2 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.<sup>27</sup> Using uncertainty mechanisms is important so that we do not damage incentives on companies to be efficient, do not unnecessarily expose companies to risks outside of their control, or expose consumers to material forecasting risks at the price control review.
- 6.2 The suite of uncertainty mechanisms we will include for RIIO-GT2 cover several uncertain areas that we identified in our December consultation:
- Uncertainty mechanisms to align allowances with delivery
  - Uncertainty mechanisms for areas fully outside of network companies' control.
- 6.3 Table 5 below sets out the uncertainty mechanisms for RIIO-2 that will apply to all the networks as well as the GT specific uncertainty mechanisms. Information on the uncertainty mechanisms that will apply in the same way across RIIO-GT2, GD2 and ET2 controls are described as 'Cross-sector'.
- 6.4 This chapter should be read in parallel with:
- Chapter 7 of the Core Document, which provides further information on:
    - our overall approach to managing uncertainty under RIIO-2
    - our current approach on the level of materiality thresholds that will apply to each re-opener mechanism
  - the RIIO-2 Finance Decision Annex and Chapter 7 of the Core Document, which provide information on the specific 'cross-sector' uncertainty mechanisms that will be implemented
  - The forthcoming update of the Business Plan Guidance, which will provide further 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 GT Annex which provides more detail on the proposals we put forward and have summarised in this chapter.

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<sup>27</sup>Mechanisms include: indexation, volume drivers, specific re-openers, and pass-through costs.

**Table 5: Summary of the uncertainty mechanisms that will be part of RIIO-GT2**

Name	Type of mechanism
<b>Cross-sector</b>	
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 <sup>28</sup>
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
<b>GT2 specific</b>	
Incremental capacity	Re-opener
Compressor Emissions Costs	Re-opener
Pipeline diversions	Re-opener
Quarry and Loss of Development	Re-opener
Policing cost associated with Counter-Terrorism Act 2008	Pass-through
Independent Systems	Pass-through
The Gas Transporters share of Xoserve costs	Pass-through

## RIIO-GT2 specific uncertainty mechanisms

6.5 The following section provides details of the uncertainty mechanisms we are seeking to retain, or introduce, for RIIO-GT2.

<sup>28</sup> Triennial review

## **Funding for incremental entry and exit capacity**

### Summary of issue

- 6.6 NGGT's licence sets out the amount of entry and exit capacity that it is required to offer to NTS users, known as baseline obligated entry and exit capacities.<sup>29</sup> The licence also requires NGGT to respond to signals received for new entry or exit capacity that are in excess of the obligated levels of capacity as set out in NGGT's licence.
- 6.7 If NGGT releases additional entry or exit capacity in response to these signals, it may be necessary to carry out work on the NTS to accommodate this additional capacity. There is considerable uncertainty about this work and the associated costs which therefore means that we do not have sufficient certainty to provide allowances in advance to cover NGGT's costs.
- 6.8 The current RIIO-1 price control includes a revenue driver mechanism that determines the amount of additional allowances that NGGT would receive if new capacity is released. The revenue driver is based on the Generic Revenue Driver Methodology (GRDM), developed by NGGT and approved by Ofgem. The methodology draws on a unit cost library developed in 2012 as part of the RIIO-1 price control.
- 6.9 However, this revenue driver has not been used during the current RIIO-GT1 price control as NGGT has accommodated all requests for new capacity without the need for additional investment on the NTS. The current approach, which places an obligation on NGGT to maintain the Generic Revenue Driver Methodology (GRDM), may not be appropriate in light of the fact that the revenue driver mechanism has not been used since 2007.

### Summary of our December proposals

- 6.10 In December, we proposed to move from a revenue driver to a re-opener mechanism. Given that the GRDM has not been used since 2007, we considered it would be more appropriate to determine any changes to NGGT's allowances in the event of the release of new capacity on a case-by-case basis. We also noted we were not convinced of the need to update and retain the unit cost library where a case-specific approach for determining allowances was implemented.

### Summary of responses

- 6.11 Four stakeholders commented on our approach for the incremental entry and exit capacity uncertainty mechanism. Most respondents supported the continued need for a mechanism to adjust allowances in the event of incremental entry and exit capacity being released.
- 6.12 Stakeholders broadly considered an uncertainty mechanism was appropriate given the ongoing uncertainty regarding whether such incremental needs will arise in response to changing customer requirements, and if they do arise, the scale of the scope of work and costs that may be required.

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<sup>29</sup> Table 6 of Special Condition 5F

[https://epr.ofgem.gov.uk//Content/Documents/National%20Grid%20Gas%20Plc%20-%20Special%20Conditions%20Consolidated%20-%20Current%20Version.pdf?utm\\_source=ofgem&utm\\_medium=&utm\\_term=&utm\\_content=licencecondition&utm\\_campaign=epr](https://epr.ofgem.gov.uk//Content/Documents/National%20Grid%20Gas%20Plc%20-%20Special%20Conditions%20Consolidated%20-%20Current%20Version.pdf?utm_source=ofgem&utm_medium=&utm_term=&utm_content=licencecondition&utm_campaign=epr)

- 6.13 Most stakeholders supported moving to a case-by-case approach for assessing funding for incremental capacity given it removes the limitations inherent in the use of a generic cost library as a proxy for specific project cost estimations. NGGT also state that irrespective of whether there exists a formal requirement to maintain a GRDM as a whole, a basis of project cost estimation will still be needed for application of the NPV test as part of the incremental capacity release processes (which is being reviewed resulting from changes anticipated from the Charging Review).
- 6.14 One energy supplier states that where NGGT undertakes a capability review of the NTS, it is expected that obligated entry and exit capacities will more closely align with consumers' and NTS users' needs over RIIO-GT2, therefore the need for funding for incremental capacity during RIIO-GT2 will be highly uncertain.
- 6.15 NGGT stated that a materiality threshold should not be applied because there are no other means to remunerate such incremental investment.

#### Decision

- 6.16 We have decided to remove the revenue driver and introduce a re-opener mechanism to manage potential costs associated with the release of incremental capacity. We consider a case-by-case assessment of costs is more appropriate given incremental capacity costs have not been incurred since 2007. We have decided to remove the unit cost library element of the GRDM. This is because it does not cover all the specific assets required for a given scheme and there is a high level of site specific variability. For example, for pipeline route costs are dependent upon site specific characteristics. This includes elements such as ground conditions, population density, road/rail/river crossings etc.
- 6.17 We will consider the materiality threshold to trigger the reopener at the Draft Determination stage. Further detail on materiality thresholds can be found in Chapter 6 of the Core Document.

#### **Compressor Emissions Costs (Industrial Emission Directive and Medium Combustion Plant)**

##### Summary of issue

- 6.18 In RIIO-GT1, we included a baseline allowance for work on compressor sites to comply with the Integrated Pollution Prevention and Control Directive (IPPCD) and the Industrial Emission Directive (IED). This was based on information provided by NGGT in its Business Plan at the time.
- 6.19 We recognised that there was uncertainty about these costs, and created an output for NGGT to develop an integrated plan for compliance with emissions legislation, which should consider all feasible options and select the most efficient option for each site. We said that if, following the development of the integrated plan, NGGT's planned expenditure is different to the baseline allowance, we would adjust this allowance up or down as part of a re-opener mechanism.

##### Summary of our December proposals

- 6.20 For the RIIO-2 price control, we proposed to retain a re-opener mechanism for costs relating to compliance with the directives.

### Summary of responses

- 6.21 Respondents generally wanted to see some flexibility regarding the uncertainty around the needs case for retaining compression capability at a site, or around the costs of replacement work for non-compliant units. See Chapter 3 section on Compressor Emissions.

### Decision

- 6.22 We will retain a re-opener mechanism for costs relating to compliance with the directives. See Chapter 3 section on Compressor Emissions for further details.

## **Pipeline diversion costs**

### Summary of issue

- 6.23 Our Final Proposals for the RIIO-1 price control included a re-opener provision for NGGT to recover those costs incurred, or expected to be incurred, in relation to diverting existing pipelines.

### Summary of our December proposals

- 6.24 For RIIO-2 we proposed to maintain a re-opener provision for pipeline diversion costs to the extent that these cannot be reasonably recovered from parties requesting the diversion.

### Summary of responses

- 6.25 Three stakeholders commented on our proposals to maintain a re-opener provision for pipeline diversion costs. Most stakeholders agreed with our proposal with one industry body stating that within NGGT's Business Plan submission, it should identify outputs clearly, on a case by case basis, for any unexpected cost items.
- 6.26 NGGT also stated that we should use the experience from the RIIO-1 re-openers and ensure that all relevant circumstances giving rise to non-customer funded diversions are captured in the licence conditions for RIIO-2.

### Decision

- 6.27 For RIIO-2 we have decided to retain a re-opener provision for pipeline diversion costs to the extent that these cannot be reasonably recovered from parties requesting the diversion. We have decided to retain the re-opener because the additional costs that may arise from the need for NGGT to divert existing pipelines are likely to be substantial, but given the level of uncertainty around the need to divert pipelines it would not be in consumers best interests to provide ex ante funding for such work. In retaining the re-opener, we will review the cost items that NGGT may recover in relation to diverting existing pipelines.

### Next Steps

- 6.28 As part of NGGT's well justified business plan we expect an explain of all the relevant circumstances that give rise to non-customer funded diversions for our consideration.

## **Quarry and Loss of Development**

### Summary of issue

- 6.29 In RIIO-1 we included a provision for additional allowances to be applied for relating to costs incurred, or expected to be incurred, by NGGT in relation to

settling any claims which have been demonstrably challenged by NGGT. These costs could include:

- loss of crop and drainage
- loss of land development (including in relation to housing and quarrying)
- sterilised minerals
- landfill and tipping.

#### Summary of our December proposals

6.30 We proposed to remove this provision for RIIO-2 as we considered that there is greater level of predictability about these costs, given information received about settled claims during the RIIO-1 price control, and that these costs should be included within NGGT's baseline allowances.

#### Summary of responses

- 6.31 Two stakeholders commented on our proposal for removing this uncertainty mechanism for RIIO-2.
- 6.32 One supplier stated that the uncertainty mechanism should be retained but it should be refocused exclusively on material one-off claims. They also stated that during the 2018 re-opener window, the discrepancy between the Final Proposals document and NGGT's licence and Price Control Financial Model was highlighted. The RIIO-GT1 Final Proposals document stated this re-opener should be focussed only on material one-off claims but baseline ex-ante allowances were not provided in NGGT's settlement.
- 6.33 NGGT supported the principle of moving stable elements of cost relating to quarry and loss development into baseline allowances. However, they argue that loss of development costs relating to legacy contracts are unpredictable and unforecastable.
- 6.34 NGGT therefore favour retaining a re-opener in relation to specific loss of development costs relating to legacy contracts. NGGT argue that an uncertainty mechanism in this area should include the options for financial payments as alternatives to diversions where they demonstrate an overall cost saving to end consumers.

#### Decision

- 6.35 We are minded to retain the re-opener mechanism for loss of development and mineralisation only.
- 6.36 The majority of Quarry and Loss cost elements include:
- Civil consultancy
  - Land ownership compensation and easements
  - Rent without access to easements
  - Canal and river crossing trust fees
  - Crop compensation
  - Drainage.

- 6.37 We recognise that these costs are relatively stable, and have therefore decided to remove the elements listed above from the uncertainty mechanism and we will be providing ex-ante funding for these cost items relating to Quarry and Loss, which will form part of the baseline allowance.
- 6.38 However, we also recognise that there is no accurate way to predict the frequency or the likelihood of loss of development and mineralisation claims over the RIIO-2 period.

#### Next steps

- 6.39 We presently do not have enough information to make the decision on the need, or the appropriateness, of the Uncertainty Mechanism. NGGT should, as part of its Business Plan, provide information regarding the types of costs associated with loss of development and mineralisation along with strategies to manage such claims.
- 6.40 Before the final Business Plan submission, we intend to work with NGGT to continue to develop the Business Plan Data Template to capture the appropriate data.

### **Policing at Gas Facilities**

#### Summary of issue

- 6.41 The Counter-Terrorism Act 2008 (sections 85 to 90) governs the arrangements for policing at gas facilities. The security requirements, and associated costs, are set by Government and are outside of NGGT's control.

#### Summary of our December proposals

- 6.42 Our proposal for RIIO-2 was to retain the current pass-through mechanism. These costs are outside of NGGT's control and are difficult to predict in advance.

#### Summary of responses

- 6.43 We received only one response from NGGT, which supported the proposal to retain the current pass-through mechanism for policing costs. NGGT explained this is because the costs are both outside its control and are difficult to predict.

#### Decision

- 6.44 For RIIO-2 we have decided to retain the current cost pass-through mechanism because these costs are outside of NGGT's control.

### **Conveyance of gas for Independent Systems**

#### Summary of issue

- 6.45 NGGT's licence (Special Condition 11F) allows NGGT to recover the costs associated with the supply of gas to independent undertakings that are not connected to the national gas network and supplied either by liquefied natural gas (LNG) or liquefied petroleum gas (LPG).
- 6.46 For RIIO-1 we provided NGGT a pass-through mechanism for the recovery of these costs.

#### December proposal

- 6.47 Our proposal was to maintain the current mechanism in RIIO-2 because these costs relate to the implementation of government policy and are outside NGGT's control.

### Summary of responses

6.48 We only received one response from NGGT which supported our proposal to retain the current pass-through mechanism. NGGT explained this is because the costs related to implementing government policy and are outside it's control.

### Decision

6.49 For RIIO-2 we have decided to retain the current mechanism because these costs relate to the implementation of government policy and are outside NGGT's control.

## **The Gas Transporters' share of Xoserve costs**

### Summary of issue

6.50 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<sup>30</sup> 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.

6.51 Following our review, Xoserve's new FGO arrangements were implemented from 1 April 2017.<sup>31</sup> Under the new arrangements, Xoserve's cost are directly funded by Gas Transporters, shippers and Independent Gas Transporters (IGTs).

6.52 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.<sup>32</sup> We did not opt 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

6.53 We consulted openly on two options for funding the Gas Transporters' share of Xoserve's costs:

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

### Summary of responses

6.54 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

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<sup>30</sup> The GDNs and NGGT are collectively known as Gas Transporters.

<sup>31</sup> 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>

<sup>32</sup> 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>

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.

- 6.55 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.<sup>33</sup>
- 6.56 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

- 6.57 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,<sup>34</sup> 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 services fit for purpose.
- 6.58 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.

### **RIIO-GT1 Uncertainty Mechanisms that will be removed for RIIO-GT2**

- 6.59 This section sets out the RIIO-GT1 uncertainty mechanisms that we will remove for RIIO-GT2. It also sets out how any associated costs that are included as part of the Business Plans will be treated.

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<sup>33</sup> Electralink runs the Data Transfer Service (DTS) for the UK electricity industry, and provides analytics and governance services to the wider GB energy market.

<sup>34</sup> As apportioned within the CDSP Data Services Contract documents.

**Table 6: Uncertainty mechanisms that will be removed for RIIO-GT2**

Name	Type of mechanism at GT1	December proposal	May decision compared to December proposal
Network Capability	Re-opener	Proposed for RIIO-GT2 but not included	Decision not to introduce re-opener – revised position from December
One-off Asset Health Costs (Feeder 9)	Re-opener	Remove for RIIO-GT2	Remove for RIIO-2 – no change from December
Network flexibility	Re-opener	Remove for RIIO-GT2	Remove for RIIO-2 – no change from December
Agency (Xoserve) costs	Re-opener	Remove for RIIO-GD/GT2 – Remove re-opener and include baseline allowances or pass-through	Decision to remove for RIIO-2 – remove re-opener and split costs into baseline allowances and pass-through
Innovation Rollout Mechanism	Re-opener	Remove for RIIO-2	Remove for RIIO-2 – no change from December

## Network Capability

### Summary of issue

6.60 As part of our RIIO-GT2 package for ensuring a safe and resilient network for consumers, we proposed that NGGT undertakes an assessment of the physical network capability and proposed a set of appropriate network capability targets as a result.

### Summary of our December proposals

6.61 Linked to the Network Capability output we also proposed to create an uncertainty mechanism in the form of a price control re-opener by which either NGGT or Ofgem would be able to propose changes to the network capability output. This would reflect changes to the network capability target that may be necessary or appropriate in light of unforeseen changes to demand, supply or network conditions.

### Summary of responses

6.62 See Chapter 4 of this document.

### Decision

6.63 We have decided that there is no need for an uncertainty mechanism that would enable NGGT or Ofgem to propose changes to the Network Capability Targets during RIIO-GT2. Should the need to make changes to the Network Capability Targets arise,<sup>35</sup> we expect to make appropriate changes to the licence conditions through the licence modification process.

<sup>35</sup> For example, this can come as a result of NGGT's Annual Network Capability Assessment.

6.64 Where investment is required to achieve a level of Network Capability by the end of RIIO-2, we will set PCDs to hold NGGT accountable for the successful delivery of those projects. We expect funding for these projects would be provided through other relevant revenue streams, such as asset health, compressor emissions reduction or load related outputs.

### **One-off Asset Health Costs**

#### Summary of issue

6.65 The One-off Asset Health Costs re-opener mechanism was designed as a means to recover costs incurred, or expected to be incurred, by NGGT in relation to specific low probability high impact events (or a series of low probability high impact events with a common trigger) not explicitly included within the allowances provided for under the Special Conditions.

6.66 We separated our treatment of asset health expenditure into two areas. The first area related to the Feeder 9 project, replacing an existing pipeline across the Humber River. The second area related to the asset health expenditure for the secondary assets within the NTS.

#### Summary of our December proposals

6.67 We proposed removing this uncertainty mechanism for RIIO-GT2 as we were not aware of any similar circumstances requiring such a mechanism - that is a high value project with uncertain solution/cost and subject to planning uncertainty. We also considered the RIIO-2 package provides sufficient accountability for NGGT to manage the likelihood and impact of high impact low probability (HILP) asset failures.

#### Summary of responses

6.68 Four stakeholders commented on our proposal regarding the One-off Asset Health Costs uncertainty mechanism. There were divided views on our proposal to remove the re-opener mechanism. One supplier stated that the uncertainty mechanism should be removed because the decision on funding for the replacement of the Feeder 9 pipeline under the River Humber has been made. Furthermore, the use of Price Control Deliverables, in combination with other uncertainty mechanisms if needed, allows for outputs and allowances to be set during RIIO-GT2 in cases in which there is not sufficient certainty of the outputs and/or allowances during the price control review.

6.69 NGGT disagreed with the proposal to remove this uncertainty mechanism. NGGT argued that the mechanism provides the ability for it to manage the continuous risk of a high impact, low probability (HILP) fault or failure on the system without resorting to re-opening a price control.

6.70 NGGT argued that the uncertainty mechanism provides a remuneration pathway for remedial work relating to HILP events and it is in consumer's interests that the network company delivers the remedial works which are not covered by the NARM methodology.

#### Decision

6.71 We have decided to remove the re-opener mechanism for RIIO-2. We consider that the Asset Resilience output and the NARM along with the statutory obligations, which are enforced by the HSE, provide sufficient accountability for NGGT to manage the likelihood and impact of HILP asset failures.

- 6.72 Through its asset management activities NGGT should ensure that the risk to consumers is maintained within reasonable bounds. NGGT has the responsibility to invest in remedial work that results in a risk that is as low as reasonably practicable.
- 6.73 Our RIIO-GT1 Final Proposals placed a significant focus on remedial work relating to the Feeder 9 under the Humber estuary.<sup>36</sup> Respondents have not provided evidence as to why it would be reasonable, and in the interest of consumers to retain this uncertainty mechanism.

### **Network flexibility**

#### Summary of issue

- 6.74 For RIIO-1 we put in place an annual re-opener to allow NGGT to propose changes to allowed expenditure required to meet changing peak day requirements (1 in 20 obligations). Proposals had to pass a materiality threshold of two per cent of average annual forecast revenue after the application of the totex efficiency incentive rate in order to for the process to be triggered. This provision has to date not been triggered. 1 in 20 annual peak demand has also declined over the past decade and the trend is unlikely to change.

#### December proposal

- 6.75 For RIIO-2 we proposed to remove this provision as 1 in 20 annual peak demand has declined over the past decade and to date it has not been triggered. Therefore, we did not see the need to retain a similar mechanism for RIIO-2.

#### Summary of responses

- 6.76 Three stakeholders commented on our proposal on Network Flexibility with all respondents in agreement that the uncertainty mechanism should be removed for RIIO-2.
- 6.77 One supplier noted that this uncertainty mechanism is not needed because NGGT's review of baseline obligated entry and exit capacities, as part of the Network Capability work, should result in network investment levels that are appropriate for the duration of RIIO-GT2.
- 6.78 NGGT also agreed with our proposal to remove the re-opener mechanism. However, NGGT do not support the arguments put forward by Ofgem in its December Strategy Consultation to justify its removal, stating that this uncertainty mechanism was included to reflect the potential requirement to meet changing 1 in 20 peak day requirement obligations.<sup>37</sup>

#### Decision

- 6.79 We have decided to remove this mechanism for RIIO-2 as the Network Capability Assessment (see Chapter 4) provides the means to ensure NGGT delivers an NTS that has the physical capability and flexibility to efficiently meet the current and future needs of NTS users.

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<sup>36</sup> Pages 102-104: <https://www.ofgem.gov.uk/ofgem-publications/53601/3riiot1fpuncertaintydec12.pdf>

<sup>37</sup> Paragraph 7.44 [https://www.ofgem.gov.uk/system/files/docs/2018/12/riio-gt2\\_sector\\_annex\\_0.pdf](https://www.ofgem.gov.uk/system/files/docs/2018/12/riio-gt2_sector_annex_0.pdf)

## **Agency (Xoserve) costs**

### Summary of issue

6.80 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

6.81 In our December GT 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

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

### Decision

6.83 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.

## **Innovation Rollout Mechanism**

6.84 This re-opener mechanism applies to both RIIO-GD1 and T1. Its purpose is to provide network companies with additional funding to rollout proven innovation, if we approve the innovation. We have decided to remove this mechanism for RIIO-2 and have set out our reasons for this decision in Chapter 8 of the Core Document.