Consultation

RIIO-3 Draft Determinations – National Gas Transmission

Publication date:	01 July 2025
Response deadline:	26 August 2025
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The next set of price controls for the Electricity Transmission (ET), Gas Distribution (GD) and Gas Transmission (GT) sectors will cover the five-year period to 31 March 2031 (RIIO-3). In December 2024, the network companies in these sectors submitted their RIIO-3 Business Plans for this period to us. We have now assessed these plans.

This document, and others published alongside it, set out our Draft Determinations for the RIIO-3 price controls. These are for consultation, and we would like views from people with an interest in RIIO-3 by 26 August 2025. We particularly welcome responses from consumer groups and energy industry network users. We also welcome responses from other stakeholders and the public.

Once the consultation is closed, we will consider all responses. We want to be transparent in our consultations. We will publish the non-confidential responses we receive alongside a decision on next steps on our website at ofgem.gov.uk/consultations. If you want your response – in whole or in part – to be considered confidential, please tell us in your response and explain why. Please clearly mark the parts of your response that you consider to be confidential, and if possible, put the confidential material in separate appendices to your response.

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1. Introduction

Purpose of this document

1.1 This document sets out our Draft Determination consultation positions for the Gas Transmission (GT) price control for National Gas Transmission (National Gas) covering the five-year period from 1 April 2026 to 31 March 2031 (RIIO-GT3). All figures in this document are in 2023/24 prices except where otherwise stated.

What is Gas Transmission

1.2 Great Britain's (GB) GT network, the National Transmission System (NTS), is owned and operated by National Gas Transmission (National Gas), which is the sole Gas Transmission Owner (GTO)[1] and Gas System Operator (GSO)[2] in GB. National Gas' duties and obligations are set out in its licence and in legislation.

1.3 The NTS is more than 7,600 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.

1.4 Natural gas is essential for the day-to-day heating of households and the enduring functioning of industrial and manufacturing processes. Furthermore, unabated gas, will continue to play a critical back-up role throughout the transition to clean power, ensuring security of supply for the whole energy system in GB. This means sufficient network capacity and capability, underpinned by strong asset health and stewardship, including to accommodate the growing west-to-east gas flows driven by increasing liquified natural gas (LNG) supplies.

What are we consulting on

1.5 In Chapter 2 we provide a summary of the key aspects of the RIIO-GT3 price control.

1.6 Chapter 3 explores the core outputs and incentives that we propose should underpin RIIO-GT3. This includes incentives to drive National Gas behaviour that benefits consumers, such as good quality of maintenance work on the NTS,

[1] 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.
[2] 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 that gas quality standards are met. National Energy System Operator (NESO) is responsible for the long-term gas system planning.

limiting the duration of unplanned outages, as well as incentives to limit the leakage of greenhouse gases. Chapter 3 also describes the outputs that will be set in RIIO-GT3 to hold National Gas accountable for critical network upgrades.

1.7 Chapter 4 sets out how we propose to manage uncertainty during RIIO-GT3. It describes the suite of Uncertainty Mechanisms (UMs) which will ensure that the investment that National Gas identifies as being required in period can be assessed and funded in a timely manner without causing unnecessary delays to delivery, including UMs for load-related projects to ensure security of supply.

1.8 In Chapter 5, we outline how we have approached our assessment of National Gas' costs and engineering justifications for the RIIO-GT3 period through these Draft Determinations to ensure that National Gas is funded for investment plans that are sufficiently mature, efficient and deliverable and that ongoing activities and the transition to net zero is efficient for both current and future consumers.

1.9 Chapter 6 provides an overview of National Gas' proposed reward for the Business Plan Incentive (BPI).

1.10 The concluding Chapters 7 and 8 set out our proposals for innovation and data and digitalisation.

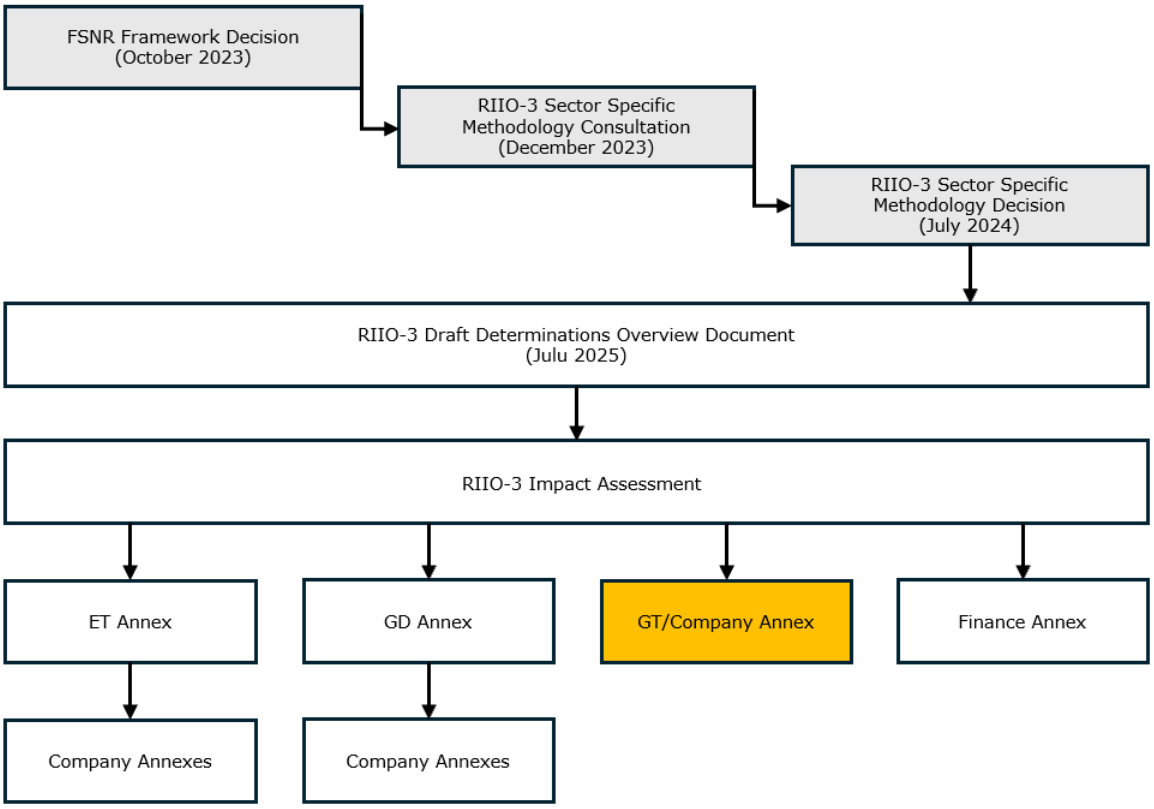
Navigating the RIIO-3 Draft Determinations documents

1.11 The RIIO-3 Draft Determinations are comprised of an Overview Document, a Finance Annex and sector annexes for ET, GD and GT. This document is both the sector and company annex for GT. The sector annexes are underpinned by a RIIO-3 Impact Assessment, company annexes and, where relevant, technical annexes. Figure 1 below maps all documents relevant to our suite of RIIO-3 Draft Determinations, including the framework and methodology documents that have preceded it.

1.12 Our Draft Determinations have considered all previous feedback from network companies and other stakeholders, including the reports from the Independent Stakeholder Groups (ISGs) that were established to challenge each of the network companies on their stakeholder engagement and business plans, and the feedback received in response to our RIIO-3 Call for Evidence[3]. Further details on our approach to embedding the consumer voice is set out in the RIIO-3 Overview Document.

[3] Call for evidence on the electricity transmission, gas transmission and gas distribution business plans for RIIO-3 | Ofgem

Figure 1: RIIO-3 Draft Determinations Map



2. RIIO-GT3 at a glance

2.1 We want National Gas to maintain a safe and resilient network, while supporting net zero transition and managing uncertainty on the future of gas.

2.2 National Gas transports the gas that heats homes and powers businesses and industry. The GT system also has a crucial role in security of supply: our SSMD was clear that network resilience is paramount. Since then, Clean Power 2030 (CP2030) has emphasised the importance of the GT network to provide electricity system security as backup for low wind and low solar conditions, during the energy system transition to net zero.

2.3 At the same time, the long-term future for gas networks is much more uncertain depending on different net zero pathways, and this is necessary and critical context to our RIIO-GT3 Draft Determinations. In terms of managing this uncertainty:

- Firstly, we welcome government's Market Update and the follow up work programme it has announced which will look at fundamental questions facing the sector including network cost recovery. This will provide critically important clarity and direction.
- Secondly, we have ensured that RIIO-GT3 is aligned with the long-term strategic system view of the National Energy System Operator (NESO).[4] We are working with National Gas, NESO, and government to ensure the full integration of gas into the Centralised Strategic Network Plan (CSNP). We have also built in flexibility through UMs for NESO and government-driven investments that are needed in period (and a proposed licence obligation on National Gas to support NESO in its planning function).

2.4 Whilst our priority for RIIO-GT3 is to maintain a resilient and safe NTS that can continue to supply gas where it is needed, we must also ensure that investments with returns over long periods of time minimise regret risk.

2.5 National Gas submitted its Business Plan on the basis of maintaining the absolute network-wide risk at the level it was at the start of RIIO-GT2. As set

[4] We formally commissioned NESO to review and advise Ofgem on alignment of National Gas' RIIO-GT3 Business Plan with the long-term energy system needs as we transition to net zero. In its response (https://www.neso.energy/document/362556/download) NESO confirmed that the underlying analysis that National Gas had undertaken aligns with NESO's detailed probabilistic modelling against the FES scenarios; and that it is supportive of National Gas' proposed investment for RIIO-GT3 to ensure network capability and resilience of the critical assets, including new investment to increase capability in South Wales.

out in Chapter 5, we do not accept that the case for a step-change in resilience across the whole network is clear or well justified.

2.6 Our proposed package of approved allowances ensure that the National Gas is able to:

- Deliver government and NESO driven investment needed to meet legislative, environmental and safety requirements;
- Deliver other asset health investment to replace aging assets and to support the needs for ensuring continued and resilient supplies of gas;
- Secure capacity investment to ensure continued capability of the network in light of the growing west-to-east gas flows driven by LNG; and
- Secure funding in-period for new investments as and when the need for or design of projects becomes more certain through a combination of re-openers and automatic mechanisms.

2.7 Across the RIIO-3 sectors we've increased our focus on cyber and climate resilience, whilst our Network Asset Risk Metric (NARM) tool will ensure the underlying health of the network assets across the electricity and gas networks remains world leading.

Prioritising consumer needs and environmental sustainability…

2.8 We want National Gas to prioritise minimising its direct impact on the environment to support net zero and to provide services which consumers value. As such RIIO-GT3 will include:

- ~£0.4bn funding aimed at reducing methane emissions (eg Network Decarbonisation and Emissions Compliance Re-Opener, Compressor Emissions Price Control Deliverable (PCD)) for compressor upgrades and replacement;
- A new Use-It-Or-Lose-It (UIOLI) mechanism for biomethane connections onto the NTS and gas distribution networks to help accelerate the transition to net zero and increase injection of biomethane;
- New financial incentives aiming at increasing the utility of new technologies to help reduce emissions from compressors and pipelines;
- GSO incentives to drive excellent performance by National Gas when delivering capacity constraint management, demand forecasting, maintenance and residual balancing services to its customers; and

- Over £11m of Network Innovation Allowance (NIA) and access to portions of a £500m Strategic Innovation Fund (SIF) to support network innovation (and third party-led innovation) that contributes to net zero.

With the lowest possible impact on bills

2.9 To deliver these objectives as efficiently as possible we have proposed baseline totex allowances for National Gas of £2.46bn. At this stage this represents ~60% of National Gas' proposed baseline funding, whilst also securing the desired level of long-term monetised risk that National Gas aimed for in its Business Plan submission. To protect consumers against non-delivery of the work against this funding and to track progress, we propose an extensive use of PCDs (eg NARM PCD, Cyber PCD).

2.10 The proposed reduction of £1.60bn against the Business Plan submission largely relates to interventions that we are unable to accept because the need for work hasn't been established or where the economic justification did not show clear consumer benefit. Some of the allowance reductions are also where we consider that the proposed works can be delivered more efficiently by National Gas.

2.11 We expect National Gas to improve its proposals ahead of our Final Determinations, which could lead to additional allowances being settled in ex ante baseline funding. We have been transparent about what additional evidence or information is needed, particularly where the needs case for such investment has not been sufficiently justified.

2.12 Furthermore, we expect that up to £0.97bn of allowances may be requested in-period through Uncertainty Mechanisms for further investments during the RIIO-GT3 period. This includes re-openers (eg Asset Health Re-opener, Network Capability Re-opener) to enable National Gas to fund the work which we think can be done as greater clarity of need and specific engineering specifications emerges during RIIO-GT3. It also includes the work required to meet government or NESO-driven investment need (ie. GOAD, CSNP, CP2030) in the future.

2.13 With approximately 75% of total allowances in ex ante baseline funding, the proportion (and absolute amount) of allowances set ex ante vs in period UMs has increased materially compared with RIIO-GT2. In doing so, we aim to give as much clarity as possible to National Gas in facilitating its infrastructure delivery programme. This greater certainty, that will help with supply chains particularly, is designed to enable delivery of projects on time and at lowest possible cost.

3. Outputs and incentives

Introduction

3.1 This chapter sets out our proposals for the package of outputs and incentives that will apply in RIIO-GT3, including Licence Obligations (LOs), Price Control Deliverables (PCDs), Use-It-Or-Lose-It (UIOLI) allowances and Output Delivery Incentives (ODIs).[5]

3.2 The outputs are set out under the headings of the RIIO-3 outcomes:

- Infrastructure fit for a low-cost transition to net zero;
- Secure and resilient supplies; and
- High quality of service from regulated firms.

3.3 Table 1: and Table 2 outline all the outputs and incentives we are proposing for RIIO-GT3 and sets out where you can find full details.

Table 1: Cross-sectoral outputs and incentives RIIO-3

Output name	**Output type**	**Sector(s)**	**Further detail**
Network Asset Risk Metric (NARM)	PCD, ODI-F and ODI-R	ET, GD, GT	Overview Document
Physical Security	PCD and re-opener	ET, GT	Overview Document
Cyber Resilience	PCD and re-opener	ET, GD, GT	Overview Document
Environmental Action Plan and Annual Environmental Report	ODI-R and LO	ET, GD, GT	Overview Document
Strategic Innovation Fund (SIF)	UIOLI	ET, GD, GT	Overview Document
Network Innovation Allowance (NIA)	UIOLI	ET, GD, GT	Overview Document
Totex Incentive Mechanism (TIM)	ODI-F	ET, GD, GT	This document
Biomethane Connections	UIOLI	GD, GT	This document

[5] ODIs can be either financial (ODI-F) or reputational (ODI-R).

Table 2: Sector specific outputs and incentives in RIIO-GT3

Output name	Output type	Sector(s)	Further detail
Gas Strategic Planning – Cooperation with NESO and Other Stakeholders	LO	GT	This document
Greenhouse Gas Emissions (compressors)	ODI-F	GT	This document
Greenhouse Gas Emissions (pipeline)	ODI-F	GT	This document
Greenhouse Gas Emissions (fugitive)	ODI-R	GT	This document
NTS Shrinkage Package	ODI-F	GT	This document
Redundant Assets	PCD	GT	This document
Compressor Emissions	PCD	GT	This document
Asset Health Non-Lead Assets	PCD	GT	This document
Network Asset Risk Metric (NARM)	PCD	GT	This document
Compressor Breakdown	UIOLI	GT	This document
Nitrogen Sleeves	PCD	GT	This document
West Import Resilience Project (WIRP)	PCD	GT	This document
Bacton Terminal Site Redevelopment	PCD	GT	This document
Entry and Exit Constraint Management	ODI-F	GT	This document
Quality of Demand Forecasting	ODI-F	GT	This document
Residual Balancing	ODI-F	GT	This document
Maintenance	ODI-F	GT	This document
Customer Satisfaction Survey	ODI-F	GT	This document

Infrastructure fit for a low-cost transition to net zero

3.4 In our SSMD we set a clear expectation that we want to focus on minimising National Gas' impact on the environment and accelerate the transition to a smarter, more flexible, and sustainable low-carbon energy system.

3.5 We included two categories of outputs under infrastructure fit for a low-cost transition to net zero:

- **Gas Strategic planning** to support NESO's whole system planning approach;
- **Environmental outputs** to work towards decarbonising the NTS.

3.6 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 UMs 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 UMs (see Chapter 8).

Gas Strategic Planning - Cooperation with NESO and Other Stakeholders (LO)

Purpose: To support alignment of National Gas' system planning with NESO's wider energy system planning processes. This includes proactive engagement, collaboration and information sharing with NESO and other stakeholders in the area of gas strategic planning.

Benefits: Increased transparency and alignment of National Gas' and NESO's wider energy system plans.

Background

3.7 In our SSMD, we required National Gas to collaborate with NESO in the area of gas strategic planning to ensure alignment with the long-term wider energy system plans. We also recognised the importance of National Gas and NESO collaboration in the area of network capability assessment that underpins National Gas' Business Plan[6] and in providing the requested information to NESO to conclude on the Gas Network Capability Needs Report (GNCNR).[7]

[6] National Gas' engagement with the NESO ahead of the Business Plan and GNCNR was one of the minimum requirements set out in the Business Plan Guidance.
[7] Gas Network Capability Needs Report (GNCNR) | National Energy System Operator

3.8 We set our expectations for National Gas to proactively consult the NESO, one of its key stakeholders, on how it could continuously improve its performance in the area of long-term gas strategic planning.

Consultation position and rationale

Summary of consultation position

Output type: Licence Obligation

Measurement: Proactive sharing of information and engagement with NESO and other relevant stakeholders in the area of gas strategic planning. Seeking, reviewing and sharing feedback provided by NESO and other stakeholders on the quality of engagement and potential areas for improvement.

Reporting: Reporting to Ofgem every two years, or when requested by Ofgem.

Applies to: National Gas System Operator

Gas and energy wide system planning areas

3.9 National Gas and NESO will collaborate across several gas strategic planning areas of work, including:

- GNCNR: NESO published its first GNCNR in December 2024, setting out physical capability of the NTS under the Future Energy Scenarios 2024. NESO is required to publish subsequent GNCNRs every second regulatory year from 2024.
- Strategic Planning Options Proposal (SPOP): This is National Gas' response to NESO's GNCNR. First SPOP will be submitted to NESO and Ofgem by the end of June 2025.
- Long-Term Development Statement: National Gas is obliged to provide its view of the future forecasts of likely use and development of the pipeline system.
- Gas Options Advice Document (GOAD): NESO's best view of the options for the NTS that could meet the needs and requirements identified in the GNCNR. The first GOAD will be sent to Ofgem by the end of 2025.
- CSNP: The first coordinated, multi-vector approach to long-term network planning across GB, expected to be published by the end of 2027, which will incorporate the conclusions from the GNCNR and GOAD. The CSNP will accelerate the development of the Government’s net zero ambitions, deliver CP2030 whilst ensuring resilience of the supporting systems, including natural gas transmission system. The CSNP will also cover hydrogen infrastructure development needs and is expected to indicate the potential

scale and level of repurposing of the existing natural gas transmission network.

Output Type

3.10 Due to the number of areas across which National Gas and NESO, as well as other stakeholders, will be collaborating on, we are proposing to introduce a licence obligation for National Gas to collaborate and share information with NESO as it may reasonably require to perform its long-term strategic planning functions.

3.11 In future, we will want to understand what feedback National Gas has received from its stakeholders, and in particular from NESO. We are proposing to include a provision into the licence to that effect.

Questions

GTQ1.	Do you agree with the proposed licence obligation for National Gas to collaborate with NESO and to seek stakeholder feedback in the area of gas strategic planning?

Greenhouse Gas Emissions (compressors) ODI-F[8]

Purpose: To incentivise National Gas to minimise the environmental impacts when making decisions regarding the venting of gas compressors.

Benefits: A reduced environmental impact from lower levels of compressor venting. A positive impact on reducing NTS shrinkage.

Background

3.12 Compressor units on the NTS are sometimes depressurised to allow for maintenance and inspections. When these assets are depressurised, gas is released which contributes to greenhouse gas (GHG) emissions in the atmosphere.

3.13 In our SSMD we decided to retain this ODI-F (reward and penalty) and indicated our intention to update emissions targets to embed historic performance with a small increase in materiality relative to RIIO-GT2.

[8] This incentive was formerly known as the Greenhouse Gas Emissions (venting) ODI-F. This has been changed to differentiate it from the GHG pipeline incentive below which also concerns venting.

3.14 National Gas proposed increasing the incentive exposure from +/-£1.5m to +/-£2.5m per annum (pa) throughout RIIO-GT3, along with tightening targets, reducing them from 2,897 tonnes of natural gas emitted per year to 2,600.

Consultation position and rationale

Summary of consultation position

ODI Type: Financial - reward and penalty.

Measurement: Measured based on tonnes of methane emitted per year.

Target: 2,224 tonnes in year one, reducing by 100 tonnes each year.

Survey scope and methodology: Annual independent audit ensuring compliance with International Auditing and Assurance Standards.

Reporting: Performance will be reported annually in Regulatory Reporting Packs (RRPs) as well as in its publicly facing Annual Environmental Report (AER).

Incentive exposure: +/-£2m annually.

Incentive value: Each tonne of gas vented both above and below the deadband will be rewarded/penalised according to the central carbon price.

Applied to: National Gas System Operator

Measurement

3.15 We propose that National Gas' performance should be measured against the tonnes of natural gas emitted from NTS compressors. This will be measured in tonnes of carbon with the value of the incentive reward/penalty being measured against the government published central traded carbon price.[9] There are no material changes proposed here relative to RIIO-GT2, which we think helps preserve continuity in measuring performance across price controls - providing additional transparency to stakeholders.

Target

3.16 Following stakeholder feedback, we decided to retain this incentive with more stretching targets. In its Business Plan, National Gas suggested a fixed target of 2,600 tonnes of natural gas vented annually.

3.17 We are not satisfied that this reflects sufficient ambition, especially taking into account the adoption of new technological improvements aimed at increasing

[9] Carbon valuation - GOV.UK

efficiency and the increasingly more stringent European standards on compressor venting.

3.18 We propose to set a dynamic target for this incentive, starting at 2,224 tonnes of natural gas vented for the first year of RIIO-GT3. This is equivalent to the average natural gas vented throughout the first three years of RIIO-GT2. We propose to reduce this target by 100 tonnes year-on-year throughout the RIIO-GT3 price control as shown in Figure 3. When assessing National Gas' performance for this incentive, we will exclude the impact of funded decarbonisation investments - if granted under Network Decarbonisation and Emissions Compliance Re-opener - on lowered emissions.

3.19 We also propose to implement a preliminary 100 tonne deadband to account for fluctuation in performance arising from unpredictable flow patterns. This deadband has been established using the difference between the worst performing year in RIIO-GT2 (2,325 tonnes) and the average performance in RIIO-GT2 (2,224 tonnes).

3.20 We are yet to receive the regulatory reporting data for year four of RIIO-GT2. We expect to consider all available performance data in forming our final target and deadband in our Final Determinations.

Incentive exposure

3.21 We do not consider National Gas' proposed increase in the cap and floor from +/-£1.5m to +/-£2.5m is warranted given the established nature of this incentive. However, we do however propose implementing a symmetrical cap and floor of +/-£2m annually to incentivise further improvements in this area. throughout RIIO-GT3.

Figure 2 - Historical GHG Venting Emissions Performance

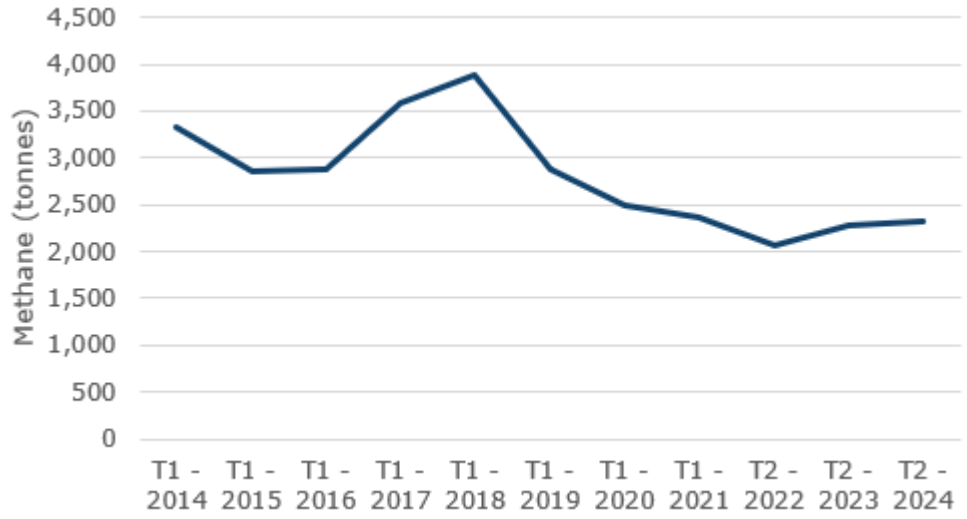
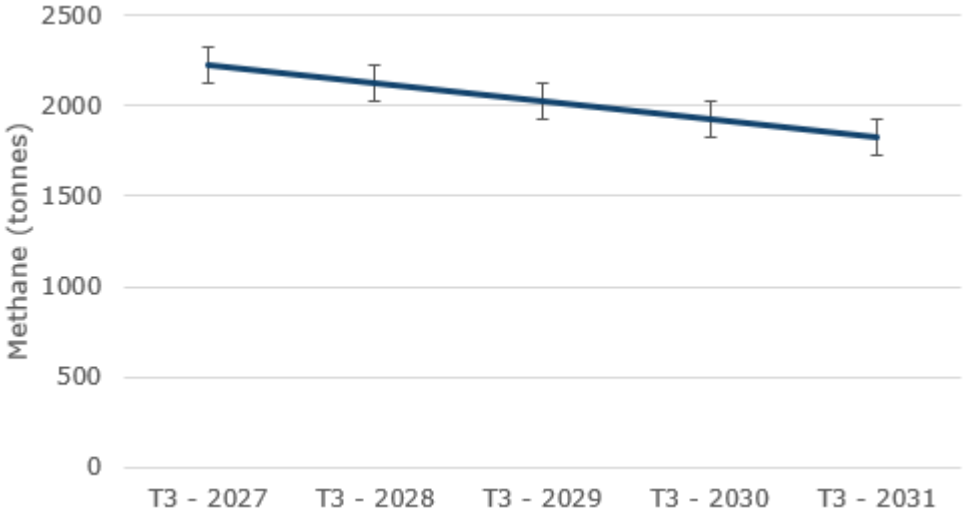


Figure 3 - Proposed RIIO-GT3 Venting Emissions Targets



Questions

GTQ2.	Do you have any views on the proposed design of this incentive?
GTQ3.	Is the yearly reduction in the target tonnes of carbon preferable to a target which remains constant throughout the price control?

Greenhouse Gas Emissions (pipeline) ODI-F

Purpose: To incentivise the GSO to optimise the utilisation of recompression technology while conducting pipeline maintenance to reduce the levels of vented gas.

Benefits: A reduced environmental impact from pipeline venting. Lower levels of shrinkage.

Background

3.22 The greenhouse gas pipeline incentive (GHG-P) is a new incentive proposal by National Gas. It encourages National Gas to effectively coordinate the use of recompression units alongside additional capacity rigs to ensure that recompression conducted during maintenance jobs is as efficient as possible.

3.23 We did not consult on this specific incentive proposal in the SSMD, though we welcome additional proposals for new incentives in gas transmission.

3.24 National Gas proposed a symmetrical incentive with a +/-£1.5m cap/floor annually, where it would be rewarded for each tonne of gas reinjected below 1barg and penalised for each tonne vented above 1.2barg. It claims this could save 80% of gas vented during maintenance works.

Consultation position and rationale

Summary of consultation position

ODI type: Financial – reward and penalty.

Measurement: Measured based on tonnes of methane emitted over the course of the price control.

Target: To be established after National Gas' baselining. Will tighten annually.

Survey scope and methodology: Annual independent audit ensuring compliance with International Auditing and Assurance Standards.

Reporting: Performance will be reported annually in RRPs as well as in its publicly facing Annual Environmental Report.

Incentive exposure: +/-£3.5m in total for years two to years five of the RIIO-GT3 price control.

Incentive value: Each tonne of gas vented both above and below the deadband will be rewarded/penalised according on the central carbon price.

Applies to: National Gas System Operator

ODI Type

3.25 We are proposing implementing a new financial incentive in this area. This incentive will be based on National Gas' performance across the whole price control, rather than an annual structure such as the compressor incentive. This will allow National Gas the opportunity to improve upon their performance throughout the price control, rather than underperforming early in the period while becoming familiar with new technology and processes.

Target

3.26 In the first year of RIIO-GT3, National Gas is expected to complete the baselining for this incentive. The target will be established following the completion of baselining by National Gas and the assessment by an external auditor. This incentive will be forward looking following the establishing of this baseline pressure.

3.27 We propose that the target is tightened year on year culminating in a final business-as-usual (BAU) pressure which will be established in the final year of the price control. This incentive will be removed at the end of RIIO-GT3 once the BAU pressure has been achieved with the expectation that National Gas will continue to operate at this level in the future.

Incentive exposure

3.28 Given the potential emissions reduction that are in scope are lower than the compressor incentive, we do not consider the requested incentive exposure of +/-£1.5m (pa) is justified.

3.29 Relative to the environmental benefit of the compressor incentive we propose a cap/floor of +/-£3.5m for the four-year period of RIIO-GT3. We consider that this better calibrates the consumer benefit relative to the value delivered by the compressor incentive. We aim for the rewards across the GHG suite to remain proportional to the benefits delivered.

3.30 When assessing National Gas' performance for this incentive, we will exclude the impact of funded decarbonisation investments – if granted under Network Decarbonisation and Emissions Compliance Re-opener - on lowered emissions.

Questions

GTQ4.	Do you have any views on the proposed design of this incentive?
GTQ5.	Do you think the limited life of this incentive is appropriate?
GTQ6.	Would you support a penalty only incentive in succeeding price controls?

Greenhouse Gas Emissions (fugitive) ODI-R

Purpose: To incentivise the Gas System Operator to identify and repair defects on the NTS more effectively year on year.

Benefits: Reduced environmental impact from leaks on the NTS, lower levels of NTS shrinkage, increased safety.

Background

3.31 The greenhouse gas fugitive incentive (GHG-F) is a new incentive proposal by National Gas.

3.32 This incentive is designed to encourage National Gas to go beyond its licence obligations with regards to identifying and repairing fugitive emissions on the NTS.

3.33 National Gas proposed a symmetrical cap and floor of +/-£1.5m, where it would be rewarded for outperforming baseline emissions by 10% year on year and penalised for poor performance.

Consultation position and rationale

Summary of consultation position

ODI type: Reputational.

Measurement: Measured in tonnes of natural gas recompressed beyond the baseline pressure (yet to be established).

Target: 10% improvement from baseline year on year.

Survey scope and methodology: Annual independent audit ensuring compliance with International Auditing and Assurance Standards.

Reporting: Performance will be reported annually in RRPs to Ofgem and in National Gas' publicly facing Annual Environmental Report.

Applies to: National Gas System Operator

ODI type

3.34 We are proposing to introduce an ODI-R for this incentive with a view to potentially implementing an ODI-F in RIIO-GT4 if National Gas can demonstrate consumer value. This is because many of the methods and technologies to be used to aid performance under this incentive are relatively unfamiliar to National Gas. National Gas has proposed altering the monitoring schedule and implementing regular monitoring on above ground sites.

3.35 Baseline fugitive emissions level will be established in year one of RIIO-GT3. Once this is established, National Gas will be incentivised to outperform the baseline rate by 10% year on year.

Target

3.36 National Gas proposed a 10% improvement year-on-year on the established baseline emissions. Ofgem considers that this is an ambitious target and welcomes the element of continual improvement this proposal embeds.

3.37 National Gas has yet to establish a baseline and expect this to be completed in time for this incentive to become active in Year Two of RIIO-GT3. This incentive will be forward looking following the establishing of this baseline.

Questions

GTQ7.	Do you have any views on the proposed design of this incentive?
GTQ8.	Do you consider it appropriate that the incentive is reputational rather than financial?
GTQ9.	Do you have views on potentially introducing this incentive as a financial incentive in RIIO-GT4 should National Gas show consistently good performance in RIIO-3?

NTS Shrinkage Package (GSO) (includes ODI-F and a LO)

3.38 Shrinkage describes the energy that is consumed, lost or otherwise not accounted for in the operation of the gas network.[10] 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.

3.39 Together, they define the total cost of NTS shrinkage that is paid by consumers through transmission charges. Both volume and price should be kept as low as possible in order to minimise consumers' NTS shrinkage cost.

3.40 In our SSMD, we:

- were minded to introduce an ODI-F for the price element of the NTS shrinkage, provided that National Gas can show consumer benefit from the proposed incentive;
- decided to address the volume aspect of NTS shrinkage by:

[10]Typically, the energy lost in the operation of the NTS is due to three areas (ie. the NTS shrinkage components): 1) 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; 2) Calorific Value Shrinkage ('CVS'): The unbilled energy arising from the Thermal Energy Regulations; and 3) 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.

  - initiating 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;
  - inviting National Gas to make use of new RIIO-GT3 funding options to reduce volumes of NTS shrinkage including due to pipeline leakage; and
- decided that overall NTS shrinkage costs should remain as a pass-through item for National Gas.

3.41 In line with our SSMD position, we are consulting on a suite of NTS Shrinkage package proposals to tackle the price and the volume element of NTS Shrinkage energy as follows:

- NTS Shrinkage Procurement ODI-F;
- NTS Shrinkage Procurement Strategy LO;
- NTS Shrinkage Review and volume reduction.

NTS Shrinkage Procurement ODI-F (GSO)

Purpose: To incentivise the GSO in efficient procurement of OUG and electricity for the operation of compressors, UAG and energy that can't be billed, whilst managing risk exposure.

Benefits: Reduced price paid for the NTS shrinkage gas and managed risk exposure due to the obligation to have a procurement strategy in place.

Background

3.42 In our SSMD, we proposed financially incentivising National Gas for the procurement of NTS shrinkage energy, provided that National Gas can show consumer benefit from the incentive. We expected National Gas to propose an incentive structure, including a cap and floor within an indicative range of up to +/- 2% of the annual total NTS shrinkage cost, and a robust and stretching target that will incentivise National Gas to minimise the price paid for the procured energy, whilst managing the risk of consumer exposure to short-term price fluctuations.

3.43 In its RIIO-GT3 Business Plan, National Gas proposed a financial ODI for the procurement of NTS shrinkage energy but with the incentive exposure of +/- £5m pa. National Gas proposed that its purchasing performance for forward products is measured against the weekly and daily market volume weighted average price, whilst for prompt products it is measured against the daily market volume weighted price and System Average price. This means a moving

target, depending on the averages of prices in a specific week. National Gas also proposed a measure to incentivise procurement of natural gas at a later date if it deems that the price will drop in the future. National Gas referred to this as a clip deferral.

3.44 National Gas considers that its proposal aligns well with its gas procurement strategy and established ways of working and could - if implemented - deliver further savings to consumers by influencing National Gas' decision to procure or delay procurement of gas on certain days.

3.45 National Gas also proposed a GHG (Pipeline) ODI-F to reduce emissions from pipeline maintenance and inspection work, that will in turn reduce overall NTS shrinkage energy volumes (see section above).

Consultation position and rationale

Summary of consultation position

ODI type: Financial, reward and penalty.

Measurement: Price for the NTS shrinkage gas per product in p/th against the standard reference price per product published by a Price Reporting Agency (PRA)[11]. We propose to use ICIS Heren's reference prices. [12]

Target: Publicly available reference price per product p/th of the NTS Shrinkage gas purchased.

Reporting: Performance will be reported annually in RRPs to Ofgem only, as it contains confidential purchasing information.

Incentive exposure: +/- £2.3m pa (calculated as app. 2% of the forecast average annual NTS Shrinkage costs).

Incentive value: Sum of (National Gas' p/th price paid per product - Reference price on the day of purchase p/th) * volume th for that product.

Applies to: National Gas System Operator

Rationale for consultation position

3.46 We welcome National Gas' proposal for the NTS shrinkage procurement incentive that focuses exclusively on the area that National Gas can control ie procurement of NTS shrinkage gas.

[11] PRAs provide daily assessments of gas prices/per product and other energy market information.
[12]ICIS Heren is one of a number of PRAs. Ofgem uses data from ICIS and other sources to assess wholesale energy costs in relation to the price cap.

3.47 Despite this, we consider the proposed incentive lacks transparency with regard to target setting. The incentive proposal is also overly complex and envisages, as a minimum, monthly re-baselining of the target costs. It is not clear how all volume procurement decisions, for all shrinkage volume would flow through the incentive as proposed. Further, we consider National Gas' proposal to measure performance of its purchases not against the reference price per product on the day of purchase, but rather against the average price paid per product by the market in that particular week as lacking ambition.

ODI Type

3.48 We are proposing to introduce a simplified symmetrical, financial incentive for NTS shrinkage procurement. We consider that an ODI-F is an appropriate incentive for National Gas to outperform a standard procurement strategy and reduce costs for consumers.

3.49 In line with our SSMD, we are proposing that incentive exposure for this ODI-F is within the range of +/- 2% of the annual total forecast NTS shrinkage cost, ie. set at +/-£2.3m pa.

ODI Target

3.50 We are proposing to introduce a new performance measure to reward or penalise National Gas for its procurement performance against the publicly available reference price per product on the day of purchase. We propose to use ICIS Heren as the PRA for the reference price.

3.51 We are proposing this to ensure calculable, verifiable and transparent consumer benefits from National Gas' NTS shrinkage procurement activities. If National Gas procures gas at a price that is lower than the reference price for the product on the day of purchase, consumer benefit is calculated as the difference in p/th paid, multiplied by the volume purchased.[13]

[13] The proposed formula for calculating savings from National Gas' procurement activities is as follows: (National Gas p/th price - ICIS Heren* p/th reference price on the day) * volume th for that product. Individual savings/losses from procurement activities will be added up to the +/- £2m cap/floor pa.

Reporting to stakeholders

3.52 Acknowledging that trading information, including procured volumes and price, is market sensitive, we are proposing that National Gas report on the performance measure at a granular level, per trade, in its RRPs.

3.53 We urge National Gas to consider whether - at aggregate level - some of the information could be published ex-post.

NTS Shrinkage Procurement Strategy LO (GSO)

Purpose: To strengthen the requirement for National Gas' NTS Shrinkage Procurement Strategy in order to manage risk exposure for consumers from the procurement of NTS Shrinkage gas and electricity.

Benefits: Managed risk exposure due to the obligation to have a proportionate, appropriate and externally audited NTS Shrinkage Procurement Strategy in place.

Background

3.54 National Gas is under a statutory duty under section 9 of the Gas Act 1986 to develop and maintain an efficient and economical pipeline system for the conveyance of gas that covers efficient procurement of the energy required for running its network. Thus, National Gas has a NTS Shrinkage Procurement Strategy in place to procure the energy required for running its network efficiently, on forward and prompt markets as appropriate. The NTS Shrinkage Procurement Strategy ensures that National Gas protects consumers from price risks, particularly on days with higher demand and lower supply than expected.

Consultation position and rationale

Summary of consultation position

Output type: Licence Obligation.

Measurement: Receipt of externally audited report on the effectiveness of National Gas' NTS Shrinkage Procurement strategy and its operationalisation, in relation to the procurement of natural gas and electricity for NTS Shrinkage.

Reporting: Performance will be reported annually in RRPs to Ofgem only, as it contains confidential information.

Applies to: National Gas System Operator

Rationale for consultation position

3.55 Since National gas submitted its Business Plan, we requested an overview of National Gas' NTS Shrinkage procurement strategy and compared it against the procurement profiles and prices paid as reported annually in the RRPs.

3.56 We propose to strengthen the obligation and scrutiny of National Gas' NTS Shrinkage procurement approach. This is to ensure that National Gas has in place an effective shrinkage procurement strategy for electricity and gas. We expect management of gas wholesale market risk to be appropriately managed internally by financial and trading risk committees within National Gas. It should ensure it manages its gas price exposure in line with best practice and with a low-risk appetite, reflecting the core underlying activity being hedged.

3.57 This obligation will go hand in hand with NTS Shrinkage Procurement ODI-F that we are proposing to introduce for RIIO-GT3 (see above). The ODI-F will incentivise National Gas to deviate from its NTS Shrinkage Procurement Strategy for gas when consumer savings could be achieved without undue risk.

3.58 We propose to require that National Gas have the procurement strategy and its implementation audited by external auditors at least every second year of the regulatory period, and to report to Ofgem accordingly with the results. Although we propose not to require National Gas to report on this market sensitive information, publicly, we invite National Gas to consider, for transparency reasons, how much of the information relating to NTS Shrinkage Procurement Strategy outcomes could be shared with the industry.

NTS Shrinkage Review and volume reduction

Purpose: To investigate and identify reasons behind NTS shrinkage volumes increases.

Benefits: Minimised NTS shrinkage volumes, lower carbon emissions released into the atmosphere and lower cost to consumers.

Background

3.59 We propose to consider the options to reduce the volume of NTS shrinkage by conducting an Ofgem-led NTS Shrinkage review (this is being done in conjunction with granting funding and introducing a financial incentive for reducing pipeline emissions during maintenance already discussed above).

Ofgem-led NTS Shrinkage Review

3.60 This year, we will launch a Call for Evidence, outside of RIIO-GT3 price control, to identify the key drivers behind UAG and CVS NTS Shrinkage volumes. The full

3.61 scope of the review is yet to be determined, but it may include metering and minimisation of metering errors, gas quality issues and impact on CV shrinkage, rules around CV capping, efficiency of compressor operation and the roles and responsibilities of the key relevant players (eg National Gas, GDNs, shippers, large offtakes) in the management of the NTS shrinkage volumes.

3.62 We expect the review to begin in 2025. Should the review result in any necessary licence changes, we will consult on them outside of the RIIO-GT3 process.

RIIO-GT3 funding to reduce volumes of NTS shrinkage

3.63 National Gas requested funding for mobile recompression that will help reduce pipeline leakage during maintenance activities. We propose to grant funding as part of the Network Decarbonisation and Emissions Compliance Re-opener and PCD (see Chapter 4).

3.64 We also propose to introduce an incentive to reduce the GHG emissions from pipeline maintenance work. See GHG emissions (Pipeline) ODI-F, above.

Questions

GTQ10.	Do you agree with the proposed NTS Shrinkage package, including the design of the NTS Shrinkage procurement ODI-F and the proposal for a new licence obligation on National Gas to have a proportionate and appropriate NTS Shrinkage Procurement Strategy in place?
GTQ11.	Do you agree with the proposed scope of the NTS Shrinkage Review?

Redundant Assets PCD (GTO)

Purpose: To provide funding for National Gas to adequately dismantle and remove redundant assets[14] from the NTS.

Benefits: Eliminate unnecessary maintenance burden, comply with regulatory conditions, comply with health and safety legislation, improve environmental conditions.

[14] A redundant asset means equipment or assets which are no longer utilised (either now or in the foreseeable future) by the licensee for the Transportation Business. This does not include assets which are or are to be repurposed or used for innovation at a different location.

Background

3.65 National Gas indicated that there would be a requirement to disconnect and/or decommission above ground assets throughout RIIO-GT3. We proposed in our SSMD that this PCD remains in place to provide funding for National Gas to decommission and disconnect redundant assets on the network.

3.66 National Gas proposed costs of £49.69m to decommission and disconnect a number of assets, sites and groups of assets that are now considered redundant. National Gas has also proposed a decommissioning of compressor units at Avonbridge under the Network Capability Re-opener.

Consultation position and rationale

Summary of consultation position

PCD type: Evaluative.

Output to be delivered: Adequate decommissioning and removal of a range of above ground assets across the NTS.

Baseline cost allowance (inclusive of ongoing efficiency challenge): £29.20m

Reporting: A PCD report to Ofgem at the end of price control.

Delivery date: 31 March 2031

Ability to change PCD during the price control period: No.

Applied to: National Gas

Rationale for consultation position

3.67 We agree with National Gas that there is a need for decommissioning and disconnecting assets throughout RIIO-GT3. National Gas suggested that the lower levels of decommissioning throughout RIIO-GT3 could be funded through another mechanism such as NARM, however this PCD has proven to be effective throughout RIIO-GT2 and as such we proposed retaining it.

3.68 The PCD will not be used to fund the decommissioning of assets which may be reused for hydrogen or Carbon Capture, Usage and Storage (CCUS). The Asset Transfer Methodology to be used to value and fund these activities is still under development.[15]

[15] We are currently consulting on the proposed asset valuation methodology for repurposing of natural gas assets here: https://www.ofgem.gov.uk/consultation/ofgems-proposed-asset-valuation-methodology-repurposing-natural-gas-assets-consultation

Output to be delivered

3.69 We propose to reduce the overall PCD allowance for removing the redundant assets from the NTS to £29.20 million.

3.70 The reduced allowance follows our cost adjustment to remove the project management, and risk and contingency costs, from the redundant assets output to avoid duplication with baseline allowances (see Chapter 5 for more detail on cost adjustments proposed). On average, we have reduced the total cost by 10%.

3.71 Additionally, our position is that the projects 'Pipethrough of block valve sight' and 'Pipethrough of single valve on a site (uncongested)' are not needed and should not be considered a part of the Redundant Assets package.

3.72 Although we have not disallowed the cost of disconnecting and decommissioning assets at eight potential sites, we require further information with regard to their location. We invite National Gas to respond to our Draft Determinations identifying the likely locations where it understands these costs will be incurred.

Questions

GTQ12.	What are your views on the scope or design of the mechanism, as well as on the proposed allowances in this section?

Compressor Emissions PCD (GTO)

Purpose: To fund compressor replacement / upgrades to comply with the Medium Combustion Plant Directive (MCPD).

Benefits: Protecting consumers by ensuring efficient investment to deliver compliance with the Medium Combustion Plant Directive (MPCD).

Background

3.73 National Gas operates a large fleet of gas-fired compressor units across the NTS, several of which do not comply with the emission limits set out in the MCPD. This PCD ensures that National Gas can fund projects to ensure compliance with these emission limits.

3.74 In our SSMD we stated our intention to retain the PCD element of the current mechanism to fund ongoing works which began in RIIO-GT2. We also suggested that this mechanism could be retained to fund RIIO-GT3 projects such as Front-End Engineering Design (FEED) studies and site reconfiguration.

3.75 We will determine allowances and outputs for the equivalent RIIO-GT2 PCD and re-opener mechanism in the coming months. Whilst we have decided to retain the Compressor Emissions PCD to fund ongoing compressor works from RIIO-GT2 to comply with the MCPD, we propose that any new projects in RIIO-GT3 are funded through the Network Decarbonisation and Emissions Compliance Re-opener & PCD (see Chapter 3).

Consultation position and rationale

Summary of consultation position

PCD type: Evaluative.

Output to be delivered: The ongoing projects outlined in the licence condition for this mechanism will be funded until completion.

Baseline cost allowance: To be determined before 31 March 2026.

Reporting: Performance will be reported annually in RRPs to Ofgem and relevant industry fora.

Delivery date: Variable based on project; completion expected in RIIO-GT3.

Ability to change PCD during the price control period? No.

Applied to: National Gas

Output to be delivered

3.76 We propose to retain the PCD element of the mechanism in RIIO-GT3 while the ongoing RIIO-GT2 projects are completed.

3.77 The existing projects which we propose to continue to fund through this PCD in RIIO-GT3 are compressor replacement / upgrade / decommissioning at Saint Fergus, Wormington, Peterborough, Huntingdon and Kings Lynn.

Baseline cost allowance

3.78 A decision on the RIIO-GT2 Compressor Emissions Re-opener will be made before the RIIO-GT3 price control period commences. Following this decision, the existing outputs, delivery dates and level of funding associated with this PCD will be modified by direction.

Questions

GTQ13.	Do you agree with the proposed Compressor Emissions PCD?
GTQ14.	Do you think the Network Decarbonisation and Emissions Compliance Re-opener & PCD is suitable for works which would have previously been funded through the Compressors Emissions Re-opener?

Biomethane Connections UIOLI (GTO)

Purpose: To fund capital expenditure costs of biomethane connections onto the NTS, for which no Government funding has been received.

Benefits: Helps achieve the UK government's ambition of increased biomethane injections into the gas networks.

Background

3.79 In SSMD, we said that we will work with the government and industry, outside of RIIO-GT3, to consider if changes are needed to the licence and the Uniform Network Code (UNC) to help facilitate biomethane connections onto the NTS if required. We also noted that there is potentially an interaction with, and a role for RIIO-GT3, in accelerating biomethane connections.

3.80 In its Business Plan, National Gas has proposed the introduction of a series of regulatory measures, including an economic and environmental test in its Licence that would socialise the cost of biomethane connections onto the NTS.

3.81 Multiple stakeholders, including respondents to the Call for Evidence, have encouraged investment in biomethane connections, emphasizing the importance of biomethane in achieving the net zero targets.

Consultation position and rationale

Summary of consultation position

Mechanism type: UIOLI

Output to be delivered: Reimbursed capex connections for biomethane producers (if no Government funding has been received).

Baseline cost allowance: Funding cap of £1.2m per biomethane connection. Total funding cap of £20m for UIOLI for the RIIO-GT3 price control.

Reporting: Performance will be reported annually in RRPs to Ofgem.

Delivery date: By the end of RIIO-GT3 price control.

Ability to change UIOLI mechanism during the price control period? No.

Applied to: National Gas

Rationale for our consultation position

3.82 The Government has set up the Green Gas Support Scheme (GGSS) which aims to increase the proportion of green gas in the GB gas network by providing tariff support to incentivise the deployment of new anaerobic digestion (AD)

biomethane plants. Tariffs are calculated to compensate plants for the building of new infrastructure to produce biomethane and ongoing operation costs, this includes connection costs. The GGSS is due to close to new applicants in March 2028. Whilst the Government has not announced details yet, a consultation on a future policy framework for biomethane is expected later on in the year. We are working closely with government to ensure the relevant mechanisms complement each other rather than compete.

3.83 National Gas has indicated that the number of biomethane producers who wish to connect directly onto the NTS has increased over the past few years. Even though a large majority of the interested connecting parties may be able to recover the connection costs through the GGSS, there may be a number who would opt for self-funding.

3.84 We propose providing funding to National Gas to cover the capital expenditure of biomethane connections, on condition that these connections (and the parties involved ie. a biomethane producer and National Gas) have not received the GGSS or any other government funding available. We do not want for the UIOLI to introduce distortions with regard to where and how biomethane producers wish to connect onto either the distribution or the transmission network, which is why we propose the mechanism to apply equally to gas distribution and gas transmission licensees (see Chapter 3 in the GD Annex).

3.85 With the GGSS and the addition of the UIOLI mechanism, we do not think that a further funding mechanism is warranted, eg an environmental and economic test. We encourage industry to continue to engage with government on the issue of a successor scheme to the GGSS.

Funding Mechanism

3.86 Based on the likely cost estimates that National Gas has provided to us, we propose to apply a funding limit of £1.2m per connection, and a total limit of £20m for the UIOLI mechanism in RIIO-GT3. The proposed thresholds are slightly higher than in distribution, which is due to the expected higher capital expenditure costs of connecting onto the high-pressure tier network.

3.87 We understand that National Gas is currently engaging with potential connectees and contractors to refine the average capex cost for biomethane connections. We expect National Gas to respond to our Draft Determinations with a reliable estimate of the likely cost breakdown for a typical biomethane connection onto the NTS.

Scope

3.88 We propose the UIOLI Biomethane mechanism should include capex connection costs. This may include costs of compression, valves, pipework etc. to enable physical connection of the biomethane plant onto the NTS.

Questions

GTQ15.	Do you agree with the introduction of the proposed UIOLI mechanism for biomethane, including with the proposed scope and capex cost caps?

Environmental Action Plan and Annual Environmental Report ODI-R commitments and outputs

Purpose: To oblige National Gas to outline its environmental commitments for the RIIO-GT3 price control and to demonstrate its performance against these commitments annually.

Benefits: A more environmentally sustainable network which focuses on mitigating emissions, limiting impact on the natural environment, and ensuring efficiency in operations.

Background

3.89 The Environmental Action Plan (EAP) and Annual Environmental Report (AER) ODI-R is a cross-sector reputational output delivery incentive (as decided at the SSMD). Reflecting this, our RIIO-3 policy design consultation, as well as a high-level cross-sector review can be found in the Overview Document.

3.90 As set out in our RIIO-3 Business Plan guidance, the common areas of the EAP considered by all sectors are Business Carbon Footprint (BCF), embodied carbon, biodiversity and natural capital, resource use, and supply chain. Shrinkage and NOx emissions are additional sector-specific issues which National Gas must consider.

3.91 Costs in National Gas' EAP can be associated with distinct EAP commitment deliverables,[16] those part of broader RIIO-GT3 projects, or UMs. This section provides our consultation position on National Gas' proposed EAP commitments within key guidance areas. The Network Decarbonisation investments are discussed separately.

[16]National Gas' EAP commitments, though funded as part of baseline, are not defined outputs.

Consultation position and rationale

ODI Type: Reputational.

Measurement: RRPs and AERs analysed annually.

Target: Commitments met, Science Based Target Initiative (SBTi) accredited where applicable.

Reporting: Both the commentary and the KPI section of the AER will be publicly facing documents available on National Gas' website.

Business Carbon Footprint: The measure of National Gas' carbon emissions as a result of its business operations.

Embodied carbon: Emissions which arise as a result of construction/production including the use and disposal of raw materials.

Biodiversity and natural capital: The diversity of plant and animal species along with the quality of the water, air and soil in a given area.

Supply chain: Emissions associated with the procurement of products and service not directly within the control of National Gas.

Resource use: Related to the utilisation of disposal to landfill, recycling and reuse of materials used in National Gas' operations.

NOx: Refers to the nitric oxide (NO) and nitrogen dioxide (NO_2) created during the combustion of gas in National Gas' compressors.

Responsible business practices and transparency: Comprises stakeholder engagement and sustainability.

Applied to: National Gas System Operator

Business carbon footprint

3.92 In our RIIO-3 Business Plan Guidance we requested that network companies adopt, retain or align with science-based emissions targets to reduce their BCF.

3.93 National Gas is not eligible to adopt science-based targets under the Science Based Targets Initiative (SBTi) given the SBTi accreditation requirements. It has however developed an SBTi aligned BCF target; a 21% reduction of scope 1 and 2 emissions by 2030/31 against a 2022/23 baseline.

3.94 National Gas has committed to reducing methane emissions by 90% from the 2022/23 baseline, from leaks, venting and operating assets on the NTS.

3.95 National Gas has committed to enhancing leak detection capabilities through innovative digital platforms, if viable. This includes a potential incorporation into the Digital Platform for Leakage Analytics.

3.96 We consider these commitments to be acceptable and proportionate given the scope of work National Gas faces in addressing the reduction of scope 1 and 2 emissions. We maintain that this is ambitious though would welcome further cooperation with industry to outline other areas where potential emissions reductions could be found.

Embodied carbon

3.97 National Gas has committed to reducing its carbon intensity by 50% and using a minimum of 30% materials from sustainable sources on all >£25m projects.

3.98 We consider this commitment to be ambitious and proportionate when compared to other sectors.

Biodiversity and natural capital

3.99 National Gas has made four biodiversity related commitments:

- Develop a strategy and governance framework to address nature related risks and opportunities;
- Deliver 10% net gain in environmental value across all non-operational land from a 2025 baseline;
- Develop and implement natural capital improvement plans for new projects (>£25m) where land has been permanently impacted; and
- Report on action taken to assess and remedy the impacts of activities conducted within National Parks.

3.100 Ofgem considers these commitments to be adequate and acceptable, based on meeting the 10% legal uplift requirement.

Supply chain

3.101 National Gas has committed to ensuring that 80% of its top suppliers meet the supplier code and that the environmental management requirements are to a high standard and align with National Gas' ambition and corporate strategy.

3.102 This commitment aligns with licensees in other sectors. We consider it acceptable and welcomes National Gas' intention to analyse the code to ensure it meets its standards. We encourage cross-sector collaboration on this issue.

Resource use

3.103 National Gas has made three commitments regarding resource use:

- Reduce waste through decreasing waste tonnage and increasing recycling rates, including a) recycle 80% of office waste by the end of RIIO-GT3; b) recycle 70% of waste from compressor and National Gas sites by the end of RIIO-GT3; and c) reduce water consumption through re-use and water metering strategies.
- Increase percentage of waste recycled and reused from National Gas' construction projects (<£25m) based on 2025/26 baseline.
- Embed circular economy principles by identifying and piloting further opportunities to implement and refine the framework from lessons learnt.

3.104 Ofgem considers these commitments to be ambitious and acceptable based on comparisons with other sectors.

NOx Emissions

3.105 National Gas has committed to reducing NOx emissions by deploying its compressor emissions strategy (DLE retrofit and new gas turbine unit installation). We consider this commitment acceptable.

Responsible business practises and transparency

3.106 National Gas has committed to continue integrating sustainability into its key business activities and decision making. National Gas has also committed to increase engagement with the public and other external stakeholders on environmental issues. We welcome these commitments, though would encourage more clarity on how and to what extent these will be pursued.

Secure and resilient supplies

Network Asset Risk Metric (NARM) PCD

Purpose: To fund asset health interventions to reduce the NARM risk.

Benefits: Adequate funding for a resilient and safe gas transmission system, ensuring consistent supply to consumers.

Background

3.107 As set out in the Overview document, the majority of assets on the NTS are covered by NARM. The NARM PCD was introduced at the start of RIIO-GT2 to fund asset replacement or refurbishment of assets for which mitigation of asset risk is the primary driver.

3.108 In our SSMD we said we would retain NARM PCD for National Gas.

Consultation position and rationale

Summary of consultation position

PCD type: Evaluative.

Output to be delivered: Baseline Network Risk Outputs

Baseline cost allowance (inclusive of ongoing efficiency challenge): £404.6m

Reporting: Performance will be reported annually in RRPs to Ofgem. There will also be a PCD report submitted to Ofgem upon project completion.

Delivery date: 31 March 2031

Ability to change PCD during the price control period?: Yes, see Asset Health Re-opener (Chapter 4). Network company ability to increase target by 5%.

Applied to: National Gas

Output to be delivered

3.109 We propose to retain the NARM PCD to fund asset health investment to keep the asset risk within reasonable bounds, including investment in valves, compressors, pipelines, sites and other.

3.110 We propose that in total, £404.6m out of the £1,173.2m asset health investment that National Gas has submitted is funded through this PCD. For further information and cost assessment, please see Chapter 5.

Approach to NARM assessment

3.111 Table 3 summarises the results of our assessment and the proposed Baseline Network Risk Outputs (BNRO) per NARM asset category can be found in Table 24. Further detail about the NARM methodology can be found in the overview document.

Table 3: Summary of baseline Network Risk Outputs per NARM asset Category, National Gas, R£m, 2023/24 Price

Company	Company Proposed	Movement from other mechanisms	Removed due to disallowed volumes	Draft Determinations Proposal
National Gas	13,707.90	-	-21.11	13,686.77$_t$

3.112 We noticed during our assessment that the volumes presented in National Gas' NARM submission for some interventions did not align with volumes submitted in the Engineering Justification Papers (EJPs). Where interventions were fully justified and recommended for full approval, we accepted the BNRO which was

proposed by National Gas. Where interventions were recommended with adjustments and where the volumes did not align, we have made a proportionate adjustment to the proposed BNRO for that intervention.

3.113 We recognise that our adjustments to the National Gas proposed BNRO based on the proposed adjusted volumes may not accurately reflect the Monetised Risk Benefit for the recommended volumes. We will work with National Gas ahead of our Final Determinations to ensure that the BNRO is reflective of the approved asset intervention volumes.

Questions

GTQ16. Do you agree with our proposed design of the NARM PCD?

Asset Health Non-Lead Assets PCD (GTO)

Purpose: Funding non-lead asset health interventions which are not covered by NARM, such as compressor acoustic buildings (CABs), and lighting systems.

Benefits: Ensures adequate funding for resilient and safe system and consistent supply to consumers.

Background

3.114 The majority of assets on the NTS are covered by NARM. Other assets such as CABs have been addressed through this mechanism in RIIO-GT2.

3.115 In our SSMD, we decided to retain the Non-lead Assets PCD due to the monitoring ability it gave us given the importance and materiality of the work.

Consultation position and rationale

Summary of consultation position

PCD type: Evaluative.

Output to be delivered: Asset health related investment in electrical infrastructure, and other assets that are not covered by NARMs.

Baseline cost allowance (inclusive of ongoing efficiency challenge): £74.3m

Reporting: Performance will be reported annually in RRPs to Ofgem and relevant industry fora. There will also be a PCD report submitted to Ofgem upon project completion.

Delivery date: 31 March 2031

Ability to change PCD during the price control period?: Yes, see Asset Health Re-opener (Chapter 4). Network company ability to increase target by 5%.

Applied to: National Gas

Output to be delivered

3.116 We propose to retain the Non-lead Assets PCD to fund investment that is not covered by NARMs, but is an essential part of the safe and reliable NTS infrastructure.

3.117 We propose that in total, £74.3m out of the £1,173.2m asset health investment that National Gas has submitted is funded through this PCD. For further information and cost assessment, please see Chapter 5.

Questions

GTQ17. Do you agree with our proposed design of the Asset Health Non-Lead Assets PCD mechanism?

Compressor Breakdown UIOLI (GTO)

Purpose: To fund unplanned compressor maintenance and repair work.

Benefits: Ensures that National Gas has the funds available for timely essential repairs and maintenance works on compressors, which cannot be reallocated to other areas of asset health. Provides funding to ensure resilient, safe system and consistent supply to consumers.

Background

3.118 In its Business Plan, National Gas requested baseline funding for addressing compressor breakdowns to ensure ongoing compressor availability. It has also requested funding for refurbishment of Mopico compressors and HV Motor Stator re-wind. Currently, all these resolutions would be funded through a NARM PCD.

Consultation position and rationale

Summary of consultation position

Output type: UIOLI

Output to be delivered: Asset health interventions to address compressor breakdown, Mopico compressor refurbishment and HV Motor Stator re-wind.

UIOLI allowance: To be confirmed.

Reporting: Performance will be reported annually in RRPs to Ofgem.

Delivery date: 31 March 2031

Ability to change UIOLI during the price control period?: No.

Applied to: National Gas

Output Type

3.119 In the context of ensuring continued resilience of the NTS and security of supply for the energy system, we are proposing to set up a UIOLI mechanism to allow National Gas to quickly fund compressor maintenance work. It will also allow National Gas to prepare for repair or refurbishment of compressor trains where inspection/monitoring of the asset indicates that the condition has deteriorated to a point where it can no longer be used.

UIOLI Scope

3.120 The proposed Compressor Breakdown UIOLI mechanism is to cover the cost of repairing and/or refurbishing compressor trains when they fail, including the proposed Mopico compressor refurbishment and HV Motor Stator re-wind. We are planning to engage with National Gas on the proposed scope and associated cost for a compressor breakdown budget from now until the Final Determinations.

UIOLI Allowance

3.121 We will continue to engage with National Gas on the proposed scope and associated costs for a compressor breakdown UIOLI, and make a decision at Final Determinations. We have identified £20.8m of costs which require further justification. If approved we expect these costs to form the cap for this UIOLI mechanism. The proposed cap will equal the sum of allowances that National Gas requested in its Business Plan.

Questions

GTQ18.	Do you have any views with regard to the type, scope and allowances for the proposed UIOLI mechanism?

Nitrogen Sleeves PCD (GTO)

Purpose: To fund nitrogen sleeve refurbishment and grouting work and ensure compliance with the pressure safety regulations.

Benefits: Ensures that National Gas has the funds available to address deteriorating nitrogen pipeline protection sleeves and maintain security of supply.

Background

3.122 Pipeline protection sleeves are installed around the NTS to mitigate the risk of a pipeline failure at a specific location. Some of these are filled with nitrogen to provide an inert atmosphere to prevent corrosion from taking place to the sleeve and pipeline and thus, to maintain positive nitrogen pressure and security of supply.

3.123 Over time, deterioration of the asset leads to loss of containment of the nitrogen fill. National Gas routinely monitors the pressure of installed nitrogen sleeves across the network and has found that a number are in unsatisfactory condition and that interventions are required to reinstate their functionality.

3.124 Due to this, in its Business Plan, National Gas requested baseline funding for nitrogen sleeve remediation and grouting.

Consultation position and rationale

Summary of consultation position

Output type: Mechanistic PCD.

Output to be delivered: Refurbishment of 359 sleeves, grouting of 182 nitrogen sleeves.

PCD allowance (inclusive of ongoing efficiency challenge): £34.76m

Reporting: Performance will be reported annually in RRPs to Ofgem and in a PCD report at the end of RIIO-GT3 price control.

Delivery date: 31 March 2031

Ability to change PCD during the price control period?: No.

Applied to: National Gas

Rationale for consultation position

3.125 In the context of ensuring continued resilience of the NTS and security of supply for the energy system, we are proposing to introduce a PCD to allow National Gas to continue and expand its nitrogen sleeve group filling programme. This will eliminate the future need for topping up of nitrogen and subsequent interventions by creating a permanent inert environment.

3.126 Given the location of nitrogen sleeves being under Major Road crossings and sensitive locations such as railway lines it is imperative that the inert environment is maintained to ensure pipeline corrosion is prevented.

Output Type

3.127 We recognise the importance of the nitrogen sleeve work for pressure maintenance and security of supply and wish to ring-fence and hold National Gas to account for the delivery of nitrogen sleeve programme of works. We consider that a mechanistic PCD is most suitable due to a consistent, well defined scope of work and stable costs per nitrogen sleeve intervention.

3.128 Nitrogen sleeve interventions will be delivered on a failure basis. The PCD will ensure outputs are aligned with the defined scope and that associated funding reflects actual intervention requirements.

PCD Scope

3.129 The proposed Nitrogen Sleeve PCD mechanism is to cover the cost of refurbishing 359 nitrogen sleeves and grouting 182 nitrogen sleeves.

3.130 National Gas may need to intervene on other, additional nitrogen sleeves than the ones it has proposed in its Business Plan. In this case, a true up mechanism will be used to adjust the allowances proposed here.

PCD Allowance

3.131 We propose a cap of £34.76m for this PCD mechanism. The proposed cap equals the sum of allowances that National Gas requested in its Business Plan, post OE adjustment.

Questions

GTQ19.	Do you have any views with regard to the type, scope and allowances for the proposed nitrogen sleeve PCD mechanism?

West Import Resilience Project (WIRP) PCD

Purpose: To allow National Gas to increase network capability in South Wales.

Benefits: Increased capacity and resilience of the NTS. Reduced capacity constraint costs in South Wales.

Background

3.132 The most recent Gas Network Capability Needs Report produced by NESO highlighted the need to increase the capability of the network in South Wales to reduce the risk of excessive constraint management costs being incurred in future years. The increased risk is due to the combination of higher LNG imports and reduced demand in South Wales.

3.133 National Gas considered a full range of investment options including the counterfactual "do nothing". The Cost Benefit Analysis indicated that the most cost-effective option (Option 11) would involve five separate components:

- Component 1: Constructing 9km of 900mm pipeline (75 Barg) between Wormington and Honeybourne Multijunctions.
- Component 2: Constructing 2km of 900mm pipeline (70 Barg) between Churchover Compressor Tee and Multijunction.
- Component 3: Flow modifications at Churchover, including control system design and upgrade, and the review of associated pipework arrangements to facilitate reverse flows and running of the compressors.
- Component 4: Creating a store of spares for the electric powered Wormington Compressor Station Unit C.
- Component 5: Pressure uprating (102 Barg) of the existing pipeline (Feeder 28) between Felindre Compressor Station / Multijunction and Three Cocks Above Ground Installation.

3.134 As all the environmental and other consents necessary to proceed with the project are in place, early project approval will allow National Gas to begin project mobilisation and delivery of the new pipeline early in the RIIO-GT3 price control period.

3.135 Respondents to our Call for Evidence supported National Gas' plan to increase capability and resilience of the NTS, with one shipper explicitly supporting investment in South Wales that would result in the same level of network capability as envisaged by the terminated Western Gas Project.

Consultation position and rationale

Summary of consultation position

Funding Type: Evaluative Price Control Deliverable for new pipelines, store of compressor spares and Feeder 28 pressure uprating (Components 1,2,4 and 5).

Output to be delivered: High pressure pipeline between Wormington and Honeybourne Multijunctions (9km) and between Churchover Compressor Tee and Multijunction (2km).

A store of spares for Wormington Compressor Station Unit C.

Pressure uprating between Felindre Compressor Station / Multijunction and Three Cocks Above Ground Installation.

Baseline cost allowance (inclusive of ongoing efficiency challenge): £63.17m

Reporting: A PCD report will be submitted to Ofgem upon project completion.

Delivery date: 31 March 2029

Ability to change PCD during the price control period?: Yes. See Network Capability Re-opener.

Applied to: National Gas

Needs case and Optioneering

3.136 We accept the needs case for this investment. National Gas have clearly demonstrated through their established Network Capability Assessment process and Cost Benefit Analysis that in the absence of network reinforcement, consumers would be exposed to an unacceptable level of constraint management costs. The need for investment was also identified by NESO in the GNCNR.

3.137 An appropriate options assessment process has been conducted to determine the most cost-effective option to address the needs case. The Cost Benefit Analysis was based on a robust set of parameters and included an appropriate set of sensitivity analysis. These included both the Holistic and Counterfactual Future Energy Scenarios 2024 and the potential impact of CP2030 on gas consumption for power generation in South Wales.

3.138 In making our assessment we requested that the Cost Benefit Analysis should be re-run using the government's 2024 gas price forecast as opposed to the original 2023 forecast, and that environmental benefits not attributable to the project are excluded. We also consulted NESO who expressed support for the specific investment option proposed by National Gas.

3.139 Having reviewed the evidence presented in the options assessment process and in particular the Cost Benefit Analysis we are content that the preferred option as identified by National Gas (Option 11) is in the best interests of consumers and should receive funding. This option minimises the total net present value of investment and constraint management costs over the assessment period. This option also delivers the largest improvement in network capability of the various options considered. The sensitivity analysis did not alter the preferred option.

3.140 Although the CBAs performed did not quantify the benefit that Option 11 would deliver for GB's Security of Supply, this will improve because of the increased entry capability to accommodate higher LNG flows due to increased Milford Haven regasification capacity (discussed further below).

Funding of the PCD

3.141 We propose that the WIRP project should have two sources of funding: Baseline funding of £65.58m to deliver Components 1, 2 and 4; and additional funding for Component 5 that will be provided through the Network Capability Re-opener. We expect National Gas to submit a Re-opener application at the beginning of RIIO-GT3.

3.142 Component 3 will not form part of the WIRP PCD and any funding will be provided through the Asset Health Re-opener and included in the Asset Health Non-Lead Assets PCD.

3.143 The proposed level of funding is in line with our position on the Western Gas Network Project.[17] We will work with National Gas to ensure that activities common to both projects are not funded twice.

Baseline Obligated Entry Capacity at Milford Haven

3.144 This investment will result in a material increase in physical entry capacity at the Milford Haven System Entry Point. As any additional capacity has not been delivered through the established UNC process, we do not propose to increase the level of Obligated Firm Entry Capacity that National Gas is required to make available under Special Condition 9.13. We will continue to work with the industry throughout RIIO-GT3 to review Baseline Obligated Entry and Exit capacities.

Questions

GTQ20. Do you agree with our proposed design of the WIRP PCD mechanism and the proposed allowance?

Bacton Terminal Site Redevelopment PCD

Purpose: To allow National Gas to address long-term asset health issues at the Bacton Gas terminal.

Benefits: This PCD will require National Gas to deliver agreed asset health interventions at Bacton Gas terminal during the RIIO-GT3 price control period.

[17] Western Gas Network – Funded incremental obligated capacity Re-opener (FIOC) Project Direction 26 June 2023

Background

3.145 Investment at Bacton Gas Terminal is required to ensure the safe, reliable and compliant operation of the terminal beyond 2035, while continuing to meet the needs of network users, contributing to security of supply and the efficient operation of wholesale markets in GB and Europe.

3.146 In our SSMD we proposed removing the re-opener for the Bacton Terminal Site Redevelopment, but to retain the Bacton PCD until all agreed asset health interventions have been delivered.

Consultation position and rationale

Summary of consultation position

PCD type: Evaluative.

Output to be delivered: Agreed asset health interventions including replacement of Cathodic Protection System, critical valves and components of the low voltage electrical system.

Baseline cost allowance: Subject to our decision on re-opener funding. To be set in our Final Determinations.

Reporting: Performance will be reported annually in RRPs to Ofgem. There will also be a PCD report submitted to Ofgem upon project completion.

Delivery date: 31 March 2031

Ability to change PCD during the price control period?: No.

Applied to: National Gas

Output to be delivered

3.147 National Gas submitted a re-opener application in October 2024 seeking funding for the following interventions:

- Replacement of the Cathodic Protection System;
- Replacement of 50 critical valves;
- Replacement of key components of the low voltage electrical system; including cables and Control and Instrumentation.

3.148 A decision on this re-opener application will be made before the start of RIIO-GT3. Following this decision the existing outputs, delivery dates and level of funding associated with this PCD will be modified by direction.

Questions

GTQ21.	Do you agree with our proposed design of the Bacton Terminal Site Redevelopment PCD mechanism?

High quality of service from regulated firms

Entry and Exit Constraint Management (ODI-F)

Purpose: To incentivise National Gas to minimise the cost and frequency of capacity constraint events, while maximising the release of capacity.

Benefits: Reduces consumer exposure to constraint costs and increases market access to entry and exit capacity.

Background

3.149 Capacity release obligations often exceed the physical capability of the NTS. The Entry and Exit Constraint Management (CM) incentive is intended to encourage 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 forward contracts to mitigate constraint risk.

3.150 In our SSMD, we recommended maintaining the current financial incentive structure, including the existing cap and floor, while introducing a tighter performance target to reflect the higher standards expected going forward.

3.151 Noting industry feedback, we also required increased transparency and committed to undertaking a review of the treatment of revenues associated with this incentive. We asked National Gas to consider these points in its Business Plan.

Consultation position and rationale

Summary of consultation position

ODI type: Financial – reward and penalty.

Measurement: Performance will be measured through comparison of actual annual constraint costs against a performance measure.

Target: Costs of £2.5m per year.

Survey scope and methodology: The performance measure is calculated by summing the costs of constraint actions (with the addition of the commodity cost of locational sell

actions) taken by National Gas, minus the revenue generated through the release of non-obligated entry and exit capacity (multiplied by a sharing factor).

Reporting: Performance will be reported annually in RRPs to Ofgem and relevant industry fora. There will also be biannual reporting to industry and a PCD report submitted to Ofgem upon project completion. Additionally, there is a licence obligation for monthly reports on National Gas' website.

Incentive exposure: +/- £5.2m pa. Reward using the TIM rate of the net underspend against the CCM target (taking account of constraint costs and applicable revenue), and similarly a penalty using the TIM rate of the net overspend against the CCM target.

Applies to: National Gas System Operator

Target

3.152 We are proposing an annual target of £2.5m, rejecting National Gas' proposed value of £10.5m. National Gas has performed well under the RIIO-GT2 incentive, with performance consistently below the current target of £8.5m. The target value of £2.5m has been proposed in order to encourage improved performance during RIIO-GT3, under the assumption that the frequency and impact of events that drive GT constraints will broadly approximate that of past instances.

3.153 We note that the majority of both recent and potential future constraints originate at and around the Milford Haven entry point. Given that we are approving significant development around this site through the WIRP, we expect that constraint risk will decrease over the course of RIIO-GT3. For this reason and as in RIIO-GT2, we will keep the target under review through the development and construction of the WIRP and expect National Gas to remodel constraint costs estimates with the WIRP development in mind, prior to Final Determinations.

Incentive value

3.154 We propose setting maximum reward and penalty at an equal distribution around the target score, at a value of £5.2m. This is consistent with the reward and penalty scheme under RIIO-GT2.

3.155 We consider that a value of £5.2m reflects the degree of consumer benefit that can be achieved through this incentive and should provide sufficient incentive to drive performance above that which is required under National Gas' licence and legislation.

3.156 The performance measure will be calculated in the same way as in RIIO-GT2, but with the additional inclusion of the commodity value of locational sell actions. This inclusion will be ensured through the Statement of Constraint Cost Allocation Rules, which National Gas will produce prior to the implementation of RIIO-GT3. This is in line with proposals in National Gas' Business Plan.

3.157 Beginning in RIIO-GT2, the TIM rate was applied to the incentive, with the intention of minimising the potential for trade-offs between SO and TO actions in the management of constraints. In its Business Plan, National Gas proposed disapplying the TIM sharing factor (set at 39%) from the sales on non-obligated Entry and Exit capacity. Given that the current arrangements have been sufficient to encourage the release of non-obligated capacity, we do not see benefit in disapplying the TIM and propose rejecting the request.

Transparency

3.158 We are encouraged by National Gas' proposal to increase transparency through regular reporting on constraint management activities through industry workgroups. We will monitor this reporting and seek feedback from industry regarding its suitability. We are proposing a licence requirement for National Gas to publish reports on constraint management activities on a yearly basis, or otherwise at the request of Ofgem.

Opportunity to review CM parameters

3.159 We propose maintaining the flexibility to re-evaluate CM parameters from RIIO-GT2. This review would be triggered if National Gas reaches the cap in two consecutive years or hits the floor in any single year.

Questions

GTQ22.	Do you agree with our proposed design of the Capacity Constraint Management incentive?
GTQ23.	Do you agree that a licence requirement around reporting on constraint management actions is necessary?

Quality of Demand Forecasting (ODI-F)

Purpose: To incentivise National Gas System Operator to make improvements in the accuracy of its gas demand forecasts.

Benefits: Improved accuracy of National Gas' forecasts of gas demand support the industry in making efficient decisions about its use of the network, increasing system efficiency.

Background

3.160 National Gas has the UNC and licence obligations to deliver NTS demand forecasts covering the period of one day ahead to five days ahead. During RIIO-GT2, National Gas has been incentivised to increase the accuracy of its forecasting.

3.161 In our SSMD, we decided to retain the financial incentive for day ahead (D-1) forecasting, requesting National Gas to propose a cap, collar and target in its Business Plan that would result in significant improvement in forecasting performance.

3.162 We also asked National Gas to consider a new financial incentive for demand forecasting two to five days ahead (D-2 to D-5), citing a need for improved performance in this area. We also raised the possibility of specific funding for any innovation projects that National Gas would take up in the demand forecasting area.

Consultation position and rationale

Summary of consultation position

ODI type: Financial, reward and penalty for D-1; Reputational for D-2 to D-5.

Measurement: Demand forecast measured against actual daily demand.

Target: D-1 annual average absolute forecast error target of 8mcm/d, decreasing by an efficiency factor of 15% across RIIO-GT3, and the demand forecast wind generation adjustment up to +2mcm/d.

Reporting: Performance will be reported annually in RRPs to Ofgem.

Incentive exposure: Each incremental 1mcm/d movement in performance is worth +/- £567k, with a symmetrical cap/floor of +/- £1.7m for D-1. D-2 to D-5 will be reputational only.

Applies to: National Gas System Operator

Target

3.163 We are proposing to retain the current incentive structure: a financial incentive for day ahead forecasting and a reputational incentive for D-2 to D-5 forecasting, in line with the proposal in National Gas' Business Plan. While we would still like to see improvement in National Gas' longer term forecasting capabilities, we recognise the inherent challenges and variability in longer-term forecasting and believe that the current consumer value to be found in

improving the accuracy of D-2 to D5 demand forecasts does not justify a financial incentive.

3.164 We are proposing the introduction of an efficiency factor into the target for the demand forecasting incentive. This would reduce the targets by a set value each formula year, requiring National Gas to improve accuracy not only to increase incentive reward, but also in order to maintain the reward year on year.

3.165 We are proposing a target for day ahead forecasting of 8mcm/d, and 13.5mcm/d for D-2 to D-5 forecasts, with an efficiency factor of 15% over 5 years. This would mean a reduction of the D-1 target of 0.24mcm/d per year, and reduction in the D-2 to D-5 target of 0.41mcm/d per year.

3.166 During RIIO-GT2 the incentive was weighted to give more prominence to days on which demand forecasting was expected to be more valuable. This meant that a higher weighting was given to performance during winter months and a lower weighting to summer months.

3.167 In its Business Plan, National Gas proposed removing the weighting, arguing that summer months have become as relevant to shippers as winter months. While we recognise that forecasting in summer has become more relevant due to the increase in LNG, we still consider forecasts on high demand days (ie. colder months) to be more valuable to customers and therefore deserve greater attention. Therefore, we are proposing to retain the weighting as under RIIO-GT2.

Incentive Value

3.168 We are proposing to retain the symmetrical cap/floor of +/- £1.7m for D-1 as under RIIO-GT2, with D-2 to D-5 remaining reputational only. We are however proposing to adjust the value of incremental changes in performance. The proposed performance cap and floor will be 5mcm/d and 11mcm/d respectively in year 1 of RIIO-GT3, meaning that each incremental 1mcm/d movement in performance is worth +/- £567k.

3.169 The performance band will move in line with the efficiency factor, meaning a yearly reduction in the performance cap and floor equal to the reduction in the target.

Wind adjuster

3.170 We are proposing to replace the storage adjuster with a wind adjuster, with a value of 2mcm per day, in line with National Gas' Business Plan. This is due to the significant reduction in the impact of storage on demand variance and the increasing significance of wind generation as a source of forecasting variability.

Questions

GTQ24. Do you agree with our proposed design of the Demand Forecasting ODI-F?

Residual Balancing (ODI-F)

Purpose: To incentivise the residual balancing of supply and demand of the System Operator while minimising the impact of any actions on market prices.

Benefits: A more balanced supply and demand with minimised impact on market prices and cost to consumers.

Background

3.171 National Gas has a duty, set out in legislation, to undertake residual balancing actions on the system, in a way that maintains safe operational limits. The residual balancing incentive is intended to drive consumer value by encouraging National Gas to consider the trade-off between linepack carry-over and the effect its actions have on cashout prices. The Residual Balancing ODI-F has two elements:

- Linepack Performance Measure (LPM) - 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".
- Price Performance Measure (PPM) - encourages National Gas to execute any residual balancing trades 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 not, it receives a penalty.

3.172 In our SSMD, we decided to retain both elements of the incentive, with the expectation that National Gas would consider more efficient shoulder month arrangements.

3.173 In its Business Plan, National Gas proposed retaining the financial incentive, with targets being kept consistent with RIIO-2. It proposed increasing the cap and collar to £3.1m and -£5.4m respectively, in line with inflation in the System Average Price (SAP) since the beginning of RIIO-2.

Consultation position and rationale

Summary of consultation position

ODI type: Financial – reward and penalty.

Measurement: Reward/penalty for performance against the targets in both schemes, PPM and LPM, while incorporating a performance range (2.8mcm/d to 5.6mcm/d) within which no incentive would apply for the LPM mechanism during the shoulder months.

Target: PPM: 1.5% of SAP LPM: 2.8mcm/d (non-shoulder months) and 5.6mcm/d with a 2.8mcm/d to 5.6mcm/d zero performance dead-band during shoulder month.

Reporting: Annual Reporting Pack to Ofgem.

Incentive exposure: +£2.4m/-£4.2m. A stepped incentive with tiered daily payments up to £1.2k (PPM scheme) and £3.2k (LPM scheme) and penalties down to -£24k for performance against the PPM and LPM targets.

Applies to: National Gas System Operator

Targets

3.174 We are proposing retaining the daily targets of 1.5% of SAP for the PPM component and 2.8mcm/d (and 5.6mcm/d during the shoulder months) for the LPM component. This is in line with the proposal in National Gas' Business Plan.

Incentive Value

3.175 We recognise the value that this incentive can provide by encouraging National Gas to go above and beyond its legislative requirements. National Gas has had to enter the market more frequently (on 70% of the days) to perform residual balancing actions in RIIO-GT2 compared to RIIO-GT1 (58% of the days). The value of trades also increased, from a peak of £67.8m in RIIO-GT1, to £452.8m in RIIO-GT2.

3.176 We are rejecting the proposal from National Gas to increase the cap and collar in line with SAP inflation, as outlined in the Business Plan. We recognise that balancing costs have increased, and that National Gas have transacted on the market more frequently over time, and we will continue to monitor balancing activity. However, National Gas has continued to perform well as the environment has become more challenging and has been rewarded through the incentive accordingly. We also note that the peaks in residual balancing during RIIO-GT2 occurred during gas crises, which we would not necessarily consider representative.

3.177 National Gas has argued that increased SAP could demonstrate an increase in consumer value being attained through the incentive. We do not believe there is sufficient evidence to suggest that this is the case and therefore propose that the value of the incentive is currently set appropriately to drive the desired

behaviours. We therefore propose to maintain the current incentive exposure for both components of the Residual Balancing ODI-F.

Shoulder Months

3.178 We are proposing to retain the shoulder month arrangements from RIIO-GT2. National Gas undertook a review of the arrangements during preparation of its Business Plan, concluding that the current arrangements strike a good balance between simplicity, operational flexibility, and value for money for consumers. We agree with this assessment.

Questions

GTQ25.	Do you agree with our proposed design of the Residual Balancing ODI-F for RIIO-GT3?

Maintenance (ODI-F)

Purpose: To incentivise the System Operator in efficient planning of network maintenance at direct exit connections from the NTS.

Benefits: Minimised impact of maintenance work on National Gas' customers and minimised disruption to customer operations.

Background

3.179 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.

3.180 The Maintenance incentive has been in place since RIIO-GT1 to encourage efficient planning and execution of maintenance work to minimise disruption to customers, which is performed periodically from April to September each year. Since the start of RIIO-GT2, the Maintenance ODI-F is split into three scheme components:

- minimisation of the use of Maintenance Days to perform Remote Valve Operations ("RVO") maintenance;
- minimisation and alignment with customers' needs for all other work that is not RVO ("non-RVO") maintenance; and
- minimisation of changes initiated by National Gas to the agreed maintenance plan ("Changes Scheme").

3.181 In our SSMD we proposed retaining a modest upside reward (at approximately the current RIIO-GT2 incentive cap of £0.5m per annum) but extend it over all three schemes. We requested that National Gas propose revised, tougher, targets for the RIIO-GT3 price control period given its outperformance on all three schemes so far in the price control.

3.182 In its RIIO-GT3 Business Plan, National Gas proposed to increase the value of the maintenance incentive due to the expectation that the maintenance work is going to increase by ~20% on average compared to the first years of RIIO-GT2. National Gas proposed to retain all three existing schemes of the Maintenance ODI-F with revised targets, caps and floors as follows:

- RVO scheme: a downside only scheme with a target of 5 days to complete the work and a penalty of -£20,000 per day above target of down to -£0.5m pa.
- Non-RVO scheme: a symmetrical scheme with a target of 85% customer alignment for the maintenance work, and a cap/floor of +£0.75m/-£1.0m pa. The proposed reward/penalty for each 0.5% change above/below the target was +£125,000/- £95,000 respectively.
- Changes Scheme: a symmetrical scheme with a target of 7.25% of total maintenance days. National Gas proposed to introduce a deadband for performance between the 4% to 7.25% changes made and a cap/floor of +£0.75m/-£1.0m pa. Each 0.5% change outside of the deadband would receive a reward of £95,000 and a penalty of -£125,000.

3.183 National Gas also proposed to introduce an extension of the current April - September maintenance period to the March - November maintenance period for all elements. This change is subject to an approved UNC Modification proposal.

Consultation position and rationale

Summary of consultation position

ODI type: Financial – reward and penalty.

Measurement: Performance in relation to: RVO Scheme: the target 5 days for completion of maintenance work; Non-RVO Scheme: 90% customer alignment for the non-RVO work; Changes scheme: number of changed days in relation to the total number of maintenance days.

Target: RVO Scheme: 5 days; Non-RVO Scheme: 90% customer alignment; Changes Scheme: 3.5% of all maintenance days changes.

Reporting: Annually, through RRPs.

Incentive exposure: +£0.6m/-£1.70m pa. RVO Scheme: downside only, penalty of -20k/day from the target up to -£0.5m (25 days); Non-RVO Scheme: reward of +/-£50k per 1% alignment change above target, up to +350k (97%) and down to -0.7m (76% alignment); Changes Scheme: reward of +£50k for each 0.7% less changes made from 3.5% target up to +250k (for 0% changes), and penalty of -£70k per each 0.7% change from 4% to the floor of -£0.5m pa (for 11% changes).

Applies to: National Gas System Operator

Rationale for consultation position

3.184 We acknowledge National Gas' performance in successfully aligning its maintenance activities with its customers.

3.185 In its Business Plan, National Gas set out the expectation that the scheduling of the maintenance work will become more congested and therefore it will be more challenging to perform well against the Maintenance ODI-F. National Gas considers this to affect the non-RVO work (eg ILI inspection, asset health related replacement work) in particular, which can easily overrun and is in general, harder to manage. We note that National Gas proposes to extend the maintenance window ahead of the RIIO-GT3 period which will alleviate some of the scheduling issues.

ODI type

3.186 We propose to accept National Gas' proposal for keeping all three schemes of the Maintenance ODI-F as financial schemes given the forecast increase in maintenance work.

3.187 We agree with National Gas that the RVO scheme has become BAU and we propose to keep the Scheme as a penalty-only scheme in RIIO-GT3. We propose to keep a modest upside of the Non-RVO and the Changes schemes to drive National Gas towards further performance improvements.

Targets

3.188 Consistent with our SSMD and recognising the current level of outperformance on all three maintenance schemes, we propose to tighten the targets further than those proposed by National Gas in its Business Plan. These are reflective of historic (out)performance, as well as corrected by a potential increase in maintenance works for RIIO-GT3.

Questions

GTQ26.	Do you agree with our proposed design of the Maintenance incentive for RIIO-GT3?

Customer Satisfaction Survey (ODI-F)

Purpose: A financial output delivery incentive to drive improvements in the quality of customer service through customer satisfaction surveys.

Benefits: Increased customer satisfaction and stakeholder engagement and improved service.

Background

3.189 In our SSMD, we set out our decision to update elements of the current customer satisfaction survey output for RIIO-GT3:

- update the survey content and methodology;
- increase the annual volumes of responses required;
- retain the incentive as a financial ODI; and
- introduce the use of different targets across the survey areas.

3.190 In line with our SSMD, National Gas proposed the restructured incentive to cover the following four Survey Areas: Day-to-day Customer Activities, Market Facilitation, Long-term Customer Activities; and Other Activities. National Gas also proposed raising the target scores by between 0.4-0.8 points from the RIIO-GT2 averages for the respective survey areas; with no deadband and a minimum response threshold between 13-21.

3.191 Feedback from our Call for Evidence on National Gas' Business Plan suggests that the CSAT incentive should be made more robust and the targets should be more stretching. Citizens Advice expressed concerns at the low number of responses, as well as noting that National Gas' proposed targets were not sufficiently ambitious.

Consultation position and rationale

Summary of consultation position

ODI type: Financial – reward and penalty.

Measurement: Performance will be measured through the mean numerical score of all valid responses within a survey area. Survey areas Day-to-day Customer Activities,

Market Facilitation and Long-term Customer Activities are weighed at 30% each, Survey Area Other at 10%.

Target: Day-to-day Customer Activities: 9, Market Facilitation: 8.9, Long-term Customer Activities: 8.5; and Other Activities: 8.7. Deadband of +/- 0.2 of the target score applies.

Survey scope and methodology: Surveys conducted with National Gas' customers following a significant interaction in one of the four Survey Areas.

Reporting: Performance will be reported annually in RRPs.

Incentive value: The maximum reward and penalty will be set at ±2.8m pa.

Applies to: National Gas System Operator

Rationale for consultation position

3.192 National Gas is the sole provider for many services. We also have evidence of improved stakeholder feedback scores since RIIO-GT1, and so we infer that the incentive continues to drive improved performance.

ODI Type

3.193 We propose to retain this incentive as a symmetrical financial ODI. We agree with the proposed Survey Areas and National Gas' proposed weighting of each of the survey areas within the incentive as follows:

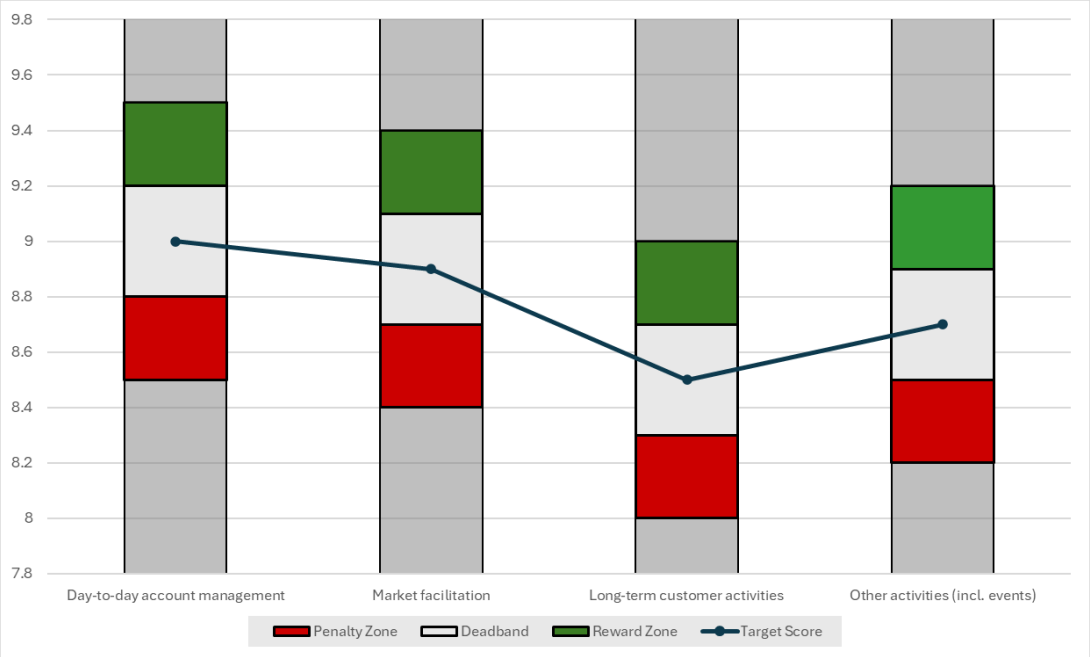
- Survey Area 1: Day-to-day customer activities, 30% of the total cap/floor;
- Survey Area 2: Market facilitation, 30% of the total cap/floor;
- Survey Area 3: Long-term customer activities, 30% of the total cap/floor; and
- Survey Area 4: Other customer activities, 10% of the total cap/floor.

Target

3.194 We propose using average performance data from the first three years of RIIO-GT2 CSAT survey results and to introduce a deadband of +/-0.2 points above/below from the target to allow for annual performance variations as shown in Figure 4 -.

3.195 The penalty and reward zones in Figure 4 show the areas where National Gas would earn/lose money, with anything greater than ±0.5 from the target score subject to the cap/floor amount.

Figure 4 - Incentive parameters for the CSAT incentive per Survey Area



Survey Scope and Methodology

3.196 Only customers who have had a significant, non-transactional interaction with National Gas will be surveyed.[18] National Gas worked with its ISG to propose what constitutes a Significant Interaction,[19] which should warrant inclusion under each of the above survey areas and propose a statistically robust minimum sample size for each survey area.

3.197 As a minimum, we propose a threshold of 30 responses required per Survey Area. If this minimum response threshold is not met, then the Survey Area will be removed from the incentive total and no reward or penalty will be applied regardless of the score. This mechanism aims to increase the response rate for the overall incentive compared to the current RIIO-GT2 format.

3.198 We asked National Gas to explore whether its customer satisfaction surveys can be delivered through different communication means (eg SMS, website feedback forms etc). We expect National Gas to consider this further with its third-party provider and include in its response to our Draft Determinations.

[18] We propose retaining the key question 'Based on your experience of the [service touchpoint] you received/attended, how satisfied are you with National Gas?' to score performance on a scale of 1 to 10. The scores for touchpoints will be aggregated into the respective survey areas with a total average score for each survey area.
[19] We propose that a 'significant interaction' will mean a direct interaction with a customer via telephone, virtual or face-to-face meeting, or email threads to resolve a query, provide information or documents, and will include a much lengthier ongoing interaction with the customer.

Incentive Value

3.199 We have decided to approximately halve the maximum reward and penalty to ±£2.8m pa to take account of past improvements and outperformance. We consider that the proposed value of the restructured CSAT incentive appropriately rewards National Gas for exceptional performance and will continue to drive further improvement for customers.

GTQ27. Do you have any views on the proposed design of this incentive?

4. Managing uncertainty

4.1 Business Plans and price controls are based on a set of assumptions on what is required over the forthcoming period. There may be significant uncertainty over some of these assumptions, and where appropriate it may be better to use mechanisms that adapt certain elements of the price control during the period. These are referred to as Uncertainty Mechanisms (UMs).

4.2 As set out in the Overview Document, the UMs that we will utilise in RIIO-GT3 are re-openers, UIOLIs, pass-through, and indexation mechanisms.

4.3 Table 4 and Table 5 outline all the UMs we are proposing for RIIO-GT3 and set out where you can find full details. UMs specific to a particular company are covered in that company's respective annex.

Table 4: Cross-sectoral UMs in RIIO-3

UM name	**UM type**	**Sector(s)**	**Further detail**
Business Rates (prescribed rates)	Pass-through	ET, GD, GT	Finance Annex
Cost of debt indexation	Indexation	ET, GD, GT	Finance Annex
Cost of equity indexation	Indexation	ET, GD, GT	Finance Annex
Inflation Indexation of RAV and Allowed Return	Indexation	ET, GD, GT	Finance Annex
Ofgem licence fee costs	Pass-through	ET, GD, GT	Finance Annex
Pension Scheme Established Deficit	Pass-through	ET, GD, GT	Finance Annex
Tax Review	Re-opener	ET, GD, GT	Finance Annex
Real Price Effects (RPEs)	Indexation	ET, GD, GT	Overview Document
Digitalisation	Re-opener	ET, GD, GT	Overview Document
Resilience	Re-opener	ET, GD, GT	Overview Document
Cyber Resilience	Re-opener	ET, GD, GT	Overview Document
Co-ordinated Adjustment Mechanism (CAM)	Re-opener	ET, GD, GT	Overview Document
Net Zero	Re-opener	ET, GD, GT	Overview Document
Net Zero Pre-construction Works and Small Net Zero Projects (NZASP)	Re-opener	GD, GT	Overview Document
Net Zero And Re-opener Development Fund (NZARD)	UIOLI	GD, GT	Overview Document

Table 5: Sector specific UMs in RIIO-GT3

UM name	UM type	Sector(s)	Further detail
Gas Strategic Planning	Re-opener	GT	This document
Pipeline Diversion	Re-opener	GT	This document
Network Decarbonisation and Emissions Compliance	Re-opener and PCD	GT	This document
Asset Health	Re-opener	GT	This document
Office and Gas National Control Centre (GNCC) Relocation	Re-opener	GT	This document
Network Capability	Re-opener	GT	This document
Bacton Enhanced Filtration	Re-opener	GT	This document
Funded Incremental Obligated Capacity	Re-opener	GT	This document
Data and Digitalisation	Re-opener	GT	This document
Policing Costs	Pass-through	GT	This document
PARCA Termination Value	Pass-through	GT	This document
NTS Shrinkage Costs	Pass-through	GT	This document
Adjustment to the Net Zero Pre-Construction Work and Small Projects Re-opener	Pass-through	GT	This document
Gas Conveyed to Independent Systems	Pass-through	GT	This document
Central Data Service Provider (CDSP) Costs	Pass-through	GT	This document
Operating Margins	Pass-through	GT	This document
Residual Balancing	Pass-through	GT	This document
NESO Gas Strategic Planning Costs	Pass-through	GT	This document

Infrastructure fit for a low-cost transition to net zero

Gas Strategic Planning Re-opener

Purpose: To account for any changes required following the publication of the GNCNR, GOAD and the CSNP, including any changes required due to the Clean Power 2030 plan, and Security of Supply considerations, such as Single Points of Failure (SPOF).

Benefits: This re-opener will allow a case-by-case assessment of project need and cost, and support delivery of key infrastructure to support wider energy plans and resilience of the NTS, at best value to the consumer.

Background

4.4 In our SSMD we decided to introduce an annual, Authority triggered re-opener to account for any changes required following the publication of NESO's energy system planning deliverables, including the Gas Options Advice Document (GOAD) and CSNP.

4.5 In its Business Plan submission, National Gas proposed that the Gas Strategic Planning Re-opener includes investment required due to CP2030.

4.6 National Gas has also proposed a separate, licensee-triggered re-opener to allow investment to mitigate the risks from the [REDACTED] Critical National Infrastructure (CNI) designated as Single Point of Failure (SPOF).

Consultation position and rationale

Summary of consultation position

UM Type: Re-opener.

Scope: Investment required following the publication of NESO's energy system planning deliverables, including GOAD and CSNP, taking into account the CP2030 plan and GB security of supply. Investment required to mitigate the risks of SPOF on the NTS.

Number and date of re-opener windows: Annual, January.

Ability for Authority to trigger the re-opener: Yes.

Materiality threshold: None.

Applied to: National Gas

Scope

4.7 We propose expanding the scope of the Gas Strategic Planning Re-Opener to encompass not only investments arising from NESO’s energy system planning output, including GOAD and CSNP, but also any additional investment required to deliver the CP2030 plan and to mitigate the risks of SPOF on the NTS.

4.8 As decided in SSMD, the Gas Strategic Planning Re-opener will be Authority-triggered.

4.9 With reference to SPOF-related re-opener applications, we acknowledge that there is a need to develop a robust framework for assessing the investment on

the CNI-designated pipelines against, which may be different to the current 1 in 20 obligation that National Gas considers in its network development planning. We will work with National Gas, NESO and government to develop and propose such a framework ahead of any SPOF-driven re-opener applications.

Questions

GTQ28.	Do you agree with the proposed expanded scope of the Authority-triggered Gas Strategic Planning Re-opener?

Network Decarbonisation and Emissions Compliance Re-opener & PCD (GTO)

Purpose: To address uncertain costs and fund the delivery of technological upgrades on compressors and other assets along with any other environmental compliance legislation related investment, and the utilisation of more refined practices (eg flaring, autotune Dry Low Emissions (DLE)) across the NTS.

Benefits: A reduction of carbon emissions on the NTS and any other environmental compliance legislation related investment. A positive impact in the form of reduced shrinkage levels.

Background

4.10 The Network Decarbonisation Re-opener was a new proposal from National Gas in its Business Plan to help reduce carbon emissions across the NTS.

4.11 National Gas has proposed that rolling out new technology such as zero loss seals for compressors, dry seals, recompression technology and flaring rigs be covered by this re-opener.

Consultation position and rationale

Summary of consultation position

Mechanism type: Re-opener and PCD.

Scope: Reducing NTS carbon emissions and complying with emissions legislation through the rollout of new technologies on compressors and other assets, including zero loss seals and recompression. Subject to Health and Safety Executive (HSE) legislative changes associated with hydrogen blending, we propose that the re-opener also includes the proposed investment for Hydrogen metering readiness.

Baseline cost allowance: Subject to the outcome of re-opener applications. To be designated during RIIO-GT3.

Number and date of re-opener windows: January 2028.

Reporting: Performance will be reported annually in RRPs to Ofgem.

Ability for Authority to trigger re-opener: Yes.

Materiality threshold: 0.5% of annual average ex ante base revenue, as outlined in Chapter 6 of the Overview Document.

Delivery date: Variable based on project; completion expected in RIIO-GT3.

Applied to: National Gas

Mechanism type

4.12 We are supportive of providing National Gas with the opportunity to request additional funding to reduce emissions from the operation of the NTS. These works would offer consumer value, including the reduction of unaccounted-for-gas within the overall NTS shrinkage levels.

4.13 However, much of this technology is new and innovative so costs cannot be calculated with a high level of accuracy, hence our proposal for a re-opener.

4.14 Given that the volume and cost aspects of the proposed works funded through this mechanism will become certain during RIIO-GT3 and will be assessed as such during the re-opener application stage, we propose that the re-opener mechanism has an associated PCD funding mechanism to hold National Gas for delivery.

Scope

4.15 This re-opener will include works (related to any assets on the NTS) which have the explicit aim of reducing carbon emissions on the NTS, ie. installation of CH4RGE Zero Loss Seals, Variable Speed Drive technology (proposed under the subheading of Net Zero UM funding) and mobile flaring equipment.

4.16 We propose to broaden the scope of National Gas' Network Decarbonisation re-opener to include the following type of investment:

- Hydrogen readiness equipment, ie hydrogen analysers that National Gas proposed as part of its Business Plan submission. We propose that the inclusion of this element is subject to the upcoming legislative changes by the HSE[20] related to hydrogen blending;
- any works aimed at complying with emissions legislation during RIIO-GT4 such as the Medium Combustion Plant Directive; and

[20] The Government has made a strategic policy decision to support blending up to 20% hydrogen by volume, but this requires HSE approval for safety. The proposed scope extension for this re-opener is subject to the relevant HSE hydrogen blending legislation.

- upgrading site lighting to low carbon/efficient alternatives.

Number and date of re-opener windows

4.17 We propose one re-opener window in January 2028 for National Gas to come forward with its application. Based on the projects brought forward by National Gas and the need to wait until innovation trials for recompression and zero loss seals are complete, we maintain that one delayed window is suitable.

4.18 We expect National Gas to propose, in its re-opener application, a plan of work for the implementation of projects it wishes to proceed with. This must take into account the outcome of the innovation trials, and prioritisation of projects with the greatest consumer benefit and highest deliverability.

Ability for authority to trigger the re-opener

4.19 This re-opener is proposed to be primarily licensee-triggered owing to the complex and unprecedented nature of the works and the need for National Gas to have flexibility in its application for funding which may be dependent on the completion of innovation trials. We propose that this re-opener can also be Authority triggered should projects reach maturity and the materiality threshold earlier.

Materiality threshold

4.20 The materiality threshold for this re-opener will align with Ofgem's standard re-opener policy, set out in Chapter 6 of the Overview Document.

Questions

GTQ29.	Do you have any views on the proposed Network Decarbonisation and Emissions Compliance Re-opener and PCD funding mechanism?

Pipelines Diversion Re-opener (GTO)

Purpose: To allow National Gas to recover costs of diverting a pipeline in response to a force majeure event, quarry and loss development claims, to mitigate the effects of a significant environmental disturbance or to manage third-party encroachment, that are outside of its control.

Benefits: Consumer money is not spent on projects with uncertain costs and/or scope of work.

Background

4.21 In our SSMD, we outlined our intention to retain the re-opener provision for pipeline diversion costs, ie. the costs which arise as a result of existing

obligations or liabilities taken on by the Gas Council or British Gas plc, and costs for which National Gas has done everything in its power to recover from the relevant party requesting the pipeline diversions. While the re-opener has not been triggered in RIIO-GT2, we accept that additional costs could arise in future from the need for National Gas to divert existing pipelines.

4.22 National Gas has expressed its intention to expand the scope of the current re-opener, to incorporate unforeseen events that would trigger the requirement to divert a pipeline, costs to mitigate the effects of a significant environmental disturbance or to manage third-party encroachment. It emphasised that such events are inherently unpredictable and therefore they cannot justify their inclusion in baseline funding request.

4.23 National Gas notes that pipeline diversions cover relatively short sections and are considered minor changes in pipeline length.

Consultation position and rationale

Summary of consultation position

UM Type: Re-opener.

Scope: To cover the costs of diverting a pipeline in response to a force majeure event, quarry and loss development claims, to mitigate the effects of a significant environmental disturbance or to manage third-party encroachment.

Number and date of re-opener windows: Annual, January.

Ability for Authority to trigger the re-opener: Yes.

Materiality threshold: 0.5% of annual average ex ante base revenue, as outlined in Chapter 6 of the Overview Document.

Applied to: National Gas System Operator

Rationale for consultation position

4.24 For the reasons set out in our SSMD, we have decided to retain the re-opener for pipeline diversion costs, as well as to cover for any unforeseen quarry and loss costs. Given the level of uncertainty around the amount and the costs of pipeline diversions needed it would not be in consumers' best interests to provide ex ante funding.

4.25 We propose to adopt the standard re-opener approach. We consider that a re-opener in any year of RIIO-GT3 is appropriate, as we recognise that these costs could arise at any time. We note that this re-opener was not triggered in RIIO-

GT2, and we are confident that with a materiality threshold in place this will not result in unnecessary increased regulatory burden.

4.26 We have set a materiality threshold, as set out in Chapter 6 of the Overview Document, of 0.5% ex-ante Base Revenue, in line with the common re-opener parameters.

Questions

GTQ30. Do you agree with retaining the Pipelines Diversion Re-opener?
GTQ31. Do you have any thoughts on the materiality threshold proposed?

Secure and Resilient Supplies

Asset Health Re-opener

Purpose: To ensure funding for adequate maintenance and management of aging assets on the NTS.

Benefits: Safe and reliable operation of assets on the NTS.

Background

4.27 There is currently the Asset Health Re-opener in place in RIIO-GT2 to cover the costs associated with above ground Plant & Equipment and CAB Infrastructure assets.

4.28 National Gas has proposed to retain and broaden the current re-opener to include a wider set of assets and installations such as cyber control systems replacement and upgrades, asset health related investment at Saint Fergus, and Welded/Buried Non-Return Valve (NRV) Overhauls.

Consultation position and rationale

Summary of consultation position

UM Type: Re-opener.

Scope: Asset health related investment that is uncertain at this time both in terms of a need and cost, specifically: works not covered by NARM which were previously covered by this re-opener (eg above ground Plant & Equipment and CAB Infrastructure assets), Saint Fergus Plant 2 Aftercooler replacement, Welded/Buried NRV overhauls, Cyber Control System Roll-over, Cyber Station and Cyber Unit Control System replacement, tree and scrub clearance to maintain access to buried pipelines and gas monitoring and control equipment.

Number and date of re-opener windows: January 2027 and January 2029.

Ability for Authority to trigger the re-opener: Yes.

Materiality threshold: 0.5% of annual average ex ante base revenue, as outlined in Chapter 6 of the Overview Document.

Applied to: National Gas

Scope

4.29 This re-opener can be used to fund asset health related works, for which either the needs case or the cost is unknown at this time.

4.30 The specific projects that we envisage to be in scope for this re-opener are as follows:

- Saint Fergus Plant 2 Aftercooler replacement, proposed by National Gas as a UM due to the current uncertainty in costs.
- Welded/Buried NRV Overhauls, proposed by National Gas as a UM due to the ongoing testing of the valves that is currently in place. The request in this UM will be determined by the outcome of the current tests.
- Cyber Control System Roll-over, Cyber Station and Cyber Unit Control System Replacement, proposed by National Gas as a UM due to the current uncertainty in costs and scope.
- Tree and scrub clearance to maintain access to buried pipelines, proposed by National Gas as baseline funding. These proposals lack cost and scope certainty and as such have been moved out of baseline allowances into an uncertainty mechanism.
- Gas quality monitoring and control equipment, proposed by National Gas as baseline funding. As set out in Chapter 5, we have made adjustments resulting from our volume assessment and propose to include this work in the Asset Health Re-opener.

4.31 In addition, the works not covered by NARM which were previously covered by this re-opener will continue to remain in scope.

Number and date of re-opener windows

4.32 We are proposing two re-opener windows, in January 2027 and January 2028. The Authority may direct National Gas to apply during subsequent windows at its discretion.

Ability for Authority to trigger the re-opener

4.33 The Authority may trigger this re-opener during other windows if it considers that within scope costs which exceed the materiality threshold have incurred or are expected to be incurred.

Questions

GTQ32. Do you have any views on the proposed Asset Health re-opener?

GTQ33. Do you have any views on the proposed re-opener application windows?

Office and Gas National Control Centre (GNCC) Relocation Re-opener

Purpose: The purpose of the re-opener is to relocate National Gas' offices, National Control Centre (NCC) and Security Control Centres.

Benefits: Provides the opportunity to ensure National Gas' Critical National Infrastructure is designed to the latest security standards and best practise.

Background

4.34 Since the introduction of the Network and Information Systems (NIS) Regulations in 2018, security and cyber legislation has moved forward significantly. National Gas aims to ensure that its control room design meets the highest standards for security barriers and protect its NIS in-scope systems.

4.35 As National Gas' current NCC and office lease expires in 2032, it seeks to relocate within the RIIO-GT3 regulatory period. National Gas provided the best cost estimates for the office relocation options. National Gas intends to refine the optioneering and costing for the office and NCC relocation from now until the Final Determinations.

Consultation position and rationale

Summary of consultation position

UM Type: Re-opener.

Scope: To fund the costs of the re-location of National GNCC.

Number and date of re-opener windows: One, in August 2026.

Ability for Authority to trigger the re-opener: No.

Materiality threshold: 0.5% of annual average ex ante base revenue, as outlined in Chapter 6 of the Overview Document.

Applied to: National Gas

Rationale for consultation position

4.36 National Gas requires a facility that meets an NIS standard for maximum reliability, security and resilience. A new facility will ensure robust protection for all critical systems.

UM Type

4.37 We propose that a re-opener is a suitable mechanism given the uncertainties around the delivery method at the time of the Business Plan submission and the impact this has on the ability to accurately predict costs.

Scope

4.38 The full scope of works is currently uncertain as National Gas is still identifying the preferred delivery route and considering several options, including lease and new build of an appropriate property for the National Control Centre and Head Office.

4.39 The size of this re-opener will depend on the preferred ownership or leasing model. In the case of the latter, the re-opener will cover the capex cost, whilst the lease payments will be covered by the opex costs in line with the International Financial Reporting Standard 16 treatment.

Number and date of re-opener windows

4.40 We expect National Gas to submit one re-opener application in the first year of the price control and have proposed August 2026 for the re-opener window.

Questions

GTQ34.	Do you agree with the proposed re-opener for National Gas' head office and GNCC relocation?

Network Capability Re-opener

Purpose: To allow National Gas to improve the performance envelope of existing compressor units, upgrade site configurations and decommissioning of redundant compressor units.

Benefits: Ensuring appropriate capability and resilience to deal with alternating flow patterns. Lower network emissions.

Background

4.41 National Gas has proposed a re-opener to request funding in RIIO-GT3 for investments to change the capability of the NTS in response to changing customer needs, forecast supply and demand patterns. National Gas claims there is significant uncertainty around the need for compressor-related investments due to unpredictable changes in flow patterns.

4.42 National Gas has proposed a suite of projects which it may request funding for during RIIO-GT3 in order to maintain the required level of network capability.

These projects include site reconfigurations at Nether Kellet and Cambridge, installation of low NOx burner technology retrofits to existing gas turbines, re-wheeling and decommissioning of compressor units at Avonbridge.

Consultation position and rationale

Summary of consultation position

UM Type: Re-opener.

Scope: Site reconfiguration, installation of low NOx burner retrofits, re-wheeling, decommissioning of redundant compressor units, uprating of Feeder 28 for WIRP and other network-capability related investment.

Number and date of re-opener windows: One, in January 2027.

Ability for Authority to trigger the re-opener: No.

Materiality threshold: 0.5% of annual average ex ante base revenue, as outlined in Chapter 6 of the Overview Document.

Applied to: National Gas

Rationale for consultation position

4.43 Ensuring appropriate levels of resilience and capability of the NTS is one of the priorities of the RIIO-GT3 price control. We propose to introduce a new Network Capability Re-opener in RIIO-GT3 to fund network-capability-related investment in compressors, including enhanced technological solutions, uprating of Feeder 28 for WIRP, re-wheeling[21] and decommissioning of compressor units should these prove to be no longer needed.

4.44 The outcome of the Feeder 28 application under this re-opener may require an amendment to the outputs, delivery dates and allowances in the WIRP PCD.

Questions

GTQ35.	Do you agree with Ofgem's proposal to introduce a new Network Capability re-opener in RIIO-GT3 as set out above?

[21] NESO recommended that a full compressor "site investigation" to increase understanding of asset performance is conducted before a decision is made on investment to replace the compression wheel (ie. re-wheeling).

Bacton Enhanced Filtration Re-opener

Purpose: To provide funding for the installation of additional filtration equipment at Bacton Gas Terminal to remove dust from gas entering the terminal prior to being supplied to the Interconnector UK pipeline system.

Benefits: Installation of additional equipment at Bacton to support international flows.

Background

4.45 Installation of new filtration equipment on two of the five NTS feeders that supply gas to Bacton gas terminal may be required to remove dust particles suspended in gas entering the terminal. This is necessary to reduce the risk of disruption to export flows across the interconnector with Belgium. Three such incidents have previously occurred in 2022 and 2023.

Consultation position and rationale

Summary of consultation position

UM Type: Re-opener.

Scope: New filtration equipment on two of the five NTS feeders that supply gas to Bacton gas terminal.

Number and date of re-opener windows: As directed by the Authority.

Ability for Authority to trigger the re-opener: Yes.

Materiality threshold: 0.5% of annual average ex ante base revenue, as outlined in Chapter 6 of the Overview Document.

Applied to: National Gas

Rationale for consultation position

4.46 We accept that the mitigation measures currently being applied by National Gas may need to be enhanced at some future date, to further reduce the risk of dust causing disruption of export flows to Belgium. At present neither the appropriate engineering solution nor the cost of implementation is known.

4.47 We expect to finalise the scope and design of this re-opener with input from National Gas ahead of the Final Determinations.

GTQ36.	Do you agree with the need for the proposed Bacton Enhanced Filtration Uncertainty Mechanism?

Funded Incremental Obligated Capacity (FIOC) Re-opener

Purpose: To provide funding for network reinforcement that will increase the level of Baseline Licence Obligated Entry or Exit Capacity to meet a request for additional capacity from a network user.

Benefits: This will allow National Gas to increase the level of obligated entry or exit capacity in response to customer demand.

Background

4.48 In our SSMD, we decided to retain the re-opener for the Funded Incremental Obligated Capacity related investment.

Consultation position and rationale

Summary of consultation position

UM Type: Re-opener.

Scope: Network reinforcement to increase the level of either obligated entry or exit capacity.

Number and date of re-opener windows: When there is an associated Planning and Advanced Reservation of Capacity Agreement (PARCA) request.

Ability for Authority to trigger the re-opener: No.

Materiality threshold: None.

Applied to: National Gas

Rationale for consultation position

4.49 We propose to retain the existing re-opener mechanism to ensure that National Gas can deliver Incremental Baseline Licence Obligated Entry or Exit Capacity in response to requests for additional capacity from customers, following submission of a PARCA application from a reservation party. Such applications and the investment required to deliver the necessary level of incremental capacity cannot be forecast accurately in advance.

4.50 We are proposing to retain the scope and design of the FIOC Re-opener as is currently in place in RIIO-GT2.

Questions

GTQ37. Do have any views on our proposal to retain FIOC re-opener as it currently exists for RIIO-GT3?

High quality of service from regulated firms

Data and Digitalisation Re-opener

Purpose: To allow National Gas to invest in additional Field Force programmes, explore replacement of Gemini and Customer Relationship Management System (CRMS) process automation and omni channel support.

Benefits: Enhanced and improved IT systems.

Background

4.51 National Gas have proposed a re-opener to fund additional IT/Digitalisation projects which have unclear scope, as well as the need:

Providing Field Force with XR capabilities and augment Field Force Safety:

4.52 National Gas wants to use Extended Reality (XR) technologies to help with training new operational field workers and to achieve faster, safer training without the need for physical assets. National Gas proposes this will deliver enhanced on-the-job support with real time digital data overlays; improved data accuracy; and attraction and retention of new talent by reducing onboarding time and improving knowledge transfer. National Gas also proposes to use wearable technology, such as smart watches, sensors and communication devices to enhance safety and productivity.

4.53 As XR technologies are still early in their lifecycle, progress will be reviewed across RIIO-GT3, although initial proof of concept has been completed successfully with plans to expand use cases gradually.

Gemini Replacement

4.54 National Gas proposes to conduct a feasibility analysis, optioneering and procurement event; as well as assessing whether the current Gemini system requires significant change to support a hydrogen market framework. National Gas wants to evaluate and potentially replace Gemini as it suggests it can enhance digitalisation solutions through digital/Artificial Intelligence opportunities; remove redundant processes; and redesign workflows for optimal efficiency.

CRMS - Process Automations and Enhancements and Omni-channel support

4.55 National Gas proposes adding additional automation and enhancements into its CRMS. This is to deal with inefficiencies in the current system. National Gas maintains this will optimise customer journeys/experience, and support integration with its Gemini system for better data quality and support for future

energy scenarios such as hydrogen or biomethane. Further, National Gas wants to implement an omni-channel support system to amalgamate all communications channels into a single solution to enable an increased volume of customer enquiries to be met on demand via self-service capability and automation.

4.56 As development of business requirements is ongoing, National Gas has submitted this as a UM, with progress to be reviewed over RIIO-GT3.

Consultation position and rationale

Summary of consultation position

UM Type: Re-opener.

Scope: Field Force related activities, CRMS upgrades and Gemini replacement.

Number and date of re-opener windows: One, July 2028.

Ability for Authority to trigger the re-opener: Yes.

Materiality threshold: 0.5% of annual average ex ante base revenue, as outlined in Chapter 6 of the Overview Document.

Applied to: National Gas

Rationale for consultation position

4.57 We have assessed the proposed scope of the IT projects proposed and consider that the relevant Field Force and CRMS projects, for which the costs are uncertain at this point in time, but are a transformative upgrade related to the already approved baseline funding projects (see Chapter 7), should be included in the scope of the Data and Digitalisation re-opener. We expect investments in reopeners to build on capabilities and not duplicate existing investment.

4.58 Although we are content for a potential Gemini replacement project to be included in the scope of this re-opener, we note that the Gemini system has undergone several upgrades in RIIO recently. Any future Gemini replacement requests should thus be submitted with a clear needs case and a strong justification provided.

Questions

GTQ38.	Do you agree with Ofgem's proposal to fund the proposed IT enhancements through Data and Digitalisation re-opener?

GT specific pass-through costs

Purpose: Where National Gas have costs that are substantially outside of its control we use pass-through mechanisms. For these items, any change in the National Gas' costs is recovered fully from customers.

Benefits: To protect National Gas from costs that are outside of their control.

Background

4.59 This section covers pass-through costs that are specific to National Gas. In our SSMD[22] we decided to retain the following National Gas specific pass-through mechanisms:

- Policing costs;
- PARCA Termination Value;
- NTS Shrinkage costs;
- Adjustment to the Net Zero Pre-construction Work and Small Projects Re-opener;
- NTS Transportation Owner Activity;
- Gas Conveyed to Independent Systems; and
- Central Data Service Provider (CDSP) Costs.

4.60 We proposed to remove the Hynet Front-End Engineering Design (FEED) Study costs from the pass-through mechanism.

Consultation position and rationale

4.61 We are proposing to retain all of the SSMD-listed pass-through categories of costs. We are also proposing to continue to treat Operating Margins and Residual Balancing system operator costs as pass-through.

4.62 In its RIIO-GT3 Business Plan, National Gas has provided an early forecast of the pass-through costs that it is expected to cover for NESO's independent strategic system planning and operating of the gas network. These costs will continue to be passed down to consumers as it is currently set out in National Gas' Transporter Licence and in the Independent System Operator and Planner's (ISOP) licence.

[22] RIIO-3 Sector Specific Methodology Decision – GT Annex, Table 1, page 57.

Questions

GTQ39.	Do you agree with our proposed list of National Gas specific pass-through costs as presented in this section?

Other Uncertainty Mechanism Proposals

4.63 This section outlines the Uncertainty Mechanism which we either propose to reject or include in a broadened scope elsewhere:

- Quarry and Loss Re-opener: In our SSMD we proposed retaining 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. National Gas has submitted a request for Quarry and Loss baseline funding which we are proposing to approve (see Chapter 55), however there is no credible evidence provided by National Gas in its Business Plan that there are likely to be material costs which are outside of its control that would fall under this UM. Although at this time there is no evidence that Quarry and Loss Re-opener costs will occur in RIIO-GT3, we propose to widen the scope of the Pipeline Diversions Re-opener to include Quarry and Loss related UM costs.
- Single Points of Failure Re-opener: In its Business Plan, National Gas proposed a re-opener for funding investment related to CNI-designated Single Points of Failure to ensure security of supply for GB. We consider the SPOF-related investment to be driven by government and NESO and as such, we propose to widen the scope of the Gas Strategic Planning Re-opener to incorporate SPOF.
- Asset Health Volume Drivers: In its Business Plan, National Gas proposed volume drivers for pipeline cathodic protection, valve bypass installations, and compressor re-wheels. As outlined in Chapter 5, we propose treating pipeline cathodic protection interventions as part of baseline expenditure. We propose setting the allowance for valve bypass installations and modifications to £0, as outlined in Chapter 5. In Chapter 4, we propose that compressor re-wheels be addressed through the Network Capability Re-opener mechanism.

GTQ40.	Do you agree with our proposal for other Uncertainty Mechanisms as outlined above?

5. Cost of service

5.1 A key part of RIIO-GT3 is setting baseline totex allowances for National Gas. The objective of our cost assessment is to ensure that these allowances reflect an efficient level of costs that allow National Gas to carry out their activities, to deliver all their outputs, and meet all their obligations.

5.2 Like in RIIO-GT2, for RIIO-GT3 we propose to use a toolkit of methodologies to assess the different categories of costs that make up totex. While developing our approach, we followed the principles for cost assessment set out in our Framework Decision and Sector Specific Methodology Consultation (SSMC) and evolved the RIIO-GT2 approach by focusing on improving the robustness of the existing methodologies while also seeking opportunities for simplification wherever possible. Overall, we consider our approach strikes a balance between incentivising cost efficiency and enabling the investment the network needs.

5.3 This chapter sets out our proposed allowances against the different cost areas within National Gas' Business Plan submission. We have set baseline totex allowances for National Gas only where we are satisfied of the need for the proposed work, that it is required in RIIO-GT3, and that there is sufficient certainty of the efficient cost of the work. Our assessment on what elements of the business plan should form the basis for setting the RIIO-GT3 baseline allowance, what should be rejected as not being in consumers' interests and any modifications we are proposing to the efficient costs for company projects or activity levels are covered below. We also list the price control deliverables for approved projects.

5.4 In developing our assessment, we have used information drawn from:

- National Gas' Business Plan;
- Responses to Supplementary Questions (SQs);
- Stakeholder feedback received through the RIIO-GT3 SSMC;
- Engagement with stakeholders through Cost Assessment Working Groups (CAWGs); and
- Independent reviews and reports commissioned by Ofgem.

5.5 Table 6 and Table 7 below show the adjustments we made to submitted costs and the proposed baseline allowances for National Gas, grouped by the main cost categories within the Business Plan Data Templates (BPDTs). National Gas submitted £4.1bn of baseline costs for RIIO-GT3. Our cost assessment process resulted in proposed baseline allowances of £2.5bn, representing a 39% reduction from the originally submitted cost. This reduction is the result of needs

case assessment, cost efficiency adjustments and our ongoing efficiency challenge (1% per annum). As part of the consultation process, we expect further evidence from National Gas might clarify certain aspects of the Business Plan submission and thus result in an increase in Ofgem proposed baseline allowances.

Table 6: RIIO-GT3 submitted totex compared to proposed totex (£m, 2023/24 prices)[23]

Cost Area	**Submitted (£m)**	**Ofgem Proposed (£m)**	**Difference (£m)**	**Difference (%)**
Load-Related Capex	65.58[24]	63.17	-2.41	-4%
Non-Load Related Capex	1358.26	577.91	-780.35	-57%
Non-Operational Capex	545.44	301.70	-243.73	-45%
Network Operating Costs	444.68	415.24	-29.43	-7%
Indirect Costs	936.34	632.04	-304.30	-32%
Other Costs	703.44	465.93	-237.52	-34%
Baseline Totex	**4053.75**	**2456.00**	**-1597.75**	**-39%**

Table 7: RIIO-GT3 submitted totex compared to proposed totex (£m, 2023/24 prices)

Cost Area	**National Gas Submitted (£m)**	**Ofgem Proposed (£m)**
Baseline Totex (Post OE)	3954.89	2456.00
RPEs	-	129.21
Modelled Totex[25]	**3954.89**	**2585.21**
Pass-through Costs	687.74	687.74
Directly remunerated services adjustment allowances	-	-

[23] Submitted Totex is net costs, excluding RPEs and ongoing efficiency. Ofgem proposed as shown here is net costs excluding RPEs but including Ofgem's view of ongoing efficiency.
[24] Original Load baseline submission was nil, adjusted up to £65.58m as these costs were brought into baseline in relation to WIRP.
[25] This corresponds to ex-ante funded totex. It does align with the BPFM's totex figures, which also contain forecasts of potential UM totex.

Cost Area	National Gas Submitted (£m)	Ofgem Proposed (£m)
NIA/Other innovation funding	836.17	737.37
Total Upfront Funding	**5478.79**	**4010.32**

5.6 The remainder of this chapter sets out the specific approach we have taken to the assessment of the cost categories making up totex, namely load and non-load capex, non-operational capex, network operating costs (NOCs), indirect costs and other costs. For our proposed approach to Real Price Effects (RPEs) and Ongoing Efficiency (OE), see Chapters 7 and 9 of the Overview Document.

Load Related Capex

Background

5.7 Load Related Capex includes investment to expand current network capacity and/or capability, as well as investment required to connect with new demand sources.

5.8 In its Business Plan submission for RIIO-GT3 National Gas did not originally request load-related capex allowances for the TO business, it has however signalled a need for a West Import Resilience Project (WIRP) Re-opener to increase entry capability in South Wales. Further detail on the background of this project is set out in Chapter 3.

Consultation Position and Rationale

Summary of consultation position

Load-Related Capex: Qualitative needs case assessment.

Rationale for consultation position

5.9 We propose to split the WIRP project into 5 components with components 1, 2 and 4 moved into baseline. The WIRP PCD will allow National Gas to commence with the building of the 11-kilometer pipeline and to invest in the purchase of Wormington spares in the first year of RIIO-GT3. The remaining components 3 and 5 will be submitted as a re-opener in the first year of the price control and are expected to be allocated to the corresponding PCDs during the price control. Further detail is set out in Chapter 3.

5.10 The WIRP PCD of £63.17m (post OE adjustment) is currently the only load-related capital expenditure proposed for RIIO-GT3.

Non-load Related Capex

Background

5.11 Non-load Related Capex are costs associated with the replacement or refurbishment of assets which need to be replaced for safety or environmental reasons, or because they are at the end of their useful life due to their age or condition. This is a key area of expenditure in RIIO-GT3.

5.12 The majority of National Gas' proposed capex spending plan relates to the asset health of its existing asset base, primarily work proposed to maintain the condition of the NTS (£1.14bn of baseline cost). A smaller amount of the plan has been proposed under new "Other Non-load" allowance categories described as "Maintainability", "Climate Change Adaptation", "Network Capability" and "Security of Supply" alongside the existing allowance categories for redundant assets (baseline) and compressor emissions (UM).

5.13 National Gas' submission for non-load related capex costs was supported by detailed evidence and information on the needs case, proposed volumes, unit costs and timings of each intervention on each asset on their network. This evidence was provided within National Gas' submission across a range of EJPs, Cost Benefit Analysis (CBAs), the Business Plan Data Tables (BPDT). Where necessary additional information was provided via SQs.

5.14 Since the last price control, in consultation with Ofgem, National Gas has developed the way in which its assets and the work undertaken on those assets are described. The new taxonomy proposed by National Gas and accepted by Ofgem is standardised and comprehensive. It is an improvement, and we welcome it.

5.15 However, because of these changes, for RIIO-GT3 the extent to which trend analysis can be usefully applied is limited. It should also be noted that because of this change, allowances within Asset Health and Non-load Other for RIIO-GT2 cannot be usefully compared with similarly described allowances from RIIO-GT3.

5.16 In RIIO-GT2, expenditure on Asset Health amounted to approximately £0.64bn (adjusted to 2023/24 prices), while Non-load Other amounted to approximately £0.09bn (adjusted to 2023/24 prices).

5.17 For RIIO-GT3, National Gas submitted a baseline allowance request for Asset Health of £1.14bn, an 80% increase from the RIIO-GT2 forecast expenditure. National Gas also requested £0.19bn of Non-load Other, amounting to a 100% increase from its RIIO-GT2 expenditure.

Consultation position and rationale

Summary of consultation position

Asset Health and Other Non-Load Volume Assessment: Needs case assessment supported by engineering review.

Risk and Contingency: Capped at 10% in line with RIIO-GT2 and removed when attributed to contractors.

Company Overheads and Project Management Costs: removal of costs covered by other allowances.

Rationale for consultation position

Assessment methodology

5.18 The cost assessment toolkit for RIIO-GT2 comprised of an assessment of the proposed work volumes, driven by specialist review and a unit cost assessment, supported by trend analysis and benchmarking where possible. In RIIO-GT3, this approach has been replicated closely, but to compensate for the limited application of trend analysis, a bottom-up approach to the assessment of unit costs has been developed.

5.19 As in RIIO-GT2, Ofgem's volume assessment has been primarily driven by technical review conducted by Ofgem engineers (see from 5.255.135). As part of this technical review, the needs case, optioneering and scope confidence was assessed across 31 EJPs submitted by National Gas. We found that six EJPs were fully justified and recommended for full approval, 22 were recommended with adjustments and three EJPs we consider to be entirely non-justified expenditure.

5.20 Ofgem also undertook a detailed review of the unit costs submitted for each proposed intervention, sampling and assessing the methodology used by National Gas to arrive at their submitted unit costs.

5.21 Where National Gas has estimated unit costs based on the mean cost experienced for similar projects, Ofgem has adjusted those unit costs to the median to reduce the distortion caused by outlier costs.

5.22 Where National Gas has estimated unit costs from first principles, based on a detailed review of a sample of unit cost estimations, we make the following adjustments:

- Percentage uplifts attributed to company overheads or project management have been removed. These costs are funded through indirect cost allowances.

- Risk & contingency allowances have been capped at 10% in line with RIIO-GT2. We approve of the use of variable rates however, and as such these allowances have been proportionately adjusted down.
- Where unit costs include risk and contingency costs attributed to contractors, these have been removed to prevent consumers insuring business risk for non-regulated businesses.
- This assessment methodology resulted in a median downward adjustment of 13%. Where an alternative methodology that we were unable to assess was used, the unit cost submission has been adjusted down by 13% also. This approach ensures our adjustments are consistent across all unit costs and incentivises National Gas to continue to develop a consistent estimation approach.

Asset Health

5.23 Asset health work is an important area of focus and the most significant expenditure area of National Gas' submission. The asset health submission has been split into nine allowances with expenditures broadly grouped by asset type. Although, as noted above, these allowances cannot be usefully compared with RIIO-GT2 allowances because of taxonomy changes, the total submission and allowances for asset health can be usefully compared.

5.24 As part of our assessment, we have reconciled the cost information submitted by National Gas, resulting in some minor adjustments to address inconsistencies in their initial submission or to reflect volumes and unit costs that were resubmitted during the SQ process. These adjustments combined to lower the starting value for our cost assessment for Asset Health by approximately £26m (2.2%). After accounting for these adjustments, National Gas' Business Plan requested £1.14bn, a significant increase in investment when compared to RIIO-GT2.

5.25 Through our assessment we made significant adjustments based on our engineering and cost adjustments. We propose allowances of £0.52bn, a reduction of 54% against the adjusted submission.

5.26 Given the importance of maintaining the asset health of the NTS, we continue to engage directly with National Gas, being fully transparent where additional evidence or improved optioneering is needed to demonstrate proposed investments are in consumer interests. This may mean that approved investment in this area increases by Final Determinations.

5.27 In addition to this baseline allowance, we propose to provide National Gas the opportunity to seek funding for future uncertain costs through the provision of an Asset Health Re-opener.

5.28 Table 8 below sets out proposed asset health allowances by project investment themes.

Table 8: Proposed Asset Health Allowances

Asset Health Theme	National Gas BP submitted totex (£m)	Draft Determinations proposed totex (£m)	Difference Draft Determinations vs. BP baseline request (£m)	Difference (%)
Valves	176.76	111.70	-65.06	-37%
Compressors	107.60	49.53	-58.07	-54%
Pipelines	209.51	156.36	-53.15	-25%
Sites	162.48	54.55	-107.93	-66%
Civils	19.21	0.00	-19.21	-100%
Electrical Assets	71.99	36.01	-35.98	-50%
CABs	66.27	8.41	-57.86	-87%
Other	163.24	39.66	-123.58	-76%
St Fergus	170.14	66.25	-103.86	-61%
Total	1,147.20	522.46	-624.74	-54%

5.29 For submitted totex:

- The amount shown for **Other** includes £30.24m of costs that have been reallocated to Asset Health from National Gas' Cyber submission.
- The figures shown may differ from the values shown in National Gas' original submission because of adjustments made to address inconsistencies in National Gas' submission or to reflect volumes and unit costs that were resubmitted during the SQ process.
- The proposed totex figures are inclusive of our ongoing efficiency challenge.

5.30 We identify £6.3m in relation to our adjustment to allowances for necessary and therefore allowed costs, which we believe could have been avoided with adequate record-keeping or due diligence on historic interventions by National Gas. We are considering the appropriate response to this. We intend to explore ways to ensure that in future periods, similar such costs are covered by the licensee and not by consumers.

5.31 For Compressors:

- We will engage with National Gas on the proposed scope and associated cost for a compressor breakdown budget which sits outside of the asset health allowances and is therefore ring-fenced (see Chapter 3 – Compressor Breakdown UIOLI). There are £20.8m of interventions included in the adjustments above that we would expect to form part of this new allowance.
- We will engage directly with National Gas on the additional evidence required to approve £12.8m associated with interventions excluded because of our volume assessment, which we expect to be necessary but have so far been inadequately justified.

5.32 For Pipelines:

- £21.7m relates to tree and scrub clearance to maintain access to buried pipelines. These proposals lack cost and scope certainty at this stage and as such have been moved out of baseline allowances into an uncertainty mechanism (see Chapter 4 - Asset Health Re-opener).
- We introduce a mechanistic PCD for nitrogen sleeve remediation and grouting interventions that are included in the allowance above and total £34.8m following unit cost adjustment.
- National Gas submitted proposed costs of approximately £26m, for work related to monitoring and maintaining cathodic protection systems to be provided as a volume driver with approximately £38m of similar interventions requested as submitted proposed baseline expenditure. We propose all of these interventions are considered within baseline expenditure and make minor volume adjustments. Our proposed cost assessment of this activity reduces the overall cost for these activities by approximately £15m.

5.33 For **Sites**, a substantial portion of our adjustments (approximately £80m) is due to either further survey evidence required to approve investment, or because the interventions proposed by National Gas do not match the survey evidence provided. We accept there is a need for additional investment in this asset base however, and we will continue to engage directly with National Gas on the evidence required to approve the right interventions.

5.34 We propose to make no allowances for **Civils**. National Gas has not demonstrated what volumes and where require intervention or provided sufficient condition data for us to allow expenditure within this theme. We await further clarification and supporting evidence for the scope and nature interventions proposed within this allowance.

5.35 For **Electrical Assets**, a substantial portion of our adjustments resulting from our volume assessment (approximately £13m) relate to site lighting which we propose to reallocate to the Network Decarbonisation and Emissions Compliance Re-opener & PCD (GTO).

5.36 For **CABs**:

- Regarding approximately £55m of the Company's proposed interventions, our technical review identified specific concerns about CAB condition but also the submitted evidence and the options considered by National Gas to address the health of these assets.
- We have already engaged directly with National Gas about the additional survey evidence or optioneering we require to adequately assess their plans for these critical assets. We have engaged early in this area to ensure they have sufficient time to collect and submit the necessary information.
- Our adjustment includes a removal of £0.7m of work proposed by National Gas to replace an asset that was not suitable for its intended use at the point of installation. While the work may be required, we do not believe that consumers should be responsible for meeting the costs in such a scenario.

5.37 **Other** asset health includes interventions relating to the asset health of assets that monitor gas quality and control the flow of gas around the network. Approximately £18m of our adjustments resulting from our volume assessment we propose to reallocate to the Asset Health Re-opener due to uncertainty on the cost or location of proposed interventions.

5.38 For interventions at **St Fergus**:

- £1.7m of our adjustment resulting from volume assessment is for interventions related to lighting at St Fergus, which we propose for inclusion in the Network Decarbonisation and Emissions Compliance Re-opener & PCD (GTO). This is consistent with our adjustments within the Electrical theme.
- Regarding our adjustment to a proposed intervention to repair pipework coatings at St Fergus, costing £18.5m we would like to see further evidence from National Gas that they are being sufficiently innovative with their use of coatings and pipework maintenance to reduce the regularity (and therefore cost) of necessary re-coating.

Other Non-Load Costs

5.39 Excluding Asset Health, National Gas have submitted baseline non-load capex costs totalling £180.4m (after reconciliation adjustments) across five categories. These proposed expenditures have been assessed in an identical manner to the

asset health expenditures above. Except for Redundant Assets (which is substantially lower in RIIO-GT3), each allowance listed below is new for RIIO-GT3 and therefore not comparable with RIIO-GT2. Table 9 below summarises National Gas' submission and our adjustments for other non-load costs.

Table 9: Other Non-Load Category

Other Non-Load Category	Submitted totex Dec 24 (£m)	DD proposed totex (£m)	Difference DD vs. Dec 24 baseline request (£m)	Difference (%)
Redundant Assets	49.69	29.20	-20.49	-41%
Climate Change Adaptation	3.45	0.08	-3.37	-98%
Maintainability	78.96	0.84	-78.12	-99%
Network Capability	27.37	22.29	-5.08	-19%
Security of Supply	20.96	3.04	-17.92	-85%
Total	180.43	55.45	-124.98	-69%

5.40 Our proposed **totex** figures are inclusive of our ongoing efficiency challenge.

5.41 For **Redundant Assets**, the submitted value has been adjusted from National Gas' original submission to account for an error in the submission for the cost of decommissioning work at Wisbech. Most of our adjustment results from our volume assessment and relates to a proposal from National Gas to pipe-through redundant valves. This work is proposed on the basis that it will deliver savings through reduced maintenance costs but that assertion hasn't been adequately evidenced.

5.42 For **Climate Change Adaptations,** our volume assessment made no adjustment to National Gas' proposals to undertake studies relating to temperature risk. The adjustment we make relates to proposals to implement temporary interventions and studies to address failing drainage systems and studies to develop permanent mitigation measures related to flood risk. National Gas have failed to demonstrate that regular maintenance to mitigate the typical defect of blocked drains would not be a more cost-effective solution.

5.43 For **Maintainability**, National Gas have proposed interventions at significant cost in this category without demonstrating the value to bill-payers. These modifications would support the maintenance of valves by re-routing gas. The

assets that are currently maintained under reduced flow and National Gas have not demonstrated why they cannot continue to manage their network in this way.

5.44 For **Network Capability**, we make no adjustments because of our volume assessment, only as a result of our unit cost assessment methodology.

5.45 For Security of Supply:

- £0.6m of proposed interventions have been reallocated to the West Import Resilience Project (WIRP) PCD.
- As previously stated (see Chapter 3), we are proposing that compressor breakdown costs sit in the Compressor Breakdown UIOLI which may sensibly form part of this allowance also, ie outside of the asset health allowances. We are planning to engage with National Gas on the proposed scope and associated cost for this mechanism.

Questions

GTQ41. Do you agree with our proposed approach to Non-load Capex volume assessment based on engineering review? How can the use of expert assessment be further improved?

GTQ42. As part of our unit cost assessment, we have removed risk and contingency allowances greater than 10% (in line with RIIO-GT2) and removed risk and contingency allowances attributed to third parties. Do you agree with this approach?

GTQ43. As part of our unit cost assessment, we have removed percentage uplifts to unit costs attributed to project management and company overheads on the basis they are funded through other allowances. Do you agree with this approach?

GTQ44. Do you agree with our approach overall for unit cost assessment? Do you have any views on how our unit cost benchmarking methodology can be improved?

Non-Operational Capex

Background

5.46 Non-operational Capex costs relate to the capital costs incurred from activities that are unrelated to core activities but support the general functioning of the business. In gas transmission these costs fall under four categories: Information Technology and Telecoms (IT&T), Small Tools, Equipment, Plant and Machinery (STEPM), Vehicles and Non-Operational Property.

5.47 At RIIO-GT2 we relied on expert review for the assessment of IT&T costs. This assessment reviewed the strength and traceability of the IT proposals against robustness of needs case, and cost certainty. For Vehicles, STEPM and Non-operational Property costs, RIIO-GT2 assessment was based on trend analysis and qualitative review.

5.48 National Gas has proposed costs for both TO and SO Non-operational Capex for RIIO-GT3, £324.83m and £220.62m respectively, totalling £545.44m (including costs re-categorised from National Gas' original Cyber-related submission and also costs assessed under Data & Digitalisation). This amounts to approximately 13% of the total RIIO-GT3 baseline submission and more than double its proposed RIIO-GT2 expenditure.[26]

5.49 National Gas requested £233.62m baseline funding for its proposed TO IT Capex projects, and £217.33m for SO, totalling £450.95m. This accounts for more than 80% of the non-operational capex submission for RIIO-GT3. The IT&T £450.95m figure includes Data and Digitalisation costs and £37.56m of costs reallocated from National Gas' Cyber submission as it was deemed not to be cyber related. The remaining £94.50m includes STEPM, Vehicles and Non-operational Property.

Consultation position and rationale

Summary of consultation position

IT&T: Expert review of the submitted IJPs. For projects with no IJPs associated, the average percentage of allowed expenditure for the projects subject to expert review for National Gas is applied.

Data and Digitalisation[27]: See Chapter 8 of this document.

STEPM: Trend model assessing submitted STEPM-aggregated cost submission.

Vehicles: Trend model assessing submitted Vehicles aggregated cost submission.

Non-operational Property: Trend models assessing disaggregated TO and SO submissions.

[26] Based on a comparison to submitted RIIO-GT2 actual and forecast costs in the RIIO-GT3 BPDTs.
[27] Data & Digitalisation costs were submitted within the Non-operational Capex BPDT table but were assessed separately. The definition and approach taken to these costs is set out in the Overview document and in Chapter 8 of this document.

Rationale for consultation position

Information Technology and Telecoms

5.50 Our assessment of National Gas' Capex IT&T submission has been based on the approach taken in RIIO-GT2, utilising the experience of experts to review the IT&T submissions. For RIIO-GT3 we have been advised by Atkins Realis and Grant Thornton consultancies in this area. The IT&T assessment has been conducted on a cross-sector basis which was also the case in RIIO-GT2.

5.51 IT, Operational Technology and IT Business Support costs were in the scope of the assessment but not Data & Digitalisation or Cyber-related costs, which were assessed separately. Details of the Digitalisation assessment can be found in Chapter 8 of this document and the assessment of the Cyber submission is confidential and will be shared with National Gas separately. The results of our assessment have been included in the proposed allowance setting for Non-operational Capex.

5.52 This assessment reviewed the strength of the IT proposals against the following criteria:

- the validity of the needs case;
- the strength and robustness of the needs case, broken down into 'value for money' and 'optioneering'; and
- the appropriateness of cost levels associated with the proposed work plans, broken down into 'scope definition', 'delivery certainty' and 'cost assurance'.

5.53 The assessment prioritised the highest materiality projects to ensure effort efficiency, allowances for some of the smaller projects in terms of materiality were determined based on the IJP they were submitted under. In any instances where there is an overlap between Data and Digitalisation and IT&T assessment or where input from the IT&T consultancy assessment has been sought in areas covered by the Data & Digitalisation assessment, the IT&T assessment framework has been applied as the primary assessment approach.[28]

5.54 Due to sensitivity around the details of each company's proposed IT&T investments, we have not published the Grant Thornton and AtkinsRéalis report. However, we will share the report, containing detailed information on the

[28] For instance, IT082 was reviewed under the Data and Digitalisation review, but deemed to be related to the result of the IT&T assessment of IT081 – therefore the same funding allocation was given.

specific criteria used, how funding percentages would align with the RAG scoring and on the overall assessment framework, directly with the licensees.

5.55 We propose setting an allowance of £239.32m for IT&T,[29] comprised of £130.65m and £108.67 for TO and SO respectively, post ongoing efficiency adjustment.

Small Tools, Equipment, Plant and Machinery (STEPM)

5.56 National Gas has submitted £47.72m under this cost category in RIIO-3 for TO only. In our assessment of National Gas' STEPM submission we have utilised a trend model using RIIO-2 actual costs as we believe this forms a robust basis for the model. Additionally, we have incorporated forecast costs submitted by National Gas relating to the remaining years of RIIO-GT2 and all years of RIIO-GT3. In this model, we used the median average to analyse the trend while reducing the influence of unusually high or low values, therefore improving the model's robustness and interpretability.

5.57 We believe the inclusion of forecast costs is appropriate here as it allows our model to reflect anticipated increases in FTEs and capital expenditure relating to BAU activities as well as account for costs associated with one-off projects.

5.58 We propose setting an allowance of £31.94m for STEPM, a reduction of £15.78m. This is comprised of our cost adjustment from the STEPM trend model and the application of our ongoing efficiency challenge.

Vehicles

5.59 Costs under the Vehicles category relate to expenditure on new and replacement wheeled vehicles which are not system assets but are utilised by National Gas. For RIIO-GT3, National Gas has submitted £14.77m for Vehicles in its Business Plan, for TO only.

5.60 We have assessed National Gas' Vehicles submission by applying a trend model, leveraging RIIO-2 actual costs to establish a reliable basis for evaluation. Additionally, we have incorporated forecast costs from the BP submission for RIIO-GT2 and RIIO-GT3, recognising the importance of fleet renewal and the issue of delays experienced by National Gas in part due to impacts of Covid-19 causing an increase in forecasts for RIIO-GT3. Similarly to STEPM, we have applied the median here to limit the influence of atypical values, which we believe supports a more robust model approach.

[29] Allowance figure includes IT&T and Data and Digitalisation costs, the assessment of which are covered in Chapter 8 of this document.

5.61 We propose setting an allowance of £9.98m for Vehicles, a reduction of £4.79m. This adjustment is made up of our cost adjustment from the trend model and the application of our ongoing efficiency challenge.

Non-operational Property

5.62 Non-operational Property covers expenditure on new and replacement property assets which are not operational or system assets. National Gas has submitted £28.72m for Non-operational Property TO and £3.29m for SO in RIIO-3, totalling 32.01m for RIIO-GT3.

5.63 For TO Non-operational Property, we have assessed the submission using a trend model, considering RIIO-2 actual costs along with forecast costs submitted for the remaining years of RIIO-2 and all years of RIIO-3. Forecast costs have been included within the trend model here to reflect anticipated increases in expenditure during the next price control period. We propose setting an allowance of £18.87m for TO Non-operational Property, post ongoing efficiency adjustment.

5.64 We have taken the same approach for SO Non-operational Property, using a trend model and considering the RIIO-2 actual and forecasts along with forecast costs for RIIO-3 to set the allowance. We propose setting an allowance of £1.59m for Non-operational Property SO after the ongoing efficiency adjustment is applied. As with the other Non-operational Capex models, we used the median in both the TO and SO cost assessment to reduce the influence of atypical values, as we believe this gives greater consistency and robustness in the results.

5.65 Table 10 sets out our proposal for Non-operational Capex allowances the application of needs case assessment, cost adjustments and our ongoing efficiency challenge.

Table 10: Non-Operational Capex Allowances

Cost Area	Submitted	Ofgem Proposed	Difference (£m)	Difference (%)
IT & Telecoms (TO)	233.62	130.65	-102.97	-44%
Vehicles (TO)	14.77	9.98	-4.79	-32%
Non-Operational Property (TO)	28.72	18.87	-9.85	-34%
STEPM (TO)	47.72	31.94	-15.77	-33%
IT & Telecoms (SO)	217.33	108.67	-108.66	-50%
Non-Operational Property (SO)	3.29	1.59	-1.70	-52%

GTQ45.	Do you agree with our approach to IT&T assessment? Do you think we should make any amendments to the assessment framework or thresholds employed? Should any cost categories be included or excluded from the assessment?
GTQ46.	Do you agree with our approach to assessment for STEPM, Vehicles and Non-op Property? Do you think we should make any amendments to the assessment approach or assess these costs differently?

Network Operating Costs (NOCs)

Background

5.66 Network Operating Costs are comprised of expenditure related to the day-do-day maintenance that is required to enable the safe running of the Gas Transmission network.

5.67 TO Direct Opex costs are those incurred on an ongoing basis relating to National Gas field-based workforce delivering its asset steward responsibilities. SO Direct Opex costs are ongoing costs incurred operating the network on a day-to-day basis. National Gas requested a baseline allowance of £266.35m for its TO Direct Opex activities throughout RIIO-GT3, and £178.33m for its SO Direct Opex costs, totalling £444.68m. This amounts to around 11% of National Gas' total submitted baseline expenditure and represents an increase of 20% compared to its proposed RIIO-GT2 expenditure[30].

5.68 The request for TO Direct Opex includes £158.42m for Planned Inspections and Maintenance, £55.83m for Faults, and £52.10m for Operational Property.

5.69 National Gas requested a baseline allowance of £178.33m for its SO Direct Opex activities including Operational Delivery, Commercial and Incentives, System Capability and Risk and National Control costs.

Consultation position and rationale

Summary of consultation position

Planned Inspections and Maintenance: Trend model assessing disaggregated TO submission.

Faults: Trend model assessing disaggregated TO submission.

Operational Property: Trend model assessing disaggregated TO submission.

[30] Based on a comparison to submitted RIIO-GT2 actual and forecast costs in the RIIO-GT3 BPDTs.

SO Network Operating Costs: Trend model assessing aggregated SO Direct Opex submitted costs.

Rationale for consultation position

5.70 For RIIO-GT3 we have assessed National Gas' Network Operating Cost funding request using aggregated and disaggregated trend models based on submissions of RIIO-GT1 and RIIO-GT2 submitted actual costs along with RIIO-GT2 and RIIO-GT3 forecasts to set the allowance for this price control period. We have incorporated figures from across all three price control periods as we believe the historical data provides a strong basis for assessing future costs and incorporating the forecast data allows more data points to improve the robustness of the model. We have used the median within all categories of our NOCs cost assessment to reduce the influence of outliers and provide a more robust representation of NOCs costs over time.

5.71 For TO we are proposing to set allowances of £245.66m and £169.58m for SO, based on our trend analysis and application of our ongoing efficiency challenge – a reduction of £20.69m and £8.75m respectively.

5.72 Table 11 and Table 12 below summarise our proposed allowances for Network Operating Costs:

Table 11: TO Network Operating Cost Allowances

Cost Area	Submitted	Ofgem Proposed	Difference (£m)	Difference (%)
Planned Inspections & Maintenance	158.42	150.65	-7.77	-5%
Faults	55.83	49.28	-6.55	-12%
Operational Property	52.10	45.74	-6.36	-12%
Total	266.35	245.66	-20.69	-8%

Table 12: SO Network Operating Cost Allowances

Cost Area	Submitted	Ofgem Proposed	Difference (£m)	Difference (%)
SO Direct Opex	178.33	169.58	-8.75	-5%

GTQ47. Do you agree with our proposed approach to cost assessment for Network Operating Costs?

Indirect Costs

Background

5.73 Indirect costs refer to internal support and overhead costs necessary to operate a transmission business that cannot be directly attributed to a specific capital project or operational activity. These costs are grouped into two main categories: Closely Associated Indirects (CAI) and Business Support Costs (BSC).

5.74 CAI costs are more directly tied to operational support. This category includes control centre operations, covering costs related to real time system operation and outage planning. CAI includes network policy and strategy, which covers system planning, network development, and regulatory strategy. In addition, CAI includes health, safety and environmental management to ensure compliance with regulations and maintain public and employee safety.

5.75 BSC covers key organisational activities that support the broader functioning of the business. It includes corporate support functions such as IT, finance, legal, human resources, property management and procurement. It also includes non-operational capital expenditures and premises costs, such as office facilities and investments in IT upgrades and digital platforms.

5.76 We also cover Pension Scheme Administration and PPF (Pension Protection Fund) Levy and Quarry and Loss in this section.

5.77 In RIIO-GT2, CAI costs were assessed using a combination of econometric and non-econometric approaches. For BSC, regression analysis was the primary tool used, with adjustments applied to account for TO-specific circumstances. BSC insurance was excluded from the regression analysis and separately assessed.

5.78 IT&T in this cost area was also removed and assessed Non-Operational Capex IT&T through expert review.

5.79 Similarly, for CAI, regression analysis was also applied to most costs, but health, safety and environment and operational training were excluded and instead reviewed using cost trends or bottom-up assessments where appropriate.

5.80 In RIIO-GT2, indirect allowances amounted to £339.6m for TO and £188.5m for SO, representing 19% of total baseline allowances. National Gas anticipate an overspend of 5% relative to its allowances across RIIO-GT2. For RIIO-GT3, National Gas has submitted indirect costs that are 34% higher than those it projected to be spent in RIIO-GT2.

Consultation position and rationale

Summary of consultation position

Closely Associated Indirects (CAI): A trend model was used to assess most of the CAI spending combined with qualitative review.

Separate assessment for Health, safety and environment, operational training and operational IT&T.

Business Support Costs (BSC): For most of the categories in BSC, a pooled ordinary least square (POLS) regression model, using both GT and ET sector data, was implemented using historic data to assess the costs.

Separate assessment of insurance and non-operational IT&T.

Rationale for consultation position

5.81 For RIIO-GT3 we have assessed indirects using an improved methodology that builds upon the RIIO-GT2 approach. These refinements are intended to address limitations of the previous methods, some of which are set out in our SSMD and apply to all sectors, some reflecting specific RIIO-GT3 challenges, including the implementation of an extensive asset management plan and changes caused by the split of National Grid and National Gas.

5.82 In our approach for RIIO-GT3 we propose to:

- Continue to use historical econometric benchmarking to robustly estimate the relationship between BSC and respective cost drivers, but to complement the comparative assessment with either ratio or trend analysis to make our assessment more robust;
- Continue to assess certain categories of CAI and BSC (IT&T, operational training, health, safety and environment and insurance) separately, at disaggregated level, using ratio benchmarking or qualitative assessment.

5.83 Overall, we consider our approach strikes the right balance between providing timely and sufficient funding of indirects whilst mitigating against any risks of late delivery, or non-delivery, and therefore protecting consumers money.

5.84 In the following sections we provide further details on our assessment methodologies and proposed funding mechanisms. Specifically, we discuss:

- Our assessment methodologies for CAI and BSC, including our econometric benchmarking approach, key modelling choices, and the use of ratio and trend analysis;

- Category-specific proposals for CAI and BSC, highlighting bespoke methodological elements; and
- Costs separately assessed.

Econometric benchmarking approach

5.85 In RIIO-GT3, we applied regression analysis exclusively to our BSC cost model. By contrast, during RIIO-GT2, regression analysis was used for both CAI and BSC cost categories. Due to changes in cost categorisation across the sector between RIIO-GT2 and RIIO-GT3 for TO companies, benchmarking was no longer a viable approach for the core CAI model.

5.86 BSCs have exhibited consistent cost trends across both the ET and GT sectors during the RIIO-1 and RIIO-GT2 price control periods, a pattern that continues into National Gas' forecast costs in its Business Plan. This consistency supports our decision to use an aggregated model for benchmarking across the two sectors. By combining the data, we benefit from a larger dataset, which enhances the model's predictive accuracy beyond what would be achievable with separate sector models. We deem that the key cost drivers for each of the cost categories, for example FTE numbers driving HR costs, were the same regardless of the sector.

5.87 As in RIIO-GT2, which represents our starting point, models have been estimated using a Pooled Ordinary Least Squares (POLS) estimator and a Cobb Douglas cost function with log transformation.

5.88 However, we have made several changes to the RIIO-GT2 modelling approach to better reflect the evolving context of RIIO-GT3. Table 13 summarises the key features of the BS models.

Table 13: Business Support modelling choices

Modelling choices	**BSC**
Estimator	Pooled OLS
Functional form	Cobb Douglas (log log)
Time period	2014-2024
Cost drivers	Composite Scale Variable (CSV)
Time variable	-
Company dummy	Gas transmission sector

Closely Associated Indirects

5.89 In this section we discuss CAI-specific aspects of our assessment methodology. For its TO activities, National Gas submitted £341.14m in CAI costs and for its SO activities £64.94m (including expenditure it was necessary to re-categorise from cyber into operational IT&T). This amounts to 10% of submitted total expenditure.

5.90 We removed the Operational IT&T, Operational Training and Health, Safety and Environment cost areas from our main cost model for this category.

5.91 Operational IT&T was reviewed separately through expert review, in the same manner as the Business Support IT&T Opex.

5.92 Operational training was also removed from the model and assessed separately. After review by our policy and cost teams, we have decided to allow all the submitted expenditure for this cost category. This is to enable National Gas to expand its apprenticeship scheme and invest in a new training centre.

5.93 Health, safety and environment was assessed separately through expert review by our engineering team. Following this review, allowances have been set using a trend model including RIIO-GT2 and RIIO-GT3 actual and forecast data. National Gas requested a significant increase in funding between RIIO-GT2 and RIIO-GT3, including funding for some one-off projects at the start of RIIO-GT3. It was decided that insufficient detail had been provided on these projects to allow the funding. We will seek a more detailed breakdown of the costs for these projects to consider approval.

5.94 The model chosen for our core CAI model was a time trend model including all actual data from the RIIO-GT2 National Gas RRP Submissions and forecast data for RIIO-GT2 and RIIO-GT3 from the Business Plan Data Templates final submission. All RIIO-GT2 and RIIO-GT3 data was included to account for

differences between the price control periods. RIIO-1 data was excluded as it was deemed to be fundamentally different in the underlying cost drivers, given that the split between National Grid and National Gas Transmission happened in RIIO-GT2.

5.95 TO and SO costs for CAI were assessed separately. As the only costs which are in the SO submission for CAI are in the Operational IT&T and Health, safety and environment categories, there was no overarching model for the CAI SO costs. All of these were assessed by expert review.

5.96 The core TO assessment was done using a top-down analysis rather than a disaggregated cost areas analysis to reduce risk associated with changes in categorisation and selective sampling.

5.97 Costs were assessed at a net rather than gross level in line with policy on general cost assessment as this ensured that capitalised elements of capex projects were included in the costs of projects within the capex plan.

5.98 Finally, we propose to remove the opex escalator mechanism for RIIO-GT3. Overall, we consider the number and scope of re-openers that might be triggered in the next price control does not warrant an in-period adjustment mechanism for CAI. Specifically, we consider most re-openers as not suitable for an opex escalator, either because the type of costs that are subject to the re-opener do not require a CAI uplift (eg digitalisation, property or cyber resilience) or because costs are linked to highly bespoke and potentially material projects (eg Bacton Enhanced Filtration). In the latter case, we would expect any CAIs to be part of the overall project assessment. We would also expect National Gas to be able to use ex ante allowances for CAIs related to low-materiality projects. On balance, we do not consider it is necessary or proportionate to introduce an opex escalator for RIIO-GT3.

Business Support

5.99 In this section we discuss specific aspects of our assessment methodology for BSC where we continue our RIIO-2 approach. For its TO activities, National Gas submitted £353.04m in BSC and £135.29m for its SO activities, including expenditure that it was necessary to re-categorise from cyber into IT&T. This amounts to 12% of the total submitted baseline expenditure.

5.100 IT&T Opex and Insurance costs were excluded from this model and assessed separately. Details of these assessments can be found in the separately assessed costs section below.

5.101 We consider the RIIO-GT2 regression methodology, based on a POLS on historical data (2014-24) and using a composite scale variable (CSV) as a driver, to still be a robust methodology maintaining stable and significant results in different time periods.

5.102 Within the regression, we have used the same formula weighting for the CSV between totex, FTE and MEAV as we did at RIIO-GT2, which links the various subcategories of BSC to the most relevant drivers. For example, HR is mainly driven by headcount, hence HR has been linked to FTEs in the calculation of the CSV weights. This means weights have stayed relatively stable compared to the RIIO-GT2 model. We found that significant changes to the CSV weights produce only a small impact on the predictive power of the model and therefore we consider our approach to be appropriate.

5.103 For RIIO-GT3, we have maintained a cross-sector approach to BSC for ET and GT. Both the type of costs and the drivers of these costs remain similar between sectors. This can be seen in the model, where gains from increased data points in the POLS significantly outweigh any issues of having a qualitatively different network company in the sample and there is no structural break within the data. We can control the qualitative difference by using a dummy variable for GT, as was done at RIIO-GT2. This renders the model more fit for purpose. This approach is in line with what was done at RIIO-T2 to analyse the BSC.

Separately Assessed Costs

5.104 As in the case of RIIO-GT2, we have subjected some costs to separate assessment due to the costs being inappropriate in a regression. We considered both quantitative and qualitative evidence in the Business Plans, as well as information submitted via SQs and through engagement with National Gas.

5.105 We considered the submitted requests for operational training in line with drivers of growth such as increases in FTEs. We were also satisfied with National Gas' justification for the expected increase in costs, which included explanations for how they are maintaining efficiencies and using innovation. As such, we propose to allow TOs' submitted costs in full.

5.106 For Insurance, we evaluated the TO and SO costs using a trend model informed by actual and forecast data from RIIO-GT2 and RIIO-GT3. The dataset was selected to reflect the trends observed during RIIO-GT2, while also accounting for the differences evident in RIIO-3.

5.107 For health, safety and environment, we have allowed the full SO submission as these costs were considered adequately justified and in line with historic trends.

For the TO costs, we conducted a qualitative assessment on the information provided on this cost area with the submission. While we accept the needs case for the one-off projects requested in the submission, we will need further cost detail with greater cost maturity to be provided in order to accept this submission.

5.108 The IT&T Opex, both in the BSC and CAI categories, was assessed through expert review as set out in our section on non-operational capex. Where spending is associated with a specific project, the recommended deduction was made to the opex costs. The overall deduction was then applied to all remaining costs in the opex categories.

Table 14: Indirect Cost Allowances[31]

Cost Area	Submitted	Ofgem Proposed	Difference (£m)	Difference (%)
Closely Associated Indirects TO	341.14	260.39	-80.75	-24%
Business Support Costs TO	353.04	225.20	-127.84	-36%
Closely Associated Indirects SO	64.27	32.75	-31.53	-49%
Business Support Costs SO	135.29	78.45	-56.84	-42%
Total Indirect costs	936.34	632.04	-304.30	-32%

Quarry and Loss

Background

5.109 Quarry and Loss costs are incurred by National Gas in settling claims from landowner whose property contains NTS assets. For Quarry and Loss National Gas submitted £20.10m. This amounts to 0.5% of its total submitted baseline expenditure and represents an increase of 31% compared to its proposed RIIO-GT2 expenditure.

5.110 In RIIO-GT2, we assessed NGTs submission for this cost area using a historic trend model based on the average actual incurred historical costs from RIIO-GT1. This resulted in Ofgem implementing a baseline allowance of 41% of the proposed baseline.

[31] This table includes £32.7m CAI operational IT&T and £9.7m to BSC IT&T that were submitted in National Gas' cyber submission. These have been reallocated as Indirect costs.

Assessment methodology

Summary of consultation position

Quarry and Loss:

To assess the quarry and loss submission for National Gas using a mixture of qualitative assessment and quantitative analysis to reach a proposed baseline of £17.45m.

Rationale for consultation position

5.111 We assessed National Gas' funding request based on trend models based on National Gas' RIIO-GT2 submitted actual costs to set the RIIO-GT3 allowances.

5.112 We did a qualitative assessment of National Gas' Business Plan to identify the drivers in RIIO-GT3 and understand any significant deviations from National Gas' historic costs.

5.113 This model included historic actual data from RIIO-GT2. This dataset was chosen as the RIIO-1 data was not considered sufficiently comparable to RIIO-GT2 and RIIO-GT3 data. Forecast data was not included as the forecast costs were considered to be of low-cost confidence.

5.114 The cost confidence for this cost category is low as it depends on the quantity and scale of claims made by landowners. This means that the historic costs have been extremely variable and the forecast costs have a high degree of uncertainty.

5.115 This resulted in a slight adjustment down for the allowance for quarry and loss.

Table 15: Quarry and Loss Cost Allowances

Cost Area	Submitted (£m)	Ofgem Proposed (£m)	Difference (£m)	Difference (%)
Quarry and Loss TO	20.10	17.45	-2.65	-13%

Pension Scheme Admin and PPF Levy

Background

5.116 National Gas submitted £21.38m and £1.13m of pension scheme administration and PPF (Pension Protection Fund) levy costs for TO and SO respectively. This amounts to 0.5% of the total submitted baseline expenditure.

5.117 We assessed National Gas' funding request based on trend models based on National Gas' RIIO-GT2 submitted actual and forecast costs to set the RIIO-GT3 allowance.

5.118 We did a qualitative assessment of National Gas' Business Plan to identify the drivers in RIIO-GT3 and understand any significant deviations from National

Gas' historic costs. For Pension Scheme Administration and PPF Levy costs, the deviation from historic costs was largely attributed to the secondary legislation court ruling in 2020 requiring that trustees equalise Guaranteed Minimum Pension (GMP) benefits[32]. National Gas has added £3m to its submitted funding for this category to cover an exercise to equalise these benefits.

5.119 Ofgem concluded a review into pension reasonableness in 2020, when revised allowances were set. After this review, allowances were set at £16.71m for TO and £0.87m for SO in the 2023/24 price base. This was lower than the £17.79m and £0.93m respectively which had been requested in the RIIO-GT2 BPDT.

Summary of consultation position

Pension Scheme Admin and PPF Levy: Cost trend model used in assessment combined with qualitative assessment.

Rationale

5.120 We assessed the pension scheme administration and PPF levy costs using trend models. For these models, TO and SO costs were split out.

5.121 This model included historic actual data for RIIO-GT2 and RIIO-GT3 forecast data. This dataset was chosen as the cost area has a high-cost confidence. This gives us confidence in its inclusion in the historic trend model. RIIO-1 data was not included as it was deemed to be less comparable across price control periods for this cost area than for others.

5.122 This resulted in a slight adjustment down to both the TO and SO allowances for pension scheme administration and PPF levy.

Table 16: Proposed Allowances for Pensions

Cost Area	Submitted (£m)	Ofgem Proposed (£m)	Difference (£m)	Difference (%)
Pension Scheme Administration and PPF Levy TO	21.38	16.92	-4.45	-21%
Pension Scheme Administration and PPF Levy SO	1.13	0.88	-0.24	-21%
Total	22.50	17.81	-4.69	-21%

GTQ48. What are your views on the proposed approach to CAI? How do you think this could be improved?

GTQ49. Do you agree with our proposal to remove the opex escalator?

[32] The Guaranteed Minimum Pensions Increase Order, 2020, No.235

GTQ50. Do you agree with our proposed approach to BSC? How do you think this could be improved?

GTQ51. Do you agree with our proposed approach to separately assessed costs?

GTQ52. Do you agree with our proposed approaches to Quarry and Loss and Pensions?

Other Costs

Background

5.123 Other costs cover any expenditure that falls outside of the predefined categories listed above. For Gas Transmission in RIIO-3, these include Physical Security costs and Cyber costs, both capex and opex.

5.124 Physical Security costs are associated with responding to governmental mandated security changes and to replace and refresh technical assets. Cyber security costs are not covered in this document and are discussed separately in the Cyber Resilience DD document. The cyber costs are proposed for both the TO and SO, while physical security costs are only proposed for the TO only.

Physical Security

5.125 Following the 2022 government review of Critical National Infrastructure (CNI), National Gas states that it operates a number of CNI sites. To ensure full compliance with National Protective Security Authority (NPSA) guidance by the end of the RIIO-GT3 price control period, National Gas is seeking baseline funding in RIIO-GT3 for its Physical Security Programme. This programme comprises the following key asset categories:

- Civil assets (eg gates, barriers, fences, foundations, cills, and temporary fencing)
- IT hardware assets (eg workstations, servers)
- Technical assets (eg cameras, Advanced Access Control Systems (AACS))

5.126 National Gas states it aims to reduce the likelihood of unplanned outages and, where such events occur, minimise their scale and duration. Opex expenditure on Physical Security is required for maintenance and fault repair of Physical Security assets, 24/7 monitoring of PSUP sites through an Alarm Receiving Centre (ARC), and management of communication infrastructure between the ARC and PSUP sites.

Consultation position and rationale

Summary of consultation position

Physical Security Capex: Qualitative assessment of needs case and related costs in capex submission.

Physical Security Opex: Trend model assessing aggregated opex submitted costs.

Rationale for consultation position

Physical Security

5.127 We undertook a qualitative review of National Gas' Physical Security Capex submission. We agree with the needs case to increase its sites security measures in response to CNI recategorization issued by government and/or to comply with NPSA guidance. We agree with National Gas' aim to increase its sites resilience to intruders and minimising risk, outages and potential restoration costs. We accept National Gas' submitted costs for Physical Security Capex in full.

5.128 For the Physical Security Opex submission, we have assessed the submitted costs using a trend model. Ex ante allowances for Physical Security Capex and Physical Security Opex will be subject to the Physical Security PCD.[33]

Cyber

5.129 Cyber OT and IT costs are confidential and as such are not discussed in this document in the interests of national security.

GTQ53.	Do you agree with our assessment approach for Physical Security? If not how should we assess these costs?

Ongoing Efficiency

5.130 We apply an ongoing efficiency challenge to all of totex (ie modelled costs plus technical assessment and bespoke assessment costs). This gives our final view of efficient totex.

5.131 For RIIO-GT3, we are proposing to apply OE at 1.0% per annum. See Chapter 9 of the Overview Document for further details on our proposed approach and rationale for OE in RIIO-3. National Gas and the GDNs, collectively commissioned a report on OE from consultancy Economic Insight to inform their proposed RIIO-GT3 positions on OE. All the gas companies submitted a proposed OE challenge of 0.5% per annum for RIIO-3, aligning with the

[33] Chapter 5 of the Overview Document

recommendations of this report. Based on our current view of the cost submission, this would amount to an OE adjustment of £98.86m.

5.132 Applying OE of 1% per annum has resulted in our Draft Determination view of totex results in a downward adjustment to our proposed totex allowance of £123.49m - £101.28m for TO and £22.21m for SO.

5.133 The table below compares our proposed efficient totex for RIIO-GT3 with National Gas' submitted costs, inclusive of their proposed OE target.

Table 17: Comparison of National Gas submitted costs and Ofgem efficient costs including OE (£m, 2023/24 prices)

Network Company	Submitted totex, excluding OE (£m)	Submitted totex, including OE at 0.5% pa (£m)	Ofgem efficient totex, including OE at 1.0% p.a. (£m)
National Gas	4053.75	3954.88	2456.00

Engineering Assessment of National Gas Transmission's Business Plan

5.134 In this section we outline the methodology we adopted to analyse the company submissions from a technical perspective and establish whether their requests represented an economic and efficient arrangement for consumers. We also provide a high-level summary of the main areas where we have applied adjustments in RIIO-GT3, with more detailed information included in relevant sub-sections.

Plan Quality

5.135 We reviewed 31 Engineering Justification Papers (EJP) from National Gas Transmission totalling approximately £1.6Bn, planned for the RIIO-GT3 price control period.

5.136 We use the term engineering assessment to refer to the areas of work associated with projects or assessment of costs which are bespoke in nature and therefore are not suitable for benchmarking. Specialists reviewed the evidence provided by National Gas to assess the needs case for a project or area of work, as well as how effectively National Gas had defined the proposed scope of work, volumes and costs. Appendix 1 provides details of this assessment for each of the submitted EJPs where volume reductions have been applied.

Thematic Issues

Overview

5.137 We have identified three thematic issues with National Gas' EJP submissions, described below.

Data Driven Approach

5.138 National Gas has moved towards a data driven approach, with National Gas providing a 'Portfolio EJP Excel' file to support its submission[34]. We consider this is a positive change and are supportive of the changes. However, there were challenges in being able to examine the data. As examples, but not limited to, the installation date appeared to be both an installation date, and simultaneously a last intervention date, and data did not contain comprehensive asset condition information. Through the SQ process, we established that this data is not suitable to inform or drive decisions. While the data submitted is a step in the right direction, this will need to be refined. We will work with National Gas to address this.

Asset Classification

5.139 For RIIO-GT3 National Gas changed its taxonomy in how it classifies its asset base with proposed interventions and 'Investment IDs' (InvID). We consider this a positive change and are supportive of the change. However, the EJPs did not provide which interventions were against which Investment IDs, this has made it challenging to understand the relationship between the EJPs, the Portfolio Data and the BPDTs.

Optioneering

5.140 Overall, our technical analysis found that National Gas' EJP submissions provided suitable narrative to justify the need for many interventions. However, often there was lack of evidence of optioneering to demonstrate the scope of the proposed intervention as the optimal solution. In many instances, National Gas failed to demonstrate they had considered sufficient alternatives or taken alternative intervention solutions to a form of maturity that allowed either technical or economic comparisons. This means that in many cases we cannot be certain that National Gas has completed sufficient analysis to propose optimum interventions and so its proposals cannot be considered fully justified. We expect additional information will be provided by National Gas to address many of these issues, summarised in Appendix 1.

[34] This 96,000 row spreadsheet includes a line by line listing of all the potential and proposed interventions on asset ids and includes some asset health data.

Assessment Conclusions

5.141 Following our technical review and analysis it was found that 56 ~~6~~ EJPs were fully justified, and we make no adjustments to volumes of work proposed by National Gas. These EJPs are listed in Table 22 and include some work on pipelines, valves, network capability and decarbonisation initiatives. These EJPs are listed in Table 23 and include some work on pipelines, valves, network capability and decarbonisation initiatives. While approving these expenditures, we have placed additional controls on those expenditures in places to mitigate the risk to the consumer where work is not completed within the price control. We also identified examples of asset condition below that we would expect given the age and duty and requests for work on apparently healthy/modern assets. Details of the proposed controls and uncertainty mechanisms set out in Chapter 4.

5.142 We are proposing to make adjustments or apply additional controls, such as PCDs, UMs and UIOLI allowances, to proposed volumes in 22 EJPs. For these 22 EJPs, we found there was a lack of evidence to support the asset health condition, lack of substantive justification to support the proposed volumes, or type of intervention. In some instances, this is due to the lack of completed surveys where National Gas are unsure on the asset, location, or condition, of a given intervention[35] or where the proposed intervention does not match survey recommendations. For the following three EJPs, we adjust the proposed expenditure to zero:

- Electrical Infrastructure: Site Lighting, Earthing, and Lightning Protection
- Civils
- Valves: Valve Bypass Installation and Modifications

5.143 This is respectively due to lack of sufficient needs case, lack of demonstratable benefit to the consumer, lack of known asset location or condition, and lack of a clear scope of work for the intervention.

Engineering engagement with companies

5.144 We expect to undertake further engagement ahead of Final Determinations to work through the detail of our engineering assessments with NGT. We do not plan to request EJP resubmissions for activities already included within NGTs Business Plan. Where there are areas that the needs case in existing EJPs can

[35] National Gas had planned to complete a limited number of asset health surveys after the submission of the EJPs and this has inhibited Ofgem evaluation.

be enhanced through the provision of further information and data, we will consider this additional evidence in coming to our Final Determinations.

Questions

GTQ54.	Do you agree with our engineering assessment of NGT's RIIO-GT3 Business Plan?

Totex Incentive Mechanism (TIM)

5.145 The TIM is designed to ensure that National Gas and consumers appropriately share the risk of overspending and share any cost efficiencies that can be realised. It also acts an incentive on National Gas to deliver cost efficient projects, by exposing them to the impacts of cost overruns.

Background

5.146 Cost sharing mechanisms in infrastructure contracting and price controls for regulated monopolies are commonplace. These are used to ensure that the parties (in this case consumers and the National Gas) both benefit from in-period efficiencies, ie share any underspend against allowances, and share the risk of any overspending. In our RIIO price controls this mechanism is referred to as the Totex Incentive Mechanism (TIM).

5.147 We have typically used the TIM primarily to drive cost efficiency and thus lower consumer bills – based on an assumption that most costs are within a network company's control and that at the time of setting allowances there was reasonable confidence that these were reflective of the efficient cost of carrying out activities. A secondary focus has also existed on managing a fair apportionment of risk between National Gas and consumers, where costs are harder to control or forecast with high degrees of confidence. The RIIO-GT2 TIM rate was mechanistically, at 39%, based on the confidence that we had in National Gas' costs when setting RIIO-GT2.

5.148 In our SSMD we set out that for RIIO-GT3 "we expect to adopt a qualitative and quantitative assessment of relevant factors, rather than mechanically derive the TIM" and "we advise companies that using a sharing factor in the range of 20-50% is plausible."

5.149 In their Business Plans submissions National Gas assumed a TIM sharing factor of 50%, for the purpose of running financial modelling scenarios. It did not provide further information or proposals on TIM.

Consultation position and rationale

5.150 We propose to set the TIM at 39% for National Gas in RIIO-GT3. We think this results in an appropriate balance of risks between National Gas and customers and retains a strong incentive for National Gas to deliver cost efficient projects.

5.151 Whilst much of activities that National Gas is expected to undertake during RIIO-GT3 are well understood, repeatable, and predictable, a degree of uncertainty remains. Additionally, several significant RIIO-GT2 re-opener projects are being delivered within the RIIO-GT3 period. We believe that applying the same incentive rate across these projects will promote consistent cost efficiency. In this context, a 39% sharing factor offers a strong and appropriate incentive for National Gas to pursue cost savings and minimise cost overruns.

Questions

GTQ56.	Do you agree with our proposed TIM sharing factor?

6. Business Plan Incentive (BPI)

6.1 This chapter sets out National Gas' results for each stage of the Business Plan Incentive (BPI), along with the rationale for the result given. For information on what the BPI is and how it is assessed, see Chapter 6 of the Overview Document.

6.2 In assessing business plans against the BPI Stages A and C, we assessed each business plan on its own merit based on criteria set out in the SSMD and Business Plan Guidance. A consistency check was undertaken across companies and sectors to ensure we were being consistent in our assessment; but the business plans were not assessed against one another. For Stage B, depending on the nature of the assessment methodology the companies could be compared against one another within each sector. For further information on this, see the Stage B section, below.

6.3 Table 18 sets out our proposed BPI results for National Gas and where further information on each stage and the result and rationale can be found.

Table 18: Proposed BPI Results for National Gas

BPI Stage	Assessment result	Further detail – refer to:
A	Pass	Chapter 6 of the Overview document for approach to assessment. This chapter for specific views on the assessment result.
B	-2.38bps	Chapter 6 of the Overview document for the approach to assessment. This chapter for specific views on the assessment result.
C	8.85bps	Chapter 6 of the Overview document for the approach to assessment. This chapter for specific views on the assessment result.
Total bps	6.46	
Total 5-year monetary equivalent £m	8.4m	

Stage A

6.4 Following our assessment, we consider that National Gas met all the minimum requirements as set out in the Business Plan Guidance and has passed Stage A of the BPI.

Stage B

6.5 The overall assessment result for National Gas is -2.38 bps, which corresponds to the weighted average of the outcomes from comparative (-0.36 bps) and bespoke (-2.03 bps) assessment. The following sections provide detail on the methodology of the assessment and the assessment results for each cost category.

Assessment methodology

6.6 The overall result for Stage B corresponds to the weighted average of the outcomes from the comparative and bespoke assessment methodologies, as set out in the SSMD.

6.7 Within GT, we have only carried out comparative analysis for one cost category; Business Support Costs (BSC). The BSC assessment applies a POLS regression across transmission sectors (GT and ET).

6.8 The remaining cost categories were assessed on their own merit within the bespoke assessment where a like-for-like comparison between companies was not possible. This assessment used three criteria: quality of cost evidence, justification of unit cost efficiency and justification of volume efficiency. The scores for each criterion were equally weighted unless in some cases where unit costs or volumes were not applicable.

Comparatively assessed costs

6.9 Table 19 sets out the comparatively assessed costs and their weightings within the overall Stage B assessment score.

Table 19: Comparatively Assessed Cost and Weightings

Comparatively assessed cost category	Weighting	Efficiency benchmark	Efficiency score	BPI reward/penalty (bps)
Business Support	6%	1.19	1.42	-0.36

Bespoke costs

6.10 The table below sets out bespoke costs assessed and the result and rationale for each one assessed.

Table 20: Assessed Bespoke Costs and Rationale

Bespoke Cost	Weighting	BPI reward/ penalty (bps)	Rationale
Network Capability	2%	0.00	Comprehensive cost evidence and adequate volumes.

Bespoke Cost	Weighting	BPI reward/ penalty (bps)	Rationale
Asset Health	29%	-1.93	The quality of cost evidence was comprehensive and relative to other licensees. National Gas have been very open and forthcoming on the detail and condition of their assets. However, significant issues with accuracy, lack of a consistent methodology to estimate unit costs, low review scores for optioneering and scope confidence in many areas, we rate National Gas poorly on the justification of efficient volumes and unit costs.
Other Non-Load	5%	-0.30	Evaluated using the same methodology as Asset Health.
Non-Op Capex IT & Telecoms	7%	0.00	Fair quality of cost evidence, good outcome for qualitative assessment however limited justification of costs other than based on existing contractual pricing. Unit cost and volumes criterion not applicable.
Non-Op Capex (Non-IT)	2%	0.00	Fair cost evidence. Unit cost and volumes criterion not applicable.
Data & Digitalisation	4%	0.00	Adequate cost evidence and all projects approved. Unit cost and volumes criterion not applicable.
Network Operating Costs	11%	0.00	Fair cost evidence. Unit cost and volumes criterion not applicable.
Cyber Security	12%	0.00	Adequate evidence provided. Unit costs and volumes largely derived from initiatives and experience from RIIO-GT2. Costs found to be high.
Physical Security	5%	0.00	Fair cost evidence and adequate volumes, all schemes fully justified.
Closely Associated Indirects	5%	0.00	Fair cost evidence. Unit cost and volumes criterion not applicable.

Bespoke Cost	Weighting	BPI reward/ penalty (bps)	Rationale
Operational Training	2%	0.15	Quality of cost evidence met the requirements and good supporting annex provided. Costs have been allowed in full.
Health, Safety and Environment	1%	0.00	Fair cost evidence. Unit cost and volumes criterion not applicable.
Operational IT CAI	2%	0.00	Fair cost evidence. Unit cost and volumes criterion not applicable.
IT & Telecoms Business Support Costs	4.6%	0.00	Fair cost evidence. Unit cost and volumes criterion not applicable.
Pension	1%	0.06	Comprehensive cost evidence. Unit cost and volumes criterion not applicable.
Insurance	1%	0.00	Fair cost evidence. Unit cost and volumes criterion not applicable.
Quarry and Loss	0.5%	0.00	Fair cost evidence. Unit cost and volumes criterion not applicable.
Total	94%	-2.03	

Stage C

6.11 The below sections set out the assessment results and rationale for the Clarity and Business Plan Commitments assessments for Stage C of the BPI. For information on the weightings used in the Clarity Scorecard and the commitment outcome metrics, please refer to Chapter 6 of the Overview.

Clarity Metric	Assessment Score	Weight	Clarity Reward (bps of RoRE)
Layout and structure	Outstanding	20%	1.4
Accessibility and conciseness	Outstanding	20%	1.4
Relevance of information	Acceptable	20%	0
Clarity of information that supports the demonstration of value to consumers	Outstanding	20%	1.4
Coherence and justification	Outstanding	20%	1.4
Total		100%	5.6

Clarity

Assessment result: 5.6 bps

6.12 National Gas' Business Plan was of a high standard, with the layout and structure of the Business Plan being clearly signposted and coherent throughout. The information provided in the Business Plan was accessible and clear, using technical language only when necessary, making its contents clear to all stakeholders. National Gas was therefore judged to be 'outstanding' against layout and structure and accessibility and conciseness.

6.13 All the information provided in the Business Plan was deemed to be relevant, however there were instances of inconsistent referencing to projects and misaligned information in the BPDTs and EJPs which triggered several follow up clarificatory questions on the Business Plan submission. For this reason, National Gas was scored 'acceptable' against relevance of information provided as opposed to 'outstanding'.

6.14 The clarity of information that supports the demonstration of value to consumers was, in most areas, well justified and identified clearly. The Business Plan commitments, spend and other consumers benefits were consistent. National Gas was therefore judged to be 'outstanding' against clarity of information that supports the demonstration of value to consumers.

6.15 On coherence and justification, the plan had a clear thread centred around National Gas' twelve commitments. The latter were underpinned by strong stakeholder engagement and expectations. National Gas clearly demonstrated how it will carry out the activities contained within the plan and why it requested the proposed allowances. Most documents submitted were coherent, supported by clear explanations and reasoning. We rated the criteria for coherence and justification as 'outstanding'.

6.16 In summation, the Business Plan was coherent and well presented, allowing Ofgem to review the relevant information efficiently and make determinations effectively.

Business Plan Commitments

Overall assessment result: 3.25 bps

Outcome: Infrastructure fit for a low-cost transition to net zero

Assessment result: 1.3bps

6.17 National Gas scored 'outstanding' on consumer value and additionality and new company proposals. It scored 'acceptable' on deliverability and stretching performance.

6.18 There were many positive proposals that National Gas put forward following stakeholder feedback, including new proposals for financial incentives (eg Greenhouse Gas incentives), biomethane proposal, as well as mechanisms directly aimed at addressing decarbonisation (eg Network Decarbonisation UM projects). These decarbonisation plans were well considered and ambitious in the Business Plan, which feed into National Gas' overall environmental commitments to reduce scope 1 and 2 emissions by 21% throughout RIIO-GT3. National Gas' plan showed clear value to consumers across the board for environmental outputs, including the Redundant Assets PCD, GHG Pipeline ODI-F and Network Decarbonisation UM.

6.19 On the other hand, some of National Gas' proposals lacked ambition and stretch in performance (eg the existing GHG Compressors ODI-F, newly proposed NTS Shrinkage ODI-F), or substance (eg pipeline diversions proposal, quarry and loss). Deliverability of several outputs, including NTS Shrinkage Procurement ODI-F, the performance of which would be difficult to monitor and measure, Pipeline Diversions Re-opener, biomethane regulatory changes, was unclear and lacked timelines for implementation.

Outcome: Secure and resilient supplies

Assessment result: 0bps

6.20 National Gas scored 'acceptable' across all four criteria.

6.21 The timeline or plan put forward for the delivery of business plan commitments relating to all activities funded as part of RIIO-GT3 baseline appeared to be credible as put forward. National Gas has shown detailed planning for outages and adjusting their submission where the work it believes required is not deliverable, however there is no timeline proposed for the stabilisation of the

NARM delivery risk. Cyber project costs showed very high estimations, while there were often no technical implementation plans.

6.22 Overall, the business plan commitments put forward by National Gas in this area were sufficiently ambitious, ie they deliver value for consumers at least in line with what is currently delivered under RIIO-GT2 and demonstrate a link with what consumers value for RIIO-GT3. The underlying modelling completed to support the Network Capability assessment and proposals was comprehensive and well justified, adequately demonstrating consumer value and the proposed timelines of specific projects (eg WIRP).

6.23 However, some of the asset health specific proposals were less clear and lacking a 'stretch' in targets beyond achieving RIIO-GT2 outputs. Stretching performance might have presented itself in National Gas' proposals for innovative approaches to manage costs without compromising resilience or reliability or to improve resilience or reliability cost-effectively. However, whilst refurbishments are prioritised over replacement in places, there is limited evidence beyond this of a concerted effort to achieve outcomes more cost-effectively than in RIIO-GT2.

Outcome: High quality of service from regulated firms

Assessment result: 1.95bps

6.24 National Gas' proposals in this area are generally positive. National Gas scored 'outstanding' across most criteria however was found to be 'poor' on the stretching performance metric.

6.25 The proposed structures for the outputs in this category were well designed and deliverable, with a clear timetable and plan of action. This is primarily due to the fact that all outputs proposed are already in place in the current price control.

6.26 National Gas has also demonstrated innovation in its proposed changes to the maintenance, CSAT and CCM incentives. Consumer value has been consistently considered throughout, with money saved to consumers demonstrated in the power station aspect of the maintenance incentive for example, and the counter factual analyses considering the effects on consumers had there been no incentives.

6.27 However, the targets proposed for each of the outputs could be more stretching. This is particularly true for the Quality of Demand Forecasting ODI-F and CSAT incentive proposal.

Questions

GTQ57. Do you agree with our BPI assessment results for National Gas as outlined in this chapter?

7. Innovation

Background

7.1 The SSMD, Business Plan Guidance and Overview Document identify the criteria and process that we have used to assess Network Innovation Allowance (NIA) funding requests. The Overview Document also details our proposals for NIA oversight, the Strategic Innovation Fund (SIF), increasing third party involvement and innovation deployment.

7.2 We set out below our Draft Determinations on National Gas Transmission's RIIO-GT3 NIA funding.

Consultation position and rationale

Level of Network Innovation Allowance (NIA) funding: In its Business Plan, National Gas requested £40m in NIA funding. Following our assessment, we propose to award £11.2m.

Rationale for consultation position

7.3 Innovation Strategy: In its Innovation Strategy, National Gas lays out its planned approach to innovation for RIIO-GT3, as well as its internal processes to deliver this and value that its previous work has brought so far. Its key areas of focus were around understanding its current asset landscape and its capability with future net zero gases, solutions to improve the resistance of its materials for future uses, automation and improvement of its measurement systems, digitalisation and data management and business development due to the changing landscape in the gas sector.

7.4 NIA Workstreams: For the reasons set out in Chapter 11 of the Overview Document, we have decided that NIA is not the most appropriate route for further work relating to future of gas and hydrogen, and so we are proposing to reduce National Gas' NIA allowance by £25.6m. While we requested that companies break down their funding request by area of focus, because National Gas did not do so we reduced its allowance based on our assessment of what proportion of its suggested work was future of gas related.

7.5 Business Plan Assessment: After assessing National Gas' Business Plan against the criteria set out in the Business Plan Guidance (paragraph 3.13), it was scored against each of these based on whether it had provided sufficient evidence to justify the amount of NIA it was requesting. Based on National Gas' score, we decided to further reduce its NIA award by 22%. From the criteria, we would have expected additional detail to be given in the following areas:

- Key areas of focus for NIA spending: National Gas sets out and explains at a high level its planned areas of focus. However, there was no detail on the breakdown of costs outside of the £40m total requested.
- Meeting eligibility criteria and scoping guidance: While National Gas provides a high-level overview of how the criteria are met, it was not explained clearly how many specific workstreams enable the transition or protect vulnerable consumers.
- Ensuring projects are not duplicative: While National Gas explains at a high level how it will avoid duplication, we expect more detail to be given here, including the processes they have in place to avoid duplication and how they work in practice.
- Proposals to disseminate: While National Gas gives examples of its dissemination efforts and events and conferences it has attended, we expected a more targeted dissemination approach as well as more comprehensive plans for future dissemination.
- An explanation of why the innovation in question cannot be funded from the totex allowance: National Gas provided insufficient information on why each workstream cannot be funded from its totex allowance.

Questions

GTQ58.	Do you agree with the level of proposed NIA funding for National Gas?

8. Data and Digitalisation

Background

8.1 The SSMD, Business Plan Guidance and Overview Document identify the criteria and process that we have used to assess the funding of proposed data and digitalisation investments. The Overview Document also details our proposals for further digitalisation of the sector through the Digitalisation licence condition, a proposed Data Sharing Infrastructure (DSI) licence condition, and a Digitalisation re-opener.

8.2 We have set out below our Draft Determinations on National Gas Transmission's RIIO-GT3 data and digitalisation funding.

Consultation position and rationale

Summary of consultation position

Level of data and digitalisation funding: In its Business Plan, National Gas requested £359.68m in funding. We identified £120.4m of investments as miscategorised, with most of this being IT and Telecoms (IT&T). This left £239.6m in data and digitalisation funding requested. Following our assessment, we propose to award £200.9m, or 84% of data and digitalisation funding requested.

Rationale for consultation position

8.3 National Gas' investment in digitalisation is driven by two key factors in the RIIO-GT3 price control; separation from National Grid, and the need for increasing visibility and control of the gas transmission system.

8.4 Separation from National Grid has driven some necessary investments over both the RIIO-GT2 and RIIO-GT3 period. Where these costs have been submitted in the RIIO-GT3 Business Plans, they have been effectively justified, and options have been adequately detailed.

8.5 These required investments from separation are in some fundamental systems such as; asset maintenance, finance and procurement, and regulatory reporting. The level of disruption these investments cause to National Gas' digital architecture have presented an opportunity to make wider changes to this architecture to better deliver organisational objectives. We are broadly supportive of these changes, though there are instances of investments that are not fully justified on a user need basis.

8.6 The proposed changes to internal architecture will allow National Gas to better exchange data between parts of its organisation and with external participants.

This will allow the sector to function more effectively, in a whole-system approach.

8.7 National Gas clearly linked its investments to an improvement in compliance with the Data Best Practice (DBP) principles. The investments proposed help improve compliance across all 11 principles. National Gas also provided a summary of its current progress with the DBP principles.

8.8 We required all licensees to signpost investments that would allow them to connect and utilise the Data Sharing Infrastructure (DSI) effectively. During the assessment period for Business Plans, we have published our decision on governance of the DSI[36]. We are confident that the proposed investments being made by National Gas will allow them to effectively connect to and utilise the DSI. In particular, investment IT040 "Enhanced data driven interoperability for an intelligent, harmonised, network" allows National Gas to prepare data to key internal standards, meaning that data will be ready for DSI exchange in a timely manner for other DSI participants.

8.9 National Gas are proposing to invest £100m in AI-related activities. These investments comprise a range of activities from minor use of AI in existing processes, to establishing core AI capabilities as an organisation. We consider that National Gas' approach to AI investments is well-thought through and allows National Gas to build capabilities and identify potential new opportunities for AI investment through innovation funding, re-opener windows, and into future price controls.

8.10 We identified 20 investments totalling £120.4m, or 33.4% of National Gas' original submission, that were miscategorised as data and digitalisation and these were assessed separately. These were mostly IT&T.

8.11 We propose to reject costs relating to ten investments totalling £38.66m or 16% of proposed investment, driven predominantly by either a lack of clear quantitative assessments of options for delivery, or by an unclear needs case from stakeholders inside and outside the business.

8.12 In respect of projects with an approved needs case, we have overlayed this review with the broader IT&T qualitative expert review outlined in Non-operational Capex IT&T for consistency.

[36] Governance of the Data Sharing Infrastructure | Ofgem

Questions

GTQ59.	Do you agree with our proposed level of funding for National Gas data and digitalisation investments?

9. Your response, data and confidentiality

9.1 All proposals published as part of these documents are draft proposals, subject to consultation. We will publish our decisions on the RIIO-3 price controls in our Final Determinations later this year. We will implement our Final Determinations by modifications to the companies' licence conditions, after further consultation on licence drafting.

Consultation stages

9.1 Table 21 below sets out the key stages for this consultation and how we will progress from Draft Determinations to Final Determinations

Table 21: Consultation stages

Stage	Date
Consultation Open	01/07/2025
Consultation closes (awaiting decision). Deadline for responses	26/08/2025
Final Determinations (including publication of consultation responses)	Winter 2025

How to respond

9.2 We want to hear from anyone interested in this consultation. Please send your response to RIIO3@ofgem.gov.uk.

9.3 We've asked for your feedback in each of the questions throughout. Please respond to each one as fully as you can.

9.4 We will publish non-confidential responses on our website at www.ofgem.gov.uk/consultations.

Your response, your data and confidentiality

9.5 You can ask us to keep your response, or parts of your response, confidential. We'll respect this, subject to obligations to disclose information, for example, under the Freedom of Information Act 2000, the Environmental Information Regulations 2004, statutory directions, court orders, government regulations or where you give us explicit permission to disclose. If you do want us to keep your response confidential, please clearly mark this on your response and explain why.

9.6 If you wish us to keep part of your response confidential, please clearly mark those parts of your response that you *do* wish to be kept confidential and those that you *do not* wish to be kept confidential. Please put the confidential material in a separate appendix to your response. If necessary, we'll get in touch with

you to discuss which parts of the information in your response should be kept confidential, and which can be published. We might ask for reasons why.

9.7 If the information you give in your response contains personal data under the General Data Protection Regulation (Regulation (EU) 2016/679) as retained in domestic law following the UK's withdrawal from the European Union ("UK GDPR"), the Gas and Electricity Markets Authority will be the data controller for the purposes of GDPR. Ofgem uses the information in responses in performing its statutory functions and in accordance with section 105 of the Utilities Act 2000. Please refer to our Privacy Notice on consultations, see Appendix 2.

9.8 If you wish to respond confidentially, we'll keep your response itself confidential, but we will publish the number (but not the names) of confidential responses we receive. We won't link responses to respondents if we publish a summary of responses, and we will evaluate each response on its own merits without undermining your right to confidentiality.

General feedback

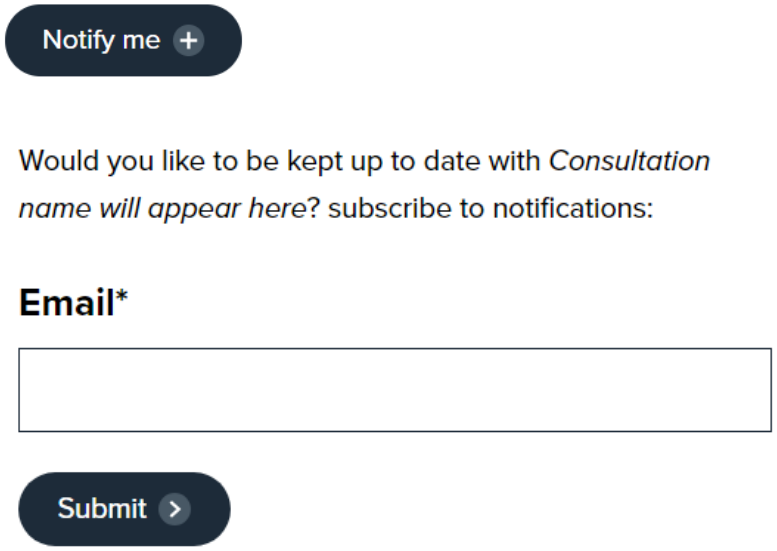
9.9 We believe that consultation is at the heart of good policy development. We welcome any comments about how we've run this consultation. We'd also like to get your answers to these questions:

1. Do you have any comments about the overall process of this consultation?
2. Do you have any comments about its tone and content?
3. Was it easy to read and understand? Or could it have been better written?
4. Were its conclusions balanced?
5. Did it make reasoned recommendations for improvement?
6. Any further comments?

Please send any general feedback comments to stakeholders@ofgem.gov.uk

How to track the progress of the consultation

You can track the progress of a consultation from upcoming to decision status using the 'notify me' function on a consultation page when published on our website. Choose the notify me button and enter your email address into the pop-up window and submit. ofgem.gov.uk/consultations



Once subscribed to the notifications for a particular consultation, you will receive an email to notify you when it has changed status. Our consultation stages are:

Upcoming > **Open** > **Closed** (awaiting decision) > **Closed** (with decision)

Appendices

Appendix 1 – Summary of Engineering Review

Table 22: Summary of Engineering Approvals

OSR	Title
NGT005	Network Capability: West Import Resilience Project
NGT008	AC Inspection and Remediation
NGT017	Pipelines
NGT018	Pressure Vessels
NGT026	Pipeline Protection

Table 23: Summary of Engineering Adjustments

EJP	Needs Case	Optioneering	Scope Confidence	Comments
NGT001 Site Assets: Asbestos, Stabbing and Redundant Assets	Partially Justified	Not Justified	Medium Confidence	National Gas did not provide sufficient evidence for the location or volumes of asbestos removal to justify this investment. Additionally, National Gas failed to present a robust needs case explaining why a more economic and efficient encapsulation approach is not being considered and had not been taken to any form of maturity within its optioneering. Furthermore, National Gas has not demonstrated why a change of approach to locate stabbings is necessary, nor how this would deliver economic and efficient value to the consumer. While a high run-rate increase is proposed, there is limited evidence to support this assumption. The draft decision is a volume reduction pending the receipt of further justifications of scope and solution.
NGT002	Partially Justified	Not Justified	Low Confidence	Ofgem understands a proactive approach from National Gas; however, we do not agree with the proposed strategy of proactively replacing the

EJP	Needs Case	Optioneering	Scope Confidence	Comments
Site Assets: Preheating, Filters & Pipework				primary coating system ahead of its design life, even accounting for the expected deterioration of sections of coating prior to the expiry of the design life. We encourage National Gas to explore alternative coating methods or materials and expand its database of qualifying materials and contractors if required. National Gas has not completed surveys and undertaken the necessary work to provide Ofgem with sufficient confidence in key parameters such as locations, volumes, or asset condition - for example steel pipe supports. As a result, Ofgem do not have the confidence to support the investment where this is not clear. The draft decision is a volume reduction pending the receipt of further justifications of scope and solution.
NGT003 CABs	Partially Justified	Not Justified	Low Confidence	The fleet of CABs (buildings that enclose gas compressors and their drives as well as the associated air intakes, exhaust systems and ventilation) have not received sufficient maintenance priority over recent years. A number of CABs are in a poor state of repair with some loss of structural integrity. This cannot persist and Ofgem intends to provide efficient and effective funding to address these issues. National Gas has not demonstrated consumer value in funding the proposed investments, requesting interventions which exceed that which is necessary or not demonstrating that an intervention will address the root cause of the issue. We have already engaged directly with National Gas about the additional evidence or optioneering we require to adequately assess their plans for these critical assets. We have engaged early in this area to ensure they have sufficient time to collect and submit the necessary information for Ofgem to approve necessary, efficient investment in these critical assets. CAB maintenance is a mix of day to day repairs and refurbishment plus the periodic refurbishment of major items. National Gas appears to have not undertaken the level of routine and minor

EJP	Needs Case	Optioneering	Scope Confidence	Comments
				maintenance that would be expected and has proposed to cluster this work into capitalised refurbishment schemes eg external painting, weeding and moss clearance, cleaning, etc. The proposed Draft Determination position is a volume reduction alongside a request for revised submission to justify a protected and comprehensive CABs remediation programme.
NGT004 Rotating Machinery	Partially Justified	Not Justified	Medium Confidence	This EJP covers all fleet compressor trains and ancillary equipment and apparatus but excludes CABs and any equipment located at the St Fergus import terminal. Much of the work proposed interleaves with work covered by allied EJPs. An evaluation of each intervention has been undertaken and it is clear that work needs doing but the justifications provided by National Gas do not always make a sufficiently robust case for consumers to fund expenditure. The draft decision is a volume reduction pending the receipt of further justifications of scope and solution. Some work packages have a sufficient priority that they should be included within protected allowances.
NGT006 Gas Quality, Metering, and Telemetry	Partially Justified	Partially Justified	Medium Confidence	This EJP covers the whole network including St Fergus. The data was provided in a confidential form meaning little of the analysis can be discussed in public. National Gas failed to make a robust argument for consumer funding of these interventions. The draft decision is a volume reduction pending the receipt of further justifications of scope and solution.
NGT009 Sites Cathodic Protection	Partially Justified	Partially Justified	Medium Confidence	National Gas did not provide sufficient evidence for the entire replacement of its CP systems where surveys suggest remediation action would be sufficient. National Gas, where possible, should complete

EJP	Needs Case	Optioneering	Scope Confidence	Comments
				surveys to support its T3 investment proposals, where this is not possible National Gas should articulate why. The draft decision is a volume reduction pending the receipt of further justifications of scope and solution.
NGT010 Electrical Infrastructure: Switchgear and Transformers	Not Justified	Partially Justified	Medium Confidence	National Gas has not sufficiently demonstrated a needs case for some of the proposed investments in this category. Some assets appear in good condition and have only been operational for a short period of time. Other assets are proposed for replacement based on obsolescence, or age alone. In some instances, condition reports have indicated that replacement is not necessary. The draft decision is a volume reduction pending the receipt of further justifications of scope and solution.
NGT011 Electrical Infrastructure: Standby Power Systems and LV Distribution	Partially Justified	Partially Justified	Medium Confidence	Numerous assets appear to be in relatively good condition and have not reached their end of life or have only been in operation for a relatively short period. National Gas has not adequately demonstrated why these cannot continue in their current operation. The draft decision is a volume reduction pending the receipt of further justifications of scope and solution.
NGT012 Electrical Infrastructure: Site Lighting, Earthing and Lightning Protection	Partially Justified	Partially Justified	Medium Confidence	National Gas has proposed investment for work contingent on surveys that have not yet been completed, and therefore, unable to evidence the volume, location, or condition to justify the work proposed. It is proposed to move all lighting to the wider network decarbonisation package given advances in low energy lighting. The draft decision is a volume reduction pending the receipt of further justifications of scope and solution plus the transfer of some proposed work to an uncertainty mechanism.
NGT013	Partially Justified	Partially Justified	Medium Confidence	Network capability needs to be seen as a whole and although each EJP has been analysed on its own merit, an overall evaluation has also been

EJP	Needs Case	Optioneering	Scope Confidence	Comments
Compressor Fleet – Network Investments and Zone 1 (Scotland)				completed. Ofgem's work has been completed alongside the NESO analysis. At the point of the evaluation NESO and National Gas had not finalised a single network capability plan and therefore final decisions cannot be made with respect to applications to improve compressor performance and to add flexibility to the network. It is proposed to provide an uncertainty mechanism to take account of the evolving analysis of the network. Further evidence is required to justify the proportionate level of spares holding and to optimise the investment in low NOx technology. The draft decision is a volume reduction and uncertainty mechanism pending the receipt of further justifications of scope and solution.
NGT014 Compressor Fleet – Zones 2 and 3 (Central)	Partially Justified	Partially Justified	Medium Confidence	Network capability needs to be seen as a whole and although each EJP has been analysed on its own merit, an overall evaluation has also been completed. Ofgem's work has been completed alongside the NESO analysis. At the point of the evaluation NESO and National Gas had not finalised a single network capability plan and therefore final decisions cannot be made with respect to applications to improve compressor performance and to add flexibility to the network. It is proposed to provide an uncertainty mechanism to take account of the evolving analysis of the network. Further evidence is required to justify the proportionate level of spares holding and to optimise the investment in low NOx technology. The draft decision is a volume reduction and uncertainty mechanism pending the receipt of further justifications of scope and solution.
NGT015	Partially Justified	Partially Justified	Medium Confidence	Network capability needs to be seen as a whole and although each EJP has been analysed on its own merit, an overall evaluation has also been

EJP	Needs Case	Optioneering	Scope Confidence	Comments
Compressor Fleet Zones 4 and 5 (South Wales and South West)				completed. Ofgem's work has been completed alongside the NESO analysis. At the point of the evaluation NESO and National Gas had not finalised a single network capability plan and therefore final decisions cannot be made with respect to applications to improve compressor performance and to add flexibility to the network. It is proposed to provide an uncertainty mechanism to take account of the evolving analysis of the network. Further evidence is required to justify the proportionate level of spares holding and to optimise the investment in low NOx technology. The draft decision is a volume reduction and uncertainty mechanism pending the receipt of further justifications of scope and solution.
NGT016 Compressor Fleet Zones 6 and 7 (East Midlands and South East)	Partially Justified	Partially Justified	Medium Confidence	Network capability needs to be seen as a whole and although each EJP has been analysed on its own merit, an overall evaluation has also been completed. Ofgem's work has been completed alongside the NESO analysis. At the point of the evaluation NESO and National Gas had not finalised a single network capability plan and therefore final decisions cannot be made with respect to applications to improve compressor performance and to add flexibility to the network. It is proposed to provide an uncertainty mechanism to take account of the evolving analysis of the network. Further evidence is required to justify the proportionate level of spares holding and to optimise the investment in low NOx technology. The draft decision is a volume reduction and uncertainty mechanism pending the receipt of further justifications of scope and solution.
NGT019 Civils	Partially Justified	Not Justified	Low Confidence	National Gas has not demonstrated what volumes, and where interventions are to be taken. Furthermore, National Gas has not presented condition data for this paper. This is largely due to incomplete

EJP	Needs Case	Optioneering	Scope Confidence	Comments
				surveys to inform its T3 investment plan. Ofgem would have expected these to be completed before its Business Plan submission. The draft decision is a volume reduction pending the receipt of further justifications of scope and solution.
NGT020 Pipeline Cathodic Protection	Justified	Justified	Justified	National Gas has sufficiently demonstrated the needs case of this work with suitable data. We are proposing a small reduction in the number of transformer rectifiers. The draft decision is a volume reduction and uncertainty mechanism pending the receipt of further justifications of scope and solution
NGT021 Network Decarbonisation Investments	Partially Justified	Not Justified	Low Confidence	NGT did not provide sufficient evidence for work relating to CH4RGE and Dry-low emissions. The draft decision is a volume reduction pending the receipt of further justifications of scope and solution
NGT022 Valves: Valves	Justified	Partially Justified	High Confidence	National Gas did not present a technical, economic or efficient case for pipe through of block valves sites or pipe through single valve (uncongested). Furthermore, did not sufficiently demonstrate a site-by-site approach and lowest cost solution for replacing block valve assemblies - we invite further discourse into an efficient approach from National Gas. The draft decision is a volume reduction pending the receipt of further justifications of scope and solution.
NGT023 Valves: Actuators	Justified	Justified	Medium Confidence	It was challenging for Ofgem to understand the drivers behind the volumes presented. Furthermore, the data presented did not provide Ofgem with confidence in the requested volumes beyond those for Shafer actuators, for example, the dates of some defects being marked as resolved, and other defects appearing to be relatively minor when compared to the proposed intervention.

EJP	Needs Case	Optioneering	Scope Confidence	Comments
				The draft decision is a volume reduction pending the receipt of further justifications of scope and solution.
NGT024 Pressure Control and Flow Control Valves	Partially Justified	Justified	High Confidence	National Gas did not sufficiently justify the volumes for replacing regulator streams (single), and the replacement of multistage pressure reduction skids resulting in recommended volume reductions. The draft decision is a volume reduction pending the receipt of further justifications of scope and solution.
NGT025 Valves: Valve Bypass Installation and Modifications	Not Justified	Not Justified	Medium Confidence	National Gas has not sufficiently demonstrated the needs case for this work and why this must be done. The draft decision is a volume reduction pending the receipt of further justifications of scope and solution.
NGT027 St Fergus: Rotating Machinery	Partially Justified	Not Justified	Medium Confidence	See comments on EJP NGT004: Rotating Machinery. The draft decision is a volume reduction pending the receipt of further justifications of scope and solution.
NGT028 St Fergus: Electrical Assets	Partially Justified	Partially Justified	Medium Confidence	National Gas did not sufficiently demonstrate the timing of the proposed work. National Gas is proposing investments on age related programmes, which is not considered to be an appropriate justification. Some assets proposed for replacement appear to have relatively good health scores. National Gas has not provided sufficient condition data to demonstrate a need for asset replacement. Further clarification on these assets is welcome. The draft decision is a volume reduction pending the receipt of further justifications of scope and solution.
NGT029	Justified	Partially Justified	High Confidence	National Gas did not provide sufficient condition data to evidence the need for the volumes in hand pumps, or technical reasoning to justify

EJP	Needs Case	Optioneering	Scope Confidence	Comments
St Fergus: Valves and Actuators				this spend, however, we welcome further clarification. National Gas proposes to replace certain valves based on the condition of other valves. There may be an engineering justification behind this position, but the case was not made in the EJP. Further clarification on these assets is welcome. We welcome further discussion on the pressure reduction skids which are not currently oversized, but National Gas believe risk becoming so during the price control period. The draft decision is a volume reduction pending the receipt of further justifications of scope and solution.
NGT030 St Fergus: Pressure Vessels	Partially Justified	Justified	Medium Confidence	National Gas has proposed investment for work on pipeline inspection gauge traps, whereas the latest survey recommends continued monitoring. National Gas has not sufficiently justified the volumes for these interventions. The draft decision is a volume reduction pending the receipt of further justifications of scope and solution.
NGT031 St Fergus: Site Assets	Justified	Partially Justified	High Confidence	National Gas has well evidenced some volumes. However, while Ofgem support the proactive approach, Ofgem do not agree with the approach regarding the proposed primary coating regime - Ofgem would encourage National Gas to explore other coating methods or materials and expand its qualifying database if necessary. The draft decision is a volume reduction pending the receipt of further justifications of scope and solution.
NGT032 St Fergus: Civils	Partially Justified	Justified	High Confidence	Ofgem carefully reviewed the evidence and found sufficient evidence for the construction of site storage building and drainage and sewage asset replacement. Beyond these volumes, National Gas has not suitably justified the proposed work. The draft decision is a volume reduction pending the receipt of further justifications of scope and solution.

Appendix 2 – Network Asset Risk Metric (NARM) PCD

9.10 Table 24 summarises the results of our assessment and the proposed Baseline Network Risk Outputs (BNRO) per NARM asset category. Further detail about the NARM methodology can be found in the Overview Document.

Table 24: Proposed BNRO per NARM asset category

Asset Category	**BNRO (R£m)**
Auxiliaries (A.2.12)-HVAC Equipment	0.01
Civils (GT.1.1)-Access	0
Civils (GT.1.1)-Buildings	0
Civils (GT.1.1)-Bunds	0
Civils (GT.1.1)-Chambers	0
Civils (GT.1.1)-Drainage	0
Civils (GT.1.1)-Ducting	0
Civils (GT.1.1)-Pathways	0
Civils (GT.1.1)-Pits	0.02
Civils (GT.1.1)-Plinths	0
Civils (GT.1.1)-Roads	0
Civils (GT.1.1)-Security Barriers	0
Civils (GT.1.1)-Security Cameras	0
Civils (GT.1.1)-Security Fences	0
Civils (GT.1.1)-Security Gates	0
Civils (GT.1.1)-Security Towers	0
Civils (GT.1.1)-Structural Integrity	0
Electrical (A.2.4)-Battery Charger	0
Electrical (A.2.4)-Cathodic Protection Equipment	0.04
Electrical (A.2.4)-Frequency Converters	0

Asset Category	BNRO (R£m)
Electrical (A.2.4)-Harmonic Filters	0.6
Electrical (A.2.4)-Power Transformers	0
Electrical (A.2.4)-Site Earthing & Lightning	0
Electrical (A.2.4)-Site Lighting	0
Electrical (A.2.4)-Small Power	0
Electrical (A.2.4)-Switchgear	0.12
Electrical (A.2.4)-Uninterruptible Power Supply	0
Mechanical (A.2.3)- After Coolers	0
Mechanical (A.2.3)-Filters	0.01
Mechanical (A.2.3)-Heat Exchangers	0.03
Mechanical (A.2.3)-Heaters and Boilers	0
Mechanical (A.2.3)-Pipe Supports	0
Mechanical (A.2.3)-Pipeline	0
Mechanical (A.2.3)-Pipeline Protection	0
Mechanical (A.2.3)-Pipework	0.12
Mechanical (A.2.3)-Pipework Protection	0
Mechanical (A.2.3)-Pressure Vessels	4.92
Mechanical (A.2.3)-Storage Tanks	11.94
Mechanical (A.2.3)-Strainers	0
Rotating (A.2.2)-Compressors	6.61
Rotating (A.2.2)-Electric Motors	19.99

Asset Category	BNRO (R£m)
Rotating (A.2.2)-Gas Turbines	74.82
Rotating (A.2.2)-Power Turbines	0
Rotating (A.2.2)-Pumps	0
Rotating (A.2.2)-Standby Generators	0
Safety and Control (A.2.5)-Actuators	0.69
Safety and Control (A.2.5)-Control Logic Units	0.1
Safety and Control (A.2.5)-Control System	0
Safety and Control (A.2.5)-Fire and Gas Detectors	0.97
Safety and Control (A.2.5)-Fire Fighting Equipment	0.03
Safety and Control (A.2.5)-Inert Gas Equipment	0.06
Safety and Control (A.2.5)-Input Devices	0.53
Safety and Control (A.2.5)-Metering	0.32
Safety and Control (A.2.5)-Regulators	2.24
Safety and Control (A.2.5)-Valves	19.83
Utilities (A.2.11)-Air Supply Equipment	0
Utilities (A.2.11)-Heating/Cooling Media	0
Utilities (A.2.11)-Nitrogen Supply Equipment	0
Pipelines-Pipeline	13,542.75
Total	**13,686.77**

Appendix 3 – Privacy notice on consultations

Personal data

The following explains your rights and gives you the information you are entitled to under the General Data Protection Regulation (GDPR).

Note that this section only refers to your personal data (your name address and anything that could be used to identify you personally) not the content of your response to the consultation.

1. **The identity of the controller and contact details of our Data Protection Officer**

The Gas and Electricity Markets Authority is the controller, (for ease of reference, "Ofgem"). The Data Protection Officer can be contacted at dpo@ofgem.gov.uk

2. **Why we are collecting your personal data**

Your personal data is being collected as an essential part of the consultation process, so that we can contact you regarding your response and for statistical purposes. We may also use it to contact you about related matters.

3. **Our legal basis for processing your personal data**

As a public authority, the GDPR makes provision for Ofgem to process personal data as necessary for the effective performance of a task carried out in the public interest. Ie. a consultation.

4. **With whom we will be sharing your personal data**

We will not share your personal data with any other person or organisation.

5. **For how long we will keep your personal data, or criteria used to determine the retention period.**

Your personal data will be held for 12 months after the project is closed.

6. **Your rights**

The data we are collecting is your personal data, and you have considerable say over what happens to it. You have the right to:

- know how we use your personal data
- access your personal data
- have personal data corrected if it is inaccurate or incomplete
- ask us to delete personal data when we no longer need it
- ask us to restrict how we process your data
- get your data from us and re-use it across other services

- object to certain ways we use your data
- be safeguarded against risks where decisions based on your data are taken entirely automatically
- tell us if we can share your information with 3rd parties
- tell us your preferred frequency, content and format of our communications with you
- to lodge a complaint with the independent Information Commissioner (ICO) if you think we are not handling your data fairly or in accordance with the law. You can contact the ICO at https://ico.org.uk/, or telephone 0303 123 1113.

7. Your personal data will not be sent overseas

8. **Your personal data will not be used for any automated decision making.**

9. Your personal data will be stored in a secure government IT system.

10. More information For more information on how Ofgem processes your data, click on the link to our "Ofgem".