

# Decision

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## **RIIO-3 Sector Specific Methodology Decision – Overview Document**

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

In particular, it sets our decisions on the specific issues on which we sought views from respondents in our Sector Specific Methodology Consultation in December 2023.

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## Foreword

If there is one lesson to be taken from the recent energy crisis, it is the need to dramatically reduce our economy's current dependence on imported fossil fuels, and thus to break the link between gas and power prices. The UK has made significant progress in phasing out coal and growing our renewable and storage power base. But the transition is entering a new, more challenging phase – for two reasons.

First, reaching the government's target for a net zero power system by 2030 requires the build-out of generation, storage and network infrastructure at a pace not seen in decades. This is likely to have impacts on communities across the country. As much as possible, these impacts must be mitigated while keeping down the cost and lead time it takes to build infrastructure. Difficult trade-offs are inevitable.

Second, a net zero power system run mainly on renewable power (such as wind and solar) requires a significant revamp of the electricity transmission network. This investment, which will run into hundreds of billions of pounds, will ensure we can expand the reach of cheaper, cleaner renewable power and break the link between gas and electricity prices, while supporting wider economic growth. The cost of paying for this extra network infrastructure is expected to be offset by falling wholesale power prices due to an increase in renewables and easing network constraints costs. And while costs are recovered over the long-term through energy bills, these up-front investments need to be made at a time when, despite recent falls in prices, many consumers continue to struggle to pay for the energy they need. This is why it we must try to keep the costs of infrastructure needed for net zero as low as possible. We will take a whole systems approach, ensuring costs are allocated efficiently but, working with government as necessary, also ensure they are recovered fairly from current and future consumers so that bills remain affordable for all.

We have already taken important steps to support a net zero transition. Working closely with government and the system operator, we are reforming the connections process to accelerate the time it takes viable projects to connect to the grid. We have also significantly reformed network regulation to enable large scale, programmatic strategic investment in network capacity at pace to meet net zero targets. Alongside this, we intend to continue to hold companies to account for their plans, performance and spend to ensure that legitimacy and consumer trust in the sector are maintained, and costs are kept under control. We want to ensure that companies build the network infrastructure in the right place and at the right time, whilst maintaining a good quality of service and asset health so that risks are not inadvertently stored up for the future. Acceleration with accountability will be the mantra for how we regulate networks in future.

We recognise also that we need to take a broader view of the impacts of regulation. Many countries are stepping up their investment in clean energy at the same time, putting unprecedented pressure on the supply chain. We are alive to these pressures and want to play our part in relieving them by designing a regulatory framework that gives long-term visibility of the pipeline of work to bolster the confidence and growth of energy sector supply chain capacity. This includes new approaches to procurement that create better propositions for those looking to grow their supply chains in the UK.

Similarly, securing the investment for net zero requires the support and confidence of the financial markets. In the electricity transmission sector this is likely to require unprecedented amounts of new capital. We are already starting to see network companies accessing the equity market at scale to help prepare for their next phase of network expansion, and are encouraged by the positive market reaction. They will also need to access the debt capital markets at larger scales. We recognise that maintaining investor confidence and a low cost of finance overall will require consistent and proportionate regulation which evolves in a rational and predictable way. This means finding an appropriate balance of risk and reward in our price controls, and tackling directly any challenges to the investability or financeability of our network utilities.

I have said a lot above about the power sector. While there will be a clear shift away from gas in any net zero pathway, over the short to medium term we do not expect that there will be large-scale, systematic changes to the operation of the gas networks. Accordingly, our priority remains ensuring safe, secure and reliable supplies of gas, while continuing to bear down on leakage. However, the uncertain pace and scale of transition away from gas, particularly in respect of heating homes and buildings, does raise some distinct challenges in how to ensure that different generations of gas consumers pay fairly for the services they receive. As such, we intend to work closely with government to help ensure that any transition away from gas is fair and at the lowest possible cost.

We need to go further and faster to ensure that consumers are no longer vulnerable to future price shocks and bills stay as low as possible over the long term. All three legs of the energy 'trilemma' - ensuring that our energy supply becomes cleaner, more secure, and more affordable – now point in the same direction. This is a pivotal moment for the energy sector. Through our regulation of energy networks, we are determined to enable the clean, affordable, and secure system our country needs.

**Akshay Kaul**

**Director General for Infrastructure**

## 1. Executive summary

- 1.1 In our Framework Decision we set out the key outcomes that consumers and network users would expect network companies to deliver during RIIO-3. These outcomes, which are a product of the approach taken at RIIO-2 and our Consumer Interest Framework,<sup>1</sup> ensure that consumer priorities remain at the heart of our decision-making:
- **Infrastructure fit for a low-cost transition to net zero:** Network companies must facilitate a low-cost, environmentally sustainable, low carbon energy system that enables the transition to net zero, with infrastructure built at pace.
  - **Secure and resilient supplies:** Network companies must deliver a safe, secure and resilient network that is efficient, data rich and responsive to change. Consumers should have access to gas and electricity supplies that are resilient to physical, financial, climate and cyber shocks.
  - **High quality of service from regulated firms:** Network companies must deliver a high quality and reliable service to all consumers and network users, including those who are in vulnerable situations.
  - **System efficiency and long-term value for money:** Network companies must deliver an efficient cost of service, minimise the costs to consumers of system transformation and ensure consumers and network users get a fair deal.
- 1.2 This chapter highlights what we consider are the main challenges for RIIO-3 across the electricity and gas sectors against each of these outcomes and how we propose to address them through our methodology decisions. Further detail is provided within each of the specific sector annexes.
- 1.3 We also summarise our key method decisions that apply across each of the sectors, including: common assumptions on future planning scenarios; how we build in flexibility and adaptability around these common assumptions to respond to different net zero trajectories and demands on the networks; proposals to maintain high quality of service, particularly on asset health and key resilience areas; how we will incentivise high-quality business plans that are ambitious, efficient and accessible; the setting of incentive rates and the balance of risk

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<sup>1</sup> [2023/24 Forward Work Programme | Ofgem](#)

between consumers and companies; and our key financial framework methodologies and we intend to apply them.

- 1.4 We consider that key enablers of all of these outcomes will be continued drive of innovation across the energy networks and further strengthening the reach of data and digitalisation, by which we mean the production of high-quality data that is shared with all those who need it to improve the working of the system. Chapter 13 sets out the ongoing work we continue to do in this area in parallel with this decision. The RIIO-3 price control process will support this development process, including providing funding and incentives to develop and maintain the systems that are required to deliver this data.
- 1.5 Our Framework Decision also set out that simplification is a key focus for RIIO-3 as we seek to reduce regulatory burden by streamlining the process where it does not expose consumers to undue risk. Throughout this document and in the sector specific annexes we set out how we propose to realise this objective.

## **Electricity transmission**

- 1.6 The electricity transmission (ET) sector is playing an increasingly pivotal role in facilitating the achievement of net zero targets. Since the RIIO-ET2 price control was set, there has been a growing evidence base – and consensus – around the need for a rapid build-out of the network to increase network capacity to reduce system constraints and connect more sources of domestic, low carbon energy. Ofgem has already responded rapidly through the development of a new, bespoke regime for the connection of new offshore wind generation on the UK’s east coast that will see a vast amount of investment deployed through the remainder of this decade.<sup>2</sup> A further investment of a similar magnitude is foreseeable for the electricity Transmission Owners (TOs) to deliver from 2026 onwards as a result of the centrally-planned investment outlook emerging from the National Energy System Operator (NESO).<sup>3</sup> This strategic approach will be critical to achieving the government’s target of a net zero power system by 2030.
- 1.7 A key priority for RIIO-ET3 is to consolidate – and learn from – the array of investment regimes that exist under RIIO-ET2 into a set of purpose-built,

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<sup>2</sup> <https://www.ofgem.gov.uk/decision/decision-accelerating-onshore-electricity-transmission-investment>

<sup>3</sup> Previously denoted as the Future System Operator (FSO), and referred to as Independent System Operator and Planner (ISOP) in the Energy Act 2023, NESO is expected to launch later in 2024 as a public corporation free from commercial interests and operationally independent from government. NESO will take on the current National Grid Electricity System Operator (ESO) and new roles.



enduring regimes that can span multiple price controls in the future. This is important for two related reasons:

- Transmission investment horizons tend to be longer than typical 5-year price control cycles<sup>4</sup> and certainty over project approval is needed for the lifespan of a project, which also helps to give the providers of capital - both supply chain and investors - greater certainty.
- The planning cycle is becoming increasingly centralised and accelerated to enable maximum system benefits to be delivered, which means flexible in-period reopeners for project approvals become increasingly valuable to consumers.

1.8 In many areas we have continued or evolved features of RIIO-ET2 mechanisms, as there is evidence and stakeholder feedback that these have worked effectively to enable network expansion to be delivered at the right time, in the right places and with a fair allocation of risk between investors and consumers. As the source of investment need will vary – some will be determined by the NESO and some by the TOs themselves – we have also created distinct elements in designing fit-for-purpose mechanisms. In all areas, we have sought to carry forward the design decisions taken in our Framework Decision. This, we believe, will help to maintain the stability and predictability in the regulation that is vital for securing the low-cost private capital that the sector – and consumers – have benefited from so far.

1.9 A considerable challenge to overcome is the increasingly constrained global and local supply chain, in particular equipment and labour markets. These are putting pressure on prices and lead times as many countries look to decarbonise their economies at the same time as the UK. We believe supply-side intervention is most effective and have sought to design a fair and efficient framework that requires companies to be accountable for risks within their control whilst offering relief for risks that are outside of their control. We are also intending to implement an advanced procurement mechanism by early 2025 that allows companies to secure supplier capacity ahead of Final Determinations that can also be used during RIIO-ET3. This will be essential to growing the long-term capacity of the supply chain and helping de-risk delivery for RIIO-ET3 and beyond.

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<sup>4</sup> Historically 12-14 years, albeit there is a policy consensus to reduce these towards 7 years following the Electricity Networks Commissioner's recommendations: <https://www.gov.uk/government/publications/accelerating-electricity-transmission-network-deployment-electricity-network-commissioners-recommendations>

- 1.10 Third party competition still has a role to play in the delivery of new ET infrastructure during future price controls, including RIIO-ET3. The RIIO-ET3 framework seeks to utilise onshore competitive tenders to drive down costs to consumers where this does not impact on timely delivery of critical infrastructure.
- 1.11 We remain committed to supporting reforms designed to reduce the length of the connections queue, which remains at a historically high level. These reforms need to be cognisant of a growing network, and that network investment plans need to be cognisant of changing customer behaviour resulting from the reforms. Alongside the load-related investment funding regimes, we will replace the existing connections incentives with new designs which are more effective at driving TO behaviour that gets connections delivered faster. This is being undertaken as part of Ofgem’s wider connections review and will be consulted upon later in 2024.
- 1.12 Our wider incentive priorities and package for RIIO-ET3 will be similar to that for RIIO-ET2. We will retain incentives that have proven to be very effective at driving TO behaviour which directly benefits consumers, such as reliable energy supplies, reduced constraint costs, and limited leakage of highly damaging gases used to keep the networks safe. We expect the RIIO-ET3 incentive package in these areas to have broadly the same strength as RIIO-ET2.

## **Gas sectors**

- 1.13 For the gas distribution (GD) and gas transmission (GT) sectors, continuing to have safe, resilient and reliable gas networks during the next price control period remains paramount as they will remain an essential service during RIIO-3.
- 1.14 However, there is still uncertainty in the pace and scale of the transition away from natural gas – particularly around the potential repurposing of assets for hydrogen or Carbon Capture Usage and Storage (CCUS) and/or potential decommissioning in the 2030s and 2040s if assets are no longer required. This transition will be influenced by future national and devolved government decisions in relation to energy policy, the decarbonisation of heat and choices for how to reach the UK's statutory net zero target and five-year carbon budgets.
- 1.15 Ongoing uncertainty regarding the future of gas presents a number of distinct challenges that will impact our approach to regulation in RIIO-3, and beyond. As such, we will continue to work closely with government to help ensure the transition away from natural gas is fair and at the lowest possible cost. We think a strategy for the future of gas should be developed to:

- set out how to plan, and pay for, potential decommissioning;
  - consider whether further government intervention is required to support a declining consumer base pay for historical investment in the gas network; and
  - inform strategic gas network planning led by the NESO via the Centralised Strategic Network Plan (CSNP) for GT and the Regional Energy Strategic Planner (RESP) for GD.
- 1.16 Ahead of the development of this strategy, we have decided not to provide funding through RIIO-3 for a decommissioning liabilities fund or upfront funding for decommissioning.
- 1.17 However, we have decided that we need to act during RIIO-3 to accelerate the speed at which gas network investment is paid back through gas bills ('regulatory depreciation') to protect future consumers as gas use begins to decline. While this will increase depreciation charges in gas bills, it will ensure that each generation of consumers pays their fair share of the value of services they receive from the gas network. However, our approach is flexible to accommodate changes in government policy and to reflect the uncertain speed of the transition to net zero. We will decide on the pace and form of regulatory depreciation for the gas sector in our Final Determinations next year, working closely with industry and government.
- 1.18 Through RIIO-3, we will ensure the gas networks can support a low-cost transition to net zero using a suite of net zero uncertainty mechanisms (UM). These mechanisms will enable RIIO-3 to respond to strategic changes in government policy and/or the speed of the net zero transition. This includes the ability to respond to government decisions on hydrogen heating and blending, which we will not fund upfront due to the ongoing uncertainty. We have decided not to fund hydrogen infrastructure for industrial use (including repurposing) through RIIO-3 to avoid duplication with the government's Hydrogen Transport Business Model (HTBM), which we are working closely with government to develop. We also consider it important for RIIO-3 to mitigate the operational impact of the gas networks – particularly around methane leakage, which is a potent greenhouse gas. We have decided to introduce dedicated funding mechanisms and new output incentives to address this.
- 1.19 RIIO-3 will also ensure that gas networks maintain a safe and resilient supply of gas to customers while they remain in use, while balancing the level of investment needed with the uncertainty around the future of gas:

- in GD, we have set out the framework to fund the investment required to maintain safety and replace deteriorating iron pipes (repex). This investment is needed to meet Health and Safety Executive requirements, but also provides wider environmental and operational benefits through reducing leakage from the network; and
- in GT, we set out a range of mechanisms that will continue to ensure security of supply, including to respond to changes in gas flows (eg increasing LNG following the gas crisis), and to ensure a resilient service to distribution networks and power stations.

1.20 Finally, we have decided to broadly retain the RIIO-2 quality of service outputs to ensure the gas networks deliver high quality of services to customers:

- in GD, this includes support for consumers in vulnerable situations through the continuation of our Vulnerability and Carbon Monoxide Allowance; and
- in GT, this includes a stronger emphasis on the importance of customer satisfaction in the areas where National Gas Transmission (National Gas) has been lagging behind, as well as refreshing gas system operator incentives designed to deliver customer service improvement (eg demand forecasting and residual balancing).

## **Cross-sectoral areas**

### **Scenarios and planning pathways**

- 1.21 The scenarios and planning pathways for future energy demand and supply that companies use to establish the need for future network capacity play an important role in the price control setting process. They are a key macro input to determining the potential demand profiles across each network sector, the impact that could have on network services and associated investment requirements.
- 1.22 For RIIO-3 we are requiring all companies to use a consistent common scenario that will reflect the latest available data from the NESO, with flexibility to test the impacts of different pathways on spending plans. Further details are provided in Chapter 5.
- 1.23 Our approach to building additional flexibility around this consistent common scenario is set out in Chapter 8. In addition to sector-specific mechanisms ( eg those described above to handle the high volume of strategically planned ET investments which are yet to be determined), this sets out a range of further in-period UMs that will be retained on a cross-sector basis.

## **Business Plan Incentive and Totex Incentive Mechanism**

- 1.24 In RIIO-2 we introduced the Business Plan Incentive (BPI) to encourage complete, efficiently costed business plans, with rewards available for companies that were ambitious and go beyond what we expected as business as usual.
- 1.25 For RIIO-3 we will retain the broad principles of the BPI but apply modifications to simplify the assessment process and strengthen the overall balance of incentives. The focus of the BPI will be on rewarding plans that are ambitious and high quality, with an in the round assessment in terms of both cost efficiency and the value of the services they provide to their consumers and network users.
- 1.26 We also plan to retain strong incentives for companies to increase their efficiency through the RIIO-3 period, ensuring that any variations in spending against budgets is shared fairly with consumers. Accordingly, the calibration of appropriate incentive rates through the Totex Incentive Mechanism (TIM) will evolve to reflect our overall assessment of the risks faced by companies and consumers in setting budget levels.
- 1.27 Further detail on the BPI and the TIM are provided in Chapter 7.

## **Network resilience**

- 1.28 In Chapter 6 we set out the outputs and incentive framework that we will apply to all of the RIIO-3 controls, covering the use of licence obligations around minimum performance standards, the use of incentives to drive quality of service improvements, and the inclusion of control mechanisms to increase transparency and ensure accountability for the delivery of outputs.
- 1.29 Within this overarching framework a key area of focus is on the need for all networks to act as responsible guardians of essential national infrastructure, ensuring high levels of asset stewardship that protects the long-term physical resilience of their networks and ensures long-term value for consumers. In Chapter 6 we set out a range of measures to strengthen the requirements through RIIO-3, including expanding the coverage of the Network Asset Risk Metric (NARM) methodology and through enhanced monitoring and assurance activities.
- 1.30 The energy system is evolving, especially with regard to the services and flexibility that network and non-network companies can provide to each other and to the system. Amidst this changing landscape, network companies must make sure that their organisations, assets and systems are resilient against a range of risks that they face, both now and in the future.

- 1.31 In our SSMC we identified that a key outcome for RIIO-3 was ensuring that network companies embed resilience into their day-to-day decision making, as well as their long-term strategy development, to safeguard the security and resilience of network services for both current and future consumers.
- 1.32 In achieving this objective, we think there are several key areas that require focus in light of the significant anticipated challenges. Specifically, network companies need to improve their long-term resilience to climate change and account for the impacts of more extreme and frequent severe weather events on their networks. The impact of Storm Arwen in 2021 is one example of how climate events can negatively impact energy networks today; these impacts will increase over time due to inevitable climate change. At the same time, the transition to net zero will increase the energy system’s vulnerability to these risks with increased outages being taken as the ET network is reinforced, and a more diverse generation mix creates system operability challenges.
- 1.33 Independent expert advisors (such as the Climate Change Committee, National Infrastructure Commission and Joint Committee on the National Security Strategy) all agree that the current level of action and investment in energy sector is not enough to manage these increasing risks and further proactive action is needed urgently.<sup>5</sup>
- 1.34 In Chapter 6 we also set out our decision that all network companies should provide a Climate Resilience Strategy setting out the measures they are taking to mitigate or adapt to the risks posed by climate change and embed climate resilience into their investment proposals.
- 1.35 Network companies need to ensure they are resilient to the increased threat of cyber-attacks. Under the Network and Information Systems Regulations (NIS-R),<sup>6</sup> network companies must take appropriate and proportionate cyber security measures to manage the risks posed to the security of their network and information systems, including their associated supply chains. Network companies are increasingly reliant on interconnected technologies and systems to deliver essential energy and services to consumers. This will increase as networks become smarter, more automated and more digitised in the drive towards net zero. It is crucial that network companies ensure their network and information

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<sup>5</sup> JCNSS (2022) [Readiness for storms ahead? Critical national infrastructure in an age of climate change \(parliament.uk\)](#), CCC (2023) [Progress report on climate change adaptation](#), NIC (2020) [Anticipate, React, Recover: Resilient Infrastructure Systems](#)

<sup>6</sup> [The NIS Regulations 2018 - GOV.UK \(www.gov.uk\)](#)

systems are protected and can adapt to the fast pace of evolution under the cyber landscape.

- 1.36 In Chapter 11 we provide more detail on our decision to build on the progress made in RIIO-2 to simplify and streamline this policy area to focus on NIS-R cyber resilience, whilst maintaining our ability to ensure network company compliance with the NIS-R and responding to changes in the cyber-risk landscape.

## **Innovation**

- 1.37 As we drive towards a decentralised, smart, and net zero system, we need to ensure that innovative services, products, and technologies can be trialled and brought into the mainstream of network operations.
- 1.38 In Chapter 12 we set out our approach to innovation in RIIO-3. While we continue to expect companies to undertake business as usual (BAU) innovation, to ensure that networks are able to deliver transformational innovation, we will retain a flexible allowance fund, the Network Innovation Allowance (NIA), and a competitive fund, the Strategic Innovation Fund (SIF).
- 1.39 The NIA will ensure companies are able to undertake essential early-stage research and development (R&D) in a flexible way, and the SIF will ensure the continued development of large-scale demonstrators focusing on addressing net zero challenges, at lowest cost to consumers. We will continue to base the NIA allotted on the quality of business plan submissions, while for the SIF we have decided to maintain a similar level of funding.
- 1.40 Through both the NIA and the SIF, we will target innovation at the most strategic and transformative issues, providing direction to the market by setting strategic challenges that reflect our priorities for innovation, and facilitating the building of diverse perspectives to develop innovations that best address these challenges.
- 1.41 To support deployment of innovation projects, network companies will be able to make a case for additional totex allowances in RIIO-3 to cover reasonable costs to deploy previously proven innovation, while we will also consider introducing reputational and financial incentives for innovation deployment.

## **Data and digitalisation**

- 1.42 How the energy system operates is changing rapidly. In response, we continue to work with government on a series of reforms, including those that will come through the NESO.

1.43 In Chapter 13 we provide further detail on digitalisation workstreams in progress. This includes the core projects of Consumer Consent, Data Sharing Infrastructure and Data Best Practice. An update is provided for the Modernising Regulatory Reporting workstream, which includes a summary of consultation responses and next steps for the project.

### **Financial framework**

1.44 We set a financial framework, and associated policies and methodologies, for price controls that are broadly stable and predictable over time. This regulatory stability gives investors the confidence to continue to invest in the sector. It also helps us to achieve a low cost of capital without constraining our ability to act in the interests of consumers by adapting to changing circumstances and through adopting best practice.

1.45 In the Finance Annex we confirm the RIIO-3 methodologies that will meet these aims, covering key areas such as allowed return, financeability and financial resilience.

1.46 In relation to the allowed return on capital:

- The allowed return on debt: We describe the incremental improvements to our methodologies for RIIO-3, including considering gas and electricity network debt costs separately and broadening the use of Regulatory Asset Value (RAV) weighted costs to all ET companies. We also lay out our approach to tackling the inflation leverage effect via the use of a partly nominal allowed return on debt.
- The allowed return on equity: We update the approach used in RIIO-2 for current market data and incorporate industry best practice as laid out in the UKRN's Guidance recommendations.<sup>7</sup> We also lay out our approach to assessing investability and ensuring that our allowed return on capital will meet the needs of the energy network sectors.

1.47 We are primarily focused on methodology decisions at this stage of the process. However, we present an early view of the cost of equity metrics and overall range based on these methodology decisions (at 60% notional gearing) and have included an uncalibrated working assumption of the cost of debt for the gas and ET sectors. These figures are shown in the tables below.

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<sup>7</sup> UK Regulators Network (2023), [UKRN guidance for regulators on the methodology for setting the cost of capital](#).

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Table 1: Early view of the cost of equity based on metric-level decisions (CPIH-real)

<b>Cost of equity metric</b>	<b>Low</b>	<b>High</b>
RFR	1.18%	1.18%
TMR	6.5%	7.0%
Debt Beta	0.075	0.075
Asset Beta	0.30	0.40
Notional Gearing	60%	60%
Equity Beta	0.64	0.89
Step-1 Cost of Equity (early view)	4.57%	6.35%

Source: Ofgem analysis

Table 2: Indicative forecast average efficient debt costs (CPIH-real)

<b>Sector</b>	<b>2026/27</b>	<b>2027/28</b>	<b>2028/29</b>	<b>2029/30</b>	<b>2030/31</b>	<b>Average</b>
GDNs & National Gas (%)	2.49	2.68	2.77	2.88	3.05	2.77
TOs (%)	2.33	2.90	3.28	3.51	3.63	3.13

Source: Ofgem analysis

1.48 On return on regulated equity (RoRE) ranges, for the GD and GT sectors, we are minded to retain an overall risk profile – and set a RoRE range – that is broadly in-line with that for RIIO-2, reflecting the stable policy environment we are seeking to maintain, including the potential further acceleration of RAV depreciation to mitigate any increase in asset stranding risk. In ET, we are minded to slightly increase the overall risk profile and RoRE range for RIIO-3, with the potential for a more pronounced increase for the subsequent price control (all else being equal). This is on the basis of:

- a stronger incentive package, driven by the introduction of delivery incentives for the Accelerated Strategic Transmission Investment (ASTI) programme. As the delivery dates will be back-ended in RIIO-3, with some falling beyond 2031, the impact on RIIO-3 RoRE ranges is expected to be modest, but potentially more pronounced in the following price control if companies are out or underperforming. We note that we will introduce similar incentives for the delivery of CSNP projects, however, these are not likely to crystallise until after RIIO-3. To a lesser extent, this is also driven by a potential increase to the strength of the connections incentive to highlight its importance in the context of the wider connections reform; and

- intending to maintain a risk profile for totex that is broadly unchanged from RIIO-2, in the round, through our package of risk-mitigating load-related UMs and our approach to setting the totex incentive mechanism (TIM).
- 1.49 Precise RoRE ranges will be published in our determinations in 2025.
- 1.50 For return adjustment mechanisms (RAMs), we continue to view RAMs as an appropriate tool to manage the risk of miscalibrations of incentives that lead to significantly higher, or lower, shareholder returns than intended. We will publish the details on thresholds and adjustment rates at Draft Determinations when we have greater knowledge about business plans and possible RoRE ranges.
- 1.51 We have decided to retain the overall approach used in RIIO-2 for assessing financeability but will further investigate improvements to the methodology. This includes the use of a broader range of credit metrics or extended financial modelling.
- 1.52 On financial resilience issues, we confirm that we will introduce three incremental improvements to our ability to protect consumers from harm. These measures cover ensuring resource availability, dividend lock-ups and credit rating requirements.
- 1.53 On regulatory depreciation, for the gas sectors we continue to assess options for addressing issues raised by the potential transition away from natural gas (discussed in more detail in Chapter 4). For the ET sector, we expect to continue with the approach used in RIIO-2.
- 1.54 The Finance Annex covers the wide range of financial parameter decisions required for the RIIO-3 price control.
- 1.55 There are numerous areas where the implementation of financial methodology decisions will require further engagement and collaboration with stakeholders. We look forward to working with stakeholders on these issues in the coming months.

## 2. Introduction

### Ofgem's responsibilities

- 2.1 Ofgem is Great Britain's independent energy regulator. We work to protect energy consumers, especially vulnerable people, by ensuring they are treated fairly and benefit from a cleaner, greener environment.
- 2.2 We operate in a statutory framework set by Parliament. This establishes our duties and gives us powers to achieve our objectives. We are governed by the Gas and Electricity Markets Authority ('GEMA'), which determines Ofgem's strategy, sets policy priorities and makes decisions on a wide range of regulatory matters, including price controls and enforcement.
- 2.3 Our principal duty is to protect the interests of current and future gas and electricity consumers. In 2023 we published a Consumer Interest Framework, which helps to explain what this duty means in practice. While GEMA's decisions are ultimately guided by our statutory duties, we use this framework to ensure that we are clear what our duty to protect consumers means in practice, and to help us identify trade-offs between different consumer interests.
- 2.4 Our statutory duties have recently been updated to include net zero and growth. The new net zero duty defines our principal objective as including consumers' interests in meeting the statutory 2050 net zero target and other associated targets. This means we will take decisions, using government's delivery plans as our baseline, that proactively enable net zero. Fulfilling this duty also requires us to better understand the full range of consumer interests in the transition to net zero, to better help deliver a fair and cost-effective transition that works for them.
- 2.5 A new growth duty requires Ofgem to have regard to the promotion of sustainable economic growth through our regulatory activities. Our primary contribution to economic growth is through regulation that minimises energy costs, keep supply resilient and energy markets functioning effectively. As we integrate the Growth Duty, we will clarify how we will factor the new duty into our regulatory approach. We expect this will include developing metrics to assess our contribution to growth across our regulatory decision making, reviewing our regulatory practices for pace, and doing more to understand the needs of business consumers.
- 2.6 Additionally, we have a duty to have regard to the strategic priorities and to carry out our regulatory functions in the manner which we consider is best calculated to

further the delivery of the policy outcomes set out in government's strategy and policy statement. Additional details on each of these responsibilities and their expected impact are set out below.

### **Net Zero Duty**

- 2.7 To date, we have had a general statutory duty to protect current and future consumers' interests. These interests included consumers' interests in the reduction of greenhouse gas emissions in electricity and gas supply.
- 2.8 The Energy Act 2023 replaced this greenhouse gas emission wording with a specific net zero mandate. For the first time consumers' interests in the reduction of greenhouse gases are defined as their interests in the Government's compliance with the specific net zero targets and five-year carbon budgets established under the Climate Change Act 2008. Ofgem will play a key role in supporting the UK government to meet its legal obligation to get to net zero by 2050.
- 2.9 In order to deliver on the net zero mandate, Ofgem will engage with stakeholders to ensure we continue to protect the interests of gas and electricity consumers, whilst delivering the necessary intervention, unlocking investment, accelerating planning, and building the infrastructure the economy needs to achieve the transition to net zero. Chapter 2 of the ET Annex in particular sets out the measures we are proposing to put in place to enable timely delivery of additional electricity transmission capacity.
- 2.10 We will consider the full implications of our net zero duty as part of our development of the RIIO-3 price controls and will assess the price control's impact on net zero in the updated Impact Assessment which we will publish alongside our Draft Determinations in 2025.

### **Growth Duty**

- 2.11 In November 2023 the UK government announced its intent to take forward proposals that would extend a Growth Duty to Ofgem. Government has legislated to apply the Growth Duty to Ofgem from 21 May 2024. All our decisions from this date are now subject to this duty. Associated Growth Duty statutory guidance specifies that we should consider growth broadly, within the economy of the UK in the medium to long term.
- 2.12 We will consider the full implications of this new duty as part of our development of the RIIO-3 price controls and will include an assessment of our impact on

growth as part of the updated Impact Assessment which we will publish alongside our Draft Determinations in 2025.

## **Strategy and Policy Statement Duties**

- 2.13 Government has now made the first Strategy and Policy Statement (SPS) for Energy Policy in Great Britain.<sup>8</sup> This took effect on 1 May 2024 and sets out the Government's strategic priorities and policy outcomes for GB energy policy. When exercising most regulatory functions, including price control setting, we have a statutory duty to have regard to the strategic priorities and to carry out its regulatory functions in the manner which we consider is best calculated to further the delivery of the policy outcomes.
- 2.14 The Strategy and Policy Statement sets out multiple outcomes that we need to contribute to delivering. We will primarily respond to these requirements through the setting of our Forward Work Programme, but we are confident that RIIO-3 will positively support outcomes in the particular areas it can contribute, such as: meeting the UK's net zero and climate change targets; supporting the accelerated delivery of the ET network at pace; support to the Transmission Acceleration Action Plan<sup>9</sup> (TAAP); safety, security and resilience of the gas and electricity systems; and fair distribution of the costs of net zero.
- 2.15 We will consider the full implications of this new duty as part of our development of the RIIO-3 price controls and will include an assessment of our impact on growth as part of the updated Impact Assessment which we will publish alongside our Draft Determinations in 2025.

## **What are we deciding on?**

- 2.16 This is our decision on the methodology we will apply for setting the RIIO-3 price controls for the GD, GT and ET network companies. These price controls will run from 1 April 2026.
- 2.17 We began this process in September 2022 with an Open Letter which set out the strategic context of future systems and network regulation (FSNR) and invited views from stakeholders on the framework.<sup>10</sup> In March 2023, we issued a consultation on the overarching FSNR framework and followed this with our Framework Decision in October 2023.<sup>11</sup> We consulted on the methodology we will

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<sup>8</sup> [Strategy and Policy Statement for Energy Policy in Great Britain \(publishing.service.gov.uk\)](https://publishing.service.gov.uk)

<sup>9</sup> [Electricity networks: transmission acceleration action plan - GOV.UK \(www.gov.uk\)](https://www.gov.uk)

<sup>10</sup> [Open Letter: Future Systems and Network Regulation | Ofgem](#)

<sup>11</sup> [Decision on frameworks for future systems and network regulation | Ofgem](#)

use to apply this framework in the context of each sector in December 2023,<sup>12</sup> and this document is our decision following that consultation.

2.18 We set out the timelines and future RIIO-3 milestones in Chapter 3.

2.19 The next price control for electricity Distribution Network Operators (DNOs), RIIO-ED3, will begin in 2028 and we will begin consulting on proposals for this sector later this year.

### **Structure of document suite**

2.20 This document provides an overview of our Sector Specific Methodology Decision (SSMD) and sets out our decisions on issues common to more than one sector. The sector specific annexes set out decisions on a sector-by-sector basis, while the Finance Annex sets out financial decisions for all three sectors.

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<sup>12</sup> [RIIO-3 Sector Specific Methodology for the Gas Distribution, Gas Transmission and Electricity Transmission Sectors | Ofgem](#)

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### 3. RIIO-3 process

#### Methodology decision and Business Plan Guidance

- 3.1 To set regulated revenues and required outputs for the electricity and gas network companies, we require information on the activities that companies intend to undertake during the price control and their associated costs. The network companies provide this information to us in the form of a business plan, supplemented by additional files. The process ahead of submission of business plans is designed to provide clarity on how we expect the price control framework to operate and to ensure the scope of required business plans is agreed.
- 3.2 Following publication of our Framework Decision in October 2023, we published the RIIO-3 Sector Specific Methodology Consultation in December 2023, consulting on the methodology we will use to apply this framework in the context of each sector. In this document we cover the key decisions we are making regarding the Sector Specific Methodology.
- 3.3 Alongside this SSMD, we have also published the RIIO-3 Business Plan Guidance (BPG). This sets out the information that should be included in companies' business plans and how we will assess those plans. This includes guidance on the RIIO-3 Enhanced Engagement framework including the role of Independent Stakeholder Groups (ISGs).
- 3.4 ISGs will represent the interests of consumers and stakeholders, providing challenge and scrutiny to the network companies both as they develop their business plans, and on an enduring basis during RIIO-3 as they deliver their plans. The ISGs will play an important role in holding network companies to account in respect to the delivery of their RIIO-2 and RIIO-3 commitments.
- 3.5 The suite of BPG documents is designed to be coherent with the methodologies set out in this methodology decision. Taken together, our methodology decision and the suite of BPG documents articulate Ofgem's focus for the RIIO-3 price control period and what we expect to see network companies provide in their final business plans. There are also some additional guidance documents associated with the BPG that we have summarised in Table 3.

Table 3: BPG associated guidance documents

No	Title	Description	Location
<b>1</b>	Investment Decision Pack (IDP): Engineering Justification Paper (EJP) Guidance	Instructions for producing EJPs to explain network requirements and rationale for proposed investment	Annex 1, BPG
	IDP: Cost Benefit Analysis (CBA) Guidance	Instructions for completing CBAs to show an investment proposal is in consumers’ interest	
<b>2</b>	Business Plan Data Template (BPDT) Guidance	Instructions for filling out a suite of templates with specific data from the business plan	Annex 2, BPG
<b>3</b>	Business Plan Financial Model (BPFM) Guidance	Instructions for populating the BPFM	Annex 3, BPG
<b>4</b>	NARM Workbook Guidance	Instructions for completing a workbook on planned asset refurbishment and replacement	Annex 4, BPG
<b>5</b>	Business Plan Incentive (BPI) Guidance	Explains the evaluation methodology to calculate the BPI	Annex 5, BPG
<b>6</b>	Business Plan templates	Various forms of documents that companies must submit with their business plan	Annex 6, BPG
<b>7</b>	NIS-R Cyber Resilience Business Plan Assessment Methodology and Requirements Guidance	Explains our expectations for cyber resilience proposals in business plans and our assessment approach	Supplementary document

**Next steps in the price control process**

- 3.6 Following this decision, we expect network companies in the GD, GT and ET sectors to submit their final business plans to us by 11<sup>th</sup> December 2024.
- 3.7 Ahead of that we expect the network companies to submit draft BPDTs, a draft BPFM and a draft NARM workbook during the summer 2024. These submissions will have no bearing on the evaluation of business plans but will play an important role in ensuring that the templates we use are fit for purpose. As a result of this assurance exercise, we may make minor modifications to the published templates and guidance before the end of September 2024, which will be published on our RIIO-3 BPG webpage.
- 3.8 Ahead of business plan submission, we will also continue to engage stakeholders through working groups on those elements of our methodology which are not yet decided, with a view to making further progress to support our Draft Determinations process in 2025.



3.9 We will also commence work on the RIIO-3 licences by holding the first Licence Drafting Working Group before the end of Q3 2024.

3.10 Table 4 below sets out the timetable for the remainder of the RIIO-3 price control process.

Table 4: Timetable for the completion of the RIIO-3 price control process

<b>Date</b>	<b>Indicative high-level milestones for RIIO-3</b>
March 2023	FSNR Framework consultation
October 2023	FSNR Framework decision
December 2023	SSMC
9 July 2024	SSMD
9 July 2024	Final BPG
31 July 2024	Companies submit draft BPDT and supporting commentary
14 August 2024	Companies submit draft BPFM
30 August 2024	Companies submit draft NARM Workbook
September 2024	Commence review of RIIO-3 Licences through the Licence Drafting Working Group
11 December 2024	Companies' final submission of business plans (including BPDTs and BPFM)
18 December 2024	Call for Evidence window opens
10 February 2025	Call for Evidence window closes
June/July 2025	Draft Determinations
Q3 2025	Informal licence consultation
Q4 2025	Final Determinations
December 2025	Statutory Licence Modifications Consultation
February 2026	Licence decision
1 <sup>st</sup> April 2026	Start of the RIIO-3 price control for ET, GT and GD

## 4. Future of gas

### Introduction

- 4.1 The pathway to net zero will involve significant further electrification, but the extent, speed and geographical variance in the transition away from gas is uncertain. While there remains significant uncertainty on future pathways, we do not currently anticipate that there will be large-scale, systematic changes to the gas networks during the RIIO-3 price control period. We are therefore retaining a broadly similar price control framework as in RIIO-2 for the gas sectors.
- 4.2 However, we must ensure that our gas regulatory frameworks can respond to how the future unfolds. This chapter sets out how we will address the uncertain future of the gas networks in RIIO-3, including the role of hydrogen.
- 4.3 It is important for us to continue to work closely with government to help ensure the transition away from natural gas is fair and at the lowest possible cost, including on a strategy for some of the future of gas challenges outlined in this chapter. We think this strategy should be developed by government to set out how to plan, and pay for, potential decommissioning, as well as to consider whether further government intervention is required to support our approach to setting depreciation. This strategy could also help inform strategic gas network planning led by the NESO via the CSNP for GT and the RESP for GD.

### Hydrogen and RIIO-3

- 4.4 Hydrogen could play a significant role in decarbonising the UK economy and help provide greener, flexible energy across a range of end uses. However, there is still significant uncertainty regarding how much (and which parts) of the gas network will potentially be repurposed for hydrogen in the future.

### Hydrogen transport infrastructure

- 4.5 We are working with government to support the design and implementation of the HTBM, which aims to support the development of hydrogen pipeline infrastructure.<sup>13</sup> This infrastructure is anticipated to connect hydrogen producers with users (eg in industry, power and transport) and storage facilities. We are

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<sup>13</sup> DESNZ Hydrogen Transport Business Model: market engagement on the first Allocation Round <https://www.gov.uk/government/consultations/hydrogen-transport-business-model-market-engagement-on-the-first-allocation-round>

carefully considering the interactions between the HTBM and RIIO-3 to ensure coherence across the two frameworks.

#### SSMC summary

- 4.6 At SSMC we described that, for hydrogen pipeline projects successful through HTBM allocation rounds, capital costs (capex) relating to the construction of new hydrogen transport infrastructure or repurposing of existing natural gas infrastructure for hydrogen would be recoverable through the HTBM. Therefore, we proposed that these costs should be out of scope of RIIO-3. We also considered development expenditure (devex), such as feasibility studies, to be out of scope for RIIO-3 as these infrastructure costs may also be recoverable through the HTBM. We asked for evidence of whether there are any activities, or costs, that are appropriate to fund through RIIO-3, eg preparatory costs for repurposing assets.
- 4.7 We also set out that we will work with DESNZ to enable the transfer of assets between RIIO-3 and the HTBM.

#### Summary of consultation responses

- 4.8 Fifteen of 22 respondents agreed that hydrogen infrastructure, including capex and devex, should be funded through the HTBM, but that it will be important to align RIIO-3 and the HTBM to ensure all relevant activities are properly funded. Three stakeholders were concerned about uncertainties surrounding the scope of the HTBM and the risk of delays to its implementation. In particular, the gas network companies thought that RIIO-3 should fund a wider range of activities including devex, repurposing and evidence gathering for hydrogen feasibility. However, they provided limited specific examples of repurposing or preparatory activities that could be appropriate to fund through RIIO-3.
- 4.9 Three stakeholders also raised concerns that any hydrogen funding provided through RIIO-3 should not distort competition.

#### SSMD decision and rationale

- 4.10 We have decided that capex and devex related to hydrogen transport infrastructure will not be funded through RIIO-3 to provide clarity to industry on the funding sources for these activities. This includes costs for repurposing the network, as we did not receive any examples of repurposing costs that would be appropriate to fund through RIIO-3. The HTBM will be open to parties beyond the incumbent gas network companies so we consider this to be a more appropriate funding mechanism in the longer term. We are working with DESNZ to support

the implementation of the HTBM next year and are confident that the HTBM will be open to well-evidenced hydrogen transportation projects proposed by gas network companies. We will work with gas network companies to ensure that relevant, ongoing devex projects that are funded through RIIO-2 can be completed (if appropriate).

- 4.11 While there was limited evidence of activities and costs for preparatory work to ready network assets for potential repurposing that have clear benefits for natural gas customers, we are open to receiving proposals for these costs in gas network companies' business plans. Where costs for this type of activity are proposed, gas network companies must show that these would not be funded by the HTBM and demonstrate clear benefits to natural gas customers.
- 4.12 We are currently considering potential valuation options for the transfer of any repurposed assets between the two regulatory asset base models. We will work with DESNZ to ensure that work on the HTBM is reflected in RIIO-3.

### **Hydrogen blending**

- 4.13 Hydrogen blending refers to the blending of hydrogen with other gases (primarily natural gas) which is then injected into pre-existing gas network infrastructure.

#### SSMC summary

- 4.14 Due to uncertainty regarding the rollout of hydrogen blending onto the pre-existing network, we proposed that any costs relating to this should be recovered through the net zero related UMs in both GD and GT.

#### Summary of consultation responses

- 4.15 Seventeen of 18 respondents acknowledged the significant amount of uncertainty around hydrogen blending and agreed that costs should be funded through net zero related UMs. One respondent disagreed, stating that network costs should be included in baseline allowances as there is more certainty following government's strategic decision in December 2023 to support blending into the GD networks.<sup>14</sup> A Gas Distribution Network (GDN) said that it will be able to provide the investment needs case for hydrogen blending in its business plan.
- 4.16 All the GDNs stated that hydrogen blending would require revisions to operational practices, for example to meet requirements of a revised safety case for the

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<sup>14</sup> DESNZ Hydrogen blending in GB distribution networks: strategic decision: <https://www.gov.uk/government/publications/hydrogen-blending-in-gb-distribution-networks-strategic-decision>

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Health and Safety Executive; change entry and exit, interconnector and storage agreements; upskill staff; and use new equipment. The GDNs also said that the ongoing HyDeploy project will provide more clarity on the operational practices that would be required to implement hydrogen blending.<sup>15</sup>

- 4.17 The GDNs said they have recently commissioned a detailed consultancy study on the requirements for hydrogen blending. The study will explore what amendments are necessary to legislation, safety and commercial arrangements, and will provide the GDNs with insight into what investments are required.<sup>16</sup>

#### SSMD decision and rationale

- 4.18 We have decided not to fund costs related to hydrogen blending through baseline allowances. We will instead provide funding through the Net Zero and Re-opener Development Fund (NZARD) and Net Zero Pre-construction and Small Projects Re-opener (NZASP) UMs as appropriate.<sup>17</sup>
- 4.19 Although government's December strategic decision indicated its support for hydrogen blending into the GD network in principle, we note there is still significant work required, including health and safety and economic feasibility reviews, a separate decision on transmission-level blending, as well as potential legislation changes before hydrogen blending is implemented. We do not anticipate that DESNZ's work on GD or GT hydrogen blending will be completed before the start of RIIO-3. Given this, we do not think associated costs or location of work can be forecast with enough certainty to include in business plans and in baseline allowances.

#### **Hydrogen heating**

- 4.20 The UK government has set an ambition to make a strategic decision in 2026 on whether to use hydrogen for domestic heating. Government has indicated that heat pumps and heat networks will be the primary means of decarbonisation in the near term, with hydrogen potentially having a role in slower time alongside those technologies in some locations.

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<sup>15</sup> For further information, please see HyDeploy: <https://hydeploy.co.uk/>

<sup>16</sup> For further information, please see commercial framework review to enable hydrogen blending: <https://www.gasgovernance.co.uk/0849>

<sup>17</sup> Please see paragraphs 8.17 – 8.40 of this document.

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### SSMC summary

- 4.21 We set out that we will continue to work with government to understand the implications of any hydrogen heating decision and to determine the most appropriate way for RIIO-3 to fund network investment requirements, decommissioning or other changes in spending as a result of the 2026 decision. We proposed to use the Heat Policy re-opener (outlined in the GD Annex) or the net zero UMs.
- 4.22 If further evidence around the ability to repurpose the existing gas network for hydrogen heating is needed following the 2026 decision, and we consider it is appropriate for RIIO-3 to fund, we also proposed that these costs could be included in our RIIO-3 innovation or net zero mechanisms. However, we did not think that these mechanisms should cover further hydrogen for heat evidence projects between the start of RIIO-3 and the government's 2026 decision.

### Summary of consultation responses

- 4.23 Eleven of 20 respondents agreed with our SSMC proposals. Some stakeholders said that hydrogen heating is not a viable option for decarbonising heating and there should be no RIIO funding. Eight respondents thought that funding should be provided through net zero UMs combined with the Heat Policy Re-opener once government policy is decided. The GDNs also emphasised the need for agile and flexible funding to deal with this uncertainty.
- 4.24 Eight stakeholders, primarily those in the gas industry, disagreed with our proposals on evidence generation, which they said is still needed ahead of the government decision on hydrogen heating.

### SSMD decision and rationale

- 4.25 We have decided not to provide up-front funding for activities related to hydrogen heating, as the value of these activities is uncertain ahead of a government decision on hydrogen heating. If there are any costs associated with hydrogen heating arising from a government decision that are appropriate to fund through RIIO, we will enable these to be funded through the net zero UMs, innovation stimuli or the Heat Policy Re-opener.
- 4.26 We also do not think that further funding to develop an evidence base for hydrogen heating is needed ahead of the government's decision, as any projects started in RIIO-3 will not be completed in time to inform the 2026 decision. We

will though allow companies to carry over NIA funding as set out in paragraph 12.37 to enable existing projects to be completed.<sup>18</sup>

## **Decommissioning**

4.27 The extent and speed of any decommissioning of the gas network is subject to future government policy decisions as well as how much of the network is repurposed for other uses. Who will bear the cost of decommissioning is also unclear and subject to future government policy decisions.

### SSMC summary

4.28 We set out that we do not anticipate decommissioning will take place at scale during RIIO-3. We noted that government policy decisions, including the 2026 decision on hydrogen heating, could impact the extent and speed of any decommissioning. We also noted that who should pay for decommissioning costs is unclear and subject to future government decisions.

4.29 We requested views on whether it was appropriate to use RIIO-3 to start collecting funds for potential future decommissioning liabilities to help mitigate this risk of intergenerational unfairness because, in the future, there will be fewer gas consumers left to pay for any decommissioning costs.

4.30 If decommissioning costs need to be incurred during RIIO-3, we proposed that these can be recovered through the Heat Policy Re-opener (outlined in the SSMC GD Annex) and/or the net zero UMs. We also proposed that innovation funding for projects exploring costs, processes and regulatory barriers associated with large-scale decommissioning could be included in the RIIO-3 innovation mechanisms or net zero related UMs.

### Summary of consultation responses

4.31 All stakeholders agreed that there is uncertainty around the timescales and funding options for decommissioning. Fifteen of 22 respondents said that RIIO-3 should not fund decommissioning activities due to these uncertainties. Stakeholders were in broad agreement that a whole systems approach is required, and the RIIO-3 period should be used to determine a decommissioning strategy with government.

4.32 Consumer groups were concerned about intergenerational fairness and noted that consumers in vulnerable situations will be hit hardest by the cost of the net zero

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<sup>18</sup> See Chapter 12 for more detail on innovation funding in RIIO-3

transition and rising bills associated with decommissioning costs. They emphasised the need to ensure future natural gas consumers are not unduly burdened by any decommissioning decisions and favoured the use of general taxation to fund decommissioning.

- 4.33 Eleven of 22 stakeholders thought that exploratory and innovation funding should be provided in RIIO-3 and highlighted the SIF and Heat Policy Re-opener as potential options.

#### SSMD decision and rationale

- 4.34 We have decided not to create a decommissioning liabilities fund or provide upfront funding for decommissioning as part of RIIO-3 as there is still significant uncertainty around the scope, timelines and funding sources for this. We do not think it is appropriate to act ahead of government decisions in this area and the development of a government-led decommissioning strategy. We intend to work closely with the government to identify the most appropriate strategy and funding options for decommissioning, including considering a whole systems approach and the impact on future and vulnerable consumers.
- 4.35 While we have decided not to fund decommissioning activities through baseline allowances, we will enable decommissioning costs that are incurred through RIIO-3 to be recovered through the Heat Policy Re-opener and/or the net zero UMs. We think the use of UMs is appropriate to enable us to react to any changes, if appropriate, once there is more clarity on government policy and a decommissioning strategy has been developed.
- 4.36 We have also decided to enable funding for projects looking at how a safe, effective, and least-cost decommissioning process could be conducted through our innovation mechanisms. This will help to reduce costs and support the delivery of any future decommissioning activities and ensure learning is socialised across the industry.

#### **Gas regulatory depreciation**

- 4.37 Regulatory depreciation is a key building block of the revenue that network companies are allowed to make. Regulatory depreciation is comprised of an assumed asset life (or lives) and an assumption of the profile(s) of usage across the asset life (or lives).



### SSMC summary

- 4.38 We expect natural gas demand to decline to meet our statutory net zero target and five-year carbon budgets. This decline in demand creates a risk that a smaller number of future natural gas consumers could be left repaying the largely fixed cost of historical and ongoing network investment.
- 4.39 In our SSMC Finance Annex, we set out that without a change to the current depreciation policy for gas network companies, we would expect to see two challenges - a rapid increase in consumers bills as well as the possibility of unpaid gas RAV remaining by the statutory net zero target date, 2050.<sup>19</sup>
- 4.40 On consumer bills, our initial modelling suggested that there could be a sharp and significant increase in gas network charges in the mid-2030s due to falling numbers of gas network domestic consumers. This potential increase in network charges could create intergenerational unfairness as future consumers would face substantially higher costs. We noted that changing our regulatory depreciation policy in RIIIO-3 could enable a fairer balancing of costs across generations of consumers by mitigating against the risk of significant increases in depreciation charges from the mid-2030s onwards.
- 4.41 We also explained that a perception of asset stranding risk could materialise if a RAV balance remains beyond the point of decarbonisation of the natural gas network or if consumer bills rise to the point RAV repayment is not feasible. We outlined that shorter asset lives and a more front-loaded depreciation profile may mitigate the perceived asset stranding risk. We also suggested adjusting asset lives so the RAV is depreciated to zero by the net zero target date of 2050 could further mitigate this risk.

### Summary of consultation responses

- 4.42 Four of nine respondents were broadly in agreement with the need to accelerate depreciation as they recognised the implications for consumers of not acting. The GDNs argued that we should only make simple changes to regulatory depreciation policy, as they said there is still uncertainty about government policies and the future of gas. National Gas stated that any decision should be left open with a commitment to reviewing the evidence at key points in the price control process. Some stakeholders suggested that accelerating depreciation so the RAV is returned by a stated end date could mitigate the perceived risk of asset

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<sup>19</sup> The RAV is the amount of investment in the network not yet paid for by consumers.

stranding. However, some gas network companies argued that they also need an Ofgem and/or government commitment that they can recover the RAV to mitigate this risk and maintain investor confidence. Other stakeholders also said that we should work with government to explore what assurances can be given.

4.43 A detailed summary of responses is provided in Chapter 9 of the Finance Annex.

#### SSMD decision and rationale

4.44 We have decided to accelerate depreciation for gas network companies during RIIO-3. Our principal objective is to protect current and future consumers. While accelerated depreciation will lead to increased depreciation charges during RIIO-3, we consider that delay will worsen the problem as the consumer base decreases, which could result in a disproportionate risk of unsustainable increases in depreciation charges for future consumers. We also think that accelerating depreciation will provide confidence to network companies and investors that we are taking steps to mitigate the perceived asset stranding risks.

4.45 For GD we will target paying back additions to the RAV in line with the statutory net zero target date, 2050. We will consider, as part of our Draft Determinations next year, whether to apply this to the entire RAV or only to new RAV additions from RIIO-3. We note that government decisions on hydrogen heating could significantly impact how much of the GD network is repurposed for hydrogen in the future. However, given the potential consumer bill impact from accelerating depreciation in GD, we think it is in the consumer interest to base decisions on current government policy, which suggests there could be significantly reduced usage of the GD network in the future. We do not think targeting repayment of GD investment by the 2050 net zero target date will prevent a high hydrogen scenario if government decides to implement a widescale rollout of hydrogen heating in the future.

4.46 We are still considering whether to target paying back the GT RAV by the statutory net zero target date. Based on current government policy, there are likely to be more potential opportunities to retain or re-purpose larger sections of the GT network, eg for hydrogen or CCUS transportation networks to support industrial decarbonisation. In addition, the potential consumer bill impact of accelerating GT depreciation later is likely to be much less than for GD as the RAV is smaller, so the risks of any delay are reduced. As such, National Gas should submit evidence through its business plan to help us understand where its network is most likely to be repurposed or retained beyond the net zero target

date, 2050. We will consider this evidence in deciding how to set the depreciation profile for GT.

- 4.47 Chapter 9 of the Finance Annex sets out more detail on our regulatory depreciation decisions, including potential options to implement them. We will develop these options with stakeholders ahead of our Draft Determinations and plan to start further engagement this calendar year.
- 4.48 A key focus of our work will be ensuring that our approach is sufficiently flexible to consider a range of options, adapting as necessary to changes in government policy and contemporary market evidence. We will also:
- work closely with stakeholders (including government, industry, consumer groups and investors) to develop the detailed depreciation policy for RIIO-3; and
  - continue to work with government to develop a government-led future of gas strategy, including considering whether further government intervention is required alongside our accelerated depreciation policy.
- 4.49 Final decisions on the pace and form of regulatory depreciation for GD and GT in RIIO-3 will be taken at Final Determinations next year.

## 5. Scenarios and planning pathways in RIIO-3

### Introduction

- 5.1 Network companies use scenarios and forecasts of energy demand and supply to establish the need for future network capacity in the price control setting process. Scenarios and common assumptions ensure consistency across different sectors and timelines, and this is important as it enables a fair and robust assessment of all business plans.
- 5.2 For the RIIO-2 controls covering the ET and GD sectors, a common scenario was developed in 2018/19 by the Energy Networks Association (ENA) working with the network companies. This scenario provided a view of future supply and demand that could be applied across the RIIO-2 sectors, and was used in the ET, GT and GD business plans. Two years later, DNOs submitted their business plans for RIIO-ED2 based on a Distribution Future Energy Scenarios (DFES) that was consistent with the net zero compliant scenario range of the ESO's 2020 Future Energy Scenarios (FES) and the CCC's Sixth Carbon Budget.

### Scenarios and planning pathways in RIIO-3

#### SSMC summary

- 5.3 We said that we expect the ESO's FES to provide a consistent basis for network planning for RIIO-3. We highlighted that electricity networks need to plan for delivering new network capacity and connections at pace. We also recognised the challenge of adopting a single common scenario across all sectors for RIIO-3 when there is still significant uncertainty as to the pathway to net zero, particularly around the transition for gas.
- 5.4 To balance these issues, we proposed that all networks plan against the FES Leading the Way 2023 scenario for the RIIO-3 price control draft BPDTs. However, we added that gas networks should also undertake a sensitivity analysis against a more conservative scenario across gas transmission and distribution (the Falling Short scenario). This would highlight the differences between these two scenarios and their cost implications.
- 5.5 We also proposed that the networks base their final business plans on FES 2024, which the ESO is due to publish on 15<sup>th</sup> July 2024.

## **Summary of consultation responses**

5.6 We received 25 responses (of which 11 were from network companies) across the following five consultation questions:

- Do you agree with the proposal to use the FES framework for selecting the RIIO-3 scenarios?
- Do you agree with the proposal to use FES Leading the Way as the planning scenario for ET in RIIO-3?
- Do you agree with the proposal to use two FES planning pathways for the gas networks, ie Leading the Way and Falling Short as the additional common conservative scenario?
- Is Falling Short the most appropriate common conservative planning scenario to be used for the gas networks? Or is a common gas network developed scenario more appropriate?
- Is it feasible for all network companies to initially plan against FES 2023 before updating business plans in line with FES 2024, as proposed?

5.7 On the issue of the basis for planning scenarios, most stakeholders agreed with our proposal to use the FES framework for preparing RIIO-3 business plans, since the FES are most widely used, follow an established process and are consulted on extensively. However, GDNs strongly opposed the use of FES for RIIO-3, stating that the FES are not representative of reality and that most investment in the gas sector is non-load related and is instead focused on ensuring compliance with safety requirements, resilience standards and other regulatory obligations.

5.8 Two other stakeholders also opposed the use of the FES as they considered that they are a subjective view of what the future may look like and are at risk of being lobbied by the key players.

5.9 National Gas supported the use of the FES for RIIO-3 and considered that the Falling Short scenario is the most representative of the future regulatory period.

5.10 On the issue of the appropriate scenario for the ET sector, respondents agreed with our proposal to use FES Leading the Way. The TOs, National Gas and DNOs were all supportive of using Leading the Way as the planning scenario for the RIIO-ET3 price control. However, some electricity network companies said that Leading the Way was not ambitious enough and that they intend to supplement their business plans with additional information to support the needs case for additional network investment.

- 5.11 Non-network stakeholders expressed strong support for Leading the Way, stating that it is the only scenario that meets the offshore wind targets, and is sufficiently ambitious for the next price control period to deliver the trajectory to net zero. Some stakeholders called for alignment with the CSNP and said that adjustments might be required to the assumptions underlying the FES Leading the Way prior to Business Plan submission.
- 5.12 Two stakeholders opposed the use of Leading the Way for RIIO-ET3 business planning and proposed that we consider the use of either the FES Strategic Transformation scenario or other scenarios (for example the CCC’s Sixth Carbon Budget balanced pathway) for the next price control. The strongest opposition to the use of FES Leading the Way for RIIO-ET3 came from the GDNs, which claimed that there was no evidence that Leading the Way scenario is representative of the future and that a more conservative scenario should be used for electricity.
- 5.13 On the issue of using two FES planning pathways for the gas networks (ie using Leading the Way as the main scenario with Falling Short as the additional common conservative scenario), there were mixed views. Just over half of stakeholders opposed our proposal; they considered that gas networks should be planning for a net zero-compliant scenario only (ie not Falling Short). Two stakeholders said that we should consider the trade-offs between potential asset stranding and the consumer impact of not building an asset when it is needed, whilst two other stakeholders said that the planning for RIIO-3 should be based on Falling Short alone as they consider this to be a more realistic scenario.
- 5.14 DNOs agreed with planning against Leading the Way as they considered there is a high likelihood that electricity will be the main heating fuel in future. One TO said that it is crucial that no decisions are made on gas until the RESP process is completed. GDNs strongly disagreed with planning against the two scenarios and said that Ofgem should use one common planning pathway for RIIO-GD3.
- 5.15 Stakeholders' views also differed about the use of the Falling Short scenario as the common conservative planning scenario for the gas networks. GDNs said that common planning pathways should be used, whilst National Gas claimed that Falling Short (with adjustments) was the closest to what it expects to see in RIIO-3. Some non-network respondents agreed with this view and said that Falling Short could be used as an additional scenario, against which we could assess the sensitivity of plans to different network planning assumptions. However, overall the majority of respondents did not agree that the FES Falling Short scenario was appropriate for network planning, due to not being a net zero compliant scenario.

- 5.16 An environmental organisation and a networks organisation stated that although planning against the FES scenarios will be important in the longer run, the choice of scenario will not have a major impact on the next price control for the gas sector, given that investment will be largely focused on safety and resilience.
- 5.17 Network operators were largely against updating to FES 2024 planning assumptions as they considered it infeasible as well as potentially derailing their focus. DNOs recalled that they were obliged to update their RIIO-ED2 business plans against the updated DFES. Most non-network responses did not consider these updates to be too onerous. One stakeholder said it would be disappointing if business plans were submitted based on dated information rather than taking the opportunity to use the latest data.
- 5.18 Several stakeholders called on Ofgem and the ESO to agree deadlines and expectations related to the release of the new 2024 pathways. One stakeholder said that Ofgem should challenge the ESO on why there are material changes between FES 2023 and FES 2024.

### **SSMD decision and rationale**

- 5.19 From 2024, the NESO will produce Strategic Pathways in the FES, which will represent a more directive, strategic view of the transition to net zero compared to the scenarios in previous versions of the FES. Although we are in no position to opine on which of these Strategic Pathways is more or less likely to materialise, it is essential that all RIIO-3 business plans are aligned to a net zero compliant scenario. This will help ensure a consistent and transparent approach to network planning to meet decarbonisation goals and is consistent with our net zero duty.
- 5.20 However, we acknowledge that despite uncertainty about policy on the role of hydrogen for domestic heating and CCUS, the gas network companies must continue to plan in accordance with safety requirements, resilience standards and other legislation. We recognise that they will likely need to adjust some assumptions in the FES for key planning drivers such as annual and peak gas demand to ensure that their networks continue to satisfy safety requirements and other regulatory obligations, such as supply security standards.
- 5.21 As a general principle, Ofgem is keen to ensure that all network business planning is based on the FES scenarios and forecasts produced by NESO. These pathways have undergone industry consultation and will also form the basis of the NESO's future strategic plans (eg Strategic Spatial Energy Plans (SSEP), CSNP, Gas Network Capability and Needs Report).

- 5.22 We have decided that the gas networks should base their draft BPDTs on the FES 2023 Falling Short scenario and highlight the adjustments that are needed to satisfy safety requirements and other regulatory obligations. We have decided the TOs should base their draft BPDTs on FES 2023 Leading the Way.
- 5.23 All companies should base their final business plans on the NESO's FES 2024 P1 Holistic Pathway, subject to the agreed variations in paragraphs 5.24 - 5.26. We consider that this pathway is appropriate because it allows for a balanced mix of future technologies and fuels for industry and household use.
- 5.24 For final business plans, the gas companies may adjust demand and supply assumptions in the P1 Holistic Pathway as necessary to account for the critical network planning considerations and obligations from the existing legislation. The gas companies must identify and justify in a BPDT all the adjustments made to the FES 24 data categories, ie demand and supply information, and how these adjustments affect their business plans.
- 5.25 We have not included a specific BPDT for the TOs to document their adjustments – instead they must produce a load investment plan with their best view of projects in the baseline and those that will proceed under an uncertainty mechanism, consistent with the approach to managing uncertainty and sensitivity analysis set out in their Load Strategy.
- 5.26 We have also agreed that owing to the timing of the publication of the FES 2024 data, which National Gas requires to complete its detailed probabilistic modelling for its final business plan, it will submit its final business plan in December on the basis of a macro approach. Key macro areas (eg 1 in 20 demand, interconnectors, N-1 supply etc) and key zones (Scotland, South East and South Wales) will be assessed against FES 2024 data, whilst the underlying data in the probabilistic model will use FES 2023 data. We will require National Gas to update its probabilistic model using FES 2024 data and share the results with us by 31 March 2025 by resubmitting the BPDT FES Pathway tab 11.03, clearly setting out any differences between the updated modelled data and the data submitted with the December business plan. We will review these differences and take them into account in our Draft Determinations to ensure that we are making our decision with the latest and most relevant data.



## 6. Outputs and incentives

### Introduction

6.1 In the price control, we use licence obligations (LOs)<sup>20</sup> to set minimum standards of performance. We use output delivery incentives (ODIs) with rewards and penalties to encourage performance improvements in the areas most important to customers. We also use price control deliverables (PCDs) to provide transparency and hold the licensees accountable for delivery.

### Price Control Deliverables

6.2 Both evaluative and mechanistic PCDs hold network companies accountable for delivery of specific projects. They allow for the return of allowances allocated to projects which have not been delivered or which have been delivered to materially different specifications. In RIIO-2, network companies were allowed to propose projects in their business plans which they considered suitable for PCDs, for which we then set allowances. In RIIO-2 we did not specify a materiality threshold for projects that could be put forward by network companies as being suitable for PCDs.

6.3 We also used UMs alongside PCDs, in situations where we had limited visibility of the parameters of the project or activities being proposed by network companies. For example, we attached re-openers to some PCDs, which allowed us to set allowances once there was better visibility on costs and overall scope.

### SSMC summary

6.4 Drawing from lessons learned in RIIO-2, we said that we would continue to set mechanistic and evaluative PCDs as we did in RIIO-2 while noting the need for some streamlining of the criteria which proposed PCD projects must meet to reduce regulatory burden.

6.5 We also proposed to set a materiality threshold for projects or activities that network companies can submit as PCDs in their business plans.

6.6 Furthermore, we signalled our intention to continue to use other aspects of the framework in RIIO-3 such as linking PCDs to LOs in the event of late or non-delivery of projects. We also set out our intention to continue with our ex post

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<sup>20</sup> Network companies found in breach of minimum standards could be subject to enforcement action and/or penalties.

assessment framework which allows us to acknowledge no-fault delays or non-delivery and allows network companies to keep a portion of underspend when PCDs are delivered with demonstrable efficiencies.

- 6.7 During the consultation process, we sought views from stakeholders on the aforementioned proposals and on how any overspend on allowances should be shared between companies and consumers.

### **Summary of consultation responses**

- 6.8 Ten respondents agreed, eight were neutral and one disagreed with our proposed approach to PCDs.
- 6.9 Those in agreement welcomed our proposal to reduce resource burden by introducing a materiality threshold (some suggesting £15 million); our minded to position to build in greater flexibility in the assessment of project delays and non-delivery where such events are outside of the network company's control; and our reflections on sharing of overspends similarly to underspends.
- 6.10 One stakeholder disagreed on the basis that the mechanistic approach used in multiple price controls has failed in the past and that continuing to use it will allow suppliers to overcharge.
- 6.11 Several stakeholders offered further points to reflect upon while generally in agreement with the overall concept. This included caution against overuse of PCDs as they take costs outside of the cost assessment and the potential disincentive to problem solving that PCDs may create by obligating companies to either follow through with sub-optimal projects or risk clawbacks and penalties. A consumer group pointed us towards lessons learned from ASTI's timely delivery incentive which it argued was tilted towards rewards at the expense of the customers.

### **SSMD decision and rationale**

- 6.12 We have decided to continue to attach mechanistic and evaluative PCDs to outputs that directly contribute to RIIO-3 outcomes or that need to be delivered in line with government legislation, standards or guidance.
- 6.13 To better streamline the process, reduce ambiguity and reduce resource burden for us and for our licensees, we have set a materiality threshold for PCDs at £15 million. We reserve the right to assign PCDs to projects with a value lower than £15 million which we deem to be strategically important and in the wider interest

of consumers and stakeholders. Definitions of projects that fall under this criterion will be communicated at the Draft Determinations stage.

- 6.14 We want to continue to encourage delivery while enabling flexibility. For this reason, where a PCD incurs an overspend due to changes in scope that deliver benefits to consumers and which can be demonstrated to have been efficiently incurred, we will be able to adjust allowances upwards, if appropriate. We will continue to claw-back allowances in the ex post assessment process in the event of non-delivery or under-delivery of projects.

### **Output Delivery Incentives**

- 6.15 Financial and reputational ODIs are used in RIIO-2 to drive service improvements. Although we set ODIs common to all companies across a particular sector, companies were also able to propose bespoke ODIs in areas where they could demonstrate the need for additional outputs beyond the common arrangements.
- 6.16 We used several means, singly and collectively, to set static or dynamic targets including historic company performance, frontier company performance, data from other sectors and bespoke stretching targets.

### **SSMC summary**

- 6.17 We covered lessons learned from the RIIO-2 process in setting financial and reputational ODIs to drive service improvements. We stated that we would continue to use these incentives in RIIO-3, noting strong support from stakeholders for well-designed incentives that set ambitious benchmarks which are embedded into future price controls.
- 6.18 We highlighted aspects of the framework which we thought warranted further consideration such as introducing incentives to encourage coordination amongst network companies and presenting financial output delivery incentive (ODI-F) values as a percentage of RoRE, a metric more directly relevant to investors and which facilitates in the round comparison with other RoRE-based performance measures relating to operational and financial out/underperformance.

### **Summary of consultation responses**

- 6.19 Sixteen respondents broadly agreed with our proposed approach to ODIs, while three stakeholders disagreed on various grounds.
- 6.20 One network company pointed out what was seen to be an almost complete removal of incentives to outperform allowances in RIIO-3 suggesting that a

penalty-only regime risks generating a perverse incentive to do only what was necessary to avoid penalty versus driving performance and promoting innovation.

- 6.21 One stakeholder drew connections between disruptions to service and management’s relationship with the workforce stating that industrial disputes can cause significant service interruptions and arguing for the extension of ODI-Fs to cover this area.
- 6.22 Reputational output delivery incentives (ODI-Rs) were seen by one environmental group as lacking in effectiveness and criticised us for not putting forward a model for holding network companies accountable for delivery in areas like the environment, net zero and vulnerability. Suggestions put forward varied from creating league tables and publicising performance to initiating scoring systems and leaderboards, but most were not in favour of additional reputational incentives due to the added resource burden.
- 6.23 Otherwise, there was broad support for the continued application and refinement of the use of ODIs.

### **SSMD decision and rationale**

- 6.24 Financial and reputational ODIs will continue to form part of our RIIO-3 toolkit for incentivising quality of service.
- 6.25 We are confirming our SSMC position to transition ODI-Fs from a base revenue to a RoRE basis. This measure is being taken because it is a more comparable and accessible metric for investors and other stakeholders, and to bring the accounting for ODI-Fs in line with other operational and financial incentives in the price control. The strength of incentives, their range, applicable caps or collars and other parameters will be consulted on at Draft Determinations where they aren’t decided in this SSMD.
- 6.26 We believe ODI-Rs play an important role in incentivising increased focus on areas of wider stakeholder interest where the application of a financial incentive is not appropriate, eg where an additional financial incentive is unnecessary or cannot be reliably calibrated. We will continue to set ODI-Rs in areas where we deem network companies have reputational capital at risk and where we can most effectively monitor and enforce these.

### **Bespoke outputs**

- 6.27 For RIIO-2, we gave network companies the opportunity to propose bespoke outputs, in collaboration with their stakeholders, Customer Engagement Groups

(CEGs) and User Groups (UGs). This included proposing bespoke PCDs; bespoke ODIs, reputational and/or financial in nature, including in areas already covered by common sector-wide outputs; and more stringent targets or incentive rates for common ODIs.

- 6.28 Proposals had to be underpinned by robust analysis (eg CBA) that demonstrated value for money for consumers. Network companies provided evidence on the extent to which proposals had been scrutinised by stakeholders (eg through the enhanced engagement process). Where network companies proposed bespoke ODIs, we assessed these as part of our review of company business plans.

### **SSMC summary**

- 6.29 We stated that as a general principle we wanted to minimise the number of bespoke outputs that we incorporate into the price control. However, we also recognised that network companies may have unique requirements and circumstances based on their local geography and the needs of their local customers which need to be reflected. In these cases, we proposed to provide network companies with the opportunity to submit bespoke outputs as part of their business plans which we would review.

### **Summary of consultation responses**

- 6.30 Stakeholders were unanimous in their agreement to our proposals for bespoke outputs although some expressed concerns about the clarity of guidance and one network company suggested that bespoke outputs tend to dilute the core package and are therefore of limited usefulness.
- 6.31 Most respondents agreed with our proposal to streamline the use of bespoke outputs to avoid a 'postcode lottery' while continuing to use them in unique situations when applicable.
- 6.32 One network company agreed with the overall framework but did not agree with the proposal to roll-out bespoke outputs that demonstrated utility across the sector. They suggested instead a trial period be granted to others to evaluate its suitability to their operations.

### **SSMD decision and rationale**

- 6.33 We have taken on board feedback around resource burden on all sides and around avoiding perverse incentives. Therefore, we have decided that we will consider new bespoke ODIs, LOs or UMs only in exceptional circumstances. We

will use our regulatory judgment in deciding whether and how any successful bespoke outputs should be made common.

## **Cross-sectoral outputs**

### **Environment**

6.34 The delivery of environmentally sustainable energy networks will be a significant part of achieving the UK's net zero vision. Ofgem is committed to providing a regulatory framework which reduces the harmful impact that the electricity transmission and gas networks and related business activities can have on the environment.

6.35 Our aims for network companies in RIIO-3 are:

- to mitigate environmental impacts that arise from network activities;
- to increase transparency of network company actions and plans to decarbonise in line with net zero and the broader impact that their activities have on the environment;
- to ensure that network companies consider biodiversity and the climate crisis in new construction activities and mitigate impacts efficiently; and
- to improve information sharing and cooperation between network companies on environmental initiatives.

6.36 The Environmental Action Plan (EAP), Annual Environmental Report (AER), Business Carbon Footprint (BCF) and Environmental Scorecard mechanisms apply to at least two of the sectors and are covered in this chapter. Any sector-specific environmental outputs are described in the sector-specific annexes.

### **Environmental Action Plan and Annual Environment Report**

#### SSMC summary

6.37 We proposed that the network companies submit an EAP as part of their business plans for RIIO-3. We proposed reviewing the minimum requirements for the EAP and strengthening them through the BPG where we consider there is a compelling case for the network companies to move faster on addressing their impact on the environment.

6.38 We also proposed retaining the LO in RIIO-3 for the network companies to publish an AER on the actions taken to reduce and manage environmental impacts.

- 6.39 We proposed setting PCDs for environmental initiatives that the network companies put forward in their EAPs where these are sufficiently material in terms of environmental benefit and cost. We considered that the combination of PCDs and monitoring smaller value actions in their AER, which is a public facing report, is an effective safeguard against the risks of the network companies not delivering their EAP commitments.
- 6.40 We also proposed the introduction of a common reporting format to make it easier to compare reports across sectors. The report structure we proposed consisted of two key documents: an AER Commentary and an AER Key Performance Indicator (KPI) table.
- 6.41 We also proposed to strengthen the AER reporting standards to ensure that network companies report consistently on elements such as sustainable resource use and waste, supply chain management, embodied carbon, biodiversity, electricity transmission losses (ET only), shrinkage (GD and GT), and biomethane and other low gas connections (GD only).
- 6.42 We considered that the most appropriate type of incentive to achieve the above objectives is an ODI-R. Public reporting, we suggested, will increase the transparency of network companies' environmental impact and enable comparability of performance between them.
- 6.43 We also proposed incorporating the Environmental Scorecard impact areas into the EAP and AER.

#### Summary of consultation responses

- 6.44 Support for retaining the EAP and the AER was very strong. We received 17 responses from stakeholders on this issue and 16 of them supported the retention of the EAP and the AER. Stakeholders suggested that both initiatives have value in that they deliver accountability and transparency while driving positive behaviour changes.
- 6.45 Three GDNs and one other stakeholder had concerns surrounding the resource burden of submitting the AER alongside other environmental reporting requirements which may be implemented in future.
- 6.46 One TO and one GDN suggested that year-on-year measurements did not adequately reflect the improvements made over the lifecycle of a project, eg biodiversity improvements can only be measured at the end of a given project.
- 6.47 One TO and one GDN suggested the addition of a biodiversity incentive aimed at encouraging network companies to go above and beyond biodiversity

requirements. The TO indicated that consumers valued this area and that the legal requirements may not meet the standards that consumers expect in terms of biodiversity improvements.

6.48 Stakeholder feedback regarding the KPI table was as follows:

- Stakeholders were largely supportive of the new AER commentary/KPI format, though there were some concerns from two GDNs about the comparability and context of the metrics included in the KPI table owing to the large variance in network size and geography.
- A GDN and another stakeholder urged Ofgem to work with licensees to ensure that the standardisation of reporting metrics reflects the improvements made by network companies as absolute figures can give a distorted view of progress.
- One TO raised a concern about KPI maturity and the pace of development in emerging areas. Commentary was deemed vital in these areas.

#### SSMD decision and rationale

6.49 We have decided to retain both the AER and the EAP in RIIO-3 as per the SSMC position. Both initiatives provide consumer value in their ability to strengthen the network companies' accountability for delivering their EAP as well as providing better transparency of companies' own environmental performance.

6.50 The AER will include KPI tables and a commentary document. The KPI tables will follow a common format and include a set of standardised metrics (where practical) to aid comparability across companies, sectors and over time. The commentary document will give the network companies the opportunity to provide context and explain key drivers of performance data in the KPI tables.

6.51 We will consult further with stakeholders regarding the development of the KPI tables and the metrics and standardisation approaches to ensure these add value in monitoring network companies' performance and that each area is covered in a comprehensive yet fair manner. Ofgem will monitor the AERs during RIIO-3 to keep track of companies' progress on delivering on their EAP commitments and environmental performance.



## **Business Carbon Footprint**

6.52 In RIIO-2, we made it a Business Plan requirement for the network companies to set a target to reduce their business-level greenhouse gas emissions, or BCF.<sup>21</sup>

### SSMC summary

6.53 We proposed retaining the reputational BCF ODI on TOs and GDNs. We considered that the companies benefit significantly from adopting a robust reduction target that means a reputational incentive is a strong driver for action. These benefits include strengthened brand reputation and credibility, increased investor confidence, future proofing and regulatory resilience, and bottom-line savings.

### Summary of consultation responses

6.54 We received 17 responses to this question. Fourteen of these respondents supported retaining the incentive. Four GDNs suggested that retaining the BCF alongside the EAP/AER could cause confusion as to which metrics should be reported. They stated that they would like to see the BCF rolled into the EAP/AER.

6.55 Two TOs, two GDNs and one of stakeholder voiced concerns regarding reporting on Science Based Targets (SBTi) in the BCF. These concerns ranged from the lack of hard targets set out each year by the SBTi process, the ambitious nature of the targets and the fact that some GDNs do not qualify for SBTi accredited targets based on the portion of their revenue being derived from the transmission or sale of gas. Most of these stakeholders urged us to consider these SBTi issues throughout the price control.

### SSMD decision and rationale

6.56 The BCF ODI-R will be removed as a separate ODI-R and instead included within the AER ODI-R for RIIO-3. The BCF is seen as a key indicator which offers a good degree of comparability, especially considering its application outside of the industry, so we think it is important to continue reporting in this area. However, we agree with stakeholders that it is simpler to combine BCF reporting into the AER to avoid any duplication.

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<sup>21</sup> A company's BCF comprises scope 1, 2 and 3 emissions. Scope 1 covers direct emissions from owned or controlled sources. Scope 2 covers indirect emissions from the generation of purchased electricity, steam, heating, and cooling

6.57 We note the importance of comparability and consistency of reporting. We have stressed this in our BPG, including setting out the need to ensure companies improve how they capture Scope 3 emissions.

6.58 We have also incorporated long-term greenhouse gas emission reduction targets into reporting. We believe this will provide network companies with an opportunity to clarify their targets and the issues they have faced in achieving their targets.

#### Next Steps

6.59 The KPI table metrics will be developed in consultation with stakeholders where appropriate. The standardisation of the metrics will be developed to offer as much transparency and fairness as possible, accounting for broad diversity in geography and scope across network companies.

#### **Environmental Scorecard ODI-F**

6.60 The Environmental Scorecard was introduced in RIIO-2 to incentivise the electricity and gas TOs to outperform selected RIIO-2 targets in their EAPs.<sup>22</sup> The impact areas covered in the Environmental Scorecard are:

- business mileage emissions;
- office and operational waste recycling;
- office waste reduction;
- office water use reduction;
- environmental value of non-operational land; and
- biodiversity net gain on new network projects.

#### SSMC summary

6.61 While performance has been positive, we proposed that aspects of the Environmental Scorecard, such as biodiversity net gain, should be applied to all network companies through the AER.

6.62 For RIIO-3 we proposed to develop incentives for areas of the AER that are auditable and measurable and where there is sufficient data to enable strong

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<sup>22</sup> Only NGET and National Gas have an active Environmental Scorecard ODI-F. A licence provision is included in SHET and SPT's licences for the Environmental Scorecard, but they did not develop the parameters needed (eg baseline targets and performance thresholds) in each of the impact areas to operate the ODI.

targets to be set. Primarily we stated that we expected these to be reputational through the AER, as described in the sections above, but that we were open to suggestions on financial incentives.

- 6.63 We stated that obligations under the AER are an appropriate driver for activities to reduce the environmental impacts arising from networks as well as to achieve broader decarbonisation targets. We argued the AER would encourage transparent reporting of activities to hold network companies accountable while supporting improved data quality, information sharing and comparability. We said that further details of the AER design would be developed through working groups and taking into considerations responses to this consultation.

#### Summary of consultation responses

- 6.64 Thirteen stakeholders responded to this consultation question with 11 supporting the removal, one opposing and one unsure. The stakeholder that opposed the removal of the scorecard suggested that broader publication could offer more value.
- 6.65 Multiple TOs and GDNs that supported the removal cited its redundant nature and the resource burden of submitting this alongside other environmental documents. Six stakeholders believe the existing scorecard areas could be folded into the AER.

#### SSMD decision and rationale

- 6.66 The Environmental Scorecard will be removed for RIIO-3. We consider that it is an unnecessary resource burden and that its elements are suitably covered in the EAP/AER.
- 6.67 Metrics from the scorecard that hold consumer value will be rolled into the AER.

### **Network Asset Risk Metric**

#### **NARM methodology**

- 6.68 NARM considers the probability and impact of an asset failing and is used to set outputs for asset management activities, such as asset replacement and refurbishment. NARM should ensure that the risk to consumers of asset failure is maintained within reasonable bounds.

#### SSMC summary

- 6.69 We proposed to work with network companies ahead of RIIO-3 to review whether current arrangements remain fit for purpose and what changes may be required

to the NARM methodologies to ensure they continue to do so. Our view, however, was that any changes would likely be limited to evolutionary updates as opposed to any material changes at this stage.

- 6.70 We proposed to build and apply the same principles and approach for the gas and ET sectors, following the demonstrable success of improving commonality and consistency in the implementation of the NARM methodology across all DNOs in RIIO-ED2.
- 6.71 We expressed an ambition to expand the coverage of the NARM methodology, and where appropriate increase the proportion of expenditure linked to outputs while recognising that this could only be delivered through a long-term process of continuous review and improvement. We also asked for views on what can be achieved between now and the start of RIIO-3, and for future price controls.
- 6.72 We proposed to maintain the RIIO-2 NARM incentive regime for RIIO-3 but make targeted improvements to the methodology, particularly around consistency, coverage, assurance and reporting requirements, to ensure all network companies continue to deliver their NARM outputs efficiently.
- 6.73 We expressed a view that NARM should provide a useful tool, as part of a wider toolkit, for assessing and justifying investment decisions and that we believe that there may be a need for additional justification through CBAs and EJPs to provide the narrative for and explain the network companies' investment decision-making process.

#### Summary of consultation responses

- 6.74 We received 18 stakeholder responses (of which 12 were from network companies) in respect of asset resilience.
- 6.75 Respondents were broadly supportive of continued use of the NARM framework in RIIO-3 to govern the delivery of asset health investment.
- 6.76 Nine respondents recognised that the current framework requires refinement to ensure it is fit for purpose and elements of the NARM framework from RIIO-2 need to be updated. Twelve network companies suggested that the principal challenge of the current design is the long-term risk benefit and funding not being correlated, creating distortions and inaccuracies which will require ex post assessment. SHET did not support continued use of the NARM framework, expressing that the current framework does not meet its stated purpose and that aspects require significant overhaul.

- 6.77 Six network companies were against our proposal to expand NARM ahead of RIIO-3. Their concerns related primarily to the timescales required to develop other asset groups and the need to prioritise refinement of the assessment and reporting on assets currently in scope prior to expansion. Three DNOs were supportive of the intention to expand the NARM framework to assets not currently included during the RIIO-3 period.
- 6.78 Five network companies commented that the current reporting structure is a data intensive and burdensome task and that simplification of the NARM reporting requirements should be a key priority.
- 6.79 Three network companies suggest that NARM assets should be exempt from CBAs and EJPs because NARM is itself similar in nature to a CBA; assessing the long-term benefits of an intervention, in terms of network risk reduction, against the associated costs of the intervention, adding this would reduce administrative burden.
- 6.80 One network company commented that while the £/risk assessment process is comparable across different interventions, it is not a realistic metric and should not be used as a basis to set allowances, but instead as a measure of efficiency for licence areas in each sector. Another network company suggests that simpler workload volume targets to support decision making once a programme has been agreed, for areas such as repex, may be more appropriate than the monetised risk metric.
- 6.81 One network company suggested there is a need to consider funding across price controls due to supply chain constraints.
- 6.82 Non-network companies support the framework with one respondent commenting that the long-term monetised risk measure gives a good indication of the effectiveness of investment decisions and that it recognises the different nature of network assets, enabling the establishment of NARM specific methodologies where appropriate. Another respondent suggested the current framework doesn't address geographical differences which could impact corrosion rates. Two non-network companies echoed network companies' concerns about framework refinement and improving data quality and reporting.

#### SSMD decision and rationale

- 6.83 We have decided to continue to use the NARM framework to set the outputs and associated funding for asset management work, building on the RIIO-2 NARM incentive regime.

- 6.84 We consider the overall approach of NARM to be sound, because it allows funding to be associated with a measurable output without being overly prescriptive and it allows work programs to adjust to need in line with the long-term interests of consumers. We recognise that the NARM funding mechanism requires refinement and are engaging with network companies to improve the current RIIO-2 funding adjustment mechanism. We will ensure these changes (and any further evolutions) are adopted into the RIIO-3 process ahead of Draft Determinations.
- 6.85 In addition to the funding mechanism, we have decided to pursue four areas of improvement for NARM:
- increasing standardisation across NARM;
  - covering more assets;
  - enhancing assurance; and
  - expansion of the required reporting framework.
- 6.86 NARM will continue to be part of a toolbox assessment approach including CBAs and EJPs to explain the network companies' investment decision-making process. We think that NARM represents a robust decision-making framework that allows network companies to carry out cost benefit analysis and to transparently and mechanistically quantify monetised risk benefits. We think that NARM will ease the regulatory burden associated with providing investment justification.
- 6.87 We do not agree that NARM assets should be exempt from CBAs and EJPs as there may be need for their use where future asset replacement and refurbishment volumes are not justified through NARM and necessary additional justification is required. Crucially, NARM indicates an intervention is required, but does not determine alone the intervention required.

### **Standardisation under NARM**

- 6.88 We intend to increase the commonality and consistency to improve comparability within NARM. For example, we will require electricity transmission licensees to develop and make use of standard methodologies for NARM, such as using consistent asset probability of failure models.
- 6.89 The reason for this is to ensure that for the same intervention on the same type of assets in similar circumstances, the NARM should produce similar risk benefits to enable a fair comparison across TOs. Similarly, the output terminology will be standardised across ED and ET to minimise interpretation errors in our reviews.

- 6.90 We understand readiness for standardisation at the start of RIIO-4 would alter the potential workloads and costs in RIIO-3. To aid in the preparation of RIIO-3 business plans, network companies should reasonably expect to accommodate:
- an industry consulted Transmission Common Network Asset Indices Measurement (tCNAIM) presented for Regulatory approval in RIIO T3 and before RIIO-T4 submissions;
  - asset data systems which are compatible with tCNAIM; and
  - tCNAIM to be populated with one or more inspection data set(s) on an individual asset basis for all assets included in tCNAIM.
- 6.91 We will introduce the requirement for companies to produce information gathering plans (IGPs) which set out how companies gather and record information required for the assets within the NARM. We expect this to mirror the ED sector.

### **Expansion of assets**

- 6.92 We intend to expand the scope of NARM beyond key lead assets. This will mainly focus on ET sector as the majority of GT and GD assets are already within the NARM. We note the Lead and Non-Lead terminology at present is not standardised in ET, but we expect a larger proportion of high-volume low-cost assets to be included.
- 6.93 The current NARM does not cover non-lead assets, so it only provides a partial picture of network risk. Expanding the scope would improve the accuracy and reliability of reported risk by providing a more systematic view encompassing a wider range of assets.
- 6.94 We also propose to disaggregate sub-categories of assets where a grouping may be too large to produce a standard methodology for assessing health, criticality, and cost.
- 6.95 For RIIO-3 business plan submissions, the outputs will use only the current asset categories, but we intend to have new reporting and accompanying methodologies in place as soon as practicable during RIIO-3. This will be for output and data reporting purposes only, to support the new assets being introduced into the NARM funding adjustment mechanism when the methodology is sufficiently mature (ie after RIIO-3).
- 6.96 We believe the following assets should be considered for extension into ET tCNAIM:

- Switchgear - Disconnectors, Earth Switches.
- Instrument Transformers - Current Transformers, Voltage Transformers and Current Voltage Transformers, High Accuracy Metering (HAMS).
- Protection & Control - Supervisory Control and Data Acquisition, Unit Protection, Distance Protection, etc.
- Civils - Primary civil structures.

### **Expanding the required reporting framework**

- 6.97 A typical network company owns thousands of assets and each of those assets has its own data profile, governed by the inspection and maintenance approaches applied to the asset. The level of data coverage varies across assets as some assets have many different condition points. NARM helps address the information asymmetry that exists between network companies and Ofgem. It does this by aggregating the millions of data points that sit in the licensee's asset management systems.
- 6.98 We want to ensure consistency of reported asset condition. We require that network companies within a sector should work together to produce a common engineering guidance document on data input to the NARM framework. The guidance document should set an approach for describing asset condition points for all asset classes in NARM and ensure much better alignment across each of them.
- 6.99 We will work with companies and stakeholders on the development of an engineering guidance document, including identification of appropriate delivery milestones and timelines, to ensure finalisation ahead of the start of RIIO-3.
- 6.100 As noted above we intend to mandate the provision of IGPs to allow Ofgem to better understand the timeliness, accuracy and completeness of the reported data at any point in time.

### **Enhancing assurance**

- 6.101 We will also consider how to implement an audit process for compliance with IGPs and Good Practice Guides. This may need to be done by an entity independent of the company, and include requiring the licensee to procure independent inspections. We want to ensure that positive changes made from the standardised engineering guidance or a Good Practice Guide are properly adopted and embedded in company practices.



6.102 Our present view is that we would require, on a sample basis, annual audits (both site based and office based as appropriate), covering some or all of:

- Accuracy - how consistently are subjective elements of asset condition measured, in line with a good practice guide;
- Completeness - that the licensee is submitting all data required by the NARM; and
- Timeliness - are inspections occurring in a timely manner to ensure data is sufficiently reflective of the actual condition;

### **Next Steps**

6.103 We will work with licensees and stakeholders through working groups in the coming months, setting out a work plan to deliver this comprehensive framework.

6.104 We envisage the programme for these works as follows:

- Development of common methodologies by April 2027; and
- Asset data systems to align with the common methodologies by April 2029.

6.105 We note that there will be additional costs for these works and elements will be uncertain. We will consider this in our business plan review.

### **Climate resilience**

6.106 To maintain reliability and resilience across the energy network in the face of more frequent and extreme climate events, network companies must proactively work to safeguard consumers from asset failures caused by climate hazards now and in the future, and should embed adaptation planning and implementation into their investment decisions.

6.107 The urgency to consider climate resilience in investment decisions now is heightened, given the scale of investment required to transition to net zero and the need to avoid locking in future costly impacts or expensive retrofitting.

6.108 The aim for network companies in RIIO-3 is to develop their knowledge of their risk profiles and embed climate resilience across the price control period, by:

- exploring and stress testing different scenarios and associated impacts;
- developing an understanding of their thresholds and trigger points to support decision making;
- better understanding interdependent risks; and

- continued cross sector work to develop climate resilience metrics and indicators.

### **SSMC summary**

6.109 We proposed that network companies apply the following principles to fully embed climate resilience into their energy network and system investments:

- Climate resilience decisions need to be based on forward-looking data and information. This is especially important as climate change is expected to bring unprecedented extreme weather and variability which means information based on the past is not a good indicator for the future.
- High impact, low likelihood extreme events (based on the latest understanding of climate science) need to be considered in light of the more frequent and severe extreme weather expected.
- The costs and benefits of adaptation actions and their impact on resilience (i.e. avoided costs) need to be correctly valued. This includes understanding the impact actions will have on improving levels of resilience over the lifetime of the asset and capturing indirect (eg impact on other sectors) as well as directly avoided costs.
- Investment decisions need to be fit for purpose for the decarbonised energy system. In particular, considering the increased vulnerability of the system to climate risks, whilst we transition to net zero.

### **Summary of consultation responses**

6.110 We received 28 stakeholder responses across OVQ23, OVQ24 and OVQ25 (of which 14 were from network companies).

6.111 All respondents agreed with the overall proposed approach and principles set out to enable climate resilience to be embedded across networks, recognising the need for focus on climate resilience within the energy sector. No respondents raised concerns with the proposed principles. Five respondents stated they support the principles and provided questions of clarity and suggestions on how to build upon the principles.

6.112 There were three responses which raised the need to consider and clearly explain how climate resilience will be integrated into asset replacement programmes such as NARM and financial decision making.

6.113 One respondent raised concerns on the development of a climate resilience metric, given the complex nature of the climate hazards and geographical nature

different network companies face. However, all other respondents agreed with the proposal to develop a climate resilience metric for all sectors, while raising questions around timelines, consistencies and clear methodologies when developing the metrics.

6.114 The SSMC responses highlighted that the climate resilience metric needs further development, considering factors such as:

- what is in scope;
- what is the value of metrics;
- how will it be used by Ofgem; and
- how will the metric interact with existing funding mechanisms.

6.115 We will consider all of the factors stated above collaboratively with the network companies through the Climate Change Resilience Working Group (CCRWG). We have also decided to refer to 'climate resilience metrics and indicators' because feedback indicates that development of a single metric may not be possible given the complex nature of climate resilience.

6.116 As part of the SSMC we asked respondents to provide any early learning that we should be aware of and look to incorporate going forward. There were six key themes identified:

- Increased engagement needed through working groups.
- Early signposting from Ofgem on the base standard of resilience and how related investment will be funded.
- A need for sector wide common terminology to be established, by defining related terms in the context of the energy sector.
- Recognising that there may be difficulty forecasting forward-looking projections, and a need to develop tailored approaches for each network are.
- A need for clear and consistent reporting (highlighting concern around duplication of current reporting).
- Ensuring learning from other networks and academics are incorporated.

6.117 All respondents broadly agreed with the suggested approach and outputs for embedding climate resilience, however there were three key themes highlighted:

- Caution should be taken embedding the climate resilience approach in respect to RIIO-3 timelines, identifying that it may not be possible to embed all aspects of the approach in time for the start of the price control.
- Caution should be taken when establishing reporting requirements, recognising companies adhere to reporting requirements such as Climate-Related Financial Disclosures and Adaptation Reporting Power (ARP), so minimising duplication is important. Differences between GT and GD also need to be recognised.
- The need for further development of the climate resilience metric, considering scope, value, use and interaction with funding mechanisms as previously highlighted.

6.118 In the SSMC we proposed a separate overarching Resilience Metric which has one associated question; OVQ26. All respondents except two broadly agreed with the approach. However, respondents did not have a clear consensus on how a resilience metric should be formatted, with several options being identified:

- Keep the climate resilience metric but remove the overarching resilience metric.
- Establish multiple resilience metrics based on resilience activities e.g. climate, workforce, supply chain and cyber.
- Sector specific metrics should be produced.

6.119 Other key takeaways from the responses included:

- A climate resilience metric is already in development as it was established as a requirement in RIIO-ED2 and ET, GT and GD are involved in this process.
- A metric should follow a simple methodology to avoid the complexity and problems which have been seen through NARM.
- Clarification of the metric timeline of development and implementation should be provided, noting it will not be possible to implement for the start of RIIO-3.

### **SSMD decision and rationale**

6.120 We have decided that the proposed climate resilience principles should be embedded into the energy network and system investment, based on the feedback provided in the SSMC. We have made minor changes to the wording, in order to streamline the principles. They now read as follows:

- Climate resilience decisions should be based on forward-looking data and information.
- High impact, low probability events should be considered (based on regional context and the latest understanding of climate science).
- The process for decision-making about climate resilience investment should be made clear, including better valuation of resilience, its associated costs and benefits, and trade-offs between different approaches (ie anticipating, reacting and recovering).
- Investment decisions should be fit for purpose for the decarbonised energy system.

6.121 Feedback on the SSMC indicated that network companies would not be able to fulfil all the proposed requirements before the start of the price control. However, we must not miss the opportunity to progress climate resilience work throughout RIIO-3. As a result, we have decided to require network companies to submit the material set out in the BPG, and to continue engaging with Ofgem and the CCRWG to progress further work set out below.

6.122 We have decided that the following activities will start development in RIIO-2 and ramp up throughout RIIO-3. Network companies are not required to submit material on these activities in their business plans in December. Instead, they should provide updates on their progress in their RIIO annual reporting. We expect network companies to comply fully with the approach outlined in this document and the BPG by the second annual reporting submission.

- Climate scenario planning: Network companies should undertake scenario planning to identify the possible impacts of climate change in their region, using the UK Climate Projections 2018 data.<sup>23</sup> Ofgem will work with network companies through the CCRWG to provide guidance on scenario planning. Companies should use a minimum of two scenarios, including the 2- and 4-degree scenarios required by ARP. Throughout RIIO-3 we will explore the option to develop sector wide bespoke scenarios.
- We expect network companies to clearly explain the assumptions underpinning the scenarios used.

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<sup>23</sup> [The UK Climate Projections \(UKCP\) is a set of tools and data that shows you how the UK climate may change in the future.](#)

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- Scenario planning should consider the potential for interdependent risks within the energy sector and between other sectors (where one part of a system is dependent on another and vice versa).
- Network companies should also undertake stress testing for high-impact, low probability climate hazards (this can include single events or compound events). This can include fragility curves and detailed modelling as well as qualitative methods, and Ofgem will work with network companies to provide guidance on this throughout the price control.
- Adaptation Pathways: Network companies should develop adaptation pathways following the process outlined in the BS8631,<sup>24</sup> noting we are not expecting accreditation to be achieved. BS8631 should be used to plan current and future decision points to a minimum of 45 years in the future, or where possible, extending to 2100. In areas of uncertainty, companies should outline the assumptions made to inform this planning. Adaptation pathways should link to the operator's short and long-term financial plans.
- Metrics and Indicators: Network companies should continue work on developing climate resilience metrics and indicators, as well as other industry best practice, through the CCRWG. They should begin monitoring and reporting on the climate resilience metric and indicators in their annual report once they have been established.

6.123 We have decided to continue developing the climate resilience metrics and indicators, as noted above, but not to continue developing an overarching resilience metric. This is based on feedback from the SSMC, and due to the complexity of developing an overarching metric which captures the wide range of resilience activities that network companies undertake.

## **Workforce resilience**

6.124 Network companies collectively have a direct workforce in excess of 40,000 employees. A lack of appropriately skilled workforce is a risk network companies should protect against, as we highlighted at SSMC, as it is essential to their ability to deliver the services that customers expect over the longer term. Failure to do so could ultimately impact their performance in the price control, for example through poor customer service results or late delivery of much-needed network expansion.

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<sup>24</sup> [BS 8631:2021 Adaptation to climate change. Using adaptation pathways for decision making. Guide](#)

### **SSMC summary**

- 6.125 At SSMC we recognized the increasing importance for network companies to deliver a modern, diverse, high quality, well-trained workforce fit for the future.
- 6.126 We stated that there could be scope to increase transparency of reporting, particularly around the steps network companies take to improve their workforce resilience.
- 6.127 We maintained our position, from RIIO-2, that we consider that it would not be appropriate to set formal performance targets and reporting requirements in RIIO-3. However, we proposed network companies work with relevant industry bodies to establish a consistent format for public reporting on an agreed set of key metrics. We also proposed to work with network companies through the relevant working groups to explore the benefit and feasibility of delivering this.

### **Summary of consultation responses**

- 6.128 All 17 respondents agreed workforce resilience should not be an area of formal performance targets and a consistent format for public reporting of key metrics should be agreed. All respondents also welcomed the opportunity to develop metrics and some set out factors they believe to be important in making a workforce resilient including retention, rewards package, attrition, skills gap in the market and retirement. Some respondents provided specific comments on the scope of key metrics, stating they would need to be broad to account for the differing challenges of companies.
- 6.129 One respondent proposed the creation of a re-opener to provide future flexibility to allow potential future actions in this area, eg industry-wide training schemes, if in consumers' interest in supporting energy transition.

### **SSMD decision and rationale**

- 6.130 We will introduce a requirement for a Workforce Resilience Strategy to be produced by network companies. This should be a robust, sustainable workforce strategy that addresses the challenges of attracting, developing and retaining an appropriately skilled workforce.
- 6.131 Although we are not prescribing the precise content of this strategy, network companies should consider how their approaches will lead to improvements in areas such as upskilling and multi-skilling their existing workforce and workforce satisfaction and retention. The strategy should have appropriate engagement and

input from stakeholders, such as supply chain partners, so that it addresses both directly and indirectly employed workforces.

- 6.132 We recognise the value of increasing transparency of networks' workforce resilience data through a consistent form of external reporting that provides stakeholders with a view of network companies' progress against workforce resilience commitments in their business plan. We recognise the developments by Energy & Utility Skills and network companies in this area and strongly request that network companies continue to work with wider industry to improve the robustness and transparency of these metrics.
- 6.133 We are open to network companies proposing specific measures in their business plan that are designed to increase workforce resilience – in-line with their Workforce Resilience Strategy and Supply Chain Resilience Strategy (set out in the next section below) – during the RIIO-3 period.

### **Supply chain resilience**

- 6.134 Two factors have combined to make the supply chain backdrop for RIIO-3 different to previous price controls. First, RIIO-3 is expected to deliver a significantly greater level of network build in electricity transmission. Second, there are already supply chain constraints in European markets, and markets outside of Europe, as other countries embark on a similar scale of build to the UK.
- 6.135 We did not consult specifically on the broader supply chain challenges in the SSMC but several respondents highlighted supply chain challenges they are experiencing, or envisage they were likely to face, either as part of their overall SSMC response or during working groups. We set out the nature of responses below and our decision.

### **Summary of consultation responses**

- 6.136 Respondents provided their views in general terms, outlining their view on the broader challenges resulting from supply chain constraints. The three TOs specifically responded to ETQ38, which sought views on how the cost assessment process could address market volatility and supply chain challenges that the electricity transmission sector is facing.
- 6.137 The main challenges respondents reported can be considered to relate to either longer procurement lead times for key equipment (due to macro, socio, economic and geo-political factors), or a lack of skilled workforce (due to factors such as early retirement and high time to competency for key roles). Respondents reported that these two factors have, or could in the future, resulted in increased



or more volatile costs - in some cases both. The SSMC responses suggest supply chain challenges are more severe and widespread in the electricity transmission sector than the other two sectors.

#### SSMD decision and rationale

- 6.138 Ahead of RIIO-3, we have been considering what are the most appropriate measures to gain the required degree of comfort, monitor developments, and adapt to possible change. We believe focusing on the following areas will secure this objective.
- 6.139 As part of their business plans, we require companies to submit a Supply Chain Resilience Strategy which sets out the steps they are taking to preserve their long-term ability to deliver the work required to fulfil their obligations.
- 6.140 In developing its strategy, the network company will need to demonstrate it is taking a strategic approach to mitigating supply chain pressures, particularly those arising from long lead times for materials. For example, in the gas sectors, the timely sourcing of essential components, such as pipes, fittings, compressors and monitoring systems, should be coordinated across projects and with a company's supply chain partners. For long lead time components, the strategy should go beyond the options to be used at a project level. Companies should, as a minimum, develop an approach to bring forward procurement activities including building relationships, capacity booking, pre-ordering, buying in bulk and strategically increasing stock levels to secure sufficient materials in advance where appropriate.
- 6.141 Supply chain challenges appear to be most acute in the ET sector. This is why Ofgem is also focused on providing regulatory solutions alongside company initiatives to help alleviate supply chain challenges faced by TOs. For RIIO-ET3, development funding will have two components: Pre-Construction Funding (PCF) and an equipment procurement mechanism.<sup>25</sup> PCF will provide TOs with the ability to develop projects at pace through the early stages of their development whereas the advanced equipment mechanism will allow TOs to book multiple factory slots for agreed equipment classes well in advance of when construction begins, so equipment supply doesn't delay project build.
- 6.142 We are working with TOs to introduce an equipment procurement mechanism during RIIO-ET2, to help TOs to de-risk their project delivery timescales in RIIO-

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<sup>25</sup> Please see Chapter 2 of the ET Annex for the full details and rationale behind our decision on PCF and the equipment procurement mechanism

ET3. The intention is to create an enduring policy mechanism that can be carried into RIIO-ET3 and future price controls.

- 6.143 We recognise the current supply environment (ie lack of factory slots for equipment, and increased demand costs across key asset classes) could result in increases to prices that network companies face which go beyond general inflationary increases. These additional increases could be captured through the further cost allowance adjustments via Real Price Effects. To enable this, companies will need to provide robust evidence of the types of supply chain spend in which there are particular inflationary pressures, and what would be a well-calibrated basket of indices.
- 6.144 We agree that the lack of appropriately skilled workforce is a risk network companies should protect against, as has been highlighted by respondents, and we recognise the potential impact that an imbalance between supply and demand could have on supply chains. Our proposals focus on companies developing robust workforce strategies and monitoring (set out in Workforce Resilience section of this document) so that companies can confidently manage the resourcing challenges and risks companies envisage they will face in RIIO-3 and beyond.

## 7. Truth Telling and Efficiency Incentives

### Introduction

- 7.1 There is informational asymmetry in the setting of a price control. We require network companies to submit information which we cannot obtain independently (such as cost forecasts and output delivery plans). We use truth-telling incentives to overcome this information asymmetry, encouraging companies to submit ambitious cost forecasts and output delivery plans, supported by high-quality information. In RIIO-2 we used the Business Plan Incentive (BPI) as a truth-telling incentive.
- 7.2 Efficiency incentives are used by regulators to encourage companies to deliver their outputs efficiently in-period, and to discourage overspending after the price control has been set. We used the Totex Incentive Mechanism (TIM) as an overall efficiency incentive in RIIO-2.

### Business Plan Incentive

- 7.3 In RIIO-2, the BPI resulted in a total penalty or reward capped at +/- 2% of allowed totex and was calculated as follows:
- In Stage 1, we reviewed business plans to ensure that they included sufficiently complete and high-quality information and imposed an upfront penalty of 0.5% of totex for failing to meet these minimum requirements.
  - In Stage 2, we rewarded companies for proposing consumer value propositions (CVPs), ie activities that went beyond BAU. The upfront reward was in proportion to the additional consumer value demonstrated in the CVP.
  - In Stage 3, we reviewed forecasts of lower-confidence costs – ie those where, due to the absence of an independent benchmark, we were more reliant on company information in setting allowances. Costs deemed to be poorly justified were removed from allowances and subject to a 10% upfront penalty.
  - In Stage 4, we reviewed forecasts for higher-confidence costs. Companies that submitted forecasts lower than the benchmark that we would otherwise have used to set their allowance, received an upfront reward. This was calculated using the confidence-dependent incentive rate (CDIR) – ie blended incentive rate calculated as the weighted average of a 50%

incentive rate on higher-confidence costs, and 15% on lower-confidence costs.

7.4 The overall BPI penalty or reward calculated for each company in RIIO-2 is shown in Table 5 below.

Table 5: RIIO-2 BPI Penalties/Rewards:

<b>Network Company</b>	<b>BPI Penalty/Reward (£m)</b>	<b>% of Totex</b>
NGET	-64.1	-1.19%
SPT	5.0	0.41%
SHET	21.8	1.01%
Cadent	0.6	0.01%
NGN	5.8	0.49%
SGN	-	-
WWU	-	-
NGT	21.7	1.08%

### **SSMC summary**

7.5 Having considered lessons learned from RIIO-2 and feedback from stakeholders as well as analysing the approach used by Ofwat in PR24, we proposed a number of changes and modifications to the BPI for RIIO-3.

7.6 Specifically, we set out three key objectives for the BPI:

- business plan information that enables us to set the price control effectively;
- ambitious cost forecasts; and
- ambitious output proposals that go beyond baseline expectations.

7.7 We also adopted simplicity and transparency criteria for the incentive as well as proportionality in the required level of resource intensity throughout the regulatory process.

7.8 Guided by the above objectives and criteria, we consulted on retaining and evolving Stage 1 of the BPI in the following ways:

- maintain a penalty for failing to meet the minimum requirements;
- retain the completeness and quality assessments with greater focus on completeness; and

- simplify the evaluation process, increasing transparency and reducing resource burden.
- 7.9 In our SSMC we also discussed the option of retaining a modified version of the BPI Stage 2 which was intended to incentivise output proposals or CVPs that go beyond baseline expectations for consumer benefit but highlighted concerns relating to execution, regulatory burden and unintended consequences, eg perceived postcode lotteries. While we recognised the potential improvement that an evolved approach to CVPs could bring, we stated that our preferred approach was to remove CVPs completely and to introduce an 'in the round' consideration of output proposals similar to Ofwat's PR24.
- 7.10 To incentivise the efficient delivery of outputs, we proposed in the SSMC either a modified version of the existing stage 3 (well-justified costs) and stage 4 (stretching-cost forecasts) BPI or; a more 'in the round' assessment of ambition without a breakdown between high and lower confidence costs recognising the potential for dilution of overall incentive strength relative to RIIO-2.
- 7.11 We also sought views on whether we should change the overall incentive value for RIIO-3 (from the +/- 2% cap in RIIO-2) and if so, whether this should be by adjusting the cap on the overall incentive or adjusting the penalty or reward value for any of the composite areas of the BPI.
- 7.12 Finally, we also asked stakeholders for views on any alternative approaches we could consider in place of an evolved BPI.

### **Summary of responses**

- 7.13 Fifteen stakeholders responded to our consultation questions on the BPI. The majority supported our proposed objectives for the truth telling incentive. Some suggested adding additional objectives such as managing risk, transparency and simplicity.
- 7.14 Several respondents emphasised the inherent tension between the objectives of ambitious cost forecasts and ambitious output proposals.
- 7.15 Irrespective of the incentive chosen, clearly prioritising and streamlining the incentive objectives and especially the minimum requirements of the BPI was an overriding theme coming out from stakeholder responses. Several of these suggested that minimum requirements should focus on completeness, and that quality is assessed in other stages of the overall incentive.

- 7.16 The vast majority of respondents welcomed the removal of stage 2 CVPs. Some suggested alternatives to CVPs if these were to be retained, such as improved guidance on priority areas.
- 7.17 Feedback was nearly evenly split on our questions around adopting an in-the-round assessment versus keeping the high-low confidence method of cost assessment. Half of stakeholders who responded to these questions supported the removal of the high-low confidence costs assessment, however some preferred it to an in-the-round assessment citing its greater objectivity.
- 7.18 A few respondents saw little value in applying the cost confidence method to certain sectors, eg GD. A few network companies disagreed with retaining the high-low confidence method on the basis of much lower supply chain and cost visibility, macro-economic factors and overall uncertainty in the transition to net zero.
- 7.19 A recurring concern amongst most respondents regardless of whether an assessment is conducted in the round or otherwise, was the need for objectivity, clarity and transparency in any assessment with many calling for disclosure of any benchmarks and methods of fair comparison amongst network companies. In addition, we noted a desire for any assessment methodology to be shared well in advance of business plan submissions.
- 7.20 There were a range of views on the size and strength of the BPI: some network companies supported the RIIO-2 level of +/- 2% totex with one network company suggesting that the overall cap and collar be defined in absolute monetary terms. Several respondents suggested that the strength of the incentive should be increased whilst others wanted it decreased. A non-network company which wanted the BPI 'sharpened' recommended a zero-sum incentive whereby higher quality business plans are rewarded from penalties levied on those companies with lower quality business plans.
- 7.21 Of those who did not support retaining the BPI at all, one approach suggested by network companies was a return to the Information Quality Incentive (IQI) framework.<sup>26</sup> Our review of all responses on this question revealed a dominant

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<sup>26</sup> The IQI was implemented in the DPCR5 and RIIO-1 price controls (2005-2021). In the IQI, the sharing factor was linked to the ratio of company submitted costs to Ofgem's view of efficient costs: submissions that were deemed less ambitious attracted lower sharing factors. Sharing factors were calibrated so that in combination with upfront rewards/penalties for submitted costs below/above Ofgem's efficient view, they would in theory provide companies with an incentive to submit forecasts that reflected their best view of costs over the price control.

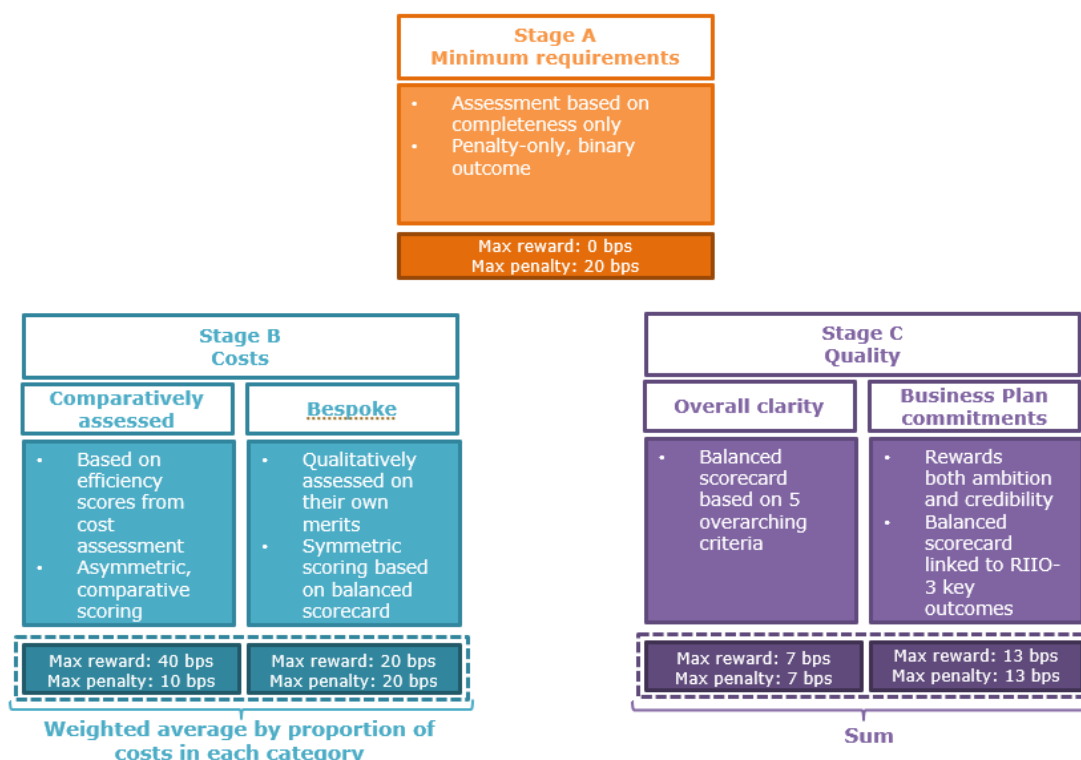
call for a holistic approach in the calibration of any iteration of the BPI as well as clarity and transparency in its mode of application.

### SSMD decision and rationale

#### Evolution of the BPI for RIIO-3

- 7.22 Based on positive feedback from most stakeholders, we have decided to retain the three overarching objectives that a truth-telling incentive should support (see paragraph 7.6).
- 7.23 Since SSMC, we have used these overarching objectives to develop the BPI for RIIO-3; building on the RIIO-2 BPI framework but streamlining, strengthening, and recalibrating the incentive, represented by the overview in Figure 1 below.

Figure 1: RIIO-3 Business Plan Incentive Overview



- 7.24 We have decided to determine BPI rewards and penalties using basis points (bps) of return on regulated equity (RoRE) against the equity portion of the RAV, rather than a percentage of allowed totex. This is to ensure consistency with the wider RIIO-3 incentive package, because RoRE better reflects what is directly relevant to investor returns, and to provide an incentive that is scaled more directly to the respective sizes of the companies.

7.25 The net reward or penalty for any given company will be calculated at Final Determinations, derived from the baseline RIIO-3 totex set at Final Determinations ie excluding re-openers under RIIO-3 and funding mechanisms outside of RIIO-3, where the quality of submissions and efficiency of solutions are managed through separate, defined processes. The calculation of the BPI is further described at paragraph 7.78.

7.26 For RIIO-3, the BPI assessment will comprise three stages:

- Stage A - we will assess whether a business plan contains the minimum amount of information required for us to set the price control effectively, in line with the BPG, focusing only on the completeness of the submission. This assessment will result in a penalty of 20 bps of RoRE if any minimum requirements are not met.
- Stage B - we will assess whether the costs submitted as part of the business plan are efficient and well justified. We will use two separate assessment methodologies, one for costs which are assessed comparatively between different companies, and one for more bespoke costs.<sup>27</sup> This assessment will result in a maximum reward of 40 bps of RoRE and a maximum penalty of 20 bps of RoRE.<sup>28</sup>
- Stage C - we will assess the quality of the business plan with regards to i) overall clarity and ii) the ambition and credibility of the commitments contained within it. Both of these elements will be assessed in the round. The assessment of clarity will account for one third of the reward/penalty for this stage, the assessment of commitments will account for the remaining two thirds. This assessment will result in a maximum reward or penalty of 20 bps of RoRE.

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<sup>27</sup> We will consider costs to be comparatively assessed where the assessment of their efficiency relies on cost information from other companies assessed under the price control. This may include cases in which the comparison is carried out across some but not all companies in a sector, or across multiple sectors in the same price control period (eg in RIIO-2 some costs were assessed comparatively across both ET and GT). For simplicity, however, we mostly refer to the example of costs compared across one sector.

<sup>28</sup> The overall reward or penalty for Stage B will be a weighted average of the reward/penalty for costs assessed using the two different methodologies, weighted by the proportion of total costs assessed under each. For comparatively assessed costs, the maximum reward will be 40 bps of RoRE and the maximum penalty 10 bps of RoRE (both multiplied by the proportion of costs that are comparatively assessed). For bespoke costs, the maximum reward and penalty will be 20 bps (multiplied by the proportion of costs that are bespoke).



- 7.27 The overall value of the BPI will therefore be capped at  $\pm 60$  bps of RoRE for each company.<sup>29</sup> We expect that the effect of this will be a strengthening of the incentive compared to the RIIO-2 BPI strength of 2% totex on a like-for-like basis, depending on the precise level of baseline totex for RIIO-3 and depending on the sector. See paragraphs 7.70 – 7.80 for further detail.
- 7.28 Our proposal has considered stakeholder feedback and learnings from RIIO-2, from which we have developed five design principles to define the detailed assessment methodology of all three stages of the RIIO-3 BPI:
- We only intend to issue rewards or penalties where there is a genuine information asymmetry, calibrating the value to be proportionate to the benefit or harm caused to consumers.
  - The rationale for issuing rewards or penalties under the BPI should be consistent with decisions made for other elements of RIIO-3, eg on cost assessment or for output incentives.
  - The categories and mechanisms of the BPI should not generate perverse incentives for companies to deviate from submitting their best view of the relevant information in their business plans.
  - There should be no duplication of the same incentive across different stages of the BPI. However, specific elements of a business plan, or specific information submitted in a business plan, may be relevant to the assessment of more than one stage of the BPI. In this case, the same information will be assessed in multiple stages of the BPI against different criteria, which create distinct incentives, each designed to promote different consumer outcomes. Because each stage assesses different criteria, the assessment of the same information against distinct incentives in multiple stages of the BPI is consistent with this principle.
  - The assessment process for the BPI should not add an excessive resource burden on either Ofgem or the companies submitting their business plans.
- 7.29 The BPI will only apply to baseline cost submissions and the information associated with them, and not to re-openers.<sup>30</sup> We will rely on the mechanisms of

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<sup>29</sup> The actual cap on the maximum penalty and reward under the BPI for any given company will vary depending the relative quantum of costs that are assessed comparably or on a bespoke basis at Stage B.

<sup>30</sup> "Cost submissions" for the purposes of the BPI will include baseline allowances which are subject to volume drivers but exclude any other UMs 7.70.

individual re-openers to perform the type of asymmetric information incentive functions which the BPI performs for baseline allowances.

- 7.30 Below, we set out in more detail our decision and rationale for the RIIO-3 BPI. Further guidance on how we will determine the rewards and penalties for each stage of the BPI can be found in the RIIO-3 BPG.

#### BPI stage A - minimum requirements

- 7.31 In Stage A of the BPI, we will assess whether network companies' business plans meet the minimum requirements that are set out in the BPG. Each minimum requirement will be assessed individually on a pass/fail basis, with the failure of a single minimum requirement resulting in the failure of a company under Stage A and a penalty of 20 bps of RoRE. Network companies that fail the minimum requirements will not be excluded from assessment under Stages B and C of the BPI.
- 7.32 Assessment of the minimum requirements will focus solely on completeness, ie whether the company satisfies each of the requirements set out in the minimum requirements or not. The quality of the business plan submission will be assessed separately, as part of Stage C (our methodology is described below).
- 7.33 As set out in our December proposals, we have taken steps to make the minimum requirements simpler, more transparent, and less resource intensive. We have streamlined the list of minimum requirements for RIIO-3, making sure that each individual requirement is discrete, clear and material.
- 7.34 The assessment of minimum requirements will be assessed on the information provided in the first submission of the business plan and will not cover subsequent information provided by the companies.

#### **Rationale for new approach to minimum requirements**

- 7.35 We have considered feedback from stakeholders and lessons learned from the RIIO-2 process, which indicated that the minimum requirements assessment from RIIO-2 needed to be made simpler, more transparent and less resource intensive. We consider that focusing minimum requirements on completeness alone (and assessing quality separately) achieves these aims, removing subjectivity and improving clarity for companies.
- 7.36 The minimum requirements represent the minimum information needed for Ofgem to set the price control effectively. As such, we consider it appropriate that companies are penalised for failing any one of the minimum requirements, and consider it disproportionate to reward companies for providing the information.

Having each minimum requirement as pass/fail only removes the need for a judgement on the materiality of a particular minimum requirement to the overall completeness objective, which is inherently subjective. However, we will ensure that our assessment of each minimum requirement is carried out with regard to the principles of proportionality.

#### BPI Stage B - efficient and well-justified costs

7.37 In Stage B of the BPI, we will assess the extent to which cost submissions in the business plans are efficient and well-justified. We have used the principles, efficiency and justification, to design the assessment process for all costs.

7.38 However, we have two distinct methodologies to assess the efficiency and justification of costs, which aligns with how different costs will be treated at cost assessment. We make the distinction for costs which are assessed comparatively between companies and costs which are assessed in a bespoke manner. We describe the methodologies for both in more detail below.

#### **Comparatively assessed costs**

7.39 For costs which are assessed through comparative benchmarking across the sector we will base the reward or penalty directly on the outcome of the cost assessment:

- The company with the lowest overall efficiency score (the frontier company) will receive the maximum reward.
- The company with the highest overall efficiency score with respect to the same costs (the most relatively inefficient company) will receive the maximum penalty.
- Companies with lower costs than the efficient benchmark will receive a reward proportionate to their (negative) catch-up efficiency challenge, with the maximum set by the frontier company.
- Companies with higher costs than the efficient benchmark will receive a penalty proportionate to their (positive) catch-up efficiency challenge, with the maximum set by the most relatively inefficient company.
- We will base this calculation on the average efficiency scores and the average benchmark across all years in the price control period.

7.40 The maximum reward and penalty for comparatively assessed costs are 40 bps and 10 bps of RoRE respectively, multiplied by the proportion of overall submitted costs which fall into this category that informs the equity RAV.

7.41 We will consider adjustments to the maximum size of the cap and penalty if the maximum levels appear disproportionate to the overall effects on our efficiency analysis and the impact on consumers. We would only do so if we felt that the incentive value was no longer proportionate. This may arise if the cost information provided in companies' business plans has limited importance in our assessment of efficient costs, or if the cost assessment suggests there is limited differentiation between companies.<sup>31</sup> In this case, the same assessment methodology would be followed, but using a lower maximum reward and/or penalty.

### **Bespoke costs**

7.42 For bespoke costs where like-for-like comparison between companies is not possible, we will assess them on their own merit, using the evidence provided in the business plans to justify them. The evidence required for the cost submissions to be well justified depends on the context of the specific submission and is likely to be sector-specific.

7.43 Given the nature of the assessment of bespoke costs, we will assess their level of justification through an in-the-round, qualitative assessment carried out by cost category. This assessment will cover the following three criteria, which will be equally weighted:

- Quality of cost evidence: whether the type of evidence provided to justify costs in this area is appropriate.
- Justification of unit cost efficiency: the extent to which the information which has been provided adequately supports the submitted unit costs in this area, taking the activity which is being funded as a given.
- Justification of volume efficiency: the extent to which the information which has been provided adequately supports the submitted volumes in this area, taking the activity which is being funded as a given.

7.44 We will carry out this in-the-round assessment for each cost area where there are bespoke costs, with the overall score for bespoke costs resulting from an average score for each cost area, weighted by the proportion of bespoke costs in each area.

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<sup>31</sup> Examples could include (but are not limited to) cases where all cost submissions less efficient than the benchmark were clustered very closely around the benchmark itself.

7.45 The maximum overall reward for the justification of bespoke costs will be 20 bps of RoRE, multiplied by the proportion of costs that fall into this category that informs the equity RAV. The maximum penalty will also be 20 bps of RoRE multiplied by the same proportion.

### **Categorisation of costs**

7.46 Costs can be categorised as comparatively assessed even if they are not benchmarked against all companies in the sector, or only against companies in that sector. For example, costs that are assessed using a combination of sector-wide and external benchmarking, or with the exclusion of some companies in the sector from the comparison, would still count as comparatively assessed so long as they result in a like-for-like comparison in efficiency scores across the sector. Combinations of top-down and bottom-up benchmarking methods which are then combined into aggregate efficiency scores would also count as comparative assessments.

7.47 The decision over which costs should be assessed comparatively across the sector and which should instead be assessed on their own merits as bespoke costs will not be part of the BPI assessment. This decision will be taken when carrying out the cost assessment and will be based on the type of activity that is being funded and whether a like-for-like comparison between different companies is appropriate or indeed possible.

7.48 When deciding whether a given cost should be treated as comparatively assessed or not, we will not base our decision mechanically on the specific method used to benchmark or assess that cost. Instead, we will base it on the extent to which the assessment of the efficiency of the cost relies on information from other companies in the same sector, and is therefore comparative in nature.

### **Eligible costs**

7.49 For the purposes of the BPI, by "submitted costs" we mean costs after the exclusion of any activities which were rejected on a needs case basis. The methodology will be applied after any potential scenario-related adjustments to ensure a like-for-like comparison of costs, but before catch-up efficiency challenges are applied. Baseline allowances for costs which are subject to a volume driver will be included, whereas any allowances associated with re-openers will be excluded.

7.50 When considering business plan commitments, we will only assess the costs of the relevant, related activity at Stage B. Ambition will be assessed as part of Stage C. This is in line with our design principle to avoid duplication of the same

incentive across multiple stages of the BPI. For comparatively assessed costs, efficiency will be assessed for comparable levels of activity. For bespoke costs, justification will be considered taking the activity to be funded as a given.

### **Rationale for the design of stage B**

- 7.51 We have decided that different mechanisms and different reward and penalty sizes for the two cost categories are appropriate. This is to align the BPI assessment with the cost assessment process and to ensure the incentive value is proportionate to the potential harm or benefit to consumers linked to the quality of the submitted information.
- 7.52 For comparatively assessed costs, the cost assessment will result in a quantitative, comparable scoring of the efficiency of each company's cost submission. As such, in line with our design principle to ensure consistency with decisions made elsewhere in assessing the information in the business plans, we decided to set the rewards or penalties based on a direct comparison of these efficiency scores.
- 7.53 We have set the maximum reward and penalty for comparatively assessed costs asymmetrically, with the maximum reward significantly larger than the maximum penalty. This is to reflect the asymmetry in the ability for companies to influence their own cost allowance (and therefore their own ex-ante incentive to inflate their true costs) when comparative benchmarking techniques are applied.<sup>32</sup>
- 7.54 In RIIO-2, companies which had submitted lower costs than their modelled efficient costs received allowances set at the level of their submissions. Companies that submitted higher costs, on the other hand, had their allowance capped at the level of their modelled efficient costs. The efficiency benchmark was also set at a specific percentile of the distribution of efficiency scores. These elements combined mean that companies submitting costs higher than the benchmark have a diminished ability to affect their (and other companies') cost allowance, which we have reflected in a significantly smaller maximum penalty.
- 7.55 We have set a symmetric reward and penalty value for bespoke costs as the asymmetry doesn't exist for this cost category. Additionally, we have set the

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<sup>32</sup> The cost assessment approach for RIIO-3 has not yet been finalised. However, if the ratchet is retained and a broadly similar approach to setting the efficiency benchmark is used, then companies above the benchmark have a lower ability to influence their own or the industries' allowed costs. When finalising our cost assessment approach, we will consider whether amending the ratchet (eg allowing companies which submit costs lower than their modelled efficient costs a proportion of the modelled efficient cost on top of their submitted level) delivers a net benefit to consumers.

maximum reward and penalty for bespoke costs at a proportionately lower level than that for comparatively assessed costs, as the cost information provided by each company is only used to set an efficient cost allowance for that specific company. This reduces the overall consumer benefit (or harm) that can be produced by this information. While this means that lower rewards and higher penalties can be awarded for bespoke costs, unlike comparatively assessed costs, bespoke costs are assessed on their own merit, and hence in principle all companies could be equally rewarded for well-justified bespoke costs.

- 7.56 Given the asymmetric incentive for comparatively assessed costs and the symmetric incentive for bespoke costs, the maximum reward for Stage B as a whole (+40 bps of RoRE) could only be attained by a company with 100% of its costs falling into the comparatively assessed category. Similarly, the maximum penalty (-20 bps of RoRE) could only be attained by a company with 100% of its costs falling into the bespoke category. We believe that the resulting difference in the overall strength and asymmetry of Stage B between companies is appropriate. This is due to the difference in the scale of risk to consumers arising from different levels of cost information asymmetry relating to comparatively assessed versus bespoke assessed costs as described above.

#### BPI stage C - quality of the business plan

- 7.57 The provision of high-quality business plans impacts consumers; enabling us to efficiently and effectively assess submissions and make determinations and ensuring that the networks are setting stretching and ambitious targets that improve service levels and add value. In Stage C, we will assess companies' business plans as a whole and assign a reward or penalty based on their overall quality. Our assessment is split into two components:
- the clarity of the business plan as a whole; and
  - the ambition and credibility of the commitments included in the business plan.

- 7.58 Below we provide an overview of these two components.

#### **Overall clarity**

- 7.59 We will assess the overall clarity of business plans against the guidance issued in Annex 5 of the BPG. We will issue rewards for business plans that are presented in a clear and coherent manner, with consistent overarching goals running through the different parts and where the demonstration of economic value to consumers is clear. By contrast, we will issue penalties for business plans that are

not presented clearly or coherently. We will base our assessment on the following criteria:

- Layout and structure.
- Accessibility and conciseness.
- Relevance of the information provided.
- Clarity of information that supports the demonstration of value to consumers.
- Coherence and justification.

7.60 The maximum incentive for the clarity component of Stage C will be  $\pm 7$  bps of RoRE, ie approximately one third of the maximum for Stage C as a whole.

### **Business plan commitments**

7.61 We will also assess the commitments contained in all sections of companies' business plans. This will include, but is not limited to, proposed targets for PCDs and ODIs, as well as any other proposed target or activity which is expected to deliver value for consumers. We expect each commitment to follow guidance issued in the BPG, and lead to the delivery of at least one of the following three overarching RIIO-3 outcomes:

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

7.62 The fourth overarching RIIO-3 outcome ("System efficiency and long-term value for money") is excluded from the above list as we expect it to be delivered through overall cost efficiencies which will be considered as part of the cost assessment process. As such, we will focus on the other three outcomes to avoid duplication of the same incentive across stages B and C.

7.63 We will assess each plan on its own merits, taking the wider context for that company and sector into consideration, rather than comparing commitments between companies or sectors. Scorecards published in Annex 5 of the BPG will be used to ensure transparency and consistency in rating companies for the purposes of Stage C.

7.64 Commitments will be grouped by the three outcomes listed in paragraph 7.61 and assessed qualitatively and in the round. The assessment will be based on the ambition of the proposed commitments, considering the extent to which the



commitments deliver value for consumers over and above what is currently delivered under RIIO-2, demonstrate a clear link with what consumers value for RIIO-3 and whether the commitments are underpinned by a credible needs case and delivery plan.

- 7.65 The maximum incentive for the commitments component of Stage C will be  $\pm 13$  bps of RoRE, ie two thirds of the maximum for Stage C as a whole.

### **Rationale for stage C**

- 7.66 Stage C has been developed in line with the principles outlined at the start of this section. It has been designed to target two areas, business plan clarity and ambitious and credible commitments, where we have identified an information asymmetry which could reduce positive outcomes for consumers.
- 7.67 We will assess the overall clarity of business plans as it is important in determining our ability to set the price control effectively. We have decided to change our RIIO-2 approach and separate the assessment of clarity from that of minimum requirements, to ensure that Stage A of the RIIO-3 BPI is an objective assessment against the minimum requirements, whilst the assessment of clarity (which is inherently qualitative) can be assessed using a balanced scorecard.
- 7.68 We are also incentivising the submission of ambitious and credible business plan commitments. Without an upfront incentive to submit credible and ambitious commitments, companies would not be motivated to reveal opportunities for higher ambition and to create additional value for consumers in their business plan. However, these commitments should only be rewarded when they are based on a credible plan with good evidence that deliverability has been considered carefully and that they are generating additional value for consumers. For these reasons, we have designed a scorecard assessing ambition with reference to credibility, additionality and alignment with customer needs, as set out in Annex 5 of the BPG.
- 7.69 With our new approach, we have listened to stakeholders, and have moved away from the CVP submission and assessment which was used in RIIO-2. Our decision reflects the feedback that CVPs led to a significant level of resource burden for little consumer gain. We consider that our assessment of ambitious commitments as part of our new Stage C better targets the desired consumer benefit, promoting the revelation of ambitious commitments for consumers, whilst reducing the resource burden on both the companies and Ofgem.

### Strength of the BPI

- 7.70 Unlike RIIO-2, we will calculate BPI rewards and penalties using basis points of RoRE against the equity portion of the RAV, rather than a proportion of allowed totex. This is to ensure consistency with other incentives in RIIO-3, because RoRE better reflects what is directly relevant to investor returns and to provide an incentive that is scaled more directly to the size of the companies. For example, a company with a small RAV that is proposing a sharp increase in totex for RIIO-3 could be exposed to a disproportionate level of risk from BPI in RoRE terms under the RIIO-2 approach, whereas the RIIO-3 approach would be directly proportionate to the size of the RAV and value at risk to equity, at the notional gearing.
- 7.71 This consistency around the use of the RAV to determine the value of the BPI and the rewards and penalties under each of the three stages meets our wider simplification objective and means that we are treating companies in different sectors on a consistent basis.
- 7.72 The outturn strength of Stage B, being a function of the proportion of comparatively assessed and bespoke assessed costs as determined by Ofgem, means that the maximum overall BPI reward and penalty applicable to companies in practice (ie the 'effective' cap and collar) varies, and is likely lower than the headline cap and collar of  $\pm 60$  bps. This is a logical consequence of the calibration of Stage B for different types of costs, in accordance with our design principle that we will issue rewards or penalties to target information asymmetry, calibrating the value to be proportionate to the benefit or harm caused to consumers.
- 7.73 **Table 6** shows the resulting overall effective cap and collar strength under scenarios representing different proportions of costs being assessed comparatively versus being assessed on a bespoke basis.

**Table 6: Effective cap and collar strength under different cost proportion scenarios<sup>33</sup>**

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<sup>33</sup> Eg at 50%, Stage A max penalty is 20bps, Stage B max penalty is (50% \* 10bps + 50% \* 20bps) and Stage C max penalty is 20bps, resulting in an overall effective max penalty of 20 + 15 + 20 = 55bps

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<b>Proportion of RIIO-3 baseline costs assessed comparatively</b>	<b>Effective Strength Max penalty (bps RoRE)</b>	<b>Effective Strength Max reward (bps RoRE)</b>
0%	-60	40
50%	-55	50
100%	-50	60

- 7.74 We have decided to set the headline BPI cap and collar at  $\pm 60$  bps of RoRE after considering the potential effective strength under various spend scenarios for RIIO-2 and RIIO-3 and cost proportion scenarios for RIIO-3. Our objective in setting the BPI strength has been to ensure that the effective strength is at least as strong as the RIIO-2 incentive, on a like-for-like basis.<sup>34</sup> Our analysis suggests that a headline cap and collar of  $\pm 60$  bps – and the implied effective strength – achieves this objective for the vast majority of companies, ie there is at least a slight increase in strength in almost all cases.
- 7.75 However, there are significant differences in the level of increase against RIIO-2 BPI strength because of the change in calculation basis from allowed totex to equity RAV. This is because network companies – including those of the same or similar size – can have materially different ratios of totex to equity RAV. In the gas sectors we expect that the effect of this will be a slight to moderate strengthening of the effective cap and collar compared to the RIIO-2 BPI cap on a like-for-like basis. In ET, depending on the final levels of baseline totex, the RIIO-3 effective cap and collar could be a moderate to significant strengthening of the incentive compared to the RIIO-2 BPI.
- 7.76 We considered setting the cap and collar lower than  $\pm 60$ bps of RoRE but this would have risked diluting the incentive relative to RIIO-2 on a like-for-like basis for many GD companies, when the effective strength is taken into account. A materially higher cap would have resulted in very significant increases in the strength for some companies, such as ET companies.
- 7.77 On balance we believe  $\pm 60$  bps of RoRE achieves an appropriate balance between ensuring the BPI continues to address information asymmetry, reducing the risk of consumer harm and setting excessively high penalties and rewards that may not be in the interest of consumers. We also believe that this overall strength is

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<sup>34</sup> For the purposes of determining the counterfactual strength we have used indicative estimates for RIIO-3 baseline totex and a cap of 2% of allowed totex, as was the case for RIIO-2.

appropriate given our decision to no longer link sharing factors under the TIM to the BPI assessment. This means that a strong incentive is needed to ensure that upfront incentives to reduce information asymmetries outweigh perverse incentives to inflate cost submissions in order to outperform them in period.

- 7.78 The monetary value of the BPI will be calculated at Final Determinations and applied annually. The annual values shall be calculated ex ante as the assessed total reward or penalty measured in basis points of RoRE (capped at  $\pm 60$  basis points), multiplied by the equity portion of the forecast NPV-neutral RAV for the respective year, based on the relevant notional gearing assumption for each licensee. The NPV-neutral RAV for the purpose of the BPI shall be derived from the baseline RIIO-3 totex set at Final Determinations, excluding RIIO-3 re-openers, RIIO-2 re-openers (eg ASTI, LOTI and MSIPs), use it or lose it allowances (UIOLI), opex escalator, ongoing efficiency and RPEs, but including volume drivers with baseline volumes. The total monetary value of the BPI for the RIIO-3 price control period shall be the sum of the respective annual values.
- 7.79 Stage A and Stage C will be assessed using the business plan and supporting information submitted by the relevant network company. Where a network company is responsible for more than one network, Stage B will be assessed and calculated at the level of each network, consistent with the cost assessment process.
- 7.80 We will make our decision on the BPI with regard to the principles of transparency, accountability and proportionality and other principles of best regulatory practice. At Draft Determinations we will publish a summary of our assessment, including, for each company, the proportion of costs that have been assessed comparatively and on a bespoke basis and the scores for the two parts of Stage B, the scores for the two parts of Stage C and whether or not a company has failed to meet the minimum requirements at Stage A.

### **Totex Incentive Mechanism**

- 7.81 In RIIO-2, the TIM worked as a symmetrical risk-sharing incentive to ensure that consumers and the companies both benefit from in-period efficiencies, ie companies and consumers share any underspend against relevant expenditure allowances, and also share the risk of any overspending. It is important to note that the TIM is designed to apply to expenditure which is not subject to a UM (eg a volume driver or pass-through), where a different risk sharing arrangement applies.

7.82 The CDIR<sup>35</sup> from stage 4 of the BPI was used to calculate a TIM sharing factor for each company in RIIO-2. The RIIO-2 TIM rates are set out in Table 7.

Table 7: RIIO-2 TIM Sharing Factors:

<b>Network Company</b>	<b>% of Totex</b>
NGET	33%
SPT	49%
SHET	36%
Cadent	50%
NGN	49%
SGN	50%
WWU	50%
NGT	39%

### **SSMC summary**

7.83 We proposed to retain the TIM in RIIO-3 with the following key objectives:

- Incentivising efficient delivery of outputs in the price control period.
- Sharing the benefits and risks from over-/under performance in a manner that contributes to addressing information asymmetry.

7.84 We highlighted the need for simplicity and transparency as well as proportionality in the required level of resource intensity throughout the regulatory process.

7.85 We also sought feedback from stakeholders on the overall incentive strength for the TIM, as well as how to set the sharing factors in RIIO-3, including three options we were considering;

- Retain the CDIR based approach, but with enhanced guidance.
- Utilise a mechanism like the IQI or the Ofwat PR24 approach.
- Fix the TIM in line with current rates, or on a sector basis.

### **Summary of consultation responses**

7.86 We received 17 responses to the consultation question on options for setting the TIM and its overall strength in RIIO-3.

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<sup>35</sup> A high-low confidence method of cost assessment.

- 7.87 Most stakeholders agreed with retaining a TIM in RIIO-3 to encourage companies to be efficient in their delivery of outputs and services. However, one consumer group considered that 100% of any unspent allowances should be returned to consumers given the increasing number of households experiencing fuel poverty due to high energy prices and the cost-of-living crisis.
- 7.88 Most stakeholders also supported a TIM reset for the RIIO-3 period. However, one GDN considered that there was no evidence for a fundamental change in the sharing factors from RIIO-2. It suggested that a simple 50% TIM is applied to all GDNs.
- 7.89 A consumer group considered that setting a low sharing factor of 10% across all sectors would be appropriate so that consumers benefit more from companies underspending against their allowances. The group said that it finds little evidence that the size of the sharing factor has a significant impact on the level of underspend that occurred under RIIO-1.
- 7.90 None of the TOs supported any of the three options discussed in the SSMC for setting the TIM in RIIO-3. They had various concerns including the challenge of differentiating high and low confidence costs for the CDIR in a period of increased input cost volatility in RIIO-3; the IQI option lacked transparency for wider stakeholders; and that a PR24-type approach could weaken the efficiency incentive, one of the primary objectives for the TIM, as it is based on an overall plan assessment, eg quality and ambition.
- 7.91 Instead, the TOs proposed adopting a risk-based approach to setting the TIM to address what they see as a heightened risk of underperformance given the large investment requirements and input cost volatility. However, each TO had a different view on how this might be achieved. One proposed setting a lower-powered, symmetrical 10% sharing factor; another suggested that out- or underperformance is subject to a cap and floor to manage the higher risk of costs falling above or below allowances; and another highlighted the option of an asymmetrical sharing factor ie high for underspend and low for overspend.
- 7.92 In the gas sectors, views were more mixed. As noted above, one GDN considered that the RIIO-2 sharing factors should be retained. However, none of the other gas network companies agreed with retaining the RIIO-2 sharing factors, although their reasons varied. One said that resetting the TIM provides an incentive to improve costs estimates between price controls. Another said that historical delivery and cost performance should also be considered when setting the TIM sharing factors. The other two networks had similar views to ET, and said

that the TIM setting approach in RIIO-3 should consider the volatile cost environment and potentially set a different sharing factor for costs with higher/lower uncertainty.

### **SSMD decision and rationale**

- 7.93 In line with the positive feedback from most stakeholders, we have decided to retain the TIM in RIIO-3, with the overarching objectives presented in paragraph 7.83, albeit with an update to the second objective to reflect that risk sharing is also to help companies to appropriately manage risk to equity returns, and not just to help address information asymmetry. We consider it is important to retain the TIM as it will have a vital role in encouraging the companies to deliver a low-cost transition to net zero as efficiently as possible and with an appropriate balance of risk and reward.
- 7.94 We have considered stakeholders' diverse feedback in relation to the options for setting the TIM and the strength of the sharing factors. We have decided that it is appropriate to review the TIM strength for RIIO-3 but to wait until Draft Determinations to confirm the specific application and calibration. We consider it important that we first assess the companies' RIIO-3 business plans and take certain policy-specific decisions on their own merits (eg on cost assessment methodology or uncertainty mechanisms), as well as the expected mix of baseline totex versus totex that is subject to a UM, to understand the RIIO-3 package in totality, and the residual risk profile(s) for each sector/company, before we take detailed decisions on TIM.
- 7.95 Our guiding principles for applying and calibrating the TIM are that it should:
- encourage in-period efficient expenditure;
  - be relatively simple;
  - minimise gaming opportunities;
  - be proportionate to the size of opportunity/risk in expenditure allowances;
  - allocate risk to the party best placed to manage these; and
  - take account of the wider price control package (including cost of capital).
- 7.96 On our approach to calibrating the precise rate/s, we expect to adopt a qualitative and quantitative assessment of relevant factors, rather than mechanically derive the TIM based on a single aspect, such as the cost confidence assessment in RIIO-2. This means we could end up with different TIM outcomes for different sectors and different companies, as we did in RIIO-2.

7.97 At this stage, we advise companies that using a sharing factor in the range of 20-50% is plausible for the purpose of business planning and financeability analysis.

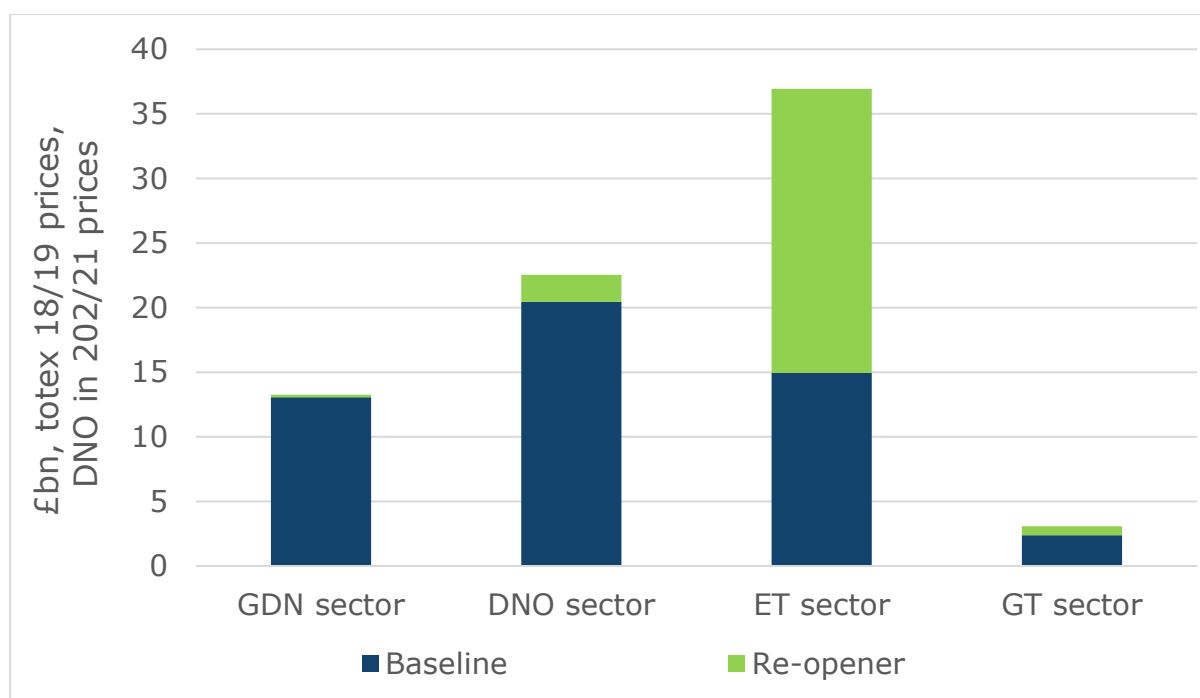


## 8. Managing Uncertainty

### Introduction

- 8.1 A key challenge in setting price controls lies in confidently forecasting costs and outputs for the duration of the price control period due to potential changes in a network company’s activities, investments, and costs.
- 8.2 When a company faces uncertainties that could significantly impact its expenditure and are beyond its control, the application of a UM may be suitable. UMs enable network company revenues to adjust according to changes in requirements, thereby reducing our need to set allowances based on forecasted requirements and safeguarding both consumers and companies from forecasting risk. Figure 2 compares the relative importance of UMs for managing less certain expenditure requirements in each sector over RIIO-2. The sector with the greatest amount (and proportion) of allowances potentially subject to UMs over RIIO-2 is ET. This trend will continue, with a significant focus on managing uncertainty in RIIO-ET3.

Figure 2: Baseline and UM expenditure<sup>36</sup> by sector during RIIO-2



- 8.3 In our Framework Decision, we outlined a variety of UMs to address these forecasting risks. These include:

<sup>36</sup> UM expenditure is an estimated value based on current intelligence of future re-opener activity.

- re-openers to decide on high value projects when there is more clarity on the need, scope, and costs during the price control period;
- volume drivers for activities with established costs but where there is uncertainty about the quantities needed;
- UIOLI allowances to deliver outcomes where the specific nature of work will be decided within period (often in consultation with stakeholders) and the total amount of expenditure is expected to be relatively low materiality;
- indexation for price uncertain changes over the period; and
- pass-through costs for expenditure entirely outside the network company's control.

8.4 In RIIO-2, we implemented UMs that are common across sectors, others that are sector-specific or shared across some but not all sectors, and others that are company-specific within a sector (see sector-specific annexes for more detail on the latter). We said at SSMC that we plan to continue this approach in RIIO-3 to ensure that UMs are correctly focused.

## **Cross-sectoral uncertainty mechanisms**

### **Net Zero Re-opener**

#### SSMC summary

- 8.5 We proposed to retain the Net Zero Re-opener with the same RIIO-2 parameters which gave us sole right to trigger the re-opener and set a materiality threshold of 0.5% of ex ante base revenue for such a process.
- 8.6 We set out that the re-opener provides an avenue to address new developments related to meeting net zero targets not covered elsewhere in the price control.

#### Summary of consultation responses

- 8.7 Stakeholders supported retaining the Net Zero Re-opener for RIIO-3 stating that it acts as a safety net where there is uncertainty in government policy. Moreover, respondents generally agreed with retaining the re-opener under the existing RIIO-2 parameters.
- 8.8 However, some respondents raised contrasting views in relation to the scope and re-opener trigger.
- 8.9 With respect to the scope, a GDN stated that it should be reviewed to ensure all possible situations are covered. In contrast, a DNO stated that the scope is too

broad and the trigger should be limited only to major changes in government policy. Similarly, a TO stated that the re-opener is vague and not well defined.

- 8.10 Another TO stated that the scope should incorporate environmental commitments to address key drivers of nature loss or Science Based Targets into the scope of the re-opener. It also stated that the Net Zero Advisory Group should be able to trigger the re-opener, as its role is to consider potential proposals for anticipatory funding and delivery of strategic innovation funding arrangements.
- 8.11 A TO stated that network companies should be able to trigger applications under the re-opener where they can evidence that a net zero development (as defined in the licence) has taken place. A GDN stated that we should ensure the re-opener has the necessary flexibility and scope; and that the triggering process is effective.
- 8.12 A TO highlighted that under the current parameters, network companies must accept the burden of costs under this re-opener until formal cost assessment, placing risk on network companies. It argued that the re-opener should instead split out scope/need and cost assessments, as this would provide more clarity.

#### SSMD decision and rationale

- 8.13 Net zero is central to the design of RIIO-3 and it is foreseeable that changes in government policy over the RIIO-3 period could have an impact on the price control. Our decision is to retain the Net Zero Re-opener to increase adaptability of the price control to changes relating to meeting net zero targets which are not otherwise captured by any other RIIO-3 mechanism.
- 8.14 We have decided that the Net Zero Re-opener should remain Authority triggered. Retaining the Authority trigger ensures that it is only used where it is the most appropriate mechanism to deal with any given change and its retention means that we are satisfied that there is a level of certainty over the change in question. Additionally, it ensures that we are satisfied with the impact of change in question and whether it should be funded via consumers.
- 8.15 The Net Zero Re-opener will retain the 0.5% of ex ante base revenue materiality threshold. We consider the level of the threshold strikes an appropriate balance in protecting network companies and customers. It ensures that Ofgem and network companies only deal with changes that are sufficiently material and where the costs of using the mechanisms are clearly outweighed by the expected benefits.
- 8.16 We will not change the scope of the Net Zero Re-opener. We consider that the scope is suitable for RIIO-3 as it is adaptable to a wide range of net zero

developments, such as changes in national or local government policy, recommendations made by the RESP in GD,<sup>37</sup> or changes in the pace or nature of the connection of new low carbon generation and the uptake of low carbon technologies.

## **Net Zero and Re-opener Development Fund UIOLI allowance**

### SSMC summary

- 8.17 We proposed to retain the Net Zero and Re-opener Development Fund UIOLI allowance (NZARD) for RIIO-3 to fund small net zero facilitation projects and early development work in RIIO-3 for the GT, ET and GD sectors.
- 8.18 We stated that the scope may vary relative to RIIO-2 to take into account the changing context for these types of projects and interactions with other RIIO-3 mechanisms. For example, we highlighted that many of the gas projects funded through this allowance in RIIO-2 have been hydrogen related, which may no longer be needed following the creation of the HTBM and government decisions on hydrogen heating in 2026.<sup>38</sup>
- 8.19 Moreover, in ET, we acknowledged that it may be more efficient to integrate this funding with the RIIO-3 equivalent of Medium Sized Investment Projects (MSIP) Re-opener.

### Summary of consultation responses

- 8.20 There was stakeholder agreement on the proposal to maintain the NZARD for RIIO-3. Stakeholders stated that it has been a useful mechanism in taking forward specific projects under the relevant re-openers.
- 8.21 A GDN stated that this UIOLI could still have a role for gas projects despite the introduction of the HTBM and prior to government decisions on hydrogen heating in 2026. Similarly, National Gas stated that the NZARD was important for hydrogen and CCUS activities. However, a supplier stated that we should limit spending from GDNs on hydrogen or heating trials ahead of the 2026 government decision on heat. Another stakeholder stated that we should also consider energy efficiency projects within the scope of the NZARD.
- 8.22 A TO stated that the current parameters make it difficult to fund the development of larger scale transmission projects to a point of providing a full project

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<sup>37</sup> See Chapter 2 of the GD Annex.

<sup>38</sup> See Chapter 4 for more detail on hydrogen.

assessment submission. Therefore, it suggested that the NZARD should only focus on the development and advancement of Net Zero Re-opener projects as they are likely to be more innovative and have a higher development risk. This TO also proposed increasing the value of the UIOLI allowance to £50m with a £10-£15m per project cap to reflect the scale of projects being progressed.

- 8.23 Another TO proposed that projects proceeding under all re-opener mechanisms should be provided with pre-construction and early-construction funding, removing the need for this UIOLI. This would provide transparency on the use of the funding, consistency with other mechanisms and clear linkages to specific projects.
- 8.24 A DNO stated that the UIOLI allowance does not incentivise efficiency and should be ring-fenced to projects that are critical for enabling net zero.
- 8.25 A supplier stated that we should consider the linkage between the UIOLI allowance and spending from GDNs on hydrogen or heating trials and limit such trials ahead of the 2026 government decision on heat.

#### SSMD decision and rationale

- 8.26 Our decision is to retain the NZARD UIOLI allowance for RIIO-3. However, we have decided to adjust the scope of the allowance to reflect the changing landscape across the different sectors and ensure the NZARD interacts efficiently with other UMs across the package.
- 8.27 Therefore, for RIIO-3 the NZARD will be used to fund small net zero facilitation projects and to allow early development work on projects that companies intend to bring forward under the following re-openers:
- ET, GT and GD - Net Zero Re-opener;
  - GT and GD only - Net Zero Pre-construction and Small Projects Re-opener; and
  - GD only - Heat Policy Re-opener and New Large Load Re-opener (if net zero related).
- 8.28 The MSIP re-opener will no longer exist in RIIO-ET3 as it has been replaced by alternative mechanisms, described in Chapter 2 of the ET Annex, which include provisions for development funding. As such, development of MSIP projects may no longer be funded under this UIOLI.
- 8.29 For GD and GT, we have decided to continue to enable the NZARD to fund small gas net zero facilitation projects and to allow early development work on projects

that companies intend to bring forward under the suite of net zero related re-openers above. We think this is appropriate as these are the re-openers within RIIO-3 that directly link to changes that are facilitated by the transition to net zero.

- 8.30 We have decided to include shrinkage related projects as an eligible cost area under the NZARD UIOLI allowance in RIIO-3.<sup>39</sup> This will fund shrinkage related activities to enable NGT and the GDNs to speed up the pace of transitions and mitigate shrinkage.
- 8.31 In relation to the materiality of the NZARD, for gas network companies we have decided to retain the RIIO-2 allowances for RIIO-3, summarised in Table 8 below. If network companies think allowances should be higher, appropriate justification must be provided in their business plans. In ET, because the NZARD only applies to the Net Zero Re-opener, the NZARD will have a value of £0 at the start of the price control, which we will have the ability to adjust if we consider it likely that a TO will need to undertake development work on a potential Net Zero Re-opener project.

Table 8:RIIO-3 NZARD UIOLI allowance

<b>Network</b>	<b>Allowance (£m)</b>
Cadent	19.8
NGN	4.5
SGN	10.8
WWU	4.7
NGT	8.7
Total	48.5

## **Net Zero Pre-construction Works and Small Net Zero Projects Re-opener**

### SSMC summary

- 8.32 In RIIO-2, gas network companies can access funding for material design and pre-construction work through the Net Zero Pre-construction Works and Small Net Zero Projects (NZASP) Re-opener. The re-opener allows companies to progress smaller net zero facilitation projects that are not in scope of the Net

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<sup>39</sup> See Chapter 2 of the RIIO-3 Gas Distribution Annex and Chapter 2 of the Gas Transmission Annex.

Zero Re-opener but exceed the materiality cap of (or are not suitable for) the NZARD UIOLI allowance.

- 8.33 In our SSMC, we proposed to retain the NZASP Re-opener in RIIO-3 for gas network companies with the same parameters and scope as in RIIO-2. We also asked for stakeholder views on whether we should retain NZASP as a separate UM or merge it with the Net Zero Re-opener and/or the NZARD. We recognised that if net zero UMs were to be merged, the scope of a single mechanism would need to be considered.

#### Summary of consultation responses

- 8.34 We received 13 responses to our NZASP proposals; the majority of stakeholders supported our proposal to retain the separate NZASP Re-opener. National Gas supported the consolidation of the NZASP Re-opener and the Net Zero Re-opener as it said this would make applications quicker, reduce funding gaps between project stages and allow different stages of net zero projects to scale up. However, a DNO suggested that we consider whether the re-opener is required at all as the NZASP and NZARD cover the same scope. It suggested that we increase the cap on the NZARD UIOLI allowance.
- 8.35 We received additional responses to the consolidation of the net zero UMs in the NZARD UIOLI responses. The majority of stakeholders highlighted that the UIOLI allowance plays a different role to the two re-openers, further supporting retaining separate mechanisms. However, a DNO suggested that whilst the intention to reduce the number of re-openers is positive, it must not be assumed that doing so will reduce resource burden.
- 8.36 Additionally, we received suggestions regarding the scope of the re-opener. A consumer group suggested that we should consider whether NZASP could overlap with the HTBM. Two GDNs and National Gas suggested various areas that the NZASP Re-opener could include:
- biomethane injections;
  - hydrogen blending;
  - interactions with the HTBM;
  - methane emission reductions;
  - carbon capture and storage; and
  - NESO strategic planning.

8.37 National Gas also suggested that costs submitted by GDNs under this re-opener should not automatically be considered as a pass-through via National Gas charges.

#### SSMD decision and rationale

8.38 We have decided to retain the NZASP Re-opener and to retain all the net zero UMs (Net Zero Re-opener, NZASP and NZARD UIOLI) as individual mechanisms in RIIO-3. We think it is important for gas network companies to continue undertaking discrete net zero projects and methane reduction projects to support the net zero transition, therefore we will continue funding this area. We also consider the NZASP Re-opener an important mechanism to bridge the funding gap between the NZARD UIOLI and the Net Zero Re-opener. As supported by respondents, we think each mechanism has its own purpose and has been designed to fund different projects at different financial materialities.<sup>40</sup> Additionally, we consider that consolidation could add more complexity to the use of the net zero UMs in RIIO-3.

8.39 We have also considered stakeholder responses regarding the widening of the scope of the NZASP Re-opener for specific projects and we plan to further develop the scope of the re-opener as part of the licence drafting process. However, we reject the proposal to include costs associated with NESO strategic planning as work associated with NESO will be funded and accounted for in the price control under the Gas Strategic Planning Re-opener (see Chapter 2 of our GT annex) and the Net Zero Re-opener for RESP recommendations. We will also ensure that there are no overlaps with the HTBM and CCUS business model to avoid duplication – including not providing capex or devex funding for hydrogen transport infrastructure in line with our decision set out in Chapter 4.

8.40 In addition, we will continue to enable the GDNs to socialise NZASP project costs across all GB consumers, where the projects produce wider social benefits across GB customers, via a National Gas pass-through. However, the GDNs should not assume this is the default. We will review the NZASP Governance Document to make sure this is clear.

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<sup>40</sup> Materialities refers to the costs of a project.



## **Non-operational IT capex re-opener**

### SSMC summary

8.41 We proposed to retain a UM which allows network companies to bring forward additional projects on non-operational IT capex to adjust allowances for new statutory/regulatory requirements relating to IT systems. We also sought views on whether a mechanism comparable with the RIIO-ED2 Digitalisation Re-opener was preferable to the RIIO-2 mechanism.

### Summary of consultation responses

8.42 Only three network companies responded to the SSMC proposals for the Non-Operational IT Capex Re-opener. All three supported retaining a re-opener given current uncertainty around the timeline and full scope of digitalisation requirements in the RIIO-3 period (including regulatory reporting, open data platform, Virtual Energy System etc) which make it challenging to reliably forecast costs in this area. They also agreed in broad terms to re-purposing the Non-operational IT Capex Re-opener as a digitalisation re-opener.

8.43 One network company asked for clarity about the materiality threshold, specifically, if the trigger would be project costs greater than 0.5% of the totex baseline position for their IT submission.

### SSMD decision and rationale

8.44 We have decided to replace the RIIO-2 re-opener with a common digitalisation re-opener for GD, GT and ET, comparable to the mechanism currently operating in RIIO-ED2. Data and digitalisation are key to enabling products, new services and interfaces for consumers and industry participants, but there is some uncertainty about the timing and full scope of developments required in this area. This re-opener will ensure that the network companies are able to respond when there is more information about the required developments in their roles and responsibilities.

8.45 We confirm that the re-opener will be subject to a materiality threshold such that we will only adjust allowances if changes set a materiality threshold of 0.5% of ex ante base revenue, exceeds a threshold of 0.5% of annual average base revenues.<sup>41</sup>

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<sup>41</sup> This materiality threshold is consistent with that adopted for the digitalisation re-opener operating in RIIO-ED2.

## Coordinated Adjustment Mechanism Re-opener

- 8.46 In RIIO-2, we introduced the Coordinated Adjustment Mechanism (CAM) Re-opener to facilitate the transfer of activities and associated revenues from one network company's price control to another. It is intended to protect consumer interests by enabling the reallocation of responsibility for, and revenue associated with, an output or project from one network company to another who can deliver that output or project with greater overall value for consumers.
- 8.47 The mechanism, which has an annual window in May, allows network companies to voluntarily submit applications without a materiality threshold. These submissions are evaluated based on the consumer benefits of reallocating activities rather than project costs. Despite its availability, the CAM has not been used in the RIIO-2 price control, with some network companies indicating a lack of incentive due to the effort required to trigger the re-opener.

### SSMC summary

- 8.48 We proposed to maintain the CAM for RIIO-3 as it can potentially deliver more benefits to consumers through the reallocation of outputs/projects to other network companies. However, we noted its lack of use in the RIIO-2 price control and the feedback from network companies could indicate a lack of sufficient incentive to use the mechanism.
- 8.49 We said the mechanism could be valuable in RIIO-3 due to the increased emphasis on whole systems strategic planning, which includes managing interactions between TO/DNO at voltage boundaries and DNOs/GDNs around electrification of heat.

### Summary of consultation responses

- 8.50 We received 14 responses to our SSMC which asked respondents if they agreed with our proposed position to retain the CAM in RIIO-3. We also solicited feedback on how to enhance the utilisation and value of this mechanism. Half of the respondents agreed with the proposed position to retain the CAM for RIIO-3. A further five saw benefits but also had concerns about keeping the CAM, believing that it could be more beneficial in RIIO-3 with certain modifications, despite its limited use in RIIO-2.
- 8.51 One DNO and one GDN opposed the retention of the CAM. The DNO contends that the introduction of the SSEP, CSNP, and RESP for RIIO-3 makes the CAM redundant. The GDN said that the current design of CAM won't achieve the desired whole system benefits as described in the SSMC.

8.52 Different views have been expressed regarding the use of CAM. One TO and National Gas call for a broader and more flexible application. One GDN expressed the view that whilst they support the principle of retaining the CAM, they felt it was unlikely to be utilised in the RIIO-3 period without greater incentivisation, guidance and government policy. One supplier and one TO emphasised the need for financial incentives, with the TO suggesting a unique incentive structure. One DNO anticipates an increased use of the CAM with the establishment of NESO due to improved accountability. In contrast, another DNO suggested an alternative mechanism, the Net Zero Re-opener, for significant cross-vector benefits to consumers.

#### SSMD decision and rationale

8.53 We have decided to retain the CAM in RIIO-3. We consider that the rationale to encourage the licensees to adopt whole systems strategic planning remains valid, particularly in advance of the full deployment of the soon to be established NESO's system planning responsibilities.

8.54 While we note the re-opener has not been used to date, we consider it is inappropriate to introduce an ODI-F in this area because of the significant gaming risk. However, we think there is scope to increase flexibility and further encourage use, through other potential adaptations, such as:

- removing the annual window to allow submissions to be made on an ad hoc basis;
- allowing a single network company to unilaterally submit an application, subject to the CAM proposal being verified and supported by the NESO; and
- the Authority being able to trigger a re-opener on the NESO's advice about a CAM proposal/opportunity that would be in consumers' interests.

8.55 We consider that the second and third options would have the benefit of encouraging network companies to think critically about the best whole system outcome and would also prevent proposals being arbitrarily blocked by another network company that was concerned about a decrease to its RAV.

8.56 Ahead of Draft Determinations, we will further consider if one or more of the above options, as well as other non-financial incentive modifications to aspects of the CAM re-opener framework, should be adopted to help the networks to take forward CAM proposals in consumers' interests during RIIO-3.

## **Physical security**

- 8.57 Network companies are responsible for a number of sites that are considered by the government as Critical National Infrastructure (CNI). Through the Physical Security Upgrade Programme (PSUP), network companies have worked with government and the National Protective Security Authority (NPSA) to identify CNI sites and implement measures to enhance their physical security where required. We provide network companies with allowances to implement the physical security enhancements recommended by DESNZ and NPSA.
- 8.58 Government<sup>42</sup> reviews physical security policy and updates guidance every two years. The result of the next review is expected to be published before business plans are submitted for RIIO-3, with the following CNI review planned to start in 2026, at the start of RIIO-3.

### SSMC summary

- 8.59 We proposed to include a re-opener to adjust allowances in the event of changes to the scope of physical security work required during RIIO-3, as was the case in RIIO-2. However, instead of establishing a dedicated re-opener for physical security, we proposed instead to allow network companies to use the new resilience re-opener for costs associated with this area. We consulted on whether physical security costs should be submitted through a broader resilience re-opener.
- 8.60 We considered that introducing a broader resilience re-opener, through which physical security costs can be submitted, would reduce the overall complexity of the RIIO-3 price control.

### Summary of consultation responses

- 8.61 We received 14 stakeholder responses (of which 11 were network companies) in respect of allowing physical security costs to be submitted through a broader resilience re-opener.
- 8.62 There was almost unanimous agreement to the proposal to allow physical security costs to be submitted through a broader resilience re-opener. One respondent stated that there should instead be two potential routes for updating physical security allowances.

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<sup>42</sup> NESO supports governmental CNI reviews.

- 8.63 The majority of respondents (nine out of 14 respondents) called for flexibility within the re-opener to be able to handle uncertainties and updates to information. Seven respondents voiced support for the scope of the re-opener, highlighting the need to be able to respond to government updates to the requirements for CNI sites. Three respondents stated that they are concerned physical security only applies to CNI/NPSA sites and that other drivers would be overlooked, adding that this should not be the only trigger for the re-opener.
- 8.64 Three network companies noted that a large proportion of physical security is BAU, adding that there is a need to upgrade and modernise security across networks, specifically in the context of increasing digitisation capacity. They also stated that funding for BAU physical security work should be included in baseline allowances, provided at the outset of RIIO-3, and the scope of the re-opener should be increased to support these works.
- 8.65 Five respondents also highlighted the close coupling of physical security with cyber and digital capabilities and the need for investment across these areas to be aligned.

#### SSMD decision and rationale

- 8.66 Whilst updated guidance on CNI might be published in time to inform network company business plans for RIIO-3, we recognise that the need for further work could materialise in the event of changes to the CNI list or additional changes to government policy during the RIIO-3 price control. Therefore, we maintain our SSMC position and will introduce a re-opener to adjust allowances in the event of changes to the scope of physical security work required during RIIO-3.
- 8.67 As set out above, this re-opener covers physical security expenditure triggered by government recommendations for new sites and replacements during the price control; therefore, it is not for any other 'BAU' physical resilience work as the costs associated with this work is covered as part of baseline funding.
- 8.68 We will also maintain our position that the Physical Security Re-opener be part of a broader resilience re-opener (set out in the next section below), through which physical security costs can be submitted, as this would reduce the overall complexity of the RIIO-3 price control.

## **Resilience Re-opener**

### SSMC summary

- 8.69 At SSMC, we recognised that the GB energy system is facing an ever-changing and growing set of risks. We also recognised that the energy system is also evolving, especially with regard to the services and flexibility organisations can provide to each other and the system. Amidst this changing landscape, network companies must make sure that their organisations, assets and systems are resilient against a range of risks that they face, both now and in the future.
- 8.70 In RIIO-2 we provided some network companies with specific allowances and re-openers to manage specific resilience risks. At SSMC, we proposed introducing a new resilience re-opener for all sectors that could adjust allowances if the government or NESO requires network companies to undertake activities that they had not planned for at the outset of the RIIO-3 price control.
- 8.71 We proposed to work with network companies through the relevant working groups ahead of the publication of our SSMD to determine the scope, trigger and re-opener window dates for our proposed mechanism.

### Summary of consultation responses

- 8.72 There was strong support for the introduction of a Resilience Re-opener, with all respondents agreeing with our proposal. Respondents agreed that the re-opener should be triggered if the government or the NESO require network companies to undertake activities that they had not planned for at the outset of the price control. One network company commented that it should only be used for unforeseen or highly uncertain expenditure.
- 8.73 Seven respondents commented that the exact scope of the re-opener needs to be clarified and they provided potential activities they believed should be within scope of the re-opener. One network company commented that a defined scope of the re-opener should not be achieved at the expense of flexibility.
- 8.74 Three of the respondents also commented that network companies should be able to trigger the re-opener based on resilience information with the support of an appropriate authority, rather than it being at the instruction of DESNZ or NESO.
- 8.75 Two network companies strongly believed there should be no materiality threshold to ensure flexibility for individual elements is maintained, with one respondent adding their support was conditional on this.

- 8.76 A respondent noted the need for clear licence criteria in respect of the triggers for each element if re-openers are bundled and to consider whether separate mechanisms would allow for greater transparency and that staggered submissions would reduce resource burden.
- 8.77 One network company suggested separate allowance for physical security, independent of the allowance for CNI sites, should be allocated.
- 8.78 One network company suggested adding adaptations required to meet climate change impacts where the work is not included in a company's business plan should be included.

#### SSMD decision and rationale

- 8.79 We have decided to introduce a Resilience Re-opener for RIIO-3. As outlined at SSMC this will be for managing risks that companies face, both now and in the future, in light of the changing landscape surrounding government or NESO resilience requirements. It will give companies the ability to adapt in light of the changing risk landscape and respond to changes in requirements imposed on companies for managing potential risks.
- 8.80 The requirement to undertake adaptive resilience measures that companies had not planned for will come from government or the NESO. As such we maintain our position that this should be an authority triggered re-opener. The areas in scope for this re-opener relate to activities associated with physical security (specifically CNI sites and associated personnel and systems); changes to engineering and resilience standards; changes to emergency measures or protocol; and further work required as a result of risk assessment or mitigation work included in the National Risk Register.

### **Opex Escalator**

#### SSMC summary

- 8.81 We proposed to retain the opex escalator as an automatic mechanism for varying operating costs associated with capital investments delivered through specified UMs, but welcomed stakeholders' views on whether the mechanism should be retained.
- 8.82 We proposed to review the scope of application of the opex escalator to ensure no risk of overlaps or gaps between baseline allowances and additional allowances provided through re-openers, as well as the methodology underlying its calibration.

Summary of consultation responses

- 8.83 We received 13 responses on the opex escalator. Eight stakeholders supported retaining the opex escalator for RIIO-3 but cited areas of concern or which require clarification. Three stakeholders were against retaining the opex escalator and two respondents did not provide a position.
- 8.84 One stakeholder expressed concerns around potential abuse of the mechanism and that any development of the opex escalator does not lead to unnecessary onerous reporting for network companies. Two respondents requested clarification to which re-openers the opex escalator will apply.
- 8.85 Five stakeholders called for a thorough review of the methodology and suggested the ongoing review of the operation of the mechanism in RIIO-2 should inform areas of improvement for RIIO-3. One TO noted an ongoing issue with the treatment of contractor indirect costs in MSIP applications being inconsistent with the basis upon which the opex escalator was calibrated. A DNO called for a holistic look at the overall UM package, including the opex escalator, for RIIO-3 to ensure sectoral differences are captured and noted the work mix across sectors may vary more than for RIIO-2. A GDN was concerned that poor calibration, in part due to no distinction between the fixed and variable components of operating costs, can create poor incentives to either complete too much work or too little work.
- 8.86 Three respondents were against retaining the opex escalator and considered the mechanism is not fit for purpose and risks material underfunding of re-openers. A TO stated a one-size-fits-all approach is unsuitable as this assumes direct costs are proportional to indirect costs, however the level of indirect costs required will vary according to the type of project being delivered. The TO called for a more flexible approach to account for differences between projects by using a bottom-up assessment of indirect costs as part of re-opener applications.
- 8.87 Another TO argued a change in approach is needed as the current opex escalator has resulted in systematic underfunding which if unchanged could negatively impact investability of the ET sector. It proposed that capitalised contractor indirect costs should be assessed as part of direct capex, with the remaining opex and business support costs forming the basis of a 'reduced' opex escalator. The TO argued this would be preferable as these cost categories are more stable over time and historical assessment is likely to result in a representative percentage uplift.



### SSMD decision and rationale

- 8.88 In principle, we agree with the need to provide additional opex allowances in line with material capex increases linked to UMs in the transmission sectors. In RIIO-3, various factors make calibration more complex, such as:
- the range of regulatory funding mechanisms available for capex projects, some of which are being carried over from RIIO-ET2, such as ASTI. This introduces greater complexity in the assessment of the volume of capex which is the basis for driving the opex escalator;
  - uncertainty in how opex costs will vary with growth in capex volumes across the different regimes; and
  - supply chain constraints that, in some areas, have led to unit cost increases above the Consumer Prices Index including owner occupiers' housing costs (CPIH) and greater volatility generally. Our intention is to neutralise these so that we can accurately measure the volume of capex.
- 8.89 Careful review of business plans – including both proposed baseline and potential UM totex – and calibration will be required to avoid the risk of materially over or under compensating on opex. We are open to alternative approaches should evidence suggest the existing mechanism is not fit for purpose. We will rely on the outcome of the ongoing review of the opex escalator mechanism, including how it is operating within the RIIO-2 period, to determine whether its design, scope of application and calibration need changing ahead of Draft Determinations.
- 8.90 In our next steps, we will take into further consideration responses to the SSMC to develop a mechanism for RIIO-3 and continue to work with stakeholders to ensure any mechanism underlying the provision of additional opex allowances works as intended.

### **Pass-through costs**

- 8.91 In price controls, pass-through mechanisms are normally implemented to adjust allowances for costs over which network companies are deemed to have limited or no control and which may be passed through consumers.
- 8.92 At SSMC we proposed to retain the following cross-sector pass-through mechanisms: pension scheme established deficit, Ofgem licence fee costs and business rates (prescribed rates).
- 8.93 Within RIIO-2 we moved bad debt from being a pass-through cost to being treated as 'unrecovered revenue'. While mechanistically this produces the same

result, it is no longer formally listed as a pass-through cost. At SSMC we proposed to retain the same approach for RIIO-3.

8.94 At SSMC we did not have a consultation question on these mechanisms. The following subsections summarise our current position, while Table 9 provides, for each sector, the annual average spend over the first three years of RIIO-2. For sector-specific pass-through mechanisms, see Chapter 5 of the relevant sector annexes.

Table 9: Annual average spend for each mechanism and each sector over first three years of RIIO-2 (£m, nominal prices, data sourced from last published Price Control Financial Models for each sector).

<b>Mechanism/Sector</b>	<b>ET</b>	<b>GT(TO)</b>	<b>GD</b>	<b>Total</b>
Pension Scheme Established Deficit	31.4	-12.9	39.6	58.1
Bad debt	-	-	6.7	6.7
Ofgem licence fee costs	-	24.7	23.8	48.5
Business rates (prescribed rates)	204.1	80.6	395.9	680.7

#### Pension Scheme Established Deficit

8.95 See Chapter 10 of the Finance Annex for our decision on this pass-through mechanism.

#### Bad debt

8.96 We are minded to retain our SSMC position and treat bad debt as a reduction in recovered revenue rather than a pass-through. However, we will review the definition of bad debt as part of the licence drafting for RIIO-3.

#### Ofgem licence fee costs

8.97 We have decided to retain our SSMC position and keep Ofgem licence fee costs as a pass-through item in RIIO-3.

#### Business rates (prescribed rates)

8.98 We have decided to retain our SSMC position and keep business rates (prescribed rates) as a pass-through item in RIIO-3.

8.99 We note that in response to GDQ63, one GDN argued that there is a discrepancy between the classification of business rates in GD compared with the ED sector. It noted that in RIIO-2, business rates for non-operational buildings could not be

included within pass-through, while in RIIO-ED2 all business rates are considered pass-through costs. We will review the details of this, and where necessary, correct any inconsistency for RIIO-GD3.

## **Effective monitoring of uncertainty mechanisms**

### SSMC summary

8.100 We have increased the number of incentives and UMs in RIIO-2, leading to more monitoring and a higher regulatory burden on us and network companies. This could result in higher costs for consumers if costs are not allocated or reported in a consistent manner.

8.101 We have seen examples in RIIO-2 where some mechanisms were used for costs that we believe were already included in other parts of the RIIO-2 assessment. The increased importance of UMs increases the importance of ensuring consistency between planned and actual cost categorisation on some projects subject to in-period review.

8.102 Companies should make sufficient efforts to ensure that submissions use the same methodologies to categorise costs and with Ofgem's expectations. Although Ofgem may be able to ensure this consistency through case-by-case reviews, we also believe that Ofgem should be able to rely on the consistency of company submissions.

8.103 We said we were considering two possible options to achieve greater consistency:

- increasing governance requirements on companies providing costs and outputs submissions to Ofgem during RIIO-3; and
- making adjustments to reduce the allowances under UMs to companies that are found to be repeatedly providing inconsistent data against consumers' interests.

### Summary of consultation responses

8.104 In OVQ43 we asked stakeholders for views on how we should effectively monitor the delivery of UMs. We received 16 responses to this question with nine respondents agreeing with our proposals for more effective monitoring of UMs.

8.105 Fourteen respondents suggested the following areas for improvement:

- Ofgem to provide clear and unambiguous guidance for submissions;
- Ofgem to ensure common understanding of guidance;
- Ofgem to give illustrative examples on key guidance points;

- Agreed resolution pathways in the event of disputes;
- Ofgem to bar the use of UMs for costs already included in cost assessment; and
- Ofgem to include UMs as standing agenda item in annual cost visits

8.106 The seven stakeholders that disagreed with our proposals did so citing a number of concerns including that allowances would be reduced for companies providing inconsistent data against consumer interests which in their view would create additional complexity and introduce undesirable subjectivity into the process.

8.107 One GDN and one DNO disagreed on the basis that existing mechanisms (Network Data Assurance Report (NetDAR), Data Assurance Guidance (DAG)) and reporting requirements (Regulatory Reporting Packs) are able to mitigate the concerns that Ofgem highlights in the SSMC and that caution would need to be exercised in the addition of new requirements. They encouraged Ofgem instead to look to the Independent Technical Advisor (ITA), a concept being introduced in RIIO-ET3 delivery of CSNP projects, as additional assurance if needed.

#### SSMD decision and rationale

8.108 We shall continue to improve the effectiveness of our monitoring and enforcement of UMs. Steps to digitalise our regulatory reporting processes as well as clarifying the guidance around UMs in RIIO-3 will yield benefits on data reporting accuracy and efficiency of the assessment process.

8.109 We do not agree with the suggestion to use the ITA in this space. Whilst this is a concept that has been proven to work in other sectors it is one that we are still developing for use in ET and we consider that in the first instance its use should be limited to the CSNP-F mechanism in RIIO-ET3. This does not rule out our ability to use specialist consultancy services to assist us with monitoring and enforcement activities (eg audits), but this would be called off on a specific needs basis, rather than through the regulatory arrangements, which would be the case for an ITA.

8.110 The increased use of uncertainty mechanisms means that it is increasingly important that companies maintain high quality monitoring data. We will continue to develop our regulatory guidance to ensure that it is effective and evolves to meet these challenges and stand ready to take enforcement action if we find that companies have not made sufficient efforts to provide the right data. In our next steps, we will further explore the precise combination of improved guidance, specific mechanisms and/or changes to license obligations during license drafting

consultations that would facilitate our ability to take enforcement action against companies found to be repeatedly providing inconsistent data against consumer interests.

## 9. Cost of service

### Introduction

- 9.1 A key part of the RIIO-3 price controls is setting totex allowances for the gas and electricity network companies. They represent a material component of consumers' bills now<sup>43</sup> and in the future, and it is important that consumer bills reflect efficient investment decisions and costs. Accordingly, it is important to establish the cost assessment toolkit that will enable us to determine the efficient level of costs at which network companies can carry out their activities. In RIIO-2, totex baseline allowances amounted to £10.8bn for the transmission sectors and £9.7bn for the GD sector (2018/19 prices).
- 9.2 In our SSMC we described the toolkit approach to cost assessment used in previous price controls, where we relied on a range of quantitative and qualitative tools and techniques to determine a robust view of network companies' efficient costs, which in turn inform baseline allowances. We have decided to continue using this toolkit approach for RIIO-3, while looking for opportunities to improve and/or simplify our methodology where we consider it appropriate to do so. Details on the development of the cost assessment approach for RIIO-3 can be found in the relevant sector annexes. The remainder of this chapter focuses on adjustments to baseline allowances due to specific price pressures (RPEs) and our assumption on future productivity improvements (ongoing efficiency).
- 9.3 RPEs are a further adjustment to cost allowances that we may apply where a general inflation measure (ie CPIH) is considered to not adequately capture external changes to prices that network companies face.
- 9.4 As part of setting an efficient level of costs for network companies over time, we also add an ongoing efficiency challenge to account for productivity improvements that we expect even the most efficient companies can achieve over the price control period.
- 9.5 We will make use of RPEs and ongoing efficiency in RIIO-3. However, we will not finalise the detailed methodology before business plan submissions, as we consider further work is needed to take into further consideration feedback received in response to SSMC, review the current approach and ensure it can be adapted to the RIIO-3 context if required, including its application to re-openers.

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<sup>43</sup> Network costs represent around a quarter of a dual fuel bill. See Ofgem website, [Energy data and research](#).

As such, in the remainder of this chapter, we only set the direction of travel for the development of the approach to RPEs and ongoing efficiency.

## **Real Price Effects**

### SSMC summary

- 9.6 We proposed to broadly retain the same approach to RPEs as RIIO-2. This is where further adjustments to allowances are made based on forecasts for the indices making up the RPE index, and allowances are adjusted or 'trued up' annually based on outturn differences between CPIH and input price indices.
- 9.7 We welcomed stakeholder views on whether there were any specific methodological aspects that could be improved and/or simplified. We also welcomed views on whether RPEs are a sufficient mechanism to tackle market volatility and consequent supply chain challenges experienced by network companies in recent years.

### Summary of consultation responses

- 9.8 We received 14 consultation responses to OVQ44. Ten stakeholders agreed that an RPE mechanism is important for both companies and consumers to ensure cost allowances and corresponding bills are representative of market dynamics. However, all ten stakeholders believed the current approach may not be delivering and welcomed the opportunity for a review of the methodology.
- 9.9 Gas network companies have commissioned a consultancy report to review the RPE methodology for RIIO-2 and investigate what approach for RIIO-3 could provide protection against cost pressures, in particular the choice of indices and the respective weighting in the RPE mechanism.
- 9.10 Two stakeholders asked for the indices used in the RPE index to be made publicly available for more transparency.
- 9.11 One stakeholder had strong views against using an indexed approach compared to a fixed upfront allowance which was the case for RIIO-1. It argued this creates issues of financial planning and annual budgeting processes which are exacerbated in periods of extreme volatility and therefore RPE allowances are largely unforecastable resulting in reduced purchasing power and slower outcomes for consumers. It believed allowances should be funded ex ante to reduce the risk of economic shocks companies may face. It proposed if Ofgem continue to index RPEs it should consider applying mean adjustments to ensure companies are funded in the short term.

- 9.12 One DNO proposed several amendments to the RPE methodology. Firstly, the materiality threshold should be dropped and RPE allowances should apply across the total cost base. Secondly, it argued that we should use a broader set of indices rather than relying on regulatory precedent and therefore continue to monitor indices which are better correlated to company costs in each sector. Thirdly, the totex RPEs allowance should reflect efficient cost structures and it suggested the use of an efficient notional cost structure. Finally, we should consider whether to forecast the price growth of indices using the long-run price growth of the index or the long-run real price effect depending on the economic forecast at the time, as the latter is better in times of high inflation.
- 9.13 Seven network companies argued that they are still exposed to the increasing cost pressures within the sector even with RPEs in place and suggested an evolved indexation approach take into account the current economic environment where there is a lack of key skills/contractors. A TO stated RPEs need to better reflect the cost drivers behind market price volatility, such as material costs, so that they can operate in a reasonable manner against a backdrop of supply chain pressures. GDNs mentioned sector specific cost pressures driven by competing infrastructure projects and labour shortages due to the uncertainty in the future of the gas sector.
- 9.14 Two stakeholders disagreed with the labour adjustment in the current RPE mechanism which is indexed negatively compared to the CPIH. They argued this is counterintuitive in an environment of limited supply and increasing demand which could lead to a reduced ability to attract and retain employees. This is exacerbated where contractor labour is considered as costs are determined by market competition.
- 9.15 Three stakeholders suggested a review of the specific cost indices used to reflect sector specific cost bases. Two GDNs asked Ofgem to consider methodological changes which consider regional differences on such matters as labour and contractor costs and reflect contractor RPEs separately considering the nuanced cost pressures faced compared to direct labour adjustments. One GDN suggested the weighting of indices should reflect the GDN's cost base, especially for 'volatile' indices such as structural steel costs which are highly variable.
- 9.16 Two GDNs suggested investigation of alternative methods to index forecasts when public data is not available, as the Long Term Average Growth (LTAG) approach for RIIO-2 has not been suitable particularly for material based indices which have seen extreme cost volatility. Both GDNs noted that, although there is a true up mechanism to account for differences annually, there is an increased



cashflow risk and recommended a focus on the financing abilities of network companies.

- 9.17 A DNO suggested Ofgem request RPE justification from network companies during the business plan submissions. It noted this was the approach taken in RIIO-ED2 and would ensure that conversations around RPEs are started early and woven through the price control setting process.

#### SSMD decision and rationale

- 9.18 We have decided to maintain our SSMC position to broadly use the RIIO-2 approach to RPEs for RIIO-3. We do not consider replacing indexation with ex ante allowances is appropriate, as it would expose consumers to the risk of forecasting errors similar to those which arose in RIIO-1, particularly in an environment of elevated input cost volatility.
- 9.19 In principle, we consider a high materiality threshold for RPEs is also appropriate, as it will allow us to focus our RPE assessment on significant and robust claims for which meaningful indices are available. Nonetheless, we will take into consideration evidence provided to determine whether any changes are required to the way we set the materiality threshold. As part of this, we will request network companies to submit their views on RPEs in the business plan submissions.
- 9.20 We will continue to collaborate and engage with stakeholders and further consider the feedback received in response to SSMC to improve and/or simplify any underlying methodological aspects, including indices selection and their weighting.

### **Ongoing efficiency**

#### SSMC summary

- 9.21 We proposed to broadly retain the RIIO-2 approach for RIIO-3.
- 9.22 We welcomed stakeholder views on i) whether the approach is suitable for RIIO-3, ii) whether there are specific methodological aspects that could be improved and/or simplified, or iii) additional data sources or evidence that could be used to inform setting the ongoing efficiency challenge.

#### Summary of consultation responses

- 9.23 We received 14 consultation responses to OVQ44. Ten stakeholders agreed there should be an achievable ongoing efficiency incentive however there were some concerns with the current methodology. Some stakeholders called for more

- transparency on the methodology and asked Ofgem to consider consultancy reports commissioned by members of the ENA to assess whether UK productivity gains can justify using the ongoing efficiency assumptions at RIIO-2 for RIIO-3.
- 9.24 Several stakeholders proposed a review of the ongoing efficiency approach in relation to the slowdown of productivity in the sector and wider macroeconomic environment. One respondent argued the EU KLEMS dataset for productivity measures is no longer a robust point of reference due to the time lag and proposed not having a specifically defined ongoing efficiency incentive because of the stagnation in UK productivity levels.
- 9.25 A GDN proposed a review should include analysis of a range of benchmarking data sources, including recent performance of network companies, to estimate productivity requirements alongside a critical review of the parameters used and to determine whether GDNs can outperform the generally poor level of productivity in the UK. It also proposed an assessment of the pertinence of historical data for future efficiency challenges considering the current macroeconomic circumstances and ongoing cost pressures. Another stakeholder requested evidence of past productivity improvements in similar industries and suggested looking at representative timescales when assessing historical data and suggested that Ofgem consider productivity improvements for opex and capex separately.
- 9.26 One GDN noted cost pressures may be exacerbated for RIIO-GD3 with increasing resource competition as both the sector and other sectors will be drawing investments from the same resource pool. It also mentioned that there will be new outputs to be delivered where the magnitude and cost are uncertain, such as cyber resilience requirements, and this makes it more difficult to achieve continued ongoing efficiency gains which are based on a set of known outputs and reduced inputs over time.
- 9.27 One stakeholder mentioned the ongoing efficiency challenge should incentivise system transformation toward net zero and noted this may mean the system may appear inefficient at one point in time however the final output is efficient. A TO was in support of our intention to discuss cost areas where ongoing efficiency should not apply particularly as there is expected to be a significant uptake of outsourced work to facilitate net zero targets which limits the efficiency potential of TOs. It proposed a targeted approach would avoid imposing unrealistic or excessive cost reductions on network companies and would ensure consumers continue to benefit from efficiency savings in areas where there aren't significant

energisation date drivers whilst mitigating against underfunding network companies.

- 9.28 Some stakeholders proposed Ofgem should consider a lower ongoing efficiency challenge for the frontier company compared to the other companies to recognise the limited scope for further improvements for the frontier company and acknowledge the value the frontier performance drives for all consumers.
- 9.29 A DNO stated calibration of ongoing efficiency should be considered separately from catch-up efficiency improvements considering that the latter concerns an efficiency challenge for less efficient firms whereas ongoing efficiency is an incremental gain in productivity for even the most efficient firms due to technological progress. It added there are several important considerations in the assessment of ongoing efficiency. Firstly, the measure of productivity can be based on either gross output or value-added (labour and capital inputs only) however application must be consistent with the chosen benchmarking method. Secondly, Total Factor Productivity (TFP) and Partial Factor Productivity (PFP) should be applied accordingly to relevant cost categories. Thirdly, productivity growth and ongoing efficiency benchmarking must be estimated over complete business cycles to avoid biased estimates of TFP growth. Fourth, only comparable sectors should be used and weighted to reflect a fair comparison of sector costs. Lastly, the DNO stated that any explicit or implicit uplift, such as an innovation uplift, will require empirical evidence.
- 9.30 A DNO argued the application of RPEs and ongoing efficiency to costs should be consistent. RPE indices are updated annually whereas ongoing efficiency is fixed for the price control period, so Ofgem could consider ongoing efficiency to be trued up annually.

#### SSMD decision and rationale

- 9.31 We will apply an ongoing efficiency challenge in RIIO-3. We intend to use a wide range of evidence for setting our ongoing efficiency assumption. This includes the EU KLEMS database, network companies' historical performance, forward-looking productivity forecasts for the UK economy and any other data sources that might inform our analysis. We will consider whether the ongoing efficiency assumption of 1% per annum at the totex level implemented in RIIO-2 is still a reasonable starting point for RIIO-3.
- 9.32 We will continue to collaborate and engage with stakeholders on the key aspects of our methodology and will further consider the feedback received in response to SSMC, as well as any additional evidence that will be provided.

- 9.33 We expect network companies to include an assumption for ongoing efficiency within their business plans and to evidence how this assumption has been derived. Ongoing efficiency assumptions should not be embedded in BPDTs costs but reported separately in the relevant table. This is to provide greater transparency on which costs ongoing efficiency assumptions are applied to.

### **Application of RPEs and ongoing efficiency to re-openers**

#### SSMC summary

- 9.34 We stated our intention to work with stakeholders to review the potential application of RPEs and ongoing efficiency to re-openers and requested stakeholder views.

#### Summary of consultation responses

- 9.35 We received 12 consultation responses to OVQ45. Four stakeholders were in support of the application of RPEs to re-openers to accommodate for unforeseen cost pressures. Six stakeholders were against a blanket application of RPEs to re-openers unless applied under certain conditions. Seven respondents were against the application of ongoing efficiency to re-openers and three were in support where application was consistent alongside RPEs.
- 9.36 Four stakeholders argued that the nature of re-openers negates the need for application of RPEs or ongoing efficiency as there is usually certainty of costs at the application stage, either as costs are already incurred or forecast costs are derived through fixed tenders. Therefore, any RPE or ongoing efficiency adjustment is likely to be immaterial and should be considered on a case-by-case basis. One respondent added that re-openers tend to be one-off, bespoke projects which are unlikely to be affected by wider productivity improvements and therefore cannot benefit from lessons learned to improve efficiency.
- 9.37 Two respondents were in favour of the application of RPEs and ongoing efficiency to re-openers on the basis that this is applied consistently, given the aligned principles of each mechanism. A DNO suggested there are two possible approaches, either requiring companies to embed RPEs and ongoing efficiency as part of re-opener applications or set the levels for the mechanisms to re-openers and companies should submit costs gross of any adjustments for these areas.
- 9.38 A TO was in support of applying RPEs to re-openers as networks are facing significant and unforeseen cost pressures within a challenging supply chain environment. Another TO requested guidance be provided to detail what evidence would be expected from network companies and how this would differentiate

between different types of re-opener applications. It called for a proportionate approach in terms of materiality to limit resource pressures and support timely decision making. It added that, as any index is imperfect at tracking costs, a true-up mechanism should be retained for all successful re-opener projects.

- 9.39 A GDN mentioned that the materiality of an RPE or ongoing efficiency adjustment depends on the time between submission and expenditure. It suggested that Ofgem could keep flexibility by determining application of RPEs as part of the re-opener assessment.
- 9.40 One DNO suggested that successful re-opener applications should be granted ex-ante RPE allowances.
- 9.41 A TO noted the high volumes of large-scale projects expected for the transmission industry and that most will fall into the re-opener category. It argued delivery of these projects in expedited timescales to meet decarbonisation targets lowers the ability and merit in applying an ongoing efficiency challenge. It was in support of applying RPEs to re-openers if a revised indexation approach is adopted for RIIO-ET3.
- 9.42 One respondent stated it was fair to apply ongoing efficiency to re-opener applications where this is additional funding for forecast spend.

#### SSMD decision and rationale

- 9.43 We recognise that re-opener applications are very heterogeneous in terms of both scope and scale, and that this might warrant a case-by-case approach to the potential application of RPEs and ongoing efficiency. For example, for mechanisms such as CSNP-F and load-related re-openers in ET (see ET Annex Chapter 2 for further detail), RPEs and ongoing efficiency might not be applied if cost reflectivity for capex contracts is already accounted for through other means.
- 9.44 We will work with stakeholders to ensure that guidance on re-opener applications is clear with respect to whether submissions should be inclusive or exclusive of RPE forecasts and ongoing efficiency assumptions.
- 9.45 Moreover, we will continue to collaborate and engage with stakeholders on the key aspects of our methodology and will further consider the feedback received in response to SSMC, as well as any additional evidence that will be provided to determine the approach to the application of RPEs and ongoing efficiency to re-openers.

## 10. A stable and predictable financial framework

### Introduction

- 10.1 In the Finance Annex of our SSMC,<sup>44</sup> we described in detail our proposals and sought views from stakeholders on the potential methodologies for setting financial parameters of RIIO-3.
- 10.2 In the SSMD Finance Annex, we review the responses from stakeholders, presents our analysis of the relevant evidence and lay out the methodology decisions we will take at this stage of the price control setting process. In this document we also signal a small number of areas where we will continue to engage with stakeholders on areas that require further analysis or development prior to setting a final methodology. Where relevant and useful to stakeholders, we present an 'early view' of associated outcomes (such as the costs of equity and debt). These figures will change based on updated data and evidence and will be confirmed in our Draft and Final Determinations in 2025.
- 10.3 The decisions in the Finance Annex carefully consider the net zero-related macro developments facing the sector – specifically the step-change in investment required in ET and the transition to a carbon-free economy by 2050. We consider updates to methodologies to reflect emerging best practice and new evidence. Where possible, we have looked to simplify the often complex processes used within the financial framework.

### Setting allowed returns on capital

- 10.4 In the Finance Annex, we discuss our approach to setting the allowed return on debt. We have taken on board evidence that the debt profile of ET and gas companies may start to diverge over time. In response, we plan to split our assessment of the efficient cost of debt, and the associated allowed return on debt, into an electricity network cost and a gas network cost.
- 10.5 We have recognised that in a period of rapid investment, as is anticipated for the ET sector in the coming years, it is even more important that our allowed returns are able to adapt to changes in market rates. For this reason, we have decided to weight the indexation of our allowed return on debt for ET companies in line with RAV growth. This will bring the allowances for SPT and NGET into line with the broad approach already in place for SHET. As the gas sectors are not expected to

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<sup>44</sup> [RIIO-3 Sector Specific Methodology Consultation – Finance Annex \(ofgem.gov.uk\)](https://www.ofgem.gov.uk/riio-3-sector-specific-methodology-consultation-finance-annex)

experience the same level of RAV growth in RIIO-3, and are likely to see declining RAV levels in future controls periods, we do not consider RAV weighting to be appropriate when setting allowed returns on debt in the gas sectors.

- 10.6 We have also progressed our work to address the inflation leverage effect that we first discussed in our Call For Input on Inflation in 2023.<sup>45</sup> Here we agreed to address this issue through the allowed return on debt methodology within the RIIO-3 price controls. Based on stakeholder responses and further analysis, we have decided to take forward inflation 'Option 1' and will pay the fixed rate element of the debt allowance on a nominal basis, with this proportion of the notionally geared RAV no longer being indexed to outturn inflation. This will completely remove the inflation leverage effect and ensure that equity returns at the notional capital structure are no longer impacted by high or low inflation. We will work further with stakeholders on an appropriate implementation for this decision.
- 10.7 These changes to the calculation of allowed returns on debt should help to ensure that companies are appropriately compensated (at the notional capital structure) for the debt financing costs that they face.
- 10.8 We also lay out the 3-step process we will use when setting allowed returns on equity. Step-1 is our Capital Asset Pricing Model-based assessment of the market cost of capital (for network companies at the notional capital structure). Our approach here is broadly in line with the approach used in RIIO-2, with some methodological improvements that build on the 2023 UKRN Guidance recommendations.<sup>46</sup>
- 10.9 In relation to the calculation of the Total Market Return, we have incorporated a superior inflation dataset (relative to what was available in RIIO-2) from the Office of National Statistics. We have also incorporated the ex ante estimation methodology recommended in the UKRN guidance and utilised by the CMA in recent determinations.
- 10.10 In relation to beta, we have taken on board evidence from stakeholders suggesting that our RIIO-2 beta comparator set can be improved. While we continue to see value in data from National Grid plc and the listed Water companies, we agree with consultation responses suggesting that our estimate may be improved by bringing in data from relevant European utilities. Doing so

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<sup>45</sup> [Call For Input - Impact of high inflation on the network price control operation | Ofgem](#)

<sup>46</sup> UKRN (2023), [UKRN guidance for regulators on the methodology for setting the cost of capital](#), pages 4 – 5.

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should give greater access to data that reveals investors' perceptions of the risks in energy networks, and should particularly improve our insight into the risks currently associated with gas networks.

- 10.11 We have also laid out Step-2 of our estimation approach, and we described how we will incorporate 'investability' assessment into this stage of the process. We introduced the concept of 'investability', alongside our existing financeability assessment, to better understand whether the allowed return on equity meets the needs of the energy network sectors. We received substantial evidence on this issue, particularly from the network companies. We remain open to evidence on the best application of investability throughout RIIO-3. We have currently concluded that the primary focus for tackling investability-related issues is to a) ensure that our cost of capital assessment is as accurate as possible, including updating the beta comparator set; b) cross check this estimate comprehensively to ensure that our estimate is not out of line with broader assessments of investor requirements and c) ensure we accurately capture and compensate efficient additional financing costs (such as equity issuance costs). We also consider that improvements in our assessment of the cost of debt, and updates to our approach to regulatory depreciation in the gas sectors, will support the overall investability of the RIIO-3 price control.
- 10.12 We briefly discuss our anticipated approach to Step-3 of the process, where we retain the ability to adapt the cost of capital if there is sufficient skew in the overall package that the expected returns and cost of capital are no longer aligned. At this point, we do not anticipate reintroducing any adjustment or 'wedge' to reflect asymmetry of information.
- 10.13 The Finance Annex lays out our approach to setting the Weighted Average Cost of Capital and assessing Financeability. Both approaches will be very similar to the respective approaches taken in RIIO-2, although we are exploring incremental improvements to our assessment of financeability.
- 10.14 As we noted in both our Framework Decision<sup>47</sup> and the SSMC, we consider it appropriate to set the allowed return on capital in line with RIIO-2 and/or the UKRN Guidance recommendations unless there is good reason not to. We considered that the stability, consistency and predictability provided by this approach would allow investors to have ongoing confidence in the regulatory

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<sup>47</sup> Ofgem (2023), [Future Systems and Network Regulation – Core Document](#), paragraph 6.36



framework, ultimately helping to keep the cost of capital for the sector as low as possible.

- 10.15 In addition, where possible, reasonable and without undue impact on accuracy, we have attempted to simplify the methodologies used to calculate the cost of capital in RIIO-3. In recent controls we have seen a trend towards regulators and stakeholders using or advocating for increased complexity when estimating the individual metrics used to estimate the cost of capital. We consider that, at times and in certain applications, this trend towards technical complexity may have led to false confidence in estimates without evidence of superior accuracy or benefits for consumers. We consider that, especially in relation to the cost of equity, we are often estimating future costs that are unknowable (certainly to the level of several decimal places), and that there may be overall value to consumers from the regulator and stakeholders focusing on less or simpler (but equally likely to be accurate) methodologies when forming our estimates. We reflect this approach in our decision-making.

### **Financial resilience**

- 10.16 In the Finance Annex, we also discuss our approach to Financial Resilience and our decision to further strengthen our financial resilience 'toolkit'. We are taking forward proposals to increase the requirements on network companies in relation to credit ratings and resource availability, and we are introducing a distribution block that will prevent companies from paying money to shareholders if gearing (debt as a percentage of total capital) exceeds 75%. The aggregate financial strength of the sector is strong, but it is vital that we remain vigilant to potential threats. We consider these measures improve our ability protect consumers from harm linked to significant deterioration in resilience whilst imposing no additional costs on companies operating with responsible financing strategies.

### **Regulatory depreciation**

- 10.17 The Finance Annex further explains our updated approach to Regulatory Depreciation, also discussed in Chapter 4 in relation to the future of gas. We have listened to feedback from stakeholders and have decided to take forward proposals to further accelerate depreciation. Accelerating depreciation involves decisions that impact when costs hit consumer bills (and so intergenerational fairness). In Chapter 8 of the Finance Annex, we lay out our potential options for implementing this change. However, we will continue to consult with stakeholders to ensure that a wide range of views are considered before we make a final

decision on this difficult issue. We will also continue to work with government to ensure that our methodology is aligned to government policy and that our approach to managing the net zero transition is as fair and coordinated as possible.

### **Other financial issues**

- 10.18 We discuss our approach to corporation tax, where we are taking forward a proposal to improve our definition of gearing within the tax clawback assessment.
- 10.19 On RoRE ranges, for the GD and GT sectors, we are minded to keep an overall risk profile – and set a RoRE range – that is broadly in-line with that for RIIO-2, reflecting the stable policy environment we are seeking to maintain, including the potential further acceleration of RAV depreciation to mitigate any increase in asset stranding risk. In ET, we are minded to slightly increase the overall risk profile and RoRE range for RIIO-3, with the potential for a more pronounced increase for the subsequent price control (all else being equal). We discuss Return Adjustment Mechanisms (RAMs), where we expect our approach to be similar to that used in RIIO-2. We will keep this issue under review, and may make adjustments at Draft Determinations to reflect evidence presented in network company business plans. We are particularly keen to ensure that the impact of major projects is effectively captured via our use of RAMs.
- 10.20 In Chapter 10 of the Finance Annex we discuss other financial issues such as capitalisation rate and directly remunerated services. In these areas we expect our approach to be broadly similar to that used in RIIO-2. In Section 10, we also discuss Transparency through reporting measures, where we do not propose any changes to existing requirements.

### **Next steps**

- 10.21 The methodology decisions in the Finance Annex are important as they provide information and guidance to stakeholders and explain the way in which we will set the financial elements of the RIIO-3 price control. There are a number of areas where the implementation of methodologies requires further consultation and collaboration with stakeholders, and we look forward to working on these issues in the coming months. Final decisions will be based on updated evidence and market data as appropriate and final figures may differ from those presented in this document.

## 11. Cyber Security

### Introduction

- 11.1 Network companies are reliant on interconnected technologies and systems to deliver essential energy and services to consumers. This reliance will increase as networks become smarter, more automated and more digitised in the drive towards net zero.
- 11.2 As a result, the threat of cyber attacks is an increasing concern for the integrity of operational technology and information technology systems. Network companies must ensure systems are adequately protected to detect and prevent cyber attacks.
- 11.3 The Network and Information Systems Regulations 2018 (NIS-R) require network companies to take appropriate and proportionate cyber security measures to manage the risks posed to the security of their network and information systems. They also designate Ofgem and DESNZ as the joint Competent Authority (CA) for the electricity and downstream gas sectors in GB.
- 11.4 To assist network companies in achieving compliance with the NIS-R, the National Cyber Security Centre (NCSC) developed a cross-sector Cyber Assessment Framework (CAF), published in 2018. Under the CAF, network companies perform a self-assessment and identify cyber security measures that should be implemented to ensure compliance with the NIS-R.
- 11.5 We have issued NIS Supplementary Guidance for the downstream gas and electricity sectors in Great Britain.<sup>48</sup> We expect the need to achieve and maintain NIS-R compliance to be the main driver of cyber resilience investment requirements for RIIO-3. Network companies have a clear mandate to incorporate the current CAF profiles into their risk management activities and to adopt the current CAF profiles to assess cyber security resilience and ensure compliance with the NIS-R.
- 11.6 Our objective for RIIO-3 is to build on the good progress made to date in RIIO-2 in complying with the NIS-R and to streamline this policy area where appropriate to reduce the regulatory burden.

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<sup>48</sup> August 2023, [NIS Supplementary Guidance and CAF Overlay for DGE Sector \(ofgem.gov.uk\)](https://www.ofgem.gov.uk/nis-supplementary-guidance-and-caf-overlay-for-dge-sector)

## **Cyber resilience guidance documents**

### **SSMC summary**

11.7 In the SSMC, we proposed to:

- align the NIS-R obligations and RIIO cyber resilience expectations; and
- consolidate the Cyber Resilience Business Plan / Re-opener Guidance with the NIS Supplementary Guidance.

11.8 We considered that this would help network companies to submit improvement projects that are clearly linked to NIS-R compliance activities as part of their RIIO-3 NIS-R Cyber Resilience Business Plan submissions.

### **Summary of consultation responses**

11.9 We received nine responses to our guidance document consultation proposal. Four respondents stated that they agreed with our consultation proposal and five responses were mixed.

11.10 Respondents supported our proposals to:

- Better align the NIS-R obligations to RIIO cyber resilience expectations;
- Consolidate cyber guidance documents where appropriate to do so; and
- Simplify the cyber resilience framework for RIIO-3.

11.11 Respondents raised the following concerns with our proposals:

- Consolidating the Cyber Resilience Business Plan / Re-opener Guidance with the NIS Supplementary Guidance may not work as the documents have differing purposes.
- Consolidating the Cyber Resilience Business Plan / Re-opener Guidance with the NIS Supplementary Guidance may result in key RIIO submission requirements being missed in what will be a 350+ page document. Potentially leading to confusion and wider variability in network company RIIO submissions.

11.12 Respondents suggested a number of alternative proposals for consideration:

- The publication of all RIIO-3 cyber guidance and related templates as non-confidential documents.
- Retention of a short separate RIIO Business Plan / Re-opener Guidance document.

- Clear definitions and guidance on what will and will not be funded via cyber resilience in RIIO-3.
- Clear definitions of any funding mechanisms used in RIIO-3 for cyber.

### **SSMD decision and rationale**

- 11.13 Based on the SSMC and cyber working group feedback, we will retain a separate RIIO-3 NIS-R Cyber Resilience Business Plan Assessment Methodology and Requirements (CRBP Requirements) document. This will ensure our RIIO-3 assessment approach and requirements are clear for network companies. We recognise the feedback that merging this into the NIS Guidance could result in this information being lost.
- 11.14 Based on the SSMC feedback we have aligned our CRBP Requirements document, which sets out our RIIO expectations, to the Ofgem NIS Guidance for Downstream Gas and Electricity Operators of Essential Services in GB<sup>49</sup> and the NIS Supplementary Guidance.<sup>50</sup> As we mentioned above, we expect the need to achieve and maintain NIS-R compliance to be the main driver of cyber resilience investment requirements for RIIO-3. Network companies have a clear mandate to incorporate the current CAF profiles into their risk management activities and to adopt the current CAF profiles to assess cyber security resilience and ensure compliance with the NIS-R.
- 11.15 We recognise the SSMC feedback to clarify what will and will not be funded via NIS-R Cyber Resilience in RIIO-3. We have included guiding principles in Appendix 2 of our CRBP Requirements document. We have built on the CAF mapping in the NIS Supplementary Guidance Appendices by also including several example projects mapped to the CAF Contributing Outcomes as a guide in Appendix 3 of our CRBP Requirements document. We recognise this is an area that network companies indicated further clarification would be welcome in the cyber working groups. We also include a clear explanation of the funding mechanisms in our CRBP Requirements.
- 11.16 Based on the SSMC feedback, we will publish the CRBP Requirements document and all NIS-R Cyber Resilience templates as non-confidential documents on our

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<sup>49</sup> Ofgem, April 2022, [NIS Guidance for Downstream Gas and Electricity Operators of Essential Services in GB v2.0.pdf \(ofgem.gov.uk\)](#)

<sup>50</sup> Ofgem, August 2023, [NIS Supplementary Guidance and CAF Overlay for DGE Sector \(ofgem.gov.uk\)](#)

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website. All network company NIS-R Cyber Resilience Business Plans, and our Draft and Final Determinations on cyber will remain confidential.

## **IT and OT plans**

### **SSMC summary**

11.17 We proposed that as part of their RIIO-3 NIS-R Cyber Resilience Business Plans, network companies should submit a:

- business IT security plan focussed on the investments that companies need to make to maintain the IT security of their business systems; and
- cyber resilience OT plan focussed on the investments that companies need to make to comply with or maintain compliance with the NIS-R.

11.18 We proposed to standardise the information we receive in the IT and OT plans and outlined our intention to work with stakeholders to develop templates.

### **Summary of consultation responses**

11.19 We received ten responses to our IT and OT plans consultation proposal. Three respondents stated that they agreed with our consultation proposal and seven responses were mixed.

11.20 The respondents supported our proposals to standardise IT and OT plans, where appropriate, through the use of templates.

11.21 The respondents raised the following concerns with our proposals:

- Separate IT and OT plans does not align with the NIS-R which is agnostic of system type;<sup>51</sup>
- Lack of clarity in the SSMC on the level of detail required for cyber resilience IT and OT plans;
- The narrowing of focus of cyber resilience in RIIO-3 to assets subject to NIS-R; and
- Lack of clarity in SSMC on how activities that do not directly contribute to NIS-R compliance or CAF outcome attainment but do contribute to overall cyber resilience will be funded in RIIO-3.

11.22 The respondents suggested a number of alternative proposals for consideration:

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<sup>51</sup> <https://www.legislation.gov.uk/ukxi/2018/506>

- The submission of a single cyber resilience plan, combining both IT and OT investments for the RIIO-3 period.
- The inclusion of cyber resilience IT and OT plans as part of the broader RIIO-3 Business Plan submissions.
- Inclusion of systems both within and outside the NIS-R scope as part of cyber resilience IT and OT Plans.

### **SSMD decision and rationale**

11.23 Based on the SSMC and working group feedback, we agree that one holistic Cyber Resilience Business Plan that is agnostic of IT or OT is better aligned to the NIS-R. As a result for RIIO-3, we expect network companies to submit one NIS-R Cyber Resilience Business Plan that is focused on investments that will enable compliance with the NIS-R. As we mentioned above, we expect the need to achieve and maintain NIS-R compliance to be the main driver of cyber resilience investment requirements for RIIO-3.

11.24 In RIIO-1, cyber resilience formed part of the broader business plan submission. However, since the introduction of the NIS-R in 2018 it is important for companies to be able to clearly articulate what investments are required to enable compliance with NIS-R. Therefore, due to the confidential nature of the NIS-R cyber resilience investments we do not think that including them as part of the broader business plan is appropriate for RIIO-3.

11.25 To reduce the regulatory burden and better align to the NIS-R obligations, we are asking network companies to update (where required) and re-submit, as the basis of the RIIO-3 NIS-R Cyber Resilience Business Plan in December 2024, the NIS Self-Assessment and Improvement report that was submitted in Autumn 2022.<sup>52</sup> This outlines the key activities that network companies need to implement to mitigate the cyber risks identified to achieve and maintain compliance with NIS-R. In the working groups, the network companies were broadly supportive of re-using existing NIS-R reporting templates for the RIIO-3 NIS-R Cyber Resilience Business Plan.

11.26 To better align the RIIO expectations to the NIS-R obligations in RIIO-3, we expect network companies to only include economic and efficient investments that aim to improve cyber resilience of assets subject to the NIS-R in the RIIO-3

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<sup>52</sup> [NIS Directive and NIS Regulations 2018: Ofgem guidance for Operators of Essential Services | Ofgem](#)

NIS-R Cyber Resilience Business Plan. For IT and OT assets that are not within the NIS-R scope, economic and efficient investments should be proposed through the relevant alternative RIIO-3 funding routes such as IT and Telecoms capex, asset health, etc. However, where a network company can demonstrate a clear and well justified link for investment in an asset that is not subject to the NIS-R that will deliver risk reduction to assets subject to the NIS-R, we may consider this through the cyber resilience funding route. We provide further guidance for network companies in the RIIO-3 CRBP Requirements document.

- 11.27 Following working group feedback, we have developed a standardised NIS-R Cyber Resilience Investment Document (CRID) template to be populated for either a programme of works or an individual project aligned to each CAF Principle. We have also developed a standardised NIS-R Detailed Costs template for network companies to use to lay out the RIIO-3 funding requirements for each project. These two templates along with our CRBP Requirements document outline what our minimum requirements are.
- 11.28 As we mentioned in our decision in the cyber resilience documents section above, we recognise the SSMC feedback to clarify what will and will not be funded via cyber resilience in RIIO-3. We include guiding principles in Appendix 2 of our CRBP Requirements document. We have built on the CAF mapping in the NIS Supplementary Guidance Appendices by also including several example projects mapped to the CAF Contributing Outcomes as a guide in Appendix 3 of our CRBP Requirements document. We recognise this is an area that network companies indicated further clarification would be welcome in the working groups.
- 11.29 The RIIO-3 cyber resilience templates and the CRBP Requirements document will be published as supplementary documents to the RIIO-3 BPG.

## **Allowances**

### **SSMC summary**

- 11.30 For RIIO-3, our ambition is to set baseline allowances for network companies to deliver their cyber resilience plans. Our rationale for this is as follows:
- as investment in this area matures and transitions to delivering BAU activities, we want to encourage companies to deliver efficiently; and
  - during RIIO-2 we have gathered cost data for delivering IT and OT activities. This may be sufficient to effectively benchmark costs submitted to us through the business plan data templates (BPDTs).



- 11.31 We recognised that investment in this area may not have matured sufficiently to set baseline allowances for all cyber resilience OT activities. We asked for your views on this, as well as the risks and benefits of our proposed approach.
- 11.32 In the event that there is uncertainty around cyber resilience OT activities and costs, we proposed to retain our RIIO-2 approach and provide funding via UIOLI.
- 11.33 We proposed that network companies should submit costs associated with their cyber resilience plans, as part of their RIIO-3 BPDTs. We outlined our intention to work with stakeholders to develop the Cyber BPDT.

### **Summary of consultation responses**

- 11.34 We received 12 responses to our allowance consultation position. Five respondents stated that they agreed with us and seven responses were more mixed.
- 11.35 Respondents supported our proposals to:
- set baseline allowances for known activities that will contribute to NIS-R compliance and CAF Contributing Outcome attainment;
  - retain a UIOLI for uncertainties in cyber resilience OT activities in RIIO-3; and
  - benchmark to provide insight on comparable investments and to inform Ofgem cost assessment of efficient spend.
- 11.36 Respondents raised the following concerns with our proposals:
- The amount of cyber resilience baseline allowance that will be possible to set up front at the beginning of the RIIO-3 price control.
  - Lack of clarity on how BAU activities that contribute to cyber resilience will be funded where there is not a direct link to NIS-R compliance or CAF Contributing Outcome attainment.
  - The accuracy and meaningfulness of benchmarked costs due to differences between network companies in terms of size, geographical location and system architectures.
  - The impact benchmarking may have on the ambition of RIIO-3 cyber plans if a company wants to stay ahead of the curve.
- 11.37 The respondents suggested a number of alternative proposals for consideration:
- UIOLI could be applied across IT and OT cyber resilience investments.

- Clear definitions and guidance on what activities will and will not be funded via cyber resilience in RIIO-3.
- Clear definition and guidance on the cyber funding mechanisms.

### **SSMD decision and rationale**

11.38 We have considered the feedback provided in the SSMC responses and through the cyber working groups and we recognise the points raised in relation to uncertainty in OT investments. Network companies have developed their cyber maturity during RIIO-2 and should now have strategic plans in place to enable them to adopt the current CAF profiles for cyber resilience and ensure compliance with the NIS-R. We consider that network companies should be able to submit well-justified and robustly costed NIS-R Cyber Resilience Business Plans by the final business plan submission date.

11.39 As we outlined in the SSMC, we want to set a majority of RIIO-3 cyber resilience baseline allowances at the beginning of the price control. For activities where there is a clear needs case, proposed delivery schedule and cost, allowances will be awarded with the application of the TIM and monitored through PCDs.

11.40 Setting baseline allowances that are subject to the TIM will encourage companies to look for efficient and innovative ways to deliver cyber resilience and maintain compliance with NIS-R. Through the NIS Self-Assessment and Improvement Report completed in Autumn 2022 and through NIS Annual reporting network companies have clear improvement plans in place to ensure compliance with NIS-R. We expect alignment between the NIS-R Improvement Plan activities and the NIS-R Cyber Resilience investments requested in RIIO-3.

11.41 Based on feedback from network companies in the working groups, where there is uncertainty in relation to the cost or the nature of the investment required, we will consider awarding allowances via two mechanisms:

- The first is where a PCD can be set as the network company can justify the business need, the specific needs case, preferred option and schedule, but there is uncertainty over the estimated cost to deliver. In this case, allowances will be awarded ex ante, subject to the TIM, and delivery will be monitored via a PCD. A network company must include details of the estimated cost range, lower and upper, and the basis of the estimate for us to assess.
- The second is where a PCD cannot be set as the network company can justify the overall business need and specific needs case for a proposed

project, but there is uncertainty over the preferred option, schedule and cost. In this case, we will consider awarding a UIOLI allowance. However, this will be by exception and the needs case minimum requirements must be met. If we do award a UIOLI allowance, it will be capped at 20% of a network company's total awarded baseline allowance for cyber resilience and funding will only be initially awarded for years 1-3 of the RIIO-3 price control period. This will enable network companies to move forward at the beginning of RIIO-3 and then submit a mid-period re-opener application once more certainty has been gained. Where a PCD cannot be set and a UIOLI is used, the benefits and outcomes will be reported annually and will be assessed ex post.

- 11.42 All BAU activities, eg system / asset refreshes, licences, should be accounted for as part of a network company's general RIIO-3 baseline funding not cyber resilience. The RIIO-3 cyber resilience funding stream should only be used for improvement projects that will enable a company to comply with NIS-R. We provide guidance on this in the CRBP Requirements document.
- 11.43 We recognise the concerns network companies have raised through their SSMC responses in relation to benchmarking. Our intention is to use benchmarking to provide insight on comparable investments only and to inform our cost assessment of efficient spend. We acknowledge the differences between the network companies and that not all investments will be comparable or possible to benchmark. We do not want to stifle network company ambitions; our intention is to ensure that consumers are getting value for money for comparable investments.
- 11.44 For the NIS-R cyber resilience BPDT, we received constructive feedback from network companies through the cyber working groups and one to one engagements. As a result, we modified the NIS-R cyber resilience BPDT based on the feedback received. We have issued sector specific Regulatory Instructions and Guidance (RIGs) to provide network companies with guidance on how to fill in the NIS-R cyber resilience BPDT. We expect network companies to align their cyber resilience allowance requests to the primary CAF Principle and Contributing Outcome. This will enable us to get a better understanding of where network companies are focusing their improvement plan activities for RIIO-3.

## **PCDs and reporting**

### **SSMC summary**

- 11.45 For RIIO-3, we want to reduce the number of PCDs that we set within the price control, whilst ensuring that we have sufficient oversight to ensure compliance with the NIS-R.
- 11.46 We explained that we can achieve this by aligning with our broader proposed RIIO-3 approach for setting PCDs. We proposed that only material projects that directly deliver the CAF outcomes should be submitted as PCDs.
- 11.47 We considered that mapping PCD outcomes to the CAF (eg at the Objective level, Principle level or at the Contributing Outcome level) would support the closer alignment of RIIO to the NIS-R and enable the current and future NIS-R inspection regimes to support the RIIO-3 closeout PCD assessment and any ex post assessment.

### **Summary of stakeholder responses**

- 11.48 We received 12 responses to our PCD and reporting consultation position. Seven respondents stated that they agreed with our consultation position and five responses were mixed.
- 11.49 The respondents supported our proposals to:
- Simplify cyber PCDs.
  - Look for opportunities to reduce the regulatory burden.
  - Consider a materiality threshold for cyber PCDs.
- 11.50 Respondents highlighted the following areas of concern:
- Lack of clarity on how PCDs will be mapped to the CAF in practice.
  - Lack of clarity on how non-NIS investments will be treated where these are not linked to CAF attainment.
- 11.51 Respondents suggested a number of alternative proposals for consideration:
- PCDs to be mapped to the 16 CAF Principles.
  - PCDs for projects only, no BAU activities.
  - PCDs for all cyber related costs but for PCDs to be less granular.
  - The materiality threshold for cyber projects monitored by PCDs to be set at £0.5m.

- The materiality threshold for cyber projects monitored by PCDs to be set at £15m.
- Combining PCD progress reporting into the NIS Annual reporting process/templates.
- Two stage reporting process – full end of year report with a simple tabular report which can be shared within year to provide early visibility of any deviations and avoid any surprises at the end of year.

### **SSMD decision and rationale**

11.52 Retaining PCDs is important to enable us to hold companies to account for delivering NIS-R cyber resilience improvement projects effectively and ensure value for money for consumers. Based on the SSMC and cyber working group feedback, we will simplify the structure of the RIIO-3 NIS-R cyber resilience PCDs to align to the 16 CAF Principles supported by the 42 CAF Contributing Outcomes. This will reduce the total number of RIIO-3 NIS-R cyber resilience PCDs to 16 per network company. Each of the 16 PCDs will include the necessary level of detail required to support our PCD evaluative assessment.

11.53 All PCD funded RIIO-3 NIS-R cyber resilience programmes or projects will be mapped against the primary CAF Principle. We do not intend to apply a materiality threshold for projects monitored by PCDs. We view a materiality threshold as a potential blocker to requesting allowances and for ongoing reporting given the range of costs associated with the maintenance or deployment of cyber security controls. We will continue to work with the network companies to determine how the mapping will be done in practice.

11.54 For RIIO-3, we intend to ask network companies to report annually, which is aligned with the current RIIO-2 reporting requirements. We will continue to work with network companies to develop the reporting requirements for RIIO-3 to ensure they are as efficient and effective as possible. We will also explore if there is an opportunity to combine the RIIO-3 NIS-R cyber resilience PCD reporting with the NIS Annual reporting.

### **Re-openers**

#### **SSMC summary**

11.55 We recognise the need for a re-opener mechanism that network companies can use to adjust allowances in the event of changes to the cyber threat landscape,

changes in government policy or guidance or the emergence of new technology capable of improving cyber resilience.

11.56 We proposed to establish a broader resilience re-opener for RIIO-3 with a mid-period re-opener window. We considered that this approach would reduce the overall complexity of the RIIO-3 price control.

11.57 We proposed that the mid-period re-opener also considers any additional cyber resilience funding requirements which may emerge from changes to government policy, guidance or the risk landscape during RIIO-3. Moreover, we also proposed to retain the option for the Authority to direct new re-opener windows in RIIO-3.

### **Summary of consultation responses**

11.58 We received ten responses to our re-opener consultation position. One respondent stated that they agreed with our consultation position, nine responses were mixed.

11.59 Respondents supported our proposals to:

- Retain authority triggered re-openers on cyber resilience.
- Apply no materiality threshold for cyber resilience re-openers in RIIO-3.

11.60 Respondents highlighted the following areas of concern:

- The use of only one mid-period re-opener in RIIO-3, stating this will not be sufficiently flexible to reflect the changing cyber threat environment.
- Including cyber as part of a broader resilience re-opener mid-period may mean cyber projects are not reviewed by cyber subject matter experts.
- The resilience re-opener is not restricted to government or regulatory environment changes only.

11.61 Respondents suggested a number of alternative proposals for consideration:

- To retain cyber specific re-openers.
- To align annual re-openers to NIS-R annual reporting.
- To retain a year 1 re-opener mechanism.
- A combined cyber and physical security re-opener.
- Ofgem to consider if companies can trigger re-openers.
- Further clarity on the type and level of detail required for re-opener applications.

## **SSMD decision and rationale**

- 11.62 We have considered the concerns that network companies have raised regarding our proposal to reduce the number of cyber resilience re-openers in RIIO-3. However, as we outlined in the Allowances sub-section above, we want to encourage network companies to submit well justified and costed NIS-R Cyber Resilience Business Plans in December 2024. We did not receive well justified cyber resilience plans at RIIO-2, and in some cases we did not receive any, which was the main reason for the year 1 re-opener. Network companies have developed their cyber maturity during RIIO-2 and should now have strategic plans in place to enable them to adopt the current CAF profiles for cyber resilience and ensure compliance with the NIS-R.
- 11.63 Therefore, we are maintaining our SSMC position to have one mid-period resilience re-opener which will include cyber resilience. The NIS-R cyber resilience re-opener applications will be submitted confidentially and will be assessed by cyber subject matter experts. We will not apply a materiality threshold for the NIS-R cyber resilience re-opener applications. Network companies will be able to use the re-opener to request amendments to baseline funded projects as well as for new projects to enable compliance with the NIS-R. We will issue guidance for companies on the level of detail we will require for a NIS-R cyber resilience re-opener application once the RIIO-3 period has started.
- 11.64 We will maintain the ability to direct a new re-opener window should there be a significant change to the cyber threat or regulatory landscape during RIIO-3. Where there is a well justified need, network companies can request for the Authority to direct a new re-opener window. We outline the process for this in Appendix 6 of our CRBP Requirements document.

## 12. Innovation

### Introduction

- 12.1 Innovation is an essential part of how we expect energy networks to operate. To deliver a low-carbon energy system that is reliable, safe and efficient at a pace in line with our net zero targets, companies have to find new ways of developing and operating their networks.
- 12.2 Within RIIO-2, we encourage innovation in a number of ways. The TIM encourages innovation within the core price control framework. Two additional stimuli, the NIA, and the SIF, provide companies with additional funding for innovating.

### Case for change

- 12.3 Achieving net zero and decarbonisation ambitions will require further innovation delivered faster than before, with network companies facing a wide range of challenges that need to be addressed in RIIO-3.
- 12.4 To meet these challenges, we expect network companies to deliver both incremental and transformational innovation. We believe that the current innovation package needs reform to meet those ambitions. Issues we have observed and have received feedback on include:
- the way that NIA and SIF operate is not as simple and streamlined as it could be;
  - network companies may not partner up with innovators that are putting forward potentially positive ideas;
  - the risk that the nature of 5-year price controls could disincentivise network companies from embarking on transformational innovations for which they are unlikely to see rewards within the same price control period;
  - the current rulebook governing network activities may need to evolve to remain fit for purpose and avoid becoming a barrier to transformational innovations; and
  - innovation is not consistently shared, rolled out and deployed across networks, which is an issue we have observed across multiple price controls.



12.5 As a result of this, we believe that aspects of the current innovation stimulus need reform.

## **Reforming the structure of innovation funding**

### **SSMC summary**

12.6 In the SSMC, we set out our expectation that more innovation projects should be funded as BAU by companies, and highlighted that the wider RIIO-2 framework retains strong incentives for companies to innovate (in particular via the TIM).

12.7 We also proposed:

- Retaining a flexible allowance to allow companies to undertake R&D, on the basis that the allowance, currently known as the NIA, provides accessibility, flexibility and continuity to networks and their partners.
- Retaining a competitive network innovation funding pot that focuses on the key challenges facing the energy sector, on the basis that the competitive fund, currently known as the SIF, has delivered projects of high quality so far.

### **Summary of consultation responses**

12.8 Among the 26 responses to this question, there was widespread agreement with our proposal to retain the flexible allowance (ie NIA). Most agreed that the NIA constitutes a consistent and reliable source of funding, playing a critical role in the agile development of smaller scale, low-to-medium Technology Readiness Level (TRL), and higher risk innovation within the industry. Its flexibility is also noted as a benefit by numerous respondents, allowing them to easily involve third parties.

12.9 However, three non-network respondents asked that the governance arrangements of the flexible allowance be revised, by increasing scrutiny to prevent it from being used for projects that should be BAU, as well as to avoid duplication. Furthermore, one network and two non-network respondents requested that the scope and purpose of the NIA and SIF be more clearly delineated to prevent overlaps. Four network respondents supported a review of the NIA criteria to include additional areas such as emissions reporting, productivity/operational efficiency, and reliability of network assets as well as network resilience.

12.10 Twenty one respondents agreed with our proposal to keep the competitive innovation funding pot, currently known as SIF. This phased application-based

mechanism is perceived by respondents as being necessary to allow for consistency in delivery (and de-risking) of large-scale strategic innovation projects.

- 12.11 However, seven respondents asked for the fund to be continued in a reformed format. The most requested reform, from five network companies, was to remove the Discovery phase of SIF and allocate these funds to NIA instead, to further support early R&D project development. A further request from three network respondents was to make SIF Challenges broader and longer-term, to enable consistency in project planning. Thirdly, three network companies asked for the number of application windows to be increased to at least two per year, or to have a continuous application window, to avoid bottlenecks. Two non-network respondents also suggested that project progress be challenged by an independent organisation with a whole systems perspective.
- 12.12 On the question of how funding should focus on whole systems problems, three (two networks, one non-network) respondents stated that cross-sector funding opportunities (eg with other regulators) should be increased to tackle challenges around net zero and bring further benefits to consumers. Two network companies and one other respondent also suggested that an independent organisation be made in charge of setting long-term innovation goals, helping align cross-sector funding streams.

### **SSMD decision and rationale**

- 12.13 We will retain the opportunity for companies to receive a flexible allowance fund in RIIO-3. We will continue to set the NIA based on the justification set out in company business plan submissions. This will ensure that companies are provided with a pot of money to undertake essential early-stage R&D, working in close collaboration with third parties. This is important to enable risky innovation going beyond BAU, involving a wide variety of partners and delivered in a timely way. We believe that the flexibility and pace of the NIA play a key role in driving innovative projects taking a whole systems approach to solving challenges of meeting net zero. Our decision has been taken in line with the majority of consultation respondents agreeing with our proposal to retain the fund, noting the benefits of its flexibility and agility.
- 12.14 We have considered concerns around potential project duplication and activities that should be BAU being undertaken within the NIA. To address these, we will base the amount of NIA that each network receives on the justification they put forward in their business plan. We will also explore increasing oversight of the

NIA, with a lean and continuous process in place to monitor projects, while still retaining the fund's flexibility. This will involve increased dedicated resource to manage the allowance, as well as improved project reporting. The aim is not only to increase the quality of project proposals, but also create links with Ofgem, helping identify duplicative or BAU projects. The increased monitoring will be set out in the upcoming RIIO-3 NIA Governance document.

- 12.15 We will retain the current NIA criteria to 'facilitate energy system transition and/or benefit consumers in vulnerable situations'. However, we welcome network companies interpreting these criteria broadly, and using their business plans to make the case for how their proposed innovation projects deliver benefits to consumers and the wider energy system, and why they believe they are not incentivised elsewhere within the price control.
- 12.16 The rationale for focusing on these two criteria in RIIO-2 was that some projects undertaken within the NIA in RIIO-1, particularly operational and maintenance projects, could have been funded through companies' totex allowances, as they had the potential to deliver efficiency savings for network companies. This rationale remains, as we will continue to have incentives for companies to fund such projects within their BAU work. We are however mindful that there is a broad range of innovation in network activities needed to transition to a net zero energy system, some of which requires taking a level of risk companies may not be prepared to run as BAU projects, and some may only deliver a small benefit to the company itself.
- 12.17 While we view a number of the additional criteria requested to be incentivised elsewhere within the price control (including health and safety, and work to improve operational efficiency), there are some areas (in particular sustainability and network resilience) where there may be some innovation that could fit the existing criteria and purpose of the NIA. We therefore welcome companies to interpret the NIA criteria broadly and use their business plans to make the case for why a given project is worth dedicated innovation funding, and cannot be funded through their totex allowances.
- 12.18 We will also retain a competitive innovation fund in RIIO-3. Doing so will ensure the continued development of large-scale demonstrators focusing on addressing net zero challenges, at lowest cost to consumers. The SIF Challenges and the phased approach to the fund ensure that projects maintain their strategic direction when scaling up disruptive technologies and processes essential to meeting net zero. According to preliminary Cost Benefit Analyses (CBAs) of the SIF, undertaken by networks as part of their Beta applications in 2023, the fund

has the potential to create £5 billion of financial benefits by 2035, with 28,423 TCO2 emissions saved by 2035. Our decision has been taken in line with the majority of consultation responses, agreeing with our proposal to retain the fund for these reasons.

- 12.19 This decision also takes into account concerns expressed by respondents on excessive bureaucracy around applying for and managing projects within the SIF, particularly for smaller feasibility work. To address this, we have decided that the type of feasibility work currently undertaken under the SIF Discovery Phase will be carried out within the NIA, with the SIF focusing on higher TRL projects currently being undertaken under the Alpha (focused on experimental development) and Beta (focused on build, operation and/or demonstration of innovation) phases. To increase the agility of the competition fund, we will also aim to make SIF Challenges longer term, to better facilitate collaborative work on long-term strategic challenges. We will continue the monitoring and support of projects to ensure high project quality.
- 12.20 To ensure that the requisite feasibility study work has been undertaken so that the SIF has a good funnel of projects, we will explore establishing a link between the NIA and the SIF that creates an incentive for networks to apply into the SIF, building on projects undertaken within the NIA. This will ensure that risky, high-impact, strategic projects are explored within the NIA, in readiness to apply for the SIF. We will undertake market engagement ahead of the Draft Determinations publication to finalise what form this link takes.

## **Amount of innovation funding**

### **SSMC summary**

- 12.21 In the SSMC we proposed retaining a similar level of innovation funding, based on preliminary reviews indicating the SIF represents good value for money.

### **Summary of consultation responses**

- 12.22 Out of 21 respondents, 14 (of which nine were networks) agreed with the proposal to keep a similar amount of innovation funding. There were also calls from four respondents (two networks and two non-networks) to increase funding, and one stakeholder asked to consider decreasing it.
- 12.23 Reasons given for increasing the amount of funding included inflationary pressures on companies, ensuring alignment with government R&D targets, as well as delivering the ambitious transformation required to reach net zero.

Reasons given for decreasing the amount of funding included ensuring more value for money for consumers.

### **SSMD decision and rationale**

- 12.24 For the NIA, our decision is to keep a similar quantity of funding in RIIO-3. We will base the amount given to companies on the quality of their submitted business plans. We consider that basing our decision on business plans when determining the amount of flexible allowance given to companies adequately addresses consultation respondents' concerns around ensuring value for money for consumers.
- 12.25 For the SIF, our decision is to also keep a similar quantity of funding in RIIO-3. This quantity will cover the adjusted remit of the SIF, namely focusing less on feasibility studies that will instead be funded under the flexible allowance fund. We think that the current volume of funding and projects represents a good balance between funding a wide range of impactful projects and ensuring that the portfolio is manageable by the industry, Ofgem and third parties.
- 12.26 With respect to both funds, we will retain the option of increasing the size of funding available during the price control if compelling new policy evidence emerges that innovation in a specific area is required.
- 12.27 Our decision to retain similar quantities of funding for both the NIA and competition fund also reflects consultation responses, largely agreeing with our proposal to continue with a similar level of innovation funding.

### **Increasing third party involvement**

#### **SSMC summary**

- 12.28 In the SSMC we proposed establishing an accelerator to support early-stage innovators, on the basis that networks might filter out ideas and not partner up with innovators whose potentially positive innovations and projects could benefit consumers.

#### **Summary of consultation responses**

- 12.29 On the potential need to expand the scope of innovation funding to be more inclusive of third parties, 13 network responses generally challenged this, while 12 non-network responses were in favour. Challenges to this proposal largely stemmed from network company assertions of the support they already provide for third parties, which they consider to be working well. Support for this proposal

typically revolved around the basis that it would engender more diversified input and challenge networks filtering out of potentially positive innovation ideas that could benefit consumers, and thereby enable more beneficial, non-financially motivated improvements for vulnerable consumers.

- 12.30 On establishing an accelerator to support early-stage innovators, responses varied from agreement (eight, only one of which was from a network company), disagreement (three network companies), to a large group of respondents questioning the need and purpose of the accelerator (12, of which four were from non-networks). There was therefore a clear distinction between networks, which were largely against the idea, and non-network respondents who were mostly for it. The varying interpretations in responses revealed a lot of confusion over what it could, or should, do.
- 12.31 On funding a potential accelerator through a future challenge fund and to be sponsored by networks, responses were again mixed, with six non-networks in favour, five networks against it, and ten respondents which were unsure (three of which were from non-networks). Network responses strongly advised this should come separately/additionally to innovation funding, while non-network responses broadly suggested this would be logical from current funding. Regardless of these different positions, all responses typically advised that how an accelerator should be funded should be determined by its scope/function.

### **SSMD decision and rationale**

- 12.32 We are not yet deciding whether or not to introduce an innovation accelerator in RIIO-3. This is because:
- there is a significant evidence gap due to clear disagreement in SSMC responses between network companies, innovators and industry bodies on the need for an accelerator, as well as varied understandings of the term; and
  - if introduced, an accelerator should have clearly delineated parameters, which we cannot currently set. If done right, it could help early-stage innovators, creating a smoother pipeline of innovation projects but if done too heavily it could disrupt the cycle of innovation and add more bureaucracy.

### **Price control timings**

#### **SSMC summary**

- 12.33 In the SSMC we sought feedback and evidence from the market around whether the current five-year price control structure stifles certain types of innovation,

reflecting concerns raised around networks limiting innovation to shorter-term and lower-risk projects to ensure delivery and returns during a price control period.

### **Summary of consultation responses**

- 12.34 Regarding whether potential innovation projects are not being implemented or are not seeking funding due to the five-year structure of the price control, all but one of the 18 respondents to this question flagged a concern.
- 12.35 Eight respondents called for a carry-over mechanism within NIA (same as previous Carry-over Network Innovation Allowance (CNIA)). This would avoid a cliff-edge in activity, as well as help bridge any risk, by enabling projects to continue across the period between price controls until projects are completed.
- 12.36 Four respondents stated that the price control structure undermines long-term thinking or planning, but did not provide clear evidence for this contention or suggest an alternative model.

### **SSMD decision and rationale**

- 12.37 In RIIO-3 we will re-introduce the CNIA. The CNIA timeframe will be 18 months, meaning companies are expected to complete their RIIO-2 NIA projects by 30 September 2027.
- 12.38 The CNIA was successfully implemented between RIIO 1 and 2, with networks reporting that this enabled them to better plan and deliver innovation projects.
- 12.39 The CNIA enables networks to use unspent NIA funding to continue progress and fund projects started in RIIO-2 so they can follow the natural development of innovation projects rather than forcing them to complete by the end of RIIO-2.
- 12.40 Giving network companies 18 months will ensure that they can start projects towards the end of the price control if they still have NIA funds left to spend.

## **Utilising regulatory sandboxes to shape future network regulation**

### **SSMC summary**

- 12.41 In the SSMC we proposed building the potential for Future Regulation Sandbox (FRS)<sup>53</sup> trials to be conducted during RIIO-3, with an explicit focus on informing changes to the rules governing energy network activities. We also proposed that

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<sup>53</sup> Proposal to introduce the Future Regulation Sandbox, October 2023:  
<https://www.ofgem.gov.uk/call-for-input/proposal-introduce-future-regulation-sandbox>

the RIIO-3 framework should enable and be able to fund such trials as and when they take place.

### **Summary of consultation responses**

- 12.42 Of the 18 respondents to this question, 17 expressed some level of agreement with our proposal to introduce the FRS. One network respondent held the view that the FRS should only be used to trial new regulations, rather than testing changes to existing ones.
- 12.43 Some caveats and concerns were raised about the proposal to introduce the FRS, including considerations related to the pace of implementation, the need for industry input, and a desire for more information. These echo comments received through our recent Call for Input<sup>54</sup> which outlined more fully our FRS proposal. More detail on these comments can be found in our Summary of Responses to the proposal to introduce the FRS.<sup>55</sup>
- 12.44 There was support from six respondents (five of which were network companies) for integration of the FRS with the SIF and NIA to provide a route to funding for network-focused trials. One respondent expressed opposition to using re-openers as a route to fund trials.
- 12.45 Fifteen respondents, including 10 network companies, suggested a broad range of topics where live FRS trials could add value to our policy-making process. These included trialling new rules for 100% hydrogen networks, different connection management policies, new network charging rules, and new rules to encourage flexibility services. Most suggestions were not specific enough to be translated into a trial immediately, but the breadth of topics referred to in the responses supports the potential for a broad application of, and need for, the FRS.

### **SSMD decision and rationale**

- 12.46 We decided in April 2024 that, based on the positive feedback received, we will continue developing the FRS into a deployable policy-making tool which will work in addition to our existing regulatory toolbox. Given the FRS is still in development, our focus at this stage is to build the right conditions into RIIO-3 to

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<sup>54</sup> Call for Input (Proposal to introduce the Future Regulation Sandbox), October 2023: <https://www.ofgem.gov.uk/sites/default/files/2023-10/Proposal%20to%20introduce%20the%20Future%20Regulation%20Sandbox%20CFI%20final.pdf>

<sup>55</sup> Summary of Responses to proposal to introduce the Future Regulation Sandbox, April 2024: <https://www.ofgem.gov.uk/publications/summary-responses-proposal-introduce-future-regulation-sandbox>



enable any future trials to take place, should the need arise. Our decision takes into account the broad support both in the FRS consultation and the SSMC from energy networks, consumer organisations, innovators and code bodies.

- 12.47 The key issue for any network-related FRS trials would be how to fund them, in case existing baseline allowances are not sufficient or would be inappropriate to use. The initiative for and design of any given FRS trial will be led by us. We therefore expect to closely scrutinise and be involved in determining trial costs and routes to funding, which will vary on a case-by-case basis. FRS trials will likely involve innovative technology or practices, which is why we consider the utilisation of existing innovation funding mechanisms justified.
- 12.48 Networks could use the NIA, as long as the given trial topic fits within the NIA criteria. Similarly, the SIF could be a vehicle to deliver FRS trials, as long as they align with a SIF Challenge and the programme timelines. Existing NIA and SIF governance processes would ensure transparent reporting and scrutiny on how the funds are utilised. We will further consider whether existing uncertainty mechanisms could be an appropriate route to fund FRS trials.

## **Innovation Deployment**

### **SSMC summary**

- 12.49 In the SSMC we sought feedback and evidence from the market around whether the actual deployment of innovation into BAU is low, why this is the case if so, and what a potential new mechanism could look like to address barriers to deployment.

### **Summary of consultation responses**

- 12.50 There were 20 responses on deployment levels. Sixteen respondents, two of which were non-networks, stated that deployment shouldn't be the only measure of project success. Most mentioned that learning and accumulating knowledge are key aspects of innovation, and that a high failure rate should be expected. Six respondents also pointed out that the concern should not be about whether individual projects get deployed, but whether across their portfolio of innovation projects networks could evidence that a sufficient number reach deployment.
- 12.51 Five network companies explicitly disagreed with the premise that there was insufficient deployment whereas three non-network respondents explicitly agreed, with limited evidence being presented to prove either side of the argument. However, the majority of respondents did acknowledge various challenges

companies face in deploying even proven and mature innovation. These range from insufficient incentives on networks to deploy innovations in the interest of consumers and insufficient funding for deployment activities, to practical issues involving updating policies and retraining staff. Some acknowledged that there was typically a lag between a project closing and a solution being implemented, with the latter often lasting over the course of several price controls.

- 12.52 There were 21 responses to the question on the design of potential new mechanisms to increase innovation deployment. There was broad support, particularly from network companies, for the introduction of new mechanisms to fund and reward deployment of high TRL innovation that is high risk or delivers benefits to/savings to consumers (rather than network companies in the first instance). Respondents suggested this could take the form of a separate UIOLI allowance, or an expansion of the NIA or SIF to cover deployment activities. Three network companies were open to exploring a performance-based incentive that would reward network companies for benefits delivered through innovation.
- 12.53 Four respondents mentioned the Innovation Rollout Mechanism (IRM), which was part of RIIO-1, stating that it would be beneficial to have a similar late-stage re-opener available within RIIO-3, although with less complex administration than the IRM. Two network respondents also set out that the current ASTI framework, with its high-powered delivery incentives, disincentivised risk-taking even though there may be long-term consumer value attached to introducing innovation.
- 12.54 As for the topic of penalties, seven respondents were against the idea, as failure and risk are inherent to innovation, arguing that any penalties designed should be designed in a balanced manner, as they could discourage higher risk innovation. Three respondents suggested the idea of introducing a clawback measure, whereby funding is clawed back in case networks fail to deliver on their deployment plans.
- 12.55 Eight non-network respondents suggested the inclusion of a reputational incentive to increase reporting on deployment activities and outcomes, to have stronger expectations for NIA and SIF projects to develop deployment plans, and generally to make network companies more accountable for deployment.

### **SSMD decision and rationale**

- 12.56 Deploying innovation that has been developed and tested is crucial to ensure that consumers see the returns on innovation projects that they invested in. That said, we fully recognise that not all innovation projects will lead to a deployable

solution or technology, and that value also arises from sharing knowledge and learning, including of things that did not work.

- 12.57 We continue to expect companies to fund some innovation projects and their deployment as BAU using their totex allowance, incentivised by TIM, rather than relying solely on additional innovation stimulus funds. To that end, as in RIIO-2, network companies will be able to make a case for additional totex allowances in RIIO-3 to cover reasonable costs to deploy previously proven innovation. We will scrutinise these requests as part of the business plan assessment and have provided more detail in the RIIO-3 BPG. However, if companies then do not use funds for the agreed purpose, we will seek to recover this money.
- 12.58 We will consider introducing a reputational incentive on innovation deployment, focused on increasing visibility of the data that is already reported through the Innovation Measurement Framework (IMF). We recognise that it is difficult for stakeholders to scrutinise network companies' performance on innovation deployment. Even though the IMF collects relevant data points, which are reported on the Smarter Networks Portal, data on deployment is difficult to access, collate and interpret meaningfully. We are therefore looking to explore, with input from stakeholders, how to improve the visibility and transparency of innovation deployment data, to ensure network companies can be better held to account on their performance in this regard.
- 12.59 We will also give further consideration to a financial incentive. Our overarching ambition is that the right conditions and incentives are in place for energy networks to deploy innovation that delivers benefits to consumers and other network users, and delivers whole system benefits, and to do so in a timely manner. This includes innovation that delivers benefits over a longer time-period, that is strategic and risky. The feedback received shows that multiple challenges remain in achieving this ambition, both arising from the way network companies are incentivised as well as the broader price control structure. We therefore wish to explore these challenges and potential solutions further with stakeholders, to inform our decision on whether to introduce a financial mechanism that will further these objectives.

## 13. Data and Digitalisation

### Introduction

- 13.1 In 2021 we and government published a joint Energy Digitalisation Strategy,<sup>56</sup> committing to a series of actions to support the digitalisation of the energy sector. This built on previous work by the independent Energy Data Taskforce.<sup>57</sup> To meet these actions, we introduced licence obligations in RIIO-2 requiring networks to consult on and publish Digitalisation Strategies and Action Plans and comply with Data Best Practice.<sup>58</sup> We are committed to further digitalisation of the energy sector and unlocking the value of both consumer data and energy system data and will be continuing this line of work in RIIO-3.
- 13.2 In our SSMC we outlined our three key workstreams in progress on digitalisation. These are Consumer Consent, Data Sharing Infrastructure and Data Best Practice.
- 13.3 These workstreams are evolving in parallel to the RIIO-3 process, and we plan to consult on governance models for data sharing infrastructure this summer. If you have questions or comments on digitalisation workstreams, please contact: [digitalisation@ofgem.gov.uk](mailto:digitalisation@ofgem.gov.uk).
- 13.4 We also stated our ambition to remove our reliance on Excel-based transmission of regulatory data, improve the accessibility and efficiency of providing stakeholders with data on price controls and make use of any synergies with Data Sharing Infrastructure (DSI). We set out a preliminary timetable for "modernising regulatory reporting."

### Modernising regulatory reporting

#### SSMC summary

- 13.5 We shared our perceived benefits of modernising regulatory reporting and provided an indicative timeline for the work we proposed to undertake. We said we intended to commence external engagement in 2025 after the submission of business plans.

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<sup>56</sup> [Digitalising our energy system for net zero: strategy and action plan 2021 \(publishing.service.gov.uk\)](https://publishing.service.gov.uk)

<sup>57</sup> [Energy Data Taskforce | A Modern Digitalised Energy System \(catapult.org.uk\)](https://catapult.org.uk)

<sup>58</sup> See also: [Decision on updates to Data Best Practice Guidance and Digitalisation Strategy and Action Plan Guidance | Ofgem](#)

## **Summary of consultation responses**

- 13.6 There were twenty responses to questions OVQ59, OVQ60 and OVQ61.
- 13.7 In general, there was broad support for modernising regulatory reporting and the benefits that it could bring. There were no responses disagreeing with our ambition to move beyond Excel, although one respondent caveated that ad-hoc reporting such as operational status updates should be excluded from the project.
- 13.8 One consumer group requested more data be made public, and another stakeholder suggested more public data on emissions to maximise potential reputational levers on company performance.
- 13.9 Regarding the timelines (OVQ59), three network companies were concerned the timeline was too aggressive, one noting that there would need to be proper assurance of the process. Three network companies agreed the timelines looked sensible, though two with caveats that more clarity is needed on the scope and nature of re-designing data templates. Three other stakeholders wanted the external engagement to start sooner than 2025.
- 13.10 Regarding initial opportunities (OVQ60 and OVQ61), one DNO suggested focusing on Annex F – Interruptions as a dataset as it has a large degree of consistency and so serves as a proof of concept. One GDN suggested focusing on repex expenditure tables and National Gas suggested focussing on core totex and unit cost expenditure tables to reduce the number of manual steps in data preparation. Another GDN stated that the project should extend to the Price Control Financial Model to gain similar efficiency benefits there.
- 13.11 Almost all network companies stated they would like us to streamline the data that is requested or remove any unnecessary reporting. One GDN expressed that a re-opener may be necessary because spend required to deliver the work on modernising reporting would not be known with certainty prior to business plan submission.
- 13.12 A TO asked whether the transition would be gradual or "big-bang", and whether the DAG would need to change.

## **Next steps**

- 13.13 We do not expect the transition to a new reporting system will be a "big-bang" transition, but we may seek to transition by groups of data types. For example, all actual expenditure tables may be altered in one step, but other tables would be left in Excel or paused to be changed later with some catch-up. Changes to the

DAG would be considered as required following engagement with stakeholders on a case-by-case basis.

- 13.14 We have not proposed (and are not intending to propose) a re-opener associated with reporting changes, because it would largely replace already existing business-as-usual processes with the aim to decrease the overall administrative burden.
- 13.15 Beyond our commitment to undertake this modernisation project, no additional decisions need to be made at this stage about the modernising regulatory reporting workstream.
- 13.16 Ofgem is working to have the right infrastructure and technical support in place to accommodate meaningful change to the RIGs and reporting templates. Ofgem will move this program to direct engagement via working groups commencing with 'initial reflections' on the reporting packs and business plan data templates. We expect this effort to then be merged into the RIIO-3 Regulatory Reporting Pack development process.

## Appendix 1 Approach to assessing Impacts

### Summary

- A1.1 In our Framework Decision we concluded that the current RIIO methodology for price controls provides the necessary balance for achieving several challenging objectives such as supporting the energy system transition while maintaining security of supply and high quality of service, and fostering system efficiency and long-term value for money.
- A1.2 As part of the methodology development for RIIO-3, we are revising the detailed design of the price control for each sector to achieve the best outcomes for consumers. We intend to modify some of the mechanisms we used in RIIO-2, including to simplify our approach based on learning from that period.
- A1.3 This appendix provides a preliminary view of our approach to assessing the impacts of the RIIO-3 package. As in previous RIIO impact assessments (IAs), the full justification for many decisions will be found in the main document and the relevant sector annexes. The scope of the IA will focus on the impact of decisions beyond the natural evolution of the price control and which are needed to meet the Government’s net zero ambitions, including to:
- incentivise timely, efficient investment in network infrastructure; and
  - manage expected long term changes in consumer demand and network capacity, expressed for example by future energy scenarios.
- A1.4 Our IA in RIIO-3 needs to be informed by network companies’ business plan submissions and engagement with stakeholders. It will be published, and consulted on, as part of the Draft Determinations, with an aim to providing an explanation of how the price control is likely to affect consumers, industry and the environment. The final IA will be published along with the Final Determination.
- A1.5 Our IA will also provide an analysis of the expected impacts that result from, and are informed by, the fulfilment of our statutory duties. For example, they will provide an assessment of how our decisions influence economic growth and also set out how they are likely to influence and achieve the strategy and policy outcomes detailed in the Strategy and Policy Statement.

## Problem under consideration

- A1.6 Electricity and gas networks are regulated monopolies. Ofgem is required to determine the regulatory framework that will be in place from April 2026 onwards for the gas and electricity transmission, and gas distribution sectors.
- A1.7 While we design, and set, the new gas and electricity price controls, there are distinct challenges in the electricity and gas sectors that need to be managed.
- A1.8 Over the coming years, the electricity networks require significant reinforcement and new network build to avoid capacity constraints becoming an obstacle to achieving legislated net zero targets and interim carbon budgets. Our price controls set out the spending plans necessary to meet this challenge, in light of anticipated increases in electricity demand. They determine the financial framework to attract the scale of capital investment required, and determine the associated accountabilities placed on the network companies to deliver new infrastructure on time and budget.
- A1.9 The gas networks also face several challenges. The pathway to net zero will involve significant further electrification, but the extent, speed and geographical variance in the transition away from gas is uncertain. While this uncertainty remains, we do not currently anticipate that there will be large-scale systemic changes to the gas networks during the RIIO-3 price control period. However, the uncertain pace and scale of transition away from gas, particularly in respect of heating homes and buildings, does raise some distinct challenges in how the costs of gas network investment are recovered. This is critical to ensuring that both current and future gas consumers pay fairly for the services they receive.
- A1.10 This appendix should be read alongside the suite of SSMD documents. When it comes to setting the price control there are three key areas that drive over 90% of the allowed revenue:
- Totex – the revenues that we allow the companies to recover to deliver the outputs, which in turn impacts 'fast money' and, indirectly, 'slow money';
  - Depreciation – the scale of funding each company can expect to receive back through 'slow money'; and
  - Weighted Average Cost of Capital (WACC) – the combination of cost of debt, cost of equity and gearing that tells companies the expected return they should receive on their Regulatory Asset Value for delivering neutral performance.



A1.11 This appendix focuses on some of the key decisions that will affect these three elements of the price control and provides a qualitative view of their rationale and expected impacts. Once we receive information from the relevant companies, at Draft Determinations we shall update our assessment and aim to quantify these wherever possible. This will include updating our analysis using proposed allowed revenues, as set in the price controls for gas and electricity transmission and gas distribution companies.

## **Description of options being considered**

A1.12 In our Framework Decision, we decided to continue with the framework set out in RIIO-2. As a result, in our IA approach, we are considering the following two options for moving from our Framework Decision towards its implementation in RIIO-3:

- **Option 1 ('the counterfactual')** – is the application of the same RIIO-2 framework to the RIIO-3 period. This includes some changes that would take place anyway as a result of the data and accumulated experience of running the price control.
- **Option 2 ('preferred option')** - is a revised RIIO-2 framework that, in addition to the proposed changes in option 1, focuses on more substantial changes which are necessary to support the move to net zero.

### **Option 1 - Counterfactual**

A1.13 Under Option 1, we would continue to apply the same tools as in RIIO-2 but would take account of historical performance and lessons learnt to update and recalibrate parameters and outcomes. A list of these decisions can be seen in Table A1 below.

A1.14 These decisions would modify the current price control in light of the evidence collected during RIIO-2. In general, these could be expected to result in a small impact on consumers and would not significantly affect the size of totex, the efficiency incentive, depreciation and the cost of capital. Option 1 also assumes the same outputs, incentives and uncertainty mechanisms as in RIIO-2 with some modifications based on historical performance and feedback received in response to SSMC.

**Option 2 - Preferred option**

A1.15 Our preferred option maintains the RIIO approach to set allowed revenues, outputs and incentives, but contains a number of differences, particularly in relation to changes needed for delivering net zero.<sup>59</sup> Our IA will focus on some significant changes to totex and depreciation which represent the biggest modifications in the RIIO methodology. More fundamental changes to regulation were considered and assessed as part of the Framework Consultation and Decision and the related IA. These are set out in Table A1.

A1.16 The decisions being made as part of Option 2 are intended to produce benefits related to meeting Ofgem’s statutory objectives, including our Net Zero and Growth duties as additional objectives when compared to RIIO-2. We also need to analyse the impact with respect to the four areas of the Consumer Interest Framework, which are consistent with the four strategic outcomes of RIIO-3.<sup>60</sup>

A1.17 We have identified several challenges for the next price control in relation to both the overall policy landscape and to the specific price control decisions. In RIIO-3, network users will expect network companies to deliver the key outcomes highlighted in our Consumer Interest Framework<sup>61</sup> and which move beyond the outcomes from RIIO-2. Therefore, and as emphasised throughout the SSMD documents, we have decided to introduce changes to the regulatory tools of RIIO to ensure:

- Infrastructure fit for a low-cost transition to net zero: Network companies must facilitate a low-cost, environmentally sustainable, low carbon energy system that enables the transition to net zero, with infrastructure built at pace;
- Secure and resilient supplies: Network companies must deliver a safe, secure and resilient network that is efficient, data rich and responsive to change. Consumers should have access to supplies that are resilient to physical, financial, and cyber shocks;
- High quality of service from regulated firms: Network companies must deliver a high quality and reliable service to all consumers and network users, including those who are vulnerable;

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<sup>59</sup> As flagged in the [Future Systems and Network Regulation Core Document](#).

<sup>60</sup> Chapter 2 Future Systems and Network Regulation Core Document October 2023

<sup>61</sup> [Forward Work Programme 2023-24 \(ofgem.gov.uk\)](#)

- System efficiency and long-term value for money: Network companies must deliver an efficient cost of service, minimise the costs to consumers of system transformation and ensure consumers and network users get a fair deal.

A1.18 The outcomes above would be relevant for any price control design. For the preferred option, our assessment focusses on changes to:

- Mechanisms for delivering additional load related investment;
- Changes to BPI/TIM incentives; and
- A mechanism for controlling investment under demand decline in the gas sectors.

A1.19 Each of these factors represent a shift from the RIIO-2 price control and our final decisions in relation to them will be significantly influenced by the information the network companies provide to us as part of their business plans. For this reason, once we have this, our IA will be updated accordingly with quantification of expected impacts at the draft determination stage.

A1.20 Each option 2 element is detailed below; however, our full decisions are set out in, and should be read in conjunction with, the other SSMD documents.

### **Mechanisms for delivering additional load related investment**

A1.21 We have set out our policy decisions and the outputs we expect the network companies to deliver. These are the factors which determine the size of the totex investments required for the RIIO-3 period across each sector, including the additional capacity required through the electricity transmission system. This should allow the companies to understand what we need them to have considered in their business plans for us to assess the impacts of RIIO-3.

A1.22 We consider that changes to the approach to drivers, re-openers and deliverables will be necessary to achieve our aim of facilitating unprecedented network expansion in electricity transmission, including to deliver the government ambition of a net zero power system by 2030. By comparison, as made clear in the relevant sector annexes, for gas transmission and distribution, load related expenditure is expected to be limited during RIIO-3, with the majority of investment driven by legislative and health and safety requirements to maintain a safe, secure and resilient existing gas network. The approaches to asset health related investment and repex (in gas distribution) are also expected to be broadly consistent with RIIO-2.

A1.23 The totex allowances required to deliver the outputs will be the subject of cost assessment. At this stage we have indicated our intention is to retain indexation of Real Price Effects, subject to a review at Draft Determinations to ensure it remains fit for purpose, particularly given supply chain price volatility. We intend to retain an Ongoing Efficiency (OE) productivity challenge, consistent with the approach taken in RIIO-2. Our focus will be on driving a cost-effective transition for consumers, but the proposed precise scale of the OE challenge will be set at Draft Determinations, reflective of the full set of evidence available. This will in turn, inform our IA.

### **Changes to BPI/TIM incentives**

A1.24 As part of the SSMD, we are modifying the RIIO-2 incentives to better encourage companies to submit fit-for-purpose, efficient and ambitious business plans. We will retain the BPI in RIIO-3 but the incentive has been adjusted. The BPI will focus on rewarding plans that are of high quality in terms of well-justified costs and outputs. Companies may be rewarded under the BPI if they deliver business plans which provide transparent cost information that helps Ofgem to set efficient allowances. We have implemented some minor modifications that see it reduced to a three-stage process in which we assess minimum requirements, review the transparency and efficiency of the cost submission and assess the ambition and quality of the business plan in the round. We have removed consumer value propositions (CVP), which were time-consuming to generate in RIIO-2/ED2 and had a low success rate. The reward and penalty strength is slightly more powerful than in RIIO-2, with a symmetrical cap/collar of +/- 60 bps of Return on Regulated Equity (RoRE).

A1.25 We will continue with the TIM mechanism in RIIO-3. In RIIO-1, very high incentive rates (up to 70%) contributed to significant outperformance. However, systematic outperformance may have also indicated that network companies were set allowances and targets that were easier to outperform than anticipated. This may arise because the presence of “information asymmetry”. In RIIO-2, incentive rates were reduced to reflect the level of confidence we had in setting allowances with sharing factors for companies ranging from 33% for NGET to 50% for Cadent, SGN and WWU. Price control deliverables were introduced to link large amounts of totex to specific outputs. If these particular outputs are not delivered, consumers recover all (or some) of the associated allowed totex back.

A1.26 We do not expect to increase the rate of TIM, but we are moving to a risk-based approach in which Ofgem determines the default sharing factor for each sector based on an assessment of the level of risk in each sector, rather than on a mechanical relationship with the BPI assessment, which was the RIIO-2 approach. We will set the TIM incentive rates at Draft Determinations, which shall again inform our IA.

### **Mechanism for controlling investment under demand decline in the gas sectors**

A1.27 We must ensure that gas network companies continue to build and operate safe, resilient, and reliable gas networks during the next price control period. They remain an essential service for heating the majority of homes in GB and are also essential for many industries and businesses. As detailed above, we do not expect to see widespread changes to the investment needed for gas network operations, safety, and resilience during RIIO-3.

A1.28 We are therefore largely using the same framework for these price controls as applied in RIIO-2. However, there are several issues which make RIIO-3 particularly challenging both in terms of our decisions on gas networks but also in assessing their impacts, these include:

- The rate of declining demand for natural gas raises intergenerational fairness issues for consumers, and perceived investor risk, with respect to how quickly to pay back existing gas network investments through customer network charges;
- The need to consider how gas networks can support a low-cost transition to net zero, despite uncertainty around the future of gas;
- Ensuring that gas networks maintain a safe and resilient supply of gas to customers, while recognising that the benefit of new investment is expected to be realised over a shorter period than in previous price controls; and
- Ensuring the gas networks deliver a high quality of service to customers, particularly consumers in vulnerable situations.

A1.29 The primary risks which may arise from potential impacts we have identified with the declining demand scenario relate to distributional and intergenerational fairness (how consumer impacts would be distributed over time), and to investors:

- **Consumer Impact.** The level of depreciation paid per customer is calculated by dividing the annual quantum of return by the number of consumers, so the fewer consumers the higher the cost per consumer. Given current expectations that consumer numbers on the gas network will begin to decrease quickly through the 2030s, this means those left on the network longest could face rapidly increasing costs. This group of future consumers are also likely to include those vulnerable consumers who are also likely to find it hardest to transition away from gas.
- **Investor Impact.** Investors could be exposed to the risk of asset stranding after 2050, ie a perception of asset stranding risk could materialise if a RAV balance remains beyond the point of decarbonisation of the natural gas network or if consumer bills rise to a point at which repayment of the RAV is not feasible.

A1.30 As discussed in chapter 4, we have decided to address these risks by accelerating depreciation for gas network companies during RIIO-3. Accelerating the depreciation rate, by increasing depreciation amounts during RIIO-3, will smooth the depreciation element of consumer bill payments over time. One of the side effects of this will be to increase retail gas prices relative to electricity retail prices. This would have the effect of making the economics of switching from gas boilers to heat pumps better for consumers. We will consider both the net zero impacts as well as distributional impacts before setting the rate of accelerated depreciation for gas at Draft and Final determinations.

A1.31 As discussed in chapter 4, we have decided in the SSMD not to include any specific funding related to potential future decommissioning of the gas networks in RIIO-3. As in RIIO-2, there will be a general re-opener for additional costs or outputs from government decisions relating to the transition to Net Zero.

A1.32 All these factors are being considered in the context of our IA, however, owing to the current uncertainty surrounding gas generally, there will be limits to how we quantify potential impacts.

### **Other relevant factors**

A1.33 A final driver of investment impact is our view on the cost of capital. While we are making no decision about the cost of capital and equity at this stage, our finance annex lays out the methodology decisions we have taken in relation to these factors at this stage of the price control setting process. We will consider at Draft Determinations whether these changes should form part of the quantified costs and benefits associated with RIIO-3 in our IA.

## Quantifying benefits and costs from option 1 and 2

- A1.34 In the previous section, we highlighted which decisions would be part of the counterfactual and which ones would be part of our preferred option. Quantifying the impact of our proposals will require the use of business plans and outcomes using the same approach to RIIO-2, to create the counterfactual. This is then compared to the preferred option in RIIO-3.
- A1.35 For example, inflation adjustments and cost of capital would take into account new market conditions but follow the same financial indices and factors in the existing methodology. Equally, decisions on resilience, innovation and the environment are a natural evolution of RIIO-2 and would be captured in the counterfactual.
- A1.36 Some of the decisions we have included in the preferred option will have a large impact on investment, costs or outputs. Many of the other decisions made at SSMD are relatively small. As in previous price controls, the analysis and evidence supporting our decisions is presented in the core and network-specific documents.
- A1.37 Before the submission of business plans, it is not possible to provide a meaningful quantification of impacts. However, in this section we summarise which decisions are part of the counterfactual and which ones represent a significant departure from it.
- A1.38 As part of our Framework Decision, we estimated that the net present value of benefits from the price control over the 9-year period from 2027 to 2035, were approximately £11bn. This figure mainly represents the additional value of avoided constraints and the benefits of effective procurement. Other benefits include the value of carbon emissions saved, which were not quantified. As part of our Draft Determination IA, we will consider the wider environmental benefits and impacts of, both quantified and non-quantified, of our preferred option, once we have a clearer understanding of the business plans from the TOs and GDNs, and how the proposed investments will support our net zero duty. This will include both the short-term effects of infrastructure investment and expansion and the longer-term whole system effects.
- A1.39 We currently intend to include modelling of the benefits and costs of the key policies set out in Table 1, although these will be subject to change as we develop our approach in Draft and Final Determinations.

Table A10. Key policies in RIIO-3 IA approach

<b>Counterfactual</b>	<b>Preferred Option</b>
<p><u>All cross sector</u></p> <ul style="list-style-type: none"> <li>• Inflation adjustments</li> <li>• Cost of Capital adjustments</li> <li>• Resilience decisions</li> <li>• Innovation</li> <li>• Environment (except load related)</li> <li>• Data and Digitalisation</li> </ul>	<p><u>Cross sector</u></p> <ul style="list-style-type: none"> <li>• Changes to BPI/TIM incentives</li> </ul> <p><u>Sectoral changes</u></p> <ul style="list-style-type: none"> <li>• Accelerated depreciation in the gas sectors</li> <li>• Accelerated load related investment associated with expanding electricity transmission networks.</li> </ul>

A1.40 When all the benefits of RIIO-3 are considered, our expectation is that the benefits of the proposed changes in the RIIO-3 price control will outweigh the costs. These would also include long-term environmental impacts, such as enabling the net zero transition, and other positive effects on jobs and productivity.

A1.41 As emphasised in Table 1, the RIIO-3 price control decision will include detailed design points in both the counterfactual and the preferred option, which will result in a range of benefits and costs. With the counterfactual and the preferred options, we will consider updated values for totex, WACC, and depreciation allowances relative to RIIO-2. Alongside our IA, the Draft and Final Determinations will include a wider calculation of the costs and benefits associated with the RIIO price control regime. Our IA will present a calculation of the total effects on consumers of both options in terms of direct effects and the effects on consumers’ bills.

A1.42 At this stage, Option 2 is our preferred option because its changes seek to further support network companies to deliver net zero. We consider this to be the best way to protect the interests of existing and future consumers and to fulfil our statutory objectives, including in relation to statutory net zero targets.

## **Risks and Sensitivity**

A1.43 The key areas of risk at this stage relate to the delivery of electricity transmission network investments at a sufficient pace to support the net zero



transition, network resilience concerns, potential lack of regulatory certainty and investor confidence, and the impact on consumer bills.

- A1.44 As explained in the ET Annex, a Central Strategic Network Plan (CSNP) is being developed by the NESO that will identify infrastructure that is required to meet Britain’s net zero target. There are already significant constraint costs on the ET network; costs that the CSNP seeks to target while ensuring that networks evolve to meet future electricity demand across the country. The effective implementation of the CSNP and the efficient and effective delivery of the investments it identifies will be key to mitigating the risk that the transmission operators fail to deliver new investments at sufficient pace.
- A1.45 There is a lower risk of over-investment for ET. This is because it is already recognised that the next price control period will encompass unprecedented demand on transmission operators’ resources.
- A1.46 Decisions on our regulation of the gas sector carry a different set of risks to ET. These relate to declining demand for gas and the consequent changes to the network, uncertainty about future use and the potential need to decommission large parts of the network at some point in the future.

## **Public Sector Equality Duty (PSED)**

- A1.47 The characteristics that are protected in relation to the PSED are: age, disability, gender reassignment, marriage and civil partnership, pregnancy and maternity, race, religion or belief, sex and sexual orientation. Ofgem’s PSED is engaged where protected characteristics contribute to consumer vulnerability. The RIIO-3 price control framework will include specific requirements and allowances in the gas distribution price control designed to improve performance in support of vulnerable consumers.
- A1.48 The other key area that engages the PSED will be the distributional impacts of regulatory depreciation policy in the gas sector. Our Draft Determinations IA will need to identify the impact of future depreciation policy on consumer archetypes, some of which would have a higher percentage of customers with protected characteristics which contribute to vulnerability. The quantification of these trade-offs will be considered for our Draft and Final Determinations.

## **Next steps**

- A1.49 At this stage, we have no visibility of the business plans. This document indicates the direction of travel for the final IA. We are interested in

stakeholders' views about the direction and approach for the Draft and Final Determination IAs that we have set out here. Some questions we are keen to explore include:

- What are your views on the approach we are proposing for assessing impact of our RIIO-3 proposals?
- What are your views on the proposed scope of assessment?
- What additional evidence should we consider as part of our ongoing assessment?
- What outputs should be presented in the IA?

A1.50 We will set up a working group to help gather views on these questions over the coming months. This will help us to develop our draft IA that we will consult on at Draft Determinations. In addition to working groups, we welcome any written views from stakeholders on our proposed approach to the IA for our RIIO3 Draft and Final Determinations. Any written feedback should be provided by the 30 September 2024 to [RIIO3@ofgem.gov.uk](mailto:RIIO3@ofgem.gov.uk).