

Decision

RIIO-3 Sector Specific Methodology Decision – GT Annex				
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Contact:	RIIO-GT3 Team			
Team:	Network Price Controls			
Email:	RIIO3@ofgem.gov.uk			

This is our decision on the methodologies we will apply for the electricity and gas transmission and gas distribution sectors in the RIIO-3 price control, which will run from 1 April 2026.

Decision -RIIO-3	Sector S	Specific	Methodology	Decision -	- GT Annex
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Introduction

Structure of this document and associated documents

- 1.1 In December 2023 we published our RIIO-3 Sector Specific Methodology Consultation (SSMC), which followed our October 2023 decision on frameworks for future systems and network regulation (referred to as our 'Framework Decision').
- 1.2 We are now publishing our Sector Specific Methodology Decision (SSMD) for RIIO-3, following further engagement with key stakeholders and a detailed review of the 59 responses to our SSMC. Our SSMD is comprised of an Overview Document, a Regulatory Finance annex (Finance Annex), and sector specific annex documents for gas distribution (GD), gas transmission (GT) and electricity transmission (ET).
- 1.3 The Overview Document provides detail on how we will apply the Framework Decision to areas that are relevant across the sectors. The decisions in the Overview Document apply across the GD, GT and ET network companies.
- 1.4 This document is focused on the application of the RIIO-3 framework to GT-specific issues. It sets out our sector specific views on the aspects of the RIIO-3 price control that National Gas Transmission (National Gas) needs to understand to be able to put together its business plans.

What is gas transmission?

- 1.5 Great Britain's (GB's) GT network, the National Transmission System (NTS), is 7,630 km of high-pressure pipeline which transports gas from the entry terminals to gas distribution networks, or directly to power stations and other large industrial users. It is owned and operated by National Gas, which is the sole Gas Transmission Owner (GTO) and Gas System Operator (GSO) in GB.
- 1.6 National Gas, in its role as:
 - the GTO, is responsible for maintaining the integrity of its network, developing asset replacement schedules and for providing transmission services to the GSO and network users; and

 the GSO, is responsible for the day-to-day operation of the NTS, including balancing supply and demand, maintaining system pressures, providing market functions and ensuring gas quality standards are met.

Challenges for RIIO-GT3

- 1.7 Natural gas continues to play a major role in the day-to-day heating of households, industrial processes and the generation of electricity. While the role of gas is expected to change as we transition to net zero, maintaining a safe and resilient gas network through the transition remains paramount.
- 1.8 For RIIO-GT3, we will determine allowances and incentives to ensure the GTO continues to maintain a safe and resilient NTS. For the GSO, RIIO-GT3 will determine allowances to deliver its GSO functions, eg staff and IT (internal costs). It will also set GSO incentives to help optimise delivery of efficient service from a consumer perspective and minimise system operation costs (external costs).
- 1.9 Despite the role of gas changing in a net zero future, we do not expect there to be significant changes to National Gas' operational requirements during RIIO-GT3. In the medium to long term, it remains uncertain what impact a reduction in gas demand will have on the existing GT network and when this impact will occur. Therefore, we must ensure that our regulatory framework can respond to how the future unfolds.
- 1.10 While it is not known exactly how the United Kingdom (UK) will reach its statutory net zero target and five-year carbon budgets, researchers and policy makers are exploring potential pathways to hit climate targets in the most efficient and least disruptive way. This includes electrification, carbon capture, usage and storage (CCUS), low-carbon heat networks and hydrogen. Natural gas demand is expected to decline in all future pathways; however each possible pathway could result in a very different use of the gas networks. It is therefore vital that RIIO-GT3 is adaptable to a range of potential future pathways.
- 1.11 The speed, timing and overall balance of repurposing, decommissioning and retaining natural gas assets will be influenced by future government decisions on how to reach the statutory net zero target and five-year carbon budgets. In particular, the UK government's:

- development of a Hydrogen Transport Business Model (HTBM) to facilitate and support the development of hydrogen pipeline infrastructure, expected to be designed by 2025, could have important interactions with RIIO-3 funding;
- decisions on which existing gas network assets may be repurposed for CCUS to support industrial decarbonisation; and
- expected strategic decision on the role of hydrogen for heat in 2026 will be relevant for the gas networks, including for the future development of the NTS although it is likely that this decision will affect GD more than GT.
- 1.12 Decommissioning and repurposing will be complex, multi-decade processes, requiring detailed planning, legislation, funding, public buy-in, and political commitment. Neither is likely to start at scale before the mid-2030s, but there is merit in beginning the debate on how to approach these challenges.
- 1.13 We will continue to work closely with government, industry and consumer groups to help ensure the transition away from natural gas is fair and at the lowest possible cost. As part of this, we think government should develop a strategy for the future of gas to:
 - set out how to plan, and pay for, potential decommissioning;
 - consider whether further government intervention is required to support a declining consumer base to pay for historical investment in the gas network; and
 - help inform strategic gas network planning, led by the new National Energy System Operator (NESO) in its role as the long-term whole system planner, where it will have a key role in supporting the transition to net zero and informing transmission level strategic investment for National Gas.
- 1.14 Our SSMD will help to ensure that National Gas responds to these challenges in its business plans. Highlights of our package, by outcome, that we expect National Gas to deliver through RIIO-GT3 are set out below.

Infrastructure fit for a low-cost transition to net zero

1.15 It is vital that RIIO-GT3 is flexible to manage the uncertainty around the future of gas and to provide funding where appropriate. This will be achieved through a suite of uncertainly mechanisms that can flex funding up, and down, as need becomes clear. Our approach to managing the uncertain future of gas in RIIO-

- GT3, including in relation to hydrogen and potential decommissioning, is addressed in Chapters 4 and 8 of the Overview Document, and Chapter 2 of this document.
- 1.16 A key decision for RIIO-GT3 is how quickly to pay back the historical and future gas network investment through regulatory depreciation charges from a declining customer base. While accelerating regulatory depreciation will add to network charges, we consider it is important for us to act to ensure intergenerational fairness and to protect both future consumers and investors against the perceived risk of asset stranding. However, we are still considering the approach in GT given the potential to retain, or re-purpose, larger sections of the GT network. This is considered in Chapter 4 of the Overview Document and Chapter 9 of the Finance Annex.
- 1.17 We also recognise the importance for National Gas to minimise its direct impact on the environment to support net zero. To facilitate this in RIIO-GT3, we will place a greater prominence on reducing greenhouse gas emissions especially methane which is a potent greenhouse gas (see Chapter 6 of the Overview Document and Chapter 2 of this document). This includes challenging National Gas to deliver a more environmentally sustainable network by:
 - strengthening its incentives to reduce emissions from venting;
 - working with National Gas to introduce a new shrinkage procurement incentive to help ensure its procurement of gas is at the lowest cost for consumers;
 - requiring increased transparency on National Gas' actions, plans and progress to decarbonise in line with net zero;
 - ensuring that National Gas' compressor emissions are compliant with environmental legislation; and
 - introducing an annual, gas strategic planning re-opener to account for decisions arising from the NESO's Centralised Strategic Network Plan (CSNP).

Secure and resilient supplies

1.18 The importance of maintaining a safe and resilient network remains paramount given the pivotal role of the NTS in servicing its customers. Our package of regulatory mechanisms allows for maintaining and, where needed, upgrading the

- existing resilience standards to ensure security of supply. We expect investment in this area to remain the predominant driver of costs during RIIO-GT3.
- 1.19 In particular, our decisions on the Network Asset Risk Metric (NARM), physical security, cyber security, and climate resilience set out in our Overview Document (Chapters 6, 8 and 11) will provide substantial upfront funding, and hold National Gas to account to continue to deliver a secure and resilient network. Chapter 3 of this document also sets out how we will use project specific outputs and reopeners to continue to fund key investment projects, where there is a clear need.

High quality of service from regulated firms

- 1.20 Our RIIO-GT3 package of outputs and incentives challenges National Gas to continue to provide excellent customer service. These areas are focused on in Chapter 4 of this document and include:
 - tightening customer satisfaction and maintenance incentives to embed good historical performance as business as usual (BAU) for its customers;
 - ensuring that National Gas works effectively with the NESO to support its new role as the gas strategic planner;
 - incentivising a wider role in supporting the efficient operation of the wholesale gas market by delivering better forecasts for its customers; and
 - ensuring National Gas plays its full role in minimising the overall cost of system operation - where we will review the management of constraints and ensure that residual balancing costs are managed effectively given a more challenging operational environment.

System efficiency and long-term value for money

1.21 We will continue to ensure that there is sufficient investment to maintain a safe and reliable gas network, while balancing the cost to consumers of delivering this considering the uncertain future of gas. It is therefore more important than ever to set robust and efficient cost allowances by establishing a robust cost assessment toolkit. Chapter 5 of this document sets out our latest thinking on cost assessment that we will continue to develop for RIIO-GT3.

2. Infrastructure fit for a low-cost transition to net zero

- 2.1 A key aim of the RIIO-3 Framework is that network companies work towards net zero and support the transition to a smarter, more flexible, and sustainable low-carbon energy system. As such, RIIO-GT3 priorities for National Gas are to support and align with the NESO's whole system planning, as well as to place a stronger focus on the environment. This chapter also sets out how we will require National Gas to further minimise its impact on the environment.
- 2.2 This chapter should be read alongside our Overview Document, which considers:
 - the future of gas in more detail (see Chapter 4);
 - the cross-sector environmental framework to ensure that stakeholders have a clear understanding of National Gas' environmental actions and impacts during RIIO-GT3 (see Chapter 6); and
 - how we will use flexibility in the RIIO-3 price control to support network companies, including National Gas, to manage the uncertainty around the net zero transition through a suite of net zero related uncertainty mechanisms (see Chapter 8).

RIIO-GT3 outputs and uncertainty mechanisms

Gas Strategic Planning Re-opener

SSMC summary

- 2.3 The NESO will coordinate a gas strategic planning process. Between 2024 and 2026, the NESO will run a one-off process to produce a Gas Network Capability and Needs Report (GNCNR) (by December 2024) and the subsequent options assessment i.e. the Gas Options Advice Document (GOAD), by end of 2025. Together, these documents will provide the foundations for how the NTS will be considered as part of the NESO's 2026 CSNP the first longer-term plan for investment in the whole energy system.
- 2.4 Since the GNCNR will be published after National Gas' Business Plan submission and the NESO's GOAD will be produced too late to inform our Final Determinations for RIIO-GT3, we proposed introducing a re-opener to account for potential investment recommendations driven by the NESO. We proposed to have annual windows for this re-opener starting from the first year of the price control

to accommodate any changes following the publication of the GNCNR and GOAD and in the future, the CSNP.

SSMC responses

- 2.5 Stakeholders expressed their support for a re-opener to account for any changes due to NESO's planning and investment recommendations.
- National Gas called for more flexibility in the scope of the re-opener due to the NESO's evolving role, especially in relation to the CSNP and Regional Energy Strategic Planner (RESP). As such, it argued that the re-opener should not just cover the NESO's investment recommendations but also the delivery of additional National Gas activities (capex or opex) to support the NESO's evolving role (eg resilience-based activities, net zero, whole system adjustments across networks). National Gas said that due to this package of outputs, the re-opener would need to have a flexible and agile trigger.
- 2.7 A consumer group stated that effective collaboration between National Gas and NESO is essential for successful and timely network planning. As such, the working relationship between National Gas and NESO needs to be included in the Customer Satisfaction Survey ODI as well as in Business Plan Guidance (BPG) to demonstrate where National Gas' business plan proposals have been informed by the NESO. This would provide transparency to Ofgem that this engagement is taking place effectively.
- 2.8 All those that responded generally agreed that an annual window for the reopener is appropriate. Only National Gas commented on the authority triggering the annual window and suggested that the re-opener should have a more flexible trigger.

SSMD decision and rationale

- 2.9 We have decided to introduce an Authority-triggered Gas Strategic Planning Reopener to account for any changes required following the publication of the GNCNR, GOAD and the CSNP. We think this is vital given the uncertainty of costs arising from NESO's strategic planning outputs during the next price control period, and aligns with broad stakeholder support for its need.
- 2.10 We have decided that an annual re-opener window is appropriate from the first year of the price control to support NESO's evolving role and accommodate any changes from NESO's planning and investment recommendations. While National

Gas consider that greater flexibility is needed, we consider that our position is proportionate to manage the uncertainty and Authority triggered re-openers can still be activated outside of the annual window if required (see Overview Document, Chapter 11). In addition, there is already a range of existing re-openers, such as the Net Zero Re-opener, through which other NESO-triggered changes (for example from the RESPs), can be accommodated.

- 2.11 We recognise the importance of National Gas and NESO collaboration and we expect National Gas to engage with the NESO, eg on the network capability assessment that underpins National Gas' Business Plan. We think this is essential to ensure there is an understanding of similarities and differences in the future network assumptions between National Gas' network capability and NESO's GNCNR due to be published by the end of 2024.
- 2.12 In terms of the suggestion to integrate the NESO into the Customer Satisfaction Survey ODI we recognise that NESO is not National Gas' customer but rather a key new stakeholder that National Gas will engage with in several areas, most importantly gas strategic network planning. We intend to oblige National Gas to collaborate with the NESO in the area of gas strategic planning to ensure alignment with the long-term wider energy system plans, and as such we expect that National Gas will proactively consult the NESO on how it could continuously improve its performance.

Minimising networks' impact on the environment

- 2.13 In our SSMC we encouraged National Gas to focus and stretch itself in the area of environment and asked for more ambitious proposals for environmental outputs and incentives that would accelerate its contribution to achieving net zero.
- 2.14 Most stakeholders agreed with our stated direction of travel. A consumer group urged Ofgem to make use of data received from National Gas by publishing environmental performance in an easily understood format to show the environmental impact of the network. It also added that there must be clear value of additional financial incentives and that these incentives need alter company behaviour. An Environmental organisation said that reduction of methane emissions from the NTS operation should be prioritised, and that Ofgem should be sceptical of claims that emissions are outside of operator control.

- 2.15 We agree with stakeholders and have decided to require National Gas to use its business plan to put forward ambitious proposals for the environmental outputs and incentives package to reduce emissions from its operations. Our decisions on specific outputs are presented in this section. At the end of the section, we also outline our expectation with regard to National Gas' proposal to accelerate biomethane connections onto the NTS.
- 2.16 In this section we set out our decisions on how National Gas should safeguard the environment in RIIO-GT3, building on an assessment of the RIIO-GT2 mechanisms. Our aims for RIIO-GT3 environmental performance are:
 - to mitigate environmental impacts that arise from network activities and increase transparency of National Gas' actions and plans to decarbonise their networks in line with net zero;
 - to ensure that the TOs consider biodiversity and the climate crisis in new construction and mitigate environmental impacts prior to construction; and
 - improved information sharing and cooperation between the TOs on environmental initiatives.
- 2.17 The EAP, AER, BCF and Environmental Scorecard mechanisms all apply to at least two of the sectors, so we have described our views on those mechanisms in Chapter 6 of the Overview Document.

Greenhouse Gas Emissions (venting) ODI-F

SSMC summary

- 2.18 Compressor units on the transmission system are sometimes depressurised to move gas from sources of supply to areas of demand. When these assets are depressurised, gas is released which contributes GHG emissions. National Gas is expected to be proactive in their planning and innovative in their efforts to reduce venting emissions from their compressors.
- 2.19 To drive National Gas' environmental performance when venting, we proposed two options for the GHG incentive in RIIO-GT3:
 - Option 1: Retain the output but as an asymmetrical financial incentive, with a larger cap than collar and a more stretching target. This would encourage National Gas to continue to make further improvements to optimise the venting processes to the fullest extent possible; and

- Option 2: A downside only incentive, embedding historical performance and a
 more stretching target. This option assumes that reduced GHG emissions
 below the target should be considered business as usual (BAU) and that only
 underperformance would be penalised.
- 2.20 For both options, we expect National Gas to propose a target that is more challenging than the existing target to take account of improvements from existing emissions reduction funding granted to date.

Summary of responses

- 2.21 Stakeholders overwhelmingly stated that more needed to be done to tackle methane emissions, given the profound impact methane has on the environment. Upgrading technologies to monitor and address leaks was deemed to be key in reducing emissions.
- 2.22 Most stakeholders, including National Gas, were supportive of option 1 (retaining the output but as an asymmetrical financial incentive, with a larger cap than collar and a more stretching target). National Gas set out that this will drive innovation in reducing emissions further. Other stakeholders also indicated that there are positive actions that National Gas should be able to take in this area and if these are demonstrable, retaining an incentive is appropriate.
- 2.23 There was appetite among stakeholders for more stringent RIIO-GT3 targets due to the planned adoption of new technologies aimed at reducing emissions more aggressively throughout RIIO-3. In general, it was considered that we should ultimately ban routine venting and restrict non-routine venting to unavoidable circumstances.¹

SSMD decision and rationale

2.24 We have decided to retain the GHG incentive with an updated emissions targets and increased symmetrical caps and collars. We are minded to setting new caps and collars at the equivalent basis points (bps) of RoRE to approximately 0.27% of base revenue in RIIO-GT2.² This is a small increase in materiality relative to

¹ As legislated in the new EU Regulation on methane emissions reduction in the energy sector, adopted on 27 May 2024. https://www.consilium.europa.eu/en/press/press-releases/2024/05/27/fit-for-55-council-gives-final-green-light-to-cut-methane-emissions-in-the-energy-sector/

² Ex-ante base revenue has the value of £729m for each Regulatory Year of RIIO-GT2.

- RIIO-GT2³ which we consider is appropriate because of the more stringent emissions targets that National Gas is aiming to meet. We believe that considering National Gas' plans to reduce their emissions significantly throughout RIIO-GT3, along with the potential effects of the compressor upgrades, this cap and collar offers an appropriate reward and penalty incentive.
- 2.25 RIIO-GT3 targets should embed historical performance to drive further behaviour improvements and achieve more ambitious reductions in emissions. National Gas should propose and justify these as part of their business plans making reference to historical performance.
- 2.26 We also expect National Gas' target proposals to consider the rollout of new compressors to ensure that the GHG venting incentive remains aligned and stretching given expected changes in technology.⁴ For example, if a compressor is upgraded to be leakproof, the potential emissions from this station will need to be removed from the emissions target. This stands for both the elimination and the reduction of emissions.

Interaction with other policy areas

2.27 The actions that National Gas takes to manage constraints under the Entry Capacity and Exit Capacity Constraint Management (CCM) incentive may affect the expected level of compressor usage and venting.

NTS shrinkage package (GSO)

- 2.28 Shrinkage describes the energy that is consumed, lost or otherwise not accounted for in the operation of the gas network. There are two aspects to managing NTS shrinkage:
 - Volume of energy (electricity and gas) that is lost in the operation of the NTS;
 and
 - Price paid for the NTS shrinkage energy in National Gas' procurement process.

 $^{^3}$ In RIIO-GT2 the cap and collar for the incentive was +/- £1.5m (approximately 0.21% of base revenue) per annum.

⁴ We note that in 2025 we expect National Gas to complete compressor upgrade trials concluding with a comprehensive plan for implementing system wide upgrades. This plan will set out the rate and order of upgrades. Our decision on how we will evaluate and fund compressor work via a reopener and PCD is set out in the Compressor Emissions Re-opener and PCD section.

- 2.29 Together, they define the total cost of NTS shrinkage that is passed down to consumers through transmission charges. Both volume and price should be kept as low as possible in order to minimise consumers' NTS shrinkage cost.
- 2.30 Typically, the energy lost in the operation of the NTS is due to three areas (ie the NTS shrinkage components):
 - Compressor Fuel Use ('CFU'), also described as Own Use Gas ('OUG'): The
 energy (electricity and gas) used to run compressors to transport gas through
 the NTS;
 - Calorific Value Shrinkage ('CVS'): The unbilled energy arising from the Thermal Energy Regulations;⁵ and
 - Unaccounted for Gas ('UAG'): This includes leakage (ie gas lost in transportation over the network) and residual shrinkage, which is generally considered attributable to metering errors.

SSMC summary

- 2.31 We proposed the following options in relation to managing the volume and/or price of the NTS Shrinkage incentive:
 - Option 1: Continue with NTS Shrinkage as a reputational incentive, due to limited National Gas' control over price and volume of shrinkage gas;
 - Option 2: Reintroduce an NTS Shrinkage financial incentive but with a collar and a cap that is proportionate to the annual shrinkage costs. This would cover:
 - (1) the efficient purchasing of NTS shrinkage gas (for all three components of NTS shrinkage).
 - (2) The reduction of overall volume of NTS shrinkage (i.e. CFU, UAG and CVS); and
 - Option 3: Introduce a financial incentive for the UAG and CVS components only to focus National Gas on managing the increasing volumes of shrinkage

 $^{^5}$ The Gas (Calculation of Thermal Energy) Regulations 1996. The maximum daily CV average permitted by the Regulations is equal to 1.0 MJ/m³ above the lowest measured daily CV of the supplied gas into that charging area. If the supplied gas into a charging area has, at any point, a CV outside of this range, a capped CV (lowest CV + 1MJ/m³) is applied to the whole region for billing purposes and recovered under the RIIO price control.

- gas and the underlying reasons behind them, that require further investigation and mitigation.
- 2.32 Shrinkage costs are currently recovered directly from network customers as a pass-through item. In SSMC we also asked whether the costs could form part of National Gas' Totex allowance to incentivise National Gas further to manage them.
- 2.33 In our SSMC we asked whether the forecasting and recovery of the GSO costs, including NTS shrinkage costs, should be reviewed.

Summary of responses

- 2.34 The majority of stakeholders, including National Gas, believe that any NTS shrinkage incentives should only cover the areas under National Gas' control. Several stakeholders said that a review of the drivers of costs behind the three NTS shrinkage components is necessary before a new incentive is considered.
- 2.35 An environmental organisation argued that more urgency is needed regarding tackling methane emissions, including to exploit new technology and more accurately report emissions. It noted that it is not just metering errors that contribute to UAG, but also leakage and that Ofgem should investigate EU legislation and options arising from it. A consumer group said that it was concerned that metering errors represented such a big proportion of the UAG volumes. It added, that if this can be addressed via bilateral contracts with meter owners and National Gas, this may justify a reputational incentive.
- 2.36 In working groups since SSMC, two industry bodies argued in favour of a stronger incentive on UAG and CV shrinkage to investigate how these could be reduced.
- 2.37 National Gas supported the reintroduction of a financial ODI for the procurement of NTS shrinkage energy. It proposed to continue to utilise a mixture of forward and prompt trading products. A consumer group said that we should be clear on the extent to which National Gas' licence already requires it to procure shrinkage efficiently to ensure it is clear what additional value a financial incentive could bring. It said it does not believe it would be possible to set a fixed or dynamic single shrinkage target ex ante in a market as volatile as the gas. However, it added, that robust targets could be set if they are in relation to a gas price.

- 2.38 An environmental group considered that the current reputational incentive arrangements are complex and make it hard to identify the real environmental impacts.
- 2.39 Stakeholders we have engaged with prior to the SSMC stage said that a review of the drivers of costs behind the three NTS shrinkage components is needed to understand the volume of NTS shrinkage before a new incentive is considered.
- 2.40 One shipper stated that a metering reform is required and had concerns that biomethane developers are advised of no capacity when the reduced flow from the NTS could be below a technical tolerance for the accuracy of the NTS to distribution network (DN) meter.
- 2.41 An environmental group said that National Gas should be able to access a Net Zero Pre-construction and Small Projects (NZASP) type re-opener to reduce the volume of NTS shrinkage for significant investments where needed. However, any overlap with other relevant incentives should be reflected in their targets for these incentives. Stakeholders we have engaged with since the SSMC in working groups expressed their concerns about the volumes of NTS shrinkage and that action was needed.
- 2.42 National Gas was opposed to shrinkage costs moving from a pass-through to totex due to the nature of the shrinkage costs ie limited controllability of volumes, high volatility of prices, and the need to adjust the costs annually. A shipper also echoed this view. A GDN said that including NTS shrinkage costs in totex would create a risk of windfall loss and/or gain as they are unpredictable. It added that as National Gas has some role to play in energy transactions to balance the network, they may feel better placed to take such risks.
- 2.43 National Gas said that there is ongoing work with the industry (within the NTS Charging Methodology Forum (NTSCMF)) that could address the forecasting and recovery of the GSO costs, including NTS shrinkage costs and thus, a separate review may not be necessary. A shipper, on the other hand, supported a review of the forecasting and recovery of the NTS shrinkage costs and called for an investigation into costs from 2022/23, giving consideration to Uniform Network Code (UNC) modification 0847 'Introduction of a Minimum General Non-Transmission Services Charge'.

2.44 The shipper believed that National Gas' approach to procuring and treating NTS shrinkage lacks transparency, which, combined with changing shrinkage patterns, makes it difficult for network users to forecast GSO costs.

SSMD decision and rationale

Scope of the RIIO-3 shrinkage package

- 2.45 We have decided to incentivise National Gas in the areas of NTS shrinkage that it can control. We are minded to introduce a new NTS shrinkage ODI-F for the procurement of NTS shrinkage energy (see next section).
- 2.46 In addition, we expect National Gas to make use of new RIIO-GT3 funding options to reduce volumes of NTS shrinkage including due to pipeline leakage. (see section RIIO-3 funding options to reduce volume of NTS shrinkage below).
- 2.47 We also note the concerns of stakeholders about the NTS shrinkage volumes, in particular related to UAG and CV shrinkage. We have decided to initiate an Ofgem-led policy review with the industry, outside of RIIO-GT3, to consider options to reduce the volume of gas that is lost on the system and may be outside of National Gas' control (see section Ofgem-led policy review of NTS shrinkage volumes below for more detail).
- 2.48 Finally, we have decided that overall NTS shrinkage costs should remain as a pass-through item for National Gas (see section NTS Shrinkage costs in Totex and review of forecasting and recovery of NTS shrinkage costs).

NTS shrinkage ODI-F for procurement

- 2.49 We are minded to introduce a financial incentive for the procurement of NTS shrinkage energy. We note concerns from stakeholders in terms of calibrating such a financial incentive, therefore its implementation will be subject to National Gas demonstrating the consumer benefit from the incentive. We believe that such an incentive will encourage National Gas to continuously improve on its procurement strategies and purchase shrinkage energy more efficiently and that it has some ability to influence this.
- 2.50 We expect National Gas to propose an incentive structure, including caps/collars within an indicative range of up to +/- 2% of the annual total NTS shrinkage cost, and a robust and stretching target that will incentivise them to minimise the price paid for the procured energy, whilst managing the risk of consumer exposure to short-term price fluctuations.

RIIO-3 funding options to reduce the volume of NTS shrinkage

2.51 National Gas is encouraged to use RIIO-3's innovation schemes (Network Innovation Allowance (NIA) and Strategic Innovation Fund (SIF))⁶ and/the Net Zero and Re-opener Development Fund (NZARD)⁷ – where we have expanded the scope - to bring forward additional projects that reduce shrinkage volumes. We also encourage National Gas to consider additional new, bespoke outputs (PCD and/or ODIs), in its Business Plan. Any proposals brought forward should consider interactions between the new incentives, shrinkage targets and wider RIIO-3 funding to avoid double-counting.

Ofgem-led policy review of NTS shrinkage volumes

2.52 We have decided to initiate an Ofgem-led policy review in 2025 with the industry, outside of RIIO-GT3. This will consider options to reduce the volume of gas that is lost on the system and may be outside of National Gas' control. Such a review may include, metering and the impact of metering errors on UAG, growing volumes of CV shrinkage and the rules around CV capping, as well as the roles and responsibilities of the key relevant players (eg National Gas, GDNs, shippers, large offtakes) in the management of the NTS shrinkage volumes. As part of this review we may review licence obligations to ensure that they enable and compel National Gas to continue to work with the industry to minimise NTS shrinkage. Where necessary, at Draft Determinations we will consider any interactions of this review with RIIO-GT3.

NTS Shrinkage costs in Totex and review of forecasting and recovery of NTS shrinkage costs

- 2.53 We have decided to continue to keep the NTS shrinkage total costs outside of Totex allowance. Whilst we believe that the inclusion in Totex would have strong incentive properties we are concerned about the volatility of shrinkage costs and National Gas' controllability of them which could lead to windfall gains/losses for National Gas or consumers.
- 2.54 With regard to the forecasting and recovery of NTS Shrinkage costs. We recognise the drivers for a review; however, we think it is important that the

⁶ See Chapter 12 of the Overview document for more detail on innovation funding in RIIO-3.

⁷ See Chapter 4 of the Overview document for more detail on the Net Zero and Re-opener Development Fund (NZARD).

- review is completed outside of RIIO-3 (eg in NTS Charging Methodology Forum). This is because of the high degree of impact on the Uniform Network Code and overlap with the ongoing discussions on General Non-Transmission Services Charges. We therefore consider that National Gas, that is leading these discussions in the industry fora, is best placed to propose and coordinate such a review.
- 2.55 With regard to the transparency of the NTS shrinkage costs, National Gas should show, in its Business Plans, how it will enhance the transparency of the NTS shrinkage data, in order to help NTS users forecast GSO costs more accurately.

Next steps

2.56 We expect National Gas to provide evidence in its Business Plan to demonstrate that a financial ODI for the procurement of NTS shrinkage energy provides value for money for consumers. In addition, the financial ODI proposal should include evidence on: stakeholder engagement, including with ISG, shippers and other relevant industry organisations, the structure of the incentive and associated parameters including targets, caps/collars and incentive strength. Depending on the evidence provided, we will consider introducing a financial incentive in RIIO-3 Draft Determinations.

Redundant Assets Price Control Deliverable (PCD) (GTO)

SSMC summary

2.57 We proposed that the Redundant Assets PCD continues in RIIO-GT3 to provide funding for National Gas to decommission network assets that are now redundant.

Summary of responses

2.58 National Gas anticipates that allowances will be needed for removal of further redundant above ground assets in RIIO-GT3. For example for assets rendered redundant due to customer disconnections or that are no longer required to meet network capability. However, National Gas is unsure whether a PCD is required if there are lower volumes of work in RIIO-GT3. It thinks it could be more appropriate for costs to be picked up as part of NARM.

2.59 One shipper believed that it is appropriate to retain the Redundant Assets PCD. A consumer group considered general taxation should fund the decommissioning of assets.

SSMD decision and rationale

- 2.60 We have decided to retain the Redundant Assets PCD in RIIO-GT3, given that National Gas expects removal of further redundant above-ground assets in RIIO-GT3. We note that the purpose of this PCD is specifically to fund the decommissioning of redundant assets, which are no longer required to operate the NTS and if left unaddressed have the potential to cause environmental damage and incur maintenance costs and as such, these are not asset health costs. These assets should not have a re-purposing value eg for hydrogen or Carbon Capture Utilisation and Storage (CCUS).
- 2.61 This PCD will not be used to fund decommissioning or repurposing costs that may result from the energy system transitioning to net zero. Chapter 4 of the Overview Document sets out our wider approach to decommissioning costs which are resulting from the net zero transition, as well as our approach to funding for costs to repurpose assets to hydrogen or CCUS. We intend to work closely with the government to identify the most appropriate strategy and funding options for decommissioning, including considering a whole systems approach and the impact on future and vulnerable consumers.

Quarry and Loss Re-opener (GTO)

SSMC summary

2.62 In our SSMC we said we did not believe this re-opener to be necessary in the next price control as the uncertainty has been dealt with in RIIO-GT2.

Summary of responses

2.63 National Gas, the only respondent to this question, set out that it should be retained due to continued uncertainty in this area.

SSMD decision and rationale

2.64 Taking into account National Gas' view that there continues to be uncertainty in relation to the Quarry and Loss costs in RIIO-GT3, we are minded to retain this re-opener, subject to National Gas providing in its Business Plan credible evidence that there could be material costs which are outside of its control.

Compressor Emissions Re-opener and PCD (GTO)

SSMC summary

- 2.65 National Gas operates a number of gas fired compressor units across the NTS. These units emit air pollutants that National Gas is obliged under law to control and manage. This re-opener and PCD ensures that National Gas can fund projects whilst protecting consumers from inefficient expenditure.
- 2.66 Our intention in RIIO-GT3 is to baseline compressor emission costs. However, if necessary, we said that we would consider whether an associated re-opener is required.

Summary of responses

2.67 National Gas, the only respondent to this question, set out that it is currently trialling Dry Low Emissions (DLE) retrofit technology which may remove the need for a re-opener once the timing of rollout and costs are understood.

SSMD decision and rationale

- 2.68 We intend to retain the Compressor Emissions Re-opener in RIIO-GT3, subject to National Gas bringing forward evidence in its business plan that the projects are uncertain in need and/or cost.
- 2.69 We have decided to retain the use of a Compressor Emissions PCD for RIIO-GT3 in order to ensure the delivery of projects started in RIIO-GT2 and, subject to materiality of any spend, for any new RIIO-3 projects, including investments for FEED studies and site configuration.
- 2.70 Compressor investment due to compliance with the Combustion Plant Directive requiring reduction of compressor emissions by 2030 may necessitate compressor funding in RIIO-GT3. In its business plan National Gas should consider alternatives to investment, including operational and/or innovative solutions, such as Dry Low Emission (DLE) refit technology to reduce costs. This evidence will also be a requirement to justify any re-opener spend (if the mechanism is retained).

Pipelines diversion re-opener (GTO)

SSMC summary

2.71 In our SSMC we proposed retaining this re-opener as it protects consumers by only providing costs where there is a clear need for pipeline diversions. We said we would review whether the re-opener has been used as expected during RIIO-GT2 and see if there are any improvements that can be made to it.

Summary of responses

2.72 National Gas was the only respondent to this question. It agreed that this reopener should be maintained, but that its scope should be widened to cover other diversions (eg landslides, collapse of tunnels, farming changes, buildings above pipelines and similar) which are required but National Gas cannot forecast the timing or costs of.

SSMD decision and rationale

- 2.73 We have decided to retain the re-opener for pipeline diversion costs, to allow for the uncertainty of the costs arising due to diverting pipelines. Although this re-opener has not been used in RIIO-GT2, we accept that additional costs could arise in future from the need for National Gas to divert existing pipelines. Forecasting and baselining the costs upfront is not in consumers' best interests as the volume and costs are uncertain, and this makes a re-opener appropriate.
- 2.74 We are not intending to extend the scope of the re-opener to include other diversions as there is no historical reason to justify why such costs could not be managed flexibly through other allowances.

Biomethane Connections (GTO)

2.75 In our SSMC we did not make any explicit mention of National Gas' role in facilitating biomethane connections.

Summary of responses

- 2.76 In its response to our SSMC, National Gas proposed a renewed focus on accelerating biomethane connections onto the NTS to help achieve the UK government's ambition of increased biomethane injections into the gas networks.
- 2.77 National Gas considers that regulatory changes to the connections process are required. It said that as a minimum an economic and environmental test for

biomethane and net zero connections applications should be introduced in the licence and the UNC.

SSMD decision and rationale

- 2.78 We will work with the government and industry, outside of RIIO-3, to consider if changes are needed to the licence and the UNC and to help facilitate these if required.
- 2.79 We note that there is potentially an interaction, and a role for RIIO-GT3, in accelerating biomethane connections. National Gas should include its latest thinking in this area including the timings and potential consequences for RIIO-GT3 (eg funding or for re-openers) in its business plans.

3. Secure and resilient supplies

- 3.1 A secure and reliable gas network is paramount for existing and future consumers. The gas transmission network currently provides an essential service to supply gas distribution networks and power stations, with the latter producing an estimated $\sim 60-80\%$ of electricity on high demand-no wind days.
- 3.2 Recent events, including the gas crisis manifesting itself in rapidly changing flows to accommodate LNG and high gas prices, closure of coal-fired power stations and intermittent electricity generation, have highlighted the importance of a resilient gas transmission network.
- 3.3 We expect investment in this area to remain the predominant driver of costs in RIIO-GT3. This chapter sets out how we will enable this in RIIO-GT3. In addition, our decisions on the Network Asset Risk Metric (NARM), physical security, cyber security, and climate resilience set out in our Overview document (Chapters 6, 8 and 11) will provide substantial upfront funding, and hold National Gas to account to continue to deliver, secure and resilient supplies.

RIIO-GT3 outputs and uncertainty mechanisms

Annual Network Capability Assessment Report (ANCAR) LO (GSO) SSMC summary

- 3.4 The obligation for National Gas to prepare and submit an ANCAR to Ofgem was introduced for RIIO-GT2. Its purpose was to show the basis for future network investment decisions transparently to stakeholders. It also helped to set the trajectories and targets for constraint management outputs used in the current Capacity Constraint Management (CCM) incentive.⁸
- 3.5 Given that the long-term gas network planning will from this year become the responsibility of the NESO⁹ the obligation on National Gas to produce an ANCAR will be removed. We therefore proposed to not introduce new National Gas obligations to publish the ANCAR during RIIO-GT3.

⁸ See Entry Capacity and Exit Capacity Constraint Management (CCM) ODI-F for view on this for RIIO-3.

⁹ See Chapter 2 for our Decisions related to the NESO.

Summary of responses

3.6 We received no objections to the removal of ANCAR. National Gas said that it may decide to independently produce and publish its own Network Capability Assessment (NCA) if and desired by its stakeholders to increase transparency of its mid-term planning. A GDN suggested that the NESO's view is sought whether, or not, a parallel National Gas publication of the ANCAR is useful.

SSMD decision and rationale

3.7 We have decided to not re-introduce the obligation on National Gas to publish ANCAR in RIIO-GT3. The obligation on National Gas to produce a NCA will be transferred within new LOs on NESO to undertake gas strategic planning. National Gas will still need to provide data and engage with the NESO to inform the NESO's planning publications. To support this, we have also set our expectations for National Gas to liaise with the NESO on the NCA ahead of its business plan submission (see Gas Strategic Planning Re-opener in Chapter 2) and our intention to introduce a LO for National Gas to collaborate with NESO in the area of gas strategic planning in general (see section Gas Strategic Planning Re-opener).

Asset health non-lead assets PCD (GTO)

SSMC summary

- 3.8 In RIIO-GT2 the majority of National Gas' asset health plan on work that is necessary to maintain the safety and reliability of the network was covered by NARM. However, there are some areas such as civils and electrical investment, which are necessary for the protection of, and safe access to, operational network assets.
- 3.9 Therefore, the asset health non-lead PCD is used to ensure the delivery of these areas and protect consumers from the non-delivery of the work. We said that we were minded to retain this PCD.

Summary of responses

3.10 National Gas, the only stakeholder who responded to this question, supported the retention of the non-lead asset PCD for RIIO-GT3, given that non-lead assets will remain outside of NARM.

SSMD Decision and rationale

3.11 For RIIO-GT3, we have decided to retain the non-lead asset PCD as we think the materiality and importance of the work requires monitoring by us to ensure delivery and best value for consumers.

Bacton Terminal Site Redevelopment Re-opener and PCD (GTO)

SSMC summary

- 3.12 National Gas proposed investment in RIIO-GT2 to provide an enduring solution at the Bacton terminal to allow the connected terminals to continue to operate into the 2040s. We agreed that there was a long-term requirement, so we put in place a PCD to hold National Gas to account for the delivery of the Bacton terminal redevelopment.
- 3.13 At time of the RIIO-GT2 business plan submission, the project was still in an early development stage and there was significant uncertainty around the costs, so we also included a re-opener.
- 3.14 For RIIO-GT3, we proposed to remove the re-opener mechanism as the cost uncertainty has been resolved in RIIO-GT2, but to keep the PCD in place to hold National Gas to account for delivery which is expected by 2030.

Summary of responses

3.15 National Gas was the only respondent to our consultation question. National Gas said that it was open to the removal of the re-opener but added that its position is uncertain until the resolution of its current RIIO-GT2 re-opener application.

SSMD Decision and rationale

- 3.16 We have decided to remove the Bacton re-opener as the RIIO-GT2 funding request will have been determined by the start of RIIO-GT3 and therefore see no reason to retain it.
- 3.17 We have decided to retain the Bacton PCD until all redevelopment applications have concluded to protect consumers.

King's Lynn subsidence re-opener and PCD (GTO)

SSMC summary

3.18 This PCD was created at the start of RIIO-GT2 to deliver the necessary works to address the subsidence issues at King's Lynn compressor station. The King's Lynn output has been delivered and so we proposed to remove the re-opener and PCD.

Summary of responses

3.19 National Gas, the only respondent to this question, agreed that the re-opener and PCD can be removed.

SSMD Decision and rationale

3.20 We have decided to remove this re-opener and PCD since no additional funding for new work is required in RIIO-GT3. We expect all outputs to be reviewed as part of the RIIO-GT2 closeout.

Funded incremental obligated capacity (FIOC) (GTO)

SSMC summary

3.21 We said that we were minded to retain this re-opener as we believed it ensured good value for consumers and we still see a need to manage the potential costs associated with the release of incremental capacity.

Summary of responses

3.22 National Gas, the only respondent to this question, agreed with our proposal to carry forward the re-opener.

SSMD Decision and rationale

3.23 We have decided to retain the FIOC Re-opener in RIIO-GT3 as it will continue to allow a case-by-case assessment of need and cost related to incremental capacity to ensure good value for consumers.

4. High quality of service from regulated firms

4.1 This chapter sets out our approach to maintaining a high quality of service at a reasonable cost in RIIO-GT3. Stakeholders broadly regard good service as being able to put gas onto and take gas out of the NTS when and where required. We want to ensure that through stretching targets and commitments, stakeholders' expectations continue to be met in RIIO-GT3.

RIIO-GT3 outputs and uncertainty mechanisms

Customer Satisfaction Survey ODI-F (GTO)

4.2 In RIIO-GT2, the Customer Satisfaction Survey ODI-F aims to drive improvements in the quality of National Gas' customer service. National Gas surveys its customers and if the annual average customer satisfaction scores are higher/lower than our target, National Gas is rewarded/penalised.

Incentive design and scope

SSMC summary

- 4.3 We proposed the following three options for RIIO-GT3:
 - Option 1 (preferred): Setting a more challenging target, recalibrating the incentive, including introducing a narrower cap and collar, and reviewing its scope and engagement channels;
 - Option 2: Making the incentive penalty only; or
 - Option 3: Removing a financial incentive and setting a reputational incentive.
- 4.4 Option 1 would embed the RIIO-GT2 improvements and continue to encourage National Gas to provide a consistently high quality of service to its users including suppliers, gas shippers, distribution network operators, generators, and large demand customers. It would improve the existing financial incentive by encouraging National Gas to expand its areas of engagement, eg widen the touchpoint areas for engagement and to introduce new survey channels.
- 4.5 However, Options 2 and 3 seek to maintain high-quality customer satisfaction levels and thus BAU, but do not place a financial reward on striving to push their performance further.

Summary of responses

- 4.6 Stakeholders strongly agreed with our preferred SSMC Option 1, calling for a thorough review of the incentive going forward, including the incentive target, calibration of the incentive, touchpoints and areas of engagement. This message was echoed in our working groups on the incentive after the publication of SSMC.
- 4.7 Generally, respondents were in agreement that the best way to encourage positive changes in National Gas' behaviour is through both financial and reputational incentives.
- 4.8 National Gas said that it is exploring new initiatives related to customer journey and will be consulting their stakeholders as it develops its business plan.
- 4.9 Two respondents believed that consideration should be given to all survey channels (not just telephone surveys), whilst recognising that some areas may have low response rates and a large differential in the scores obtained. With regard to the current survey touchpoints as defined in the licence¹⁰, a consumer group argued that an averaging approach of all scores masks underlying underperformance in certain areas. They also suggested that National Gas staff should not be deciding whether a touchpoint was significant enough to warrant a survey an approach that is unique from other sectors.
- 4.10 With regard to the customers surveyed, a consumer group noted that the NESO needs to be part of the incentive as one of the key stakeholders responsible for gas strategic planning (we cover this point in Chapter 2 of this document and in the Stakeholder Satisfaction Survey sections of this chapter).

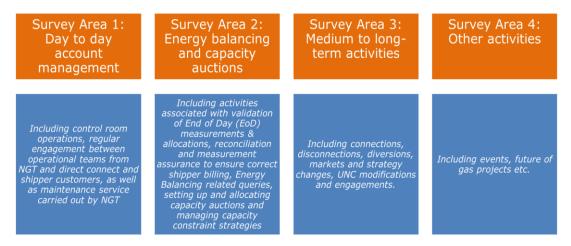
SSMD decision and rationale

4.11 We have decided to maintain the ODI-F as a reward and penalty ODI. We think the incentive remains important to continue to drive continued improvements in National Gas' customer service and its retention is broadly supported by stakeholders.

¹⁰ Special Licence Condition 4.2.7 lists the following touchpoints: Planning application process, The future use of our network, Gas construction, Gas markets policy and change services, Connections / disconnections and diversions services, Day to day account management, Energy balancing services (including allocations and measurements), Maintenance services, Events, Engagements, Forums, Capacity auctions.

4.12 Currently the ODI is broken down into 12 survey touchpoints aggregated together (of equal weights) to provide a total score. We note stakeholder feedback that the touchpoints could be consolidated further and have decided that the survey should cover the fours survey areas as shown in Figure 1. This will ensure that it aligns with National Gas' way of working and National Gas' customer interaction.

Figure 1: Customer Satisfaction Survey Incentive Areas for RIIO-GT3



4.13 We acknowledge that the number of customers National Gas can engage with differs per area and that National Gas may interact with the same customers across different areas of work. For its business plan, we expect National Gas to work with its Independent Stakeholder Group (ISG) to propose what constitutes a significant interaction, which should warrant inclusion under each of the above survey areas and propose a statistically robust minimum sample size for each survey area.

Performance Level and financial incentives

SSMC summary

- 4.14 In RIIO-GT2, the target is 7.8 points (out of the maximum 10), with symmetrical rewards/penalties +/- 0.07% of annual average ex ante base revenue for each incremental performance deviation from the target. The maximum reward/penalty is +/-0.5% of annual average ex ante base revenue.
- 4.15 In the SSMC we said that one way in which the target drives further ambition was to weight the survey area scores in a way that encourages National Gas to focus on these areas with lower scores.

4.16 We also suggested that there could be merit in introducing asymmetry to the incentive value so the value of a penalty could be greater than the value of a reward. This would ensure that National Gas' performance does not deteriorate. It would also recognise that the level of risk should appropriately correspond with the level of any reward. We also considered that lowering the cap for this incentive could be appropriate if customers place less value, in terms of rewards, to drive up satisfaction further.

Summary of responses

- 4.17 All respondents agreed that the targets for this incentive should be recalibrated to reflect National Gas' performance to date and be stretching. National Gas was supportive of the recalibration, including setting a stretching target, informed by RIIO-GT2 performance. Two respondents observed that customers' expectations of service constantly increase and hence companies need to evolve and improve service just to standstill against a fixed target and as customer satisfaction scores increase it can be difficult to maintain the progress.
- 4.18 Although stakeholders generally agreed that an upside and a downside should be retained for this incentive, they differed in their views regarding the level of the reward and penalty for National Gas.
- 4.19 National Gas is unsure about narrower cap/collar of this incentive as it would limit its ability to invest in the tools that it requires to deliver better outcomes for customers and end consumers.
- 4.20 One respondent maintained that the strength of the incentive should be considered across the overall range of incentivisation on National Gas. The respondent also cautioned against constraining caps on the incentives.
- 4.21 A consumer group considered provision of customer service to be a baseline allowance activity and that, National Gas, like other network companies, should provide a great customer service with the funding with which it is already provided. It also suggested that National Gas should ensure that data is suitably robust and representative to be subject to financial rewards and penalties.

SSMD decision and rationale

4.22 We have decided that National Gas should work with its ISG to determine a stretching performance target for each of the above four survey areas. For RIIO-

- GT3, we expect this to use and embed actual performance data from RIIO-GT2 at a minimum.¹¹
- 4.23 In terms of the incentive cap and collar we have decided to reduce the strength of the incentive by approximately a half compared to RIIO-GT2 which was 0.5% of base revenue. This will be set in bps of RoRE. We think this is appropriate given National Gas' investment to date and outperformance in RIIO-GT2. It also recognises that National Gas is performing well and that less incentive is needed in this area given the performance improvements since RIIO-GT1 and sustained good performance levels in RIIO-GT2.
- 4.24 We are minded to introduce a deadband from the survey area target, to recognise that annual minor variations in performance from a high target may not be rewarded or penalised. However, we will revisit this once we have reviewed National Gas' business plan proposals.

Transparency of the results

SSMC summary

4.25 In our SSMC, we invited National Gas to put forward proposals to increase transparency of the survey results, including an option of publishing the results of customer service on its website.

Summary of responses

- 4.26 All respondents supported full transparency of the Customer Satisfaction Survey results. National Gas stated it supported transparency, including detailed breakdowns of the data if required (within the GDPR guidelines). National Gas said it will work with Ofgem and other stakeholders to suggest an appropriate breakdown.
- 4.27 A consumer group also recommended that we make significantly greater use of the data that we have at our disposal to apply reputational pressure on all outputs and incentives by collating and publishing performance in easy to understand formats on its website.

¹¹ We note that the aggregation of the individual survey area scores for the relevant touchpoints in the current incentive will - subject to weighting - enable a continual measure of customer satisfaction.

SSMD decision and rationale

4.28 We expect National Gas to propose in its business plan how the transparency of the customer satisfaction scores could be enhanced in RIIO-GT3, including considering publication of the results on its website. In parallel, we will use our RIIO Annual Report to make available data on all RIIO outputs and incentives.

Next steps

4.29 We expect National Gas to work with its ISG to determine exactly which customers should be the focus of the survey areas, and to propose ambitious targets that embed performance to date. We will consider the final target and appropriate strength of the incentive as part of our assessment of National Gas' Business Plan.

Stakeholder Satisfaction Survey ODI-R (GTO)

SSMC summary

- 4.30 This ODI-R requires National Gas to report the levels of stakeholder satisfaction measured through a stakeholder satisfaction survey. The survey covers all stakeholder organisations it interacts with, not only its customers. It is reputational and has a public target of 7.4 out of 10.
- 4.31 We encouraged National Gas to continue to improve its stakeholder satisfaction levels but considered that, similar to other sectors, there should be one single customer satisfaction incentive. As such, we proposed its removal as an ODI-R.

Summary of responses

- 4.32 In general, all respondents agree with the removal of this incentive. National Gas however acknowledged that stakeholders provide valuable inputs and that it will continue to survey stakeholders to gather feedback.
- 4.33 A consumer organisation considers removal of this incentive appropriate given the customer satisfaction survey. A consumer organisation noted the importance of the NESO and that engagement with them should be included in the customer satisfaction survey.

SSMD decision and rationale

4.34 We have decided to remove the Stakeholder Satisfaction Survey reputational incentive for RIIO-GT3, given our reasons above and taking into account

- stakeholder views. However, effective stakeholder engagement will remain an essential part of National Gas' operations both to inform its business plan and ongoing activity. We expect National Gas to outline in its business plan how it will take NESO's and other key stakeholders' views on board to improve its performance.
- 4.35 We are mindful of stakeholder responses that called for the NESO to become one of National Gas' customers surveyed as part of the Customer Satisfaction Survey incentive. We note the importance of effective NESO engagement, but the NESO is a stakeholder that National Gas will be engaging with on strategic planning, rather than a customer. We are therefore minded to introduce an LO on National Gas to collaborate with the NESO in the area of gas strategic planning and as such we expect that National Gas will proactively consult the NESO, ie one of its key stakeholders, on how it could continuously improve its performance.
- 4.36 We think this is essential given the importance that the NESO's strategic planning will play over RIIO-GT3 and beyond.

Next steps

4.37 We will develop a proposed LO taking into account similar LOs in other sectors, and set out our proposed position in our RIIO-GT3 Draft Determinations.

Quality of Demand Forecasting ODI-F (D-1) (GSO)

SSMC summary

4.38 In RIIO-GT2 there is an ODI-F to provide an incentive to maintain and improve demand forecasting accuracy. In our SSMC we proposed that this incentive should be retained in RIIO-GT3 due to the potential consumer benefit that should be expected from improved demand forecasting, but that consideration should be given to the need for a storage adjuster and the potential for seasonal targets.¹²

Summary of responses

4.39 National Gas agreed with the proposal to retain the incentive, but pushed back on the possibility of tightening the parameters by which it is set. It cited the

¹² The storage adjuster allows for variation in the performance measure based on difficult-to-predict usage of storage sites. Seasonal targets allow for forecast accuracy to vary based on the time of year (demand).

- increased volatility in recent years, and the additional strain this has placed on resources. It identified areas in which investment could be made to improve its forecasting and argued that industry (and therefore consumers) benefit from the accuracy of its forecasting. It also recommended the retention of the storage adjuster within the incentive.
- 4.40 Other stakeholders were generally supportive of retaining this incentive, agreeing that consumers likely benefit from its inclusion in the licence. One shipper suggested that a tightening of the target would be beneficial, arguing that greater accuracy would further the economic and efficient operation of the transmission and distribution networks.

SSMD decision and rationale

- 4.41 We will retain the financial incentive for D-1 forecasting for RIIO-GT3. Industry was broadly supportive, and we recognise the potential consumer value in improving forecasting performance. Improved D-1 forecasting should create value for consumers by increasing the efficiency of Users' procurement and balancing activities and enhancing the efficiency of trading activity.
- 4.42 We acknowledge National Gas' concerns that increased gas market volatility might be expected to make forecasting challenging. Despite this, we would expect that continuous improvement, encouraged through a well calibrated incentive, should enable National Gas to improve its demand forecasting performance, even in the context of a more challenging forecasting environment.
- 4.43 We also note the increased interest in Demand Side Response (DSR) tools within industry, including the possible introduction of non-daily metered DSR. We believe that implementing an effective DSR scheme could bring significant benefit to both consumers and the effort to reach net zero, and that the efficacy of DSR tools will be highly dependent on accurate and reliable demand forecasting.
- 4.44 Therefore, with a view to better facilitating both existing and potential future DSR tools, we expect National Gas to outline a strategy in its business plan for ways in which forecasting accuracy could be significantly improved. In exchange for a more ambitious target, we will consider offering a higher reward/penalty cap/collar than is the case in RIIO-GT2. We are also minded to reduce the active range for reward, and penalty, to reflect the range of outcomes National Gas has achieved in recent years. This would mean that not only would changes in

- performance have a greater impact on the reward/penalty, but their impact would be greater financially.
- 4.45 While we recognise that the objective of significantly improving forecasting accuracy to the degree necessary for DSR to function optimally may be challenging and will require National Gas to dedicate additional effort and resources to achieve, we consider the benefits to be commensurate with the effort. It is our expectation that an organisation of National Gas' capability and experience should be able to deliver the requested improvements. If, however, National Gas can conclusively demonstrate to us that the proposed forecasting improvements are beyond its capabilities and/or technically impossible, we will consider revising the current incentive structure including the cap and collar of +/-£1.5m (~0.21% of base revenue in RIIO-GT2) pa.

Next steps

4.46 We expect National Gas to consider the proposed adjustments to the scheme. National Gas should propose in its Business Plan ways in which it can improve its forecasting performance in the D-1 timeframe, with particular attention given to the forecasting requirements of DSR tools. To aid in this, we expect National Gas to engage with its customers to ensure that the demand forecasting product meets the needs of its users.

Quality of Demand Forecasting ODI-R (D-2 to D-5) (GSO)

- 4.47 In RIIO-GT2, D-2 to D-5 Demand forecasting is incentivised reputationally as while it is seen as important by some consumers to have visibility of National Gas' performance in this area, calibrating a financial reward/penalty is difficult. The D-2 to D-5 reputational incentive requires that National Gas reports annually the average annual absolute forecasting error of its D-2 to D-5 forecasts.
- 4.48 In SSMC, we proposed two options for this incentive:
 - Option 1: Retain this incentive as a reputational incentive with the current target, acknowledging National Gas' past performance to forecast in line with and/or close to its current target, and considering that tougher targets are challenging to achieve the further ahead gas demand is forecasted; and

 Option 2: Set more challenging targets and broaden the range of forecasts provided, and introduce a financial, symmetrical incentive to improve the accuracy of the D-2 to D-5 forecasts, which would in turn benefit National Gas' customers and better support DSR arrangements.

Summary of responses

- 4.49 National Gas want to retain the incentive citing the unpredictable nature of forecasting. It noted that parameters should be reviewed, and that volatility needs to be considered based on higher level of uncertainty in D-2 to D-5.
- 4.50 National Gas stated that it had received feedback from stakeholders supporting the introduction of a financial incentive for the D-2 to D-5 forecasting, albeit we received limited feedback from wider stakeholders on this through this consultation. One stakeholder said that a financial incentive would be welcomed if customer value could be demonstrated, however the only other industry response stated that the value to them was limited.
- 4.51 On the question of expanding the range of forecasts to incorporate other areas of demand forecasting, respondents were not supportive. National Gas stated that there were no additional areas that would provide customer benefit; a comment that was echoed by the only other respondent. They also warned that strengthening the incentive could have unforeseen impacts on National Gas' control room behaviours.

SSMD decision and rationale

- 4.52 We are currently minded to introduce a financial incentive for D-2 to D-5 demand forecasting. We note stakeholder concerns about the prospect of introducing a financial incentive to forecasting over a longer timeframe, particularly given the limited evidence of consumer benefit provided to date. However, given the incentive has been purely reputational during RIIO-GT2, there may have been limited cause for National Gas to invest in its capabilities or to produce products that are of benefit to consumers across the D-2 to D-5 timeframe.
- 4.53 We consider that the provision of, and access to, D-2 to D-5 demand forecasts is beneficial to a well-functioning market and could benefit all market participants through the removal of information asymmetries. This should allow for greater competition, particularly though the provision of D-2 to D-5 demand forecasts Users that are unable to procure their own.

- 4.54 We also recognise the potential introduction of Demand Side Response (DSR) tools for non-daily metered customers and the likelihood that this would require much more accurate forecasting in order to be effectively implemented. We consider that the implementation of DSR tools could provide consumer value and could further the achievement of net zero goals, provided that a sufficient level of demand forecasting performance could be achieved.
- 4.55 Recognising that National Gas is uniquely positioned to provide this service, we are minded to introduce a financial incentive with a reward/penalty that is proportional to the potential consumer benefit that could be realised. We expect National Gas to work with other relevant entities (eg GDNs, data providers) to consider a strategy that might support DSR provision, and to provide details of this strategy in its business plan. As an alternative to an ODI-F, we may consider making funding available for National Gas through baseline allowances if we deem this to be a more effective means of achieving our stated demand forecasting aims.
- 4.56 We recognise the challenges inherent in longer term demand forecasting, and the degree of improvement that might be required to implement a DSR scheme for the D-2 to D-5 timeframe. However, it is our expectation that an organisation of National Gas' capability and experience should be able to deliver the requested improvements. Only if it can be demonstrated that this is not something that can be feasibly provided, will we consider continuing the current reputational incentive.

Next steps

- 4.57 We expect National Gas to undertake a review of its current demand forecasting practices and to put together a strategy for how these could be sufficiently improved to better facilitate non-daily metered DSR tools.
- 4.58 During this process, we expect National Gas to engage with customers to ensure that the product is appropriate, to develop a compelling proposal, and to factor in continuous improvement over time.

Maintenance Incentive ODI-F (GSO)

SSMC summary

4.59 In its role as GSO, National Gas undertakes regular network maintenance of the NTS to ensure it functions efficiently. As a result of National Gas' maintenance,

- NTS customers may experience disruption, such as outages and a reduction in the flexibility at exit connections.
- 4.60 RIIO-GT2 includes a Maintenance Incentive to deliver efficient planning and minimise the impact of maintenance work on National Gas' customers. The incentive is split into three schemes:
 - Use of Days scheme (Remote Valve Operation RVO) to minimise the number of days used to perform RVO maintenance. If the number of days used exceeds the target of 11 days, then National Gas incurs a penalty of £20,000 per day up to a total of -£0.5m per year;
 - Use of Days (non-RVO) scheme to minimise the number of days for non-RVO work. The target is to align 75% of customer impacting work with their non-RVO work. This element has a symmetric performance/reward function creating opportunity of both penalty and reward within a +/-£0.5m a year range; and
 - Changes scheme to align National Gas' delivery of maintenance works with their maintenance plans. The number of days changed from National Gas' maintenance plan should not exceed 7.25% of the total maintenance plan days in the year. If the number of days changed exceeds the target, then a penalty of £50,000 per day over the target is accrued, up to a total of -£0.5m per year.
- 4.61 We think all three elements of the incentive have been successful in driving more efficient planning and execution of network maintenance and proposed that the incentive should continue in RIIO-GT3. To ensure National Gas continue to improve its network planning and execution of network maintenance, and to ensure that users pay fairly, we also proposed to stretch targets in all three schemes of the maintenance incentive.

Summary of responses

4.62 All stakeholders who responded to the SSMC supported retaining the incentive, with both a reward and penalty, recognising National Gas' strong performance to date. National Gas set out that there should be reward and penalty across all three elements as maintenance is likely to become more challenging.

4.63 One shipper supported strengthening of the baseline targets to embed RIIO-GT2 performance. No other stakeholders commented on the approach to target setting.

SSMD decision and rationale

- 4.64 We have decided to retain the maintenance incentive across all three schemes. We think that it drives the right behaviour from National Gas in an area of value to their customers.
- 4.65 National Gas' RIIO-GT2 performance to date has been good across all three schemes. Looking at historical performance alone, retaining the incentive as a penalty-only across all three schemes could be justified. However, the volume of customer-impacting maintenance work, due to aging assets, is expected to increase in RIIO-GT3 compared to RIIO-GT2.
- 4.66 We are therefore minded to retain a modest upside reward (at approximately the equivalent bps of RoRE to the current RIIO-GT2 incentive cap of £0.5m per annum) but extend it over all three schemes. In the absence of a small reward we are concerned that National Gas will no longer strive to improve performance under each scheme amid the increased maintenance work. We consider that having a reward across all three schemes also places a small, but important focus, on the set of activities that National Gas need to effectively manage to maintain strong maintenance performance. Retaining a financial penalty across all three schemes (at a similar bps of RoRE level to the current incentive collar of -£1.5m per annum) also protects consumers if performance falls back.
- 4.67 We consider that halving the current targets for each scheme is appropriate as it will partially embed as BAU the standards National Gas has achieved in RIIO-GT2 so far. We are minded to set the following targets:
 - Use of days scheme (RVO): 5 days to perform maintenance (as opposed to the current 11 days, historical performance is 0);
 - Use of days (non-RVO) scheme: 90% alignment of customer impacting work with customer outage (as opposed to the current 75% alignment, historical performance is 100%); and
 - Changes scheme: 3.5% of the days changed in the total maintenance plan days (as opposed to 7.25% currently, historical performance is 0%).

- 4.68 We intend to retain a similar incentive structure to RIIO-GT2 to preserve simplicity on what is relatively small incentive. For each scheme, we think a linear penalty/reward function, subject to a cap and a collar, is appropriate. In terms of the relative weighting between schemes we would expect National Gas to place more weight on improving performance of the non-RVO maintenance work, which typically takes longer and may need additional incentivisation, compared to the RVO work.
- 4.69 We expect National Gas to engage with stakeholders to propose and justify the incentive parameters in its business plan (ie caps and collar, target, unit rates for each scheme, and incentive weights for each scheme).

Entry Capacity and Exit Capacity Constraint Management (CCM) ODI-F (GSO)

- 4.70 Capacity release obligations often exceed the physical capability of the NTS. The Entry and Exit CCM financially incentivises National Gas, in its role as GSO, to efficiently manage the constraint risks that this creates. The actions it can take include withholding the sale of firm capacity, buying back firm capacity and locational actions, and forwards contracts to mitigate constraint risk.
- 4.71 We identified the following options for this incentive in RIIO-GT3:
 - Option 1: Detailed review of the current ODI including its structure, target setting, and risk exposure for National Gas;
 - Option 2: Making the ODI penalty only; and
 - Option 3: Removing the financial incentive and setting an ex post price control for constraint management actions.
- 4.72 We also included a question around the potential introduction of seasonal baselines into the National Gas licence, which would allow for levels of obligated capacity release to vary at different times of the year, aligning more closely with network capability levels. This would likely reduce the chance of constraints being seen at certain high risk aggregate system entry points (ASEPs).
- 4.73 Our preferred option was Option 1, stating that National Gas should be incentivised to maximise the release of discretionary capacity and to minimise the incidence and cost of constraints. We also noted that National Gas can employ

smart working practices such as assessing commercial and physical risks of unforeseen events on assets without interrupting customers. However, we stated that the target needs to reflect historical constraint management costs and that any financial reward/penalty should be proportionate to consumer benefit.

Summary of responses

- 4.74 Stakeholders, including National Gas, support Option 1 to review the current incentive. There was also broad recognition:
 - that retaining an incentive has value and that without one there is a risk that unplanned events could become more common;
 - that past behaviours may not be a good indicator of future performance in this area if volatility in the gas market increases over time; and
 - from some industry parties, that greater transparency is needed around the
 calculation of constraint costs and revenues, the choices National Gas make
 when confronted with constraints, and the impact these actions have on the
 market.
- 4.75 While National Gas supported the proposed review, it stated that major changes to the CCM incentive would not be required. It argued that the current structure has been effective in reducing the incidence and cost of constraints by encouraging a proactive approach to risk management. Given its success they think there should be an increase in the incentive cap (currently £5.2m per year).
- 4.76 On the issue of seasonal baselines, stakeholders were not supportive, arguing that there could be detrimental impacts on security of supply and wholesale gas prices. One stakeholder stated that investment-based solutions to constraints would be more welcome. National Gas stated that a review of baselines would be more appropriate once decisions on the future of gas are made.

SSMD decision and rationale

4.77 Our decision is to retain the financial incentive, given the broad support for Option 1 and the benefit to the market of National Gas' capacity constraint management activities. However, we recognise that there are areas of concern for industry and so propose to conduct a thorough review of the arrangements prior to Draft Determinations.

- 4.78 Based on industry feedback, transparency around this incentive remains a concern. One area in which this can be improved, and in which National Gas demonstrated capability during workshops, is the reporting of constraint events. Much of the work that results from the CCM incentive (eg avoided constraint events, shifting of maintenance schedules) goes unseen, and is therefore unrecognised by the public. In order to more clearly demonstrate the value of the incentive, we have decided to introduce reporting requirements for National Gas in this area (see next steps section below).
- 4.79 Another area of concern is the calculation of constraint cost estimates. We recognise that given the nature of constraints (ie they often occur as a result of unexpected outages, or as a result of external events), forecasting in this area can be challenging. However, there should be consideration given to the likelihood of events when undertaking these calculations. To this end, we will explore options with National Gas, which may result in the production of guidance that will bring greater clarity in this area.
- 4.80 With regard to the structure of the incentive itself and in recognition of its complexity, we will carry out a thorough review of the revenue flows to ensure that the treatment is appropriate.
- 4.81 Finally, we note National Gas' concerns around rising volatility and the increased risk of constraints. However, we also recognise that National Gas has performed well in this area to date, earning close to the cap for each year in RIIO-GT2, in spite of similar concerns being raised when setting RIIO-GT2. Therefore, we are not currently proposing to make major changes to the core structure of the incentive. The parameters of the incentive will not be set until after the submission of National Gas' Business Plan. At this point we are minded to set the cap and collar values at bps of RoRE equivalent to the current cap and collar values of +/- £5.2m per annum. Given consistent outperformance of the RIIO-GT2 incentive we also think the target should be tightened to embed current performance. This should be taken as an indication of our direction of travel, as the final values will be influenced by evidence presented in National Gas' Business Plan.

Next steps

4.82 We expect National Gas to include in its business plan detailed estimates of expected constraint costs during RIIO-GT3. While we acknowledge the challenge

- in forecasting future constraints, we expect National Gas to factor the likelihood of occurrences into any cost estimates, and clearly demonstrate the methodology used to calculate this. We also expect National Gas to develop an approach to publicly report constraint incidents, to be applied during RIIO-3.
- 4.83 We recognise industry concerns around the complexity of this incentive structure, and concerns around the proper treatment of the associated revenues. We will work with National Gas, ahead of submitting its business plan, to ensure we have the information necessary to conduct a full review, before setting our Draft Determinations on the various revenue treatments, including the treatment of locational sales.

The Residual Balancing Incentive ODI-F (GSO)

- 4.84 The Residual Balancing Incentive has two elements:
 - Linepack Performance Measure (LPM) element encourages National Gas to
 optimally manage its linepack levels each day such that minimal imbalance is
 carried over from day-to-day. There are also periods where the target is
 adjusted to allow National Gas to gradually raise and lower the linepack level
 without penalty, which are referred to as the 'shoulder months'. The LPM
 component is worth between £3.2k and -£24k per day.
 - Price Performance Measure (PPM) element encourages National Gas to
 execute any residual balancing trades¹³ at prices that are close to the System
 Average Price (SAP) for the day. If this is achieved National Gas receives an
 incentive reward, if this is not, it receives a penalty. This component is worth
 between £1.2k and -£24k per day.
- 4.85 The total annual value of this incentive is calculated as the sum of the daily outcomes for the above components and subject to a cap of £1.6m per annum and a collar of -£2.8m per annum in RIIO-GT2.
- 4.86 We recognised that changed supply and demand patterns in the first two years of RIIO-GT2 (driven by the gas crisis) have increased the need for National Gas to

 $^{^{13}}$ Residual balancing trades are buy or sell actions that National Gas make in the on-the-day market to reduce system imbalance.

take more residual-balancing actions. However, we noted that this is a core BAU activity that National Gas should manage with, or without, a financial incentive. On balance, we proposed that the incentive should be retained in its current format because it encourages National Gas to carry out these activities as efficiently as possible and with minimal impact on the market, which would not be the case without the financial incentive.

Summary of responses

4.87 Only National Gas responded and supported retaining the incentive. It suggested that a revision to the PPM cap and collar should be considered to reflect the fact that balancing has become more challenging and costly over time.

SSMD Decision and rationale

- 4.88 We have decided to retain the Residual Balancing incentive. Balancing the network is a legislative and licence requirement on National Gas and is a fundamental part of the GB market as well as the safe and efficient operation of the network. We recognise the potential additional value this incentive provides to the market by encouraging National Gas to think about the trade-off between linepack carry-over and the effect its actions can have on cashout prices.
- 4.89 While we recognise value of retaining an incentive, we want to work with National Gas to review and possibly refine the incentive structure and calibration. For the LPM element we want to consider the application of the shoulder months. While we see value in allowing National Gas the flexibility to adjust linepack during the shoulder months, the current arrangements mean there are significant periods during which National Gas is not incentivised to respond to linepack variations. We want to ensure that the shoulder month arrangements do not detract from the effectiveness of the incentive. We therefore expect National Gas to consider ways in which the shoulder month arrangements could be improved.
- 4.90 We also acknowledge the comments from National Gas regarding the PPM element. We welcome suggestions in its business plan as to how it could be recalibrated. However, we are not currently minded to make major adjustments to its cap and collar. This is because the current arrangements have been sufficient to incentivise a good performance form National Gas, and we see no reason for this not to be the case going forward.

- 4.91 We are minded to keep the caps or collars for both elements unchanged. This means setting an overall incentive strength of the equivalent bps of RoRE to the current RIIO-GT2 cap of £1.6m and collar of -£2.8m per annum. However, this may be revised in light of customer benefit estimations provided by National Gas in its business plan.
- 4.92 We are minded to recalibrate the targets to be consistent with a more neutral incentive outcome. This is because despite the increase in balancing actions carried out, National Gas has continued to perform well under the current structure. We want to ensure that the targets are set in a way that will embed this good historical performance, while rewarding continued improvement. We expect National Gas to use its business plan to justify more stretching targets based on historical performance data, and to engage with relevant stakeholders when doing so.

Next steps

4.93 We expect National Gas to develop proposals for this incentive in its business plan, paying particular attention to the shoulder month arrangements. We expect National Gas to compare the expected performance under BAU requirements (ie no financial incentive) versus the proposed incentive, to fully demonstrate the benefit of the incentive to the market and consumers.

5. Cost of Service

- 5.1 The objective of cost assessment is to determine the efficient level of costs that enables National Gas to carry out their activities and deliver an appropriate level of service for its consumers. It is crucial that we develop a robust toolkit to ensure that the outcome of cost assessment reflects a balance between ensuring consumers get a fair deal now and in the future (by incentivising efficient, well-justified expenditure) and not being a blocker to the rapid pace needed to deliver net zero (by setting a funding framework that provides both certainty and adaptability to National Gas).
- 5.2 Since the publication of the SSMC, we have engaged extensively with stakeholders and conducted four cost assessment working groups (CAWGs) with National Gas and other stakeholders, to discuss the development of the cost assessment methodology for RIIO-GT3. We have also worked closely with National Gas to develop the RIIO-GT3 Business Plan Data Templates (BPDTs).
- 5.3 The ability to interrogate and analyse all the available data (both historical and forecast) is crucial to building a robust toolkit for cost assessment. As such, we will not finalise the approach for RIIO-GT3 before final business plan submissions. We will continue to engage stakeholders through the CAWGs to develop cost assessment methodologies. In this chapter we provide an update on progress made so far and set the direction of travel for the RIIO-GT3 cost assessment approach for baseline allowances.

Overview of the RIIO-GT2 cost assessment approach

- 5.4 In RIIO-GT2, we evolved our RIIO-GT1 cost assessment methodology rather than establish a completely new approach as this framework proved to be successful in driving performance.
- 5.5 The cost assessment toolkit for RIIO-GT2 comprised mainly of unit cost assessment and expert review, supported by historical trend analysis as well as benchmarking in areas that were deemed appropriate.

Options for evolving our cost assessment approach for RIIO-GT3

5.6 At SSMC we set out our initial thoughts on how we intend to approach cost assessment in RIIO-GT3 and asked for feedback. We noted that our approach

- would continue to evolve and could only be finalised after the assessment of National Gas' Business Plan.
- 5.7 In this chapter, we set out the direction of travel for the development of the RIIO-GT3 approach, covering:
 - Cost categorisation how we can group costs to understand and assess them;
 - Cost assessment toolkit the tools and techniques that can be used in our approach to assess costs; and
 - **Other considerations** for the cost assessment methodology including our approach to uncertainty mechanisms and pass-through cost items.

Cost categorisation

5.8 Cost categorisation relates to the level of aggregation at which we choose to assess costs within the price control period - either by expenditure areas (ie Totex, capex, opex) or activity (eg maintenance, business support costs, etc.).

- 5.9 We set out the main cost categories that we proposed to use for RIIO-GT3 and the need to ensure that there is transparency and a clear separation between costs incurred by, and associated revenues attributed to the GSO and GTO.
- 5.10 The main cost categories we sought views on were:
 - load related expenditure;
 - non-load related expenditure;
 - · operational expenditure; and
 - non-operational expenditure.
- 5.11 We proposed to review the interaction of costs, revenues and incentive adjustments across the GSO and GTO in more detail. This includes working with National Gas to review our approach to setting allowances for the GSO internal costs and GSO rewards and penalties from the ODIs (external costs). We also flagged the need to review holistically which outputs and incentives should continue to apply to the GTO and/or GSO part of the business only.

Summary of consultation responses

- 5.12 We received two responses to our consultation question on cost categorisation.

 National Gas agreed with the four main cost categories we proposed and supported sufficient granularity in the underlying cost categories. National Gas advised that there should be consideration of whether more granular cost categories can be combined or simplified. It also highlighted the need to consider whether there is a clear benefit in additional granularity and its intention to work with Ofgem to review the RIIO-GT2 underlying cost categories. National Gas proposed a review of cost categories alongside the associated outputs to be delivered. One DNO also noted that Ofgem should measure the benefits of further granularity against the costs in terms of time and resources and ensure that the categorisation is not regressive.
- 5.13 We received three responses to the consultation question on setting allowances for internal costs and GSO rewards and penalties from the ODIs. National Gas warned against separate incentives on the GSO, as they might distort activity towards visible GSO outcomes even if these are not cost effective. A consumer group noted that we should ensure that setting baseline allowances for a level of performance that customers are already paying for is captured within the ODIs. This would ensure customers are not paying twice and that ODIs clearly reflect these thresholds. One DNO stated that Ofgem should be mindful that separate incentives for the system operator could distort activity towards visible GSO outcomes, even if not cost effective, and away from more subtle approaches that deliver bigger consumer benefits.
- 5.14 We received two responses on the consultation question on supporting the need for greater granularity and transparency in cost reporting and to better understand the relationship between GTO and GSO costs. National Gas acknowledged the desire for greater clarity around the split of costs between the GTO and GSO, but noted that before making any changes it is important to define the principles of cost reporting and that appropriate cost allocation rules be considered against that. One DNO highlighted the need for transparency and the importance of guidance being clear.

SSMD decision and rationale

5.15 We have decided to continue to use the above high-level cost categories for RIIO-GT3. As part of our cost assessment process, we will determine the most

- appropriate techniques for each cost category and the level of aggregation. We will continue to work with National Gas to review and define the underlying granular cost categories for RIIO-GT3 where there is clear benefit for further granularity.
- 5.16 In the BPDTs, we have requested that National Gas separates the GSO and the GTO costs. We think that transparency and being able to understand these costs separately is important. We will continue to review the interaction of GSO and GTO costs, revenues and incentive adjustments. As part of our Draft Determinations, we will look at whether (and how) they should be apportioned to either the GSO or GTO. We will continue to engage with National Gas on this topic through the CAWGs and will develop our approach alongside the cost assessment methodology for RIIO-GT3.

Cost assessment toolkit

5.17 In RIIO-GT2, our cost assessment toolkit comprised of unit cost analysis, historical trend analysis, expert review, project assessment and benchmarking. At SSMC we consulted on whether our toolkit approach is appropriate or if there are other assessment techniques that we should consider for RIIO-GT3.

Unit cost

SSMC summary

- 5.18 We proposed to undertake unit cost assessment to determine efficient costs where it is appropriate. This assessment may also consider multiple cost drivers where multiple activities need to be undertaken to deliver projects.
- 5.19 We said that we expect National Gas to provide, in its business plan, information on appropriate cost drivers in developing the unit cost models. We noted that additional cost drivers may be needed to explain the variations observed in historical costs and that National Gas should consider this. We proposed to cross-check these models using historical data and use, where appropriate, expert views, international comparators, or other relevant tools to test if costs are efficient.

Summary of consultation responses

5.20 We received two responses. Both stakeholders agreed with the proposed approach and highlighted the importance of considering a number of factors

including the use of multiple cost drivers and models' cross-checks against historical data and potentially expert view if necessary.

SSMD decision and rationale

5.21 We have decided to retain our SSMC position and, where deemed appropriate, undertake unit cost assessment. Unit cost assessment is an important tool in our tool kit and will allow us to set challenging and realistic cost allowances. Its retention is also supported by stakeholders. We expect National Gas to provide information in its business plan on appropriate cost drivers.

Historical trend analysis

SSMC summary

5.22 We proposed to use historically incurred costs when deemed a good indicator of future trends, and expected to use them as an important part of our evidential base for RIIO-GT3 cost assessment. Where volumes are used to drive our assessment, we stated that we would ensure that items are comparable and, where possible, supplement the analysis with robust external data.

Summary of consultation responses

5.23 The two respondents to this consultation question agreed with the inclusion of historical trend analysis as part of the cost assessment toolkit. They noted that this should only be used when historical costs are a good indicator of future trends and that any volumes assessed together should be comparable. National Gas suggested that Ofgem should be wary of any issues relating to working in a sector of one and advised that close engagement will be required between Ofgem and the industry.

SSMD decision and rationale

5.24 Supported by feedback from stakeholders, we have decided to use historical costs as an important part of the evidence base where they are a good indicator of future trends, and where any volumes assessed together are comparable. We will consider whether historical trend analysis could be complemented by other assessment tools. We agree with National Gas that it will be important to remain conscious of the potential challenges that could arise from working in a sector of one. Regular continuous engagement with National Gas and the industry will be important in ensuring the success of our cost assessment approach.

Expert review

SSMC summary

5.25 At SSMC we stated that we expect to use expert review to supplement our overall toolkit, using multiple techniques to ensure our assessment is robust. We also proposed to use engineering assessment by subject matter experts in situations where activities are unique to the network or where we have insufficient data to assess efficient costs.

Summary of consultation responses

5.26 The two respondents to this consultation question agreed on the inclusion of expert review in RIIO-GT3 cost assessment toolkit. National Gas noted that open dialogue is required to ensure that the necessary information is present where subjectivity is present.

SSMD decision and rationale

5.27 Supported by feedback from stakeholders, we have decided to use expert review where appropriate to supplement the overall cost assessment approach for RIIO-GT3. We consider this important to ensure our approach is robust.

Project Assessment

- 5.28 We said that as part our toolkit, for specific investment projects we may carry out individual cost assessment using techniques appropriate for the project type and at a proportionate level of scrutiny. To do this, we noted that additional levels of cost granularity may be required, for example labour, plant, materials, risk and project management costs.
- 5.29 We noted that certain projects may contain uncertainty around the timing or needs case but have reasonably firm cost information. In this case, we said that we may consider leaving cost assessment until the needs case is more certain, or conduct an assessment of the efficient costs and incorporate the result in a relevant UM or PCD, triggered when the need is clear.

Summary of consultation responses

5.30 The two respondents to this consultation question suggested that there should be an open dialogue between Ofgem and industry on what information is required to make a robust judgement and an informed decision on projects.

SSMD decision and rationale

5.31 We consider that project assessment is an important part of our tool kit. We have decided to retain our SSMC position and include individual cost assessments in our cost assessment toolkit for RIIO-GT3. Project assessment is a key tool which allows us to establish challenging cost allowances. As part of future CAWGs we will engage further stakeholders on the information needed to make robust decisions. As part of this we will ensure we use cost assessment techniques appropriate for the project type. We will also consider leaving cost assessment until the needs case and/or costs are more certain. In these instances, we will consider the use of UMs or PCDs to ensure projects can progress when there is more certainty. This approach ensures flexibility of the funding mechanism, whilst protecting consumers from incurring costs prematurely.

Benchmarking

SSMC summary

5.32 We stated the importance of benchmarking in the cost assessment process, and the intention to leverage our extended base of cost data (eg historical, cross-sector and international data) where appropriate.

Summary of consultation responses

5.33 National Gas and a DNO were cautious on using cross-sector benchmarking, stressing out the importance of ensuring comparability and giving appropriate weighting to it in the overall sector assessment.

SSMD decision and rationale

5.34 We have decided to, where applicable and appropriate, use benchmarking tools in RIIO-GT3 as it is an important tool in our tool kit. Where feasible, benchmarking can ensure a more robust cost assessment. We note the cautions from responses and will endeavour to circulate any models and test our approach through the CAWG to ensure a robust approach.

Uncertainty mechanisms in RIIO-GT2

- 5.35 Uncertainty mechanisms allow us to change a network company's revenues during the price control period. We use the term uncertainty mechanisms to cover a range of regulatory approaches. This section is GT-specific and should be read in parallel with Chapters 8 and 11 of the Overview Document, which provides further information on:
 - (1) our overall approach to managing uncertainty under RIIO-3; and
 - (2) our current approach on the Authority-triggered re-openers that will apply to each re-opener mechanism.

SSMC summary

5.36 At SSMC we listed the UMs implemented in RIIO-GT2 and sought views on whether they should be retained, evolved or removed for RIIO-GT3.

Summary of consultation responses

5.37 Some stakeholders suggested the implementation of a resilience re-opener and acknowledged that there may be some scope for new re-openers. One DNO noted that National Gas and Ofgem should agree the UMs for GT amongst themselves.

SSMD decision and rationale

5.38 Chapters 2, 3 and 4 contain our decisions on GT-specific UMs. We will continue to work with stakeholders to develop the UM package for RIIO-GT3.

Pass-through costs

SSMC summary

- 5.39 Within RIIO there is a set of specific cost areas that network companies can passthrough to consumers due to the limited control they have in managing them.
- 5.40 Pass-through mechanisms such as business rates, bad debt, Ofgem license fee and pension scheme established repair applied to more than one sector and are covered in Chapter 8 of the Overview Document. Our SSMC position was to retain all the pass-through mechanisms for RIIO-GT3.

SSMD decision and rationale

5.41 Our decision on National Gas specific pass-through items, as well as stakeholders feedback, is set out in table below.

Table 1: Summary of our pass-through decisions for RIIO-GT3

Description	Summary of SSMC Proposal	Response	Decision
Policing costs: The Counter-Terrorism Act 2008 (sections 85 to 90) governs arrangements for policing at gas facilities. The security requirements, and associated costs, are set by Government and are outside the control of National Gas.	We intended to treat these costs as pass through.	Stakeholders agree with Ofgem's position.	We will treat these costs as pass through.
PARCA Termination Value	We intended to treat these costs as pass through.	Stakeholders agree with Ofgem's position.	We will treat these costs as pass through. National Gas has no control over the PARCA termination value, which is equal to the PARCA Termination Costs incurred less PARCA Termination Amounts received from PARCA Applicants.
Hynet FEED Study	The Hynet design study will be completed by Cadent in RIIO-GT2, therefore we proposed to remove the mechanism for RIIO-GT3.	Stakeholders agree with Ofgem's position.	We will remove the mechanism for RIIO-GT3 as the Hynet design study will have been completed by the start of RIIO-GT3.
NTS Shrinkage	We sought views whether these costs should be included in totex.	Different responses, see Chapter 2 of this Annex.	We will continue to treat these costs as pass-through. See Chapter 2 of this Annex for more detail.
Adjustment to the Net Zero Pre- construction Work and Small Projects Re-opener	We intended to treat these costs as pass through.	Stakeholders view this as a re-opener and not a pass through.	We will retain the separate NZASP re-opener in RIIO-3 as well as treating the costs as pass through via National Gas where appropriate (i.e. to allow the opportunity for GDNs

Description	Summary of SSMC Proposal	Response	Decision
			to socialise costs across GB consumers, where projects produce wider social benefits to customers). See Overview document for more detail, Chapter 8.
Adjustment to the Net Zero Pre- construction Work and Small Projects Re-opener	We intended to treat these costs as pass through.	Stakeholders view this as a re-opener and not a pass through.	We will retain the separate NZASP re-opener in RIIO-3 as well as treating the costs as pass through via National Gas where appropriate (i.e. to allow the opportunity for GDNs to socialise costs across GB consumers, where projects produce wider social benefits to customers). See Overview document for more detail, Chapter 8.
Gas Conveyed to Independent Systems: allows National Gas 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).	We intended to treat these costs as pass through.	Stakeholders agree with Ofgem position.	We will treat these costs as pass through because these costs relate to implementation of government policy 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).
Central Data Service Provider (CDSP) Costs: provides for the Gas Transporters' share of Xoserve costs.	We intended to treat these costs as pass through.	There was concern from a DNO and a consumer body over the possible conflict of interest that arises relating to the efficiency of costs	We have decided to retain this as a pass-through item, with the exception of Gemini costs. The current governance arrangements require industry (including National Gas, the GDNs and other users of CDSP services) to fully engage in setting and scrutinising Xoserve's CDSP costs annually, which provides oversight. We expect National Gas and the

Description	Summary of SSMC Proposal	Response	Decision
		incurred by the CDSP, given that National Gas is a major customer of the CDSP.	GDNs, together with other CDSP users, to engage fully in the CDSP budget setting process and work collaboratively to ensure these costs are efficient and services fit for purpose.

Proposals for the GT Business Plans

RIIO-GT3 Business Plan Data Templates (BPDTs)

5.42 In order to conduct robust cost assessment, it is essential that we have highquality and consistently reported data. To achieve this, National Gas is required to complete BPDTs based on our guidance documents.

SSMC summary

- 5.43 In our SSMC, we stated our intention for the RIIO-GT3 BPDTs to be simple, closely aligned with the RRPs. We proposed using both the RIIO-GT2 RRP and BPDTs as the starting point. Since issuing the SSMC, we have developed and evolved reporting requirements for RIIO-GT3. We have:
 - conducted an initial mapping exercise of the tables and structure of the RIIO-GT2 RRPs and BPDTs as the basis for determining what needed to be retained and removed;
 - shared draft RIIO-GT3 templates in batches for iterative development, and used the CAWGs and Gitlab as a forum for collaborative working with National Gas, resolving over 150 issues raised in the process; and
 - developed and updated the BPDT guidance and commentary documents in line with the changes made to the templates.

Summary of consultation responses

5.44 In response to our SSMC, stakeholders commented that they were supportive of the routine capture of data through the annual RIGs processes to improve consistency of data. There was a desire from stakeholders that the ownership change of National Gas be taken into consideration when developing the BPDTs in respect of the previous price controls. Other considerations include the granularity of information available across each of these periods and the change

in categorisation of asset health. Multiple stakeholders asked for consistency between sectors where possible whilst maintaining sector specific details.

SSMD decision and rationale

- 5.45 A final draft version of the RIIO-GT3 BPDTs and guidance have been published alongside the SSMD.
- 5.46 We have taken on board the feedback as part our engagement process with National Gas since issuing the SSMC. We consider that the BPDTs and associated guidance have addressed detailed issues and concerns raised by National Gas and are proportionate to the level of costs that need to be assessed.
- 5.47 As a next step, National Gas will submit draft business plan data to us on 31st July 2024 which enable to test the templates, guidance and processes. Following this, we will continue to work in collaboration with National Gas, via the CAWGs and Gitlab to resolve any outstanding issues and enhance the templates ahead of final business plan submission.
- 5.48 We will also engage with National Gas on the updated probabilistic modelling based on FES 2024 pathway. See our decision in Chapter 5 of the Overview document.

Next steps

5.49 Following draft BPDTs submissions, we will resume the engagement with stakeholders through the CAWGs to continue to develop our cost assessment toolkit. We will not finalise our approach to cost assessment for RIIO-GT3 before submission of the final business plan.