

Decision

ED3 Sector Specific Methodology Decision

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This document sets out our decisions on the methodologies we will apply to the electricity distribution sector in the ED3 price control, which will run from 1 April 2028.

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Contents

Foreword	5
Executive summary	7
What the SSMD does	7
The challenge ED3 is responding to	7
Our strategic approach at SSMD	7
Raising expectations for DNOs	8
Financial framework and implications for bills	11
Cost Assessment	11
What's next	12
1. ED3 context and process	13
Context and related publications	13
Navigating the Methodology Decision	14
Stakeholder engagement and consumer voice	15
Next Steps: ED3 timeline	16
2. Investing for the energy transition	17
Introduction	18
Planning networks for the energy transition	19
Delivering networks for the energy transition	32
3. Responsible and sustainable business	47
Connections	50
Redefining connection types	51
Incentives for smaller connections	56
Incentives for larger connections	66
Broad Measure of Customer Service	77
Consumer vulnerability	83
DNO role in low carbon technology and energy efficiency rollout	98
Environmental framework	104
Consumer voice/research	124
Enhanced stakeholder engagement	126
Accountability for consumer outcomes	128
4. Smarter networks	133
Data and digitalisation	135
Innovation	146
Distribution System Operator	150
5. Resilient networks	175
Network Asset Risk Metric	178
Climate Resilience	187
Reliability	194
Resilience re-opener	212

Cyber	214
Supply chain and workforce.....	217
6. Managing uncertainty and adaptation	224
Pass-through costs	224
Volume drivers.....	229
Re-openers.....	231
7. Business plan, delivery and efficiency incentives	236
Business Plan Incentive.....	236
Efficiency: Totex Incentive Mechanism	244
Delivery Accountability.....	247
8. Appendices.....	250
Appendix 1. Approach to Impact Assessment	251
Options being assessed	251
Domestic bill impacts	252
Non-domestic bill impacts	253
Range of factors considered	253
Statutory duties	253
Appendix 2. BPI early proposals	255
Appendix 3. ... Background information on electricity distribution and price controls	262
Electricity Distribution.....	262
Price control terminology	263
Appendix 4. Send us your feedback	265

Foreword

This Sector Specific Methodology Decision (SSMD) sets the basis through which Distribution Network Operators (DNOs) will support economic growth, decarbonisation and energy security, while keeping bills as low as possible. It reflects the scale of change ahead and our commitment to ensuring that local electricity networks are ready for a more electric, more digital and more distributed energy system – and one that works for all consumers.

As the energy system changes, households and businesses are becoming increasingly reliant on electricity for everyday needs such as heating, transport and essential services. Electrification has the potential to reduce exposure to volatile global energy prices and strengthen the UK's energy security, supporting more stable and affordable ways to heat homes and power transport over time. Realising these benefits depends on electricity distribution networks having the capacity and capability to deliver power where it is needed, when it is needed, and at a reasonable cost to consumers. This requires investment that is well timed and proportionate, recognising the importance of keeping costs manageable for consumers at a time of continued pressure on household energy bills.

Against this backdrop, the SSMD establishes the strategic and methodological framework for the ED3 electricity distribution price control, setting clear expectations for how DNOs should respond to these changes in their business plans. This includes responding to significant new demands being placed on local electricity networks – particularly from the continued growth of electric vehicles and heat pumps, the rapid expansion of data-driven and AI enabled services, and ambitions to increase the deployment of domestic solar and battery technologies. Building on the foundations put in place in earlier price controls, we expect DNOs to innovate to make better use of existing networks, using flexibility, digitalisation and smarter system operation to deliver more from existing networks, and designing services around the changing needs and expectations of their customers.

For the first time, the electricity distribution regulatory framework is being set in the context of a more spatially planned energy system. We expect networks to develop their business plans informed by independent evidence on how demand is expected to grow, while working closely with local stakeholders and insights to reflect priorities on the ground. This underpins our expectation of proportionate upfront investment – targeted to the scale and location of evidenced need, while retaining the flexibility to adapt as evidence continues to develop.

Affordability is at the centre of our approach to ED3. We recognise that households and businesses are facing ongoing cost pressures, shaped by recent geopolitical developments and wider economic uncertainty, and that investment to prepare the electricity distribution networks of the future must be delivered in a way that also protects today's consumers. ED3 therefore sharpens our focus on value for money, robust cost control and strong performance for customers. We are setting a

Decision ED3 Sector Specific Methodology Decision

methodology that allows space for networks to invest where it is genuinely needed, while at the same time strengthening requirements for network companies to make the best possible use of existing assets, embrace flexibility, and adopt new technologies that can reduce costs and improve outcomes for consumers.

Making it easier and faster for customers to connect quickly is a central priority for ED3. Households, businesses and developers should be able to install low carbon technologies such as heat pumps, electric vehicle charging points and solar panels quickly, reliably and through easy-to-navigate connection processes. At the same time, timely delivery of larger, more complex, connections is essential to support areas such as housing developments and electricity-intensive users such as data centres. We are therefore raising our expectations of DNOs to play their part in enabling the benefits of increased electrification and supporting economic growth.

With growing reliance on electricity for heating and transport, maintaining reliable and resilient networks also remains paramount and central to our expectations. In acknowledgment of this growing reliance, we are strengthening our commitment to vulnerable consumers, particularly those that are medically dependent, and as the frequency and intensity of storms continue to increase, we are also introducing new requirements for storm support to those most in need.

The business plans submitted later this year will be a critical test of how well companies respond to these challenges. The quality of those plans will shape the role of electricity distribution in the next phase of the energy transition, and we look forward to working with industry to turn this ambition into delivery for consumers across Great Britain.

Akshay Kaul

Director General for Infrastructure

Executive summary

What the SSMD does

The Sector Specific Methodology Decision (SSMD) sets out the strategic and methodological framework for the ED3 electricity distribution price control. The SSMD is a critical milestone in shaping Distribution Network Operators' (DNOs) ED3 business plans. It provides an early signal to DNOs, stakeholders and consumers about the direction of travel for ED3 ahead of business plan submission, while leaving space for stakeholder engagement, scrutiny and refinement as company evidence is developed.

After we have received business plans later this year, we will begin the detailed calibration of costs, allowed returns and the quantified impact on consumer bills and we will set these out at Draft and Final Determinations next year.

The challenge ED3 is responding to

The energy transition will drive up demand for electricity as heat, transport and wider parts of the economy electrify. Electricity distribution networks will therefore play a critical role in supporting economic growth, including the electrification of businesses and the deployment of electricity-intensive AI and data-driven technologies. This transition will also help households and businesses reduce reliance on volatile global gas and oil prices, supporting affordability over the longer term.

Electricity distribution networks must have the capacity, capability and resilience to support this transition, so access to the network does not become a barrier to customers. This includes households, businesses and developers adopting low-carbon technologies (LCTs), such as electric vehicles (EVs) and heat pumps, and the deployment of distributed generation including rooftop and plug-in solar.

At the same time, there is uncertainty in the near to medium term about the scale, pace and location of future electricity demand. In particular, the deployment of LCTs and distributed generation may progress at different rates across regions, reinforcing the importance of avoiding consumers paying too early for an uncertain future need. Against this backdrop, affordability remains at the forefront of our approach to ED3, particularly given the ongoing pressure on household and business energy bills. This is the central trade-off ED3 must manage: ensuring networks do not slow down electrification or economic growth, while keeping impacts on bills to a minimum.

Our strategic approach at SSMD

We recognise the need for a framework that provides upfront funding for investments that must be delivered during the ED3 period. Alongside this, ED3 will use adaptable, low friction funding mechanisms to enable networks to be ready to respond as additional demand emerges, protecting consumers from excessive upfront investment ahead of clear evidenced need.

Decision ED3 Sector Specific Methodology Decision

This approach reflects a strengthening, but still evolving, evidence base. Strategic planning information is improving, though uncertainty remains about the scale, pace and location of future electricity demand. The National Energy System Operator's (NESO) transitional Regional Energy Strategic Plans (tRESPs) represent an important independent step forward, providing a more consistent regional articulation of national energy pathways. The SSMD sets expectations on how DNOs should use tRESPs as a strategic planning input supported by local evidence and sensitivity analysis to develop their business plans. We expect proportionate baseline investment proposals supported by clear routes for in-period adaptation as evidence of the need for additional investment strengthens.

Within this strategic framework, flexibility plays a central role alongside physical network reinforcement. The SSMD promotes a balanced 'build and flex' approach, using flexibility and other smart alternatives to optimise the existing capacities of the network and in doing so help to manage uncertainty over the timing and location of future demand. Through this approach we can minimise the impact on consumer bills in the near term whilst keeping options open for the future, ensuring that investment decisions are made with greater certainty of system needs and the level of new capacity needed. This approach is not a substitute for necessary reinforcement: capacity must be delivered in time to meet customers' needs, and DNOs should not delay investment decisions beyond the point at which infrastructure can still be delivered in time without risking connection delays. The SSMD therefore signals our intention to continue developing the regulatory framework to support the use of flexibility where it drives value for consumers.

Supporting this approach, ED3 reflects the continued evolution of the Distribution System Operator (DSO) role, as DNOs take on greater responsibility for actively managing local electricity systems. The SSMD strengthens expectations on how DNOs use DSO capabilities to deliver whole-system benefits, including more effective use of flexibility and improved voltage and loss management. While we retain the existing DSO incentive framework at this stage, the SSMD signals the potential role of outcome-focused financial incentives in future to better recognise actions that deliver wider system benefits across the energy transition.

Raising expectations for DNOs

ED3 marks a step change in what we expect from DNOs in a world where more people will need to interact directly with the distribution network.

Connections and customer service

Improving connections performance is a central priority for ED3, reflecting the growing number of households, businesses and developers who need timely and reliable access to the electricity network. The SSMD therefore strengthens expectations, incentives and minimum requirements around connections, alongside a continued focus on ensuring high-quality customer service.

Decision ED3 Sector Specific Methodology Decision

For customers who require relatively small-scale connections to the network, such as connecting a new property, or upgrading an existing connection to install an EV charge point or heat pump, we have strengthened the package to reflect that much of the customer experience of electrification will be through these types of upgrades and approvals.

For customers who require much larger connections, including housing developers, industry and other businesses, we focus on improving the end-to-end customer journey, introducing targeted incentives and reporting to drive improvements in timeliness, transparency and overall quality of service. This will help support local economic growth, including the delivery of housing developments, commercial sites and electricity-intensive developments such as data centres.

Protecting consumers and supporting vulnerable customers

The SSMD strengthens expectations and delivery arrangements for supporting vulnerable consumers. We retain the core RIIO-ED2 mechanisms but enhance them to improve consistency of outcomes, including widening Priority Service Register (PSR) reach, improved support for customers who are particularly vulnerable during interruptions (including those medically dependent on supply), and improved transparency and DNO accountability through reporting and the vulnerability incentive framework.

Resilient networks

As reliance on electricity increases, the ED3 SSMD places strong emphasis on maintaining resilient and secure distribution networks. Customers need networks that are reliable in day-to-day operation, able to perform well during severe weather events and storms, resilient to the impacts of a changing climate, and protected against emerging risks such as cyber threats.

The SSMD strengthens expectations on how network companies plan for and manage these risks, building on established approaches to asset health and reliability, and setting clearer expectations on climate and cyber resilience, while also placing greater focus on supply chain and workforce resilience as critical enablers of timely and effective delivery.

Environment

In the SSMD, we continue to raise expectations of DNOs as responsible and sustainable businesses. We retain the requirement for companies to provide clear environmental action plans and are raising our baseline expectations for what these should contain. DNOs will need to demonstrate how they propose to reduce the impact on the environment of their activities and manage environmental risks. Alongside this, the SSMD places greater emphasis on the need to reduce sulphur hexafluoride (SF₆) emissions and plan for a longer-term transition away from SF₆ where feasible.

Innovation

Innovation retains an important role in ED3, with dedicated funding alongside clear expectations for DNOs to show how innovation funding is being used to support the efficient delivery of outcomes that benefit consumers. This includes enabling smarter network operation, better use of flexibility and digitalisation, and ensuring that successful innovations are deployed at scale where they deliver value for consumers.

Totex accountability

ED3 places greater emphasis on delivery accountability, reflecting the scale of investment anticipated and the importance of protecting consumer value. Where funding is provided for planned investment, it is important that the investment, or expected outcome of that investment, is delivered on a timely basis or that funding is returned to consumers. The SSMD therefore introduces more controls over how certain allowances can be used, including a new accountability framework for load-related expenditure. These measures are intended to increase confidence that funded infrastructure is delivered, and to protect consumers from paying for investment that does not materialise.

We are also retaining the Totex Incentive Mechanism (TIM) to encourage efficient delivery and ensure that the benefits of efficiency improvements are shared with consumers, though the strength of the incentive will be confirmed once we have assessed DNOs' business plans.

Business Plan Incentive (BPI)

We retain the Business Plan Incentive (BPI) to strengthen the quality and ambition of DNOs' business plans, while streamlining and simplifying its structure. The revised BPI focuses on three elements:

- placing greater emphasis on ensuring DNOs meet minimum business plan requirements, through a penalty-only assessment
- rewarding DNOs that put forward efficient and well-justified cost proposals
- rewarding high-quality early proposals that are adopted into the ED3 regulatory framework

DNOs' role in the roll-out of low carbon technologies and energy efficiency

Running alongside the development of the ED3 price control has been our work exploring whether, and how, DNOs could play an enhanced role in the coordination, and delivery of measures to reduce energy consumption and enable the installation LCTs.¹ The SSMD includes a decision to strengthen coordination expectations in this area. We also remain open to the possibility of a further expanded role for DNOs in the future, including the installation of LCTs and energy efficiency solutions in homes.

¹ [DNO Low Carbon Technology - Energy Efficiency role in ED3 | Ofgem](#)

While such approaches could deliver system and consumer benefits, they need to be considered carefully alongside the need to protect consumers and avoid market distortion. The ED3 framework is flexible to respond to the conclusions of this work.

Financial framework and implications for bills

The SSMD sets out the high-level methodological framework for the ED3 financial package, giving DNOs clarity ahead of business plan submission while not pre-judging the outcome of our determinations next year. The SSMD therefore focuses on the overall shape and toolkit, including the approach to the cost of capital, treatment of inflation and debt, mechanisms to manage under- and outperformance, and options to strengthen financial resilience.

We expect to implement key measures into ED3 that have already been successfully introduced in RIIO-3, such as our fixed rate allowance for nominal debt and our CAPM approach for setting the cost of equity. We also set out our methodological approach for assessing the financeability of the overall price control package for our Determinations next year. The SSMD also recognises that ED3 is being set against a backdrop of continued uncertainty over inflation and its impact on financing costs and consumer bills. Under the RIIO-ED2 framework, equity investors in DNOs have benefitted from periods of higher-than-anticipated inflation. Therefore, we signal our intent to take this into account when setting the ED3 financial framework, considering these effects on areas such as notional gearing. This approach will help to underpin investment, support financeability and reduce costs to customers in ED3. Further detail is set out in the Finance Annex (Annex 1), published alongside this document.

Consumer affordability is a central consideration for ED3. The SSMD is clear that while investment in electricity distribution networks is needed to support electrification and economic growth, it must be well-timed and proportionate, so that consumers are not asked to pay for capacity before it is needed. However, we recognise that enabling networks to support electrification will require increased investment over time, which is likely to place upward pressure on electricity distribution charges. The impact on consumer bills will depend on the pace and scale of electrification and the content of companies' business plans, including the extent to which higher network costs are spread across increased electricity demand and mitigated through the efficient use of existing assets, flexibility and well-timed investment. At the SSMD stage, we are not at a point in our decision making process that allows us to assess bill impacts, but affordability will be a central focus of our assessment of DNOs' business plans next year.

Cost Assessment

In ED3, we will use a cost assessment toolkit to assess DNO proposals in a consistent, transparent and proportionate way. At the SSMD stage, while some key methodological choices can be defined, our focus is on setting expectations around the evidence network companies should provide, and on establishing the principles we will use to

Decision ED3 Sector Specific Methodology Decision

test whether costs are efficient and well justified. We will continue to engage with DNOs to test and refine this approach ahead of business plan submission. For elements of our cost assessment methodology, we do not consider it appropriate to define our approach until we have tested it using data contained in business plan submissions.

Our approach draws on a range of complementary assessment methods, allowing us to consider costs from different perspectives and reflect the diversity of company circumstances and investment needs. Given the breadth and technical nature of the cost assessment framework, further detail is set out in the Cost Annex (Annex 2).

What's next

Following publication of the SSMD, DNOs will develop and submit ED3 business plans at the end of this year. Ofgem will continue engagement with consumer groups, stakeholders (including our ED3 Ofgem Panel) and industry ahead of receiving business plans, with our Draft Determinations and Final Determinations concluding at the end of 2027.

1. ED3 context and process

This chapter sets out the background information relating to this decision document, including previous related publications, how to navigate this suite of documents and the next steps for the ED3 price control setting process. It also sets out the engagement we have undertaken with consumers and stakeholders and how this has informed our decisions.

Context and related publications

- 1.1 This is our decision on the methodology we will apply for setting the next electricity distribution price control (ED3). This price control will run from 1 April 2028 to 31 March 2033. Background information on the electricity distribution network, why we set price controls and price control terminology can be found in Appendix 3.
- 1.2 We began the process of setting the ED3 price control in November 2024 with our ED3 Framework Consultation. This set out the strategic context and the framework that we proposed to apply to the price control and we invited views from stakeholders on this framework.² We published our Framework Decision in April 2025,³ and in October 2025, we consulted on the methodology we will use to apply the framework.⁴ We received responses from 84 stakeholders to our Sector Specific Methodology Consultation (SSMC) and we have taken these into account in our decisions on the ED3 methodology.⁵ This document is our decision on the methodology.
- 1.3 Following this decision on the methodology, we will expect DNOs to submit their Business Plans to us by the end of this year, and we will set out our Draft and Final Determinations in 2027. The ED3 price control will then start in April 2028.
- 1.4 In coming to our decisions set out in this document we have continued to take into account the recommendations from the National Infrastructure Commission's (NIC) independent review of the electricity distribution system and of the associated regulatory framework.⁶ We provided a response to the recommendations relevant to Ofgem in Chapter 9 of our consultation on the methodology.⁷ None of the decisions we are making in this methodology materially depart from the recommendations set out in the NIC review. We will

² [Framework consultation: electricity distribution price control \(ED3\) | Ofgem](#)

³ [Framework decision: electricity distribution price control \(ED3\) | Ofgem](#)

⁴ [Sector specific methodology consultation: electricity distribution price control \(ED3\) | Ofgem](#)

⁵ [Sector specific methodology consultation: electricity distribution price control \(ED3\) | Ofgem](#)

⁶ As of the 1 April 2025 the NIC no longer operates and is now part of a new organisation - the National Infrastructure and Service Transformation Authority (NISTA), within HM Treasury. For the purposes of this document, we refer to the NIC as this was the body that carried out the review. [Electricity distribution networks: Creating capacity for the future - NIC](#)

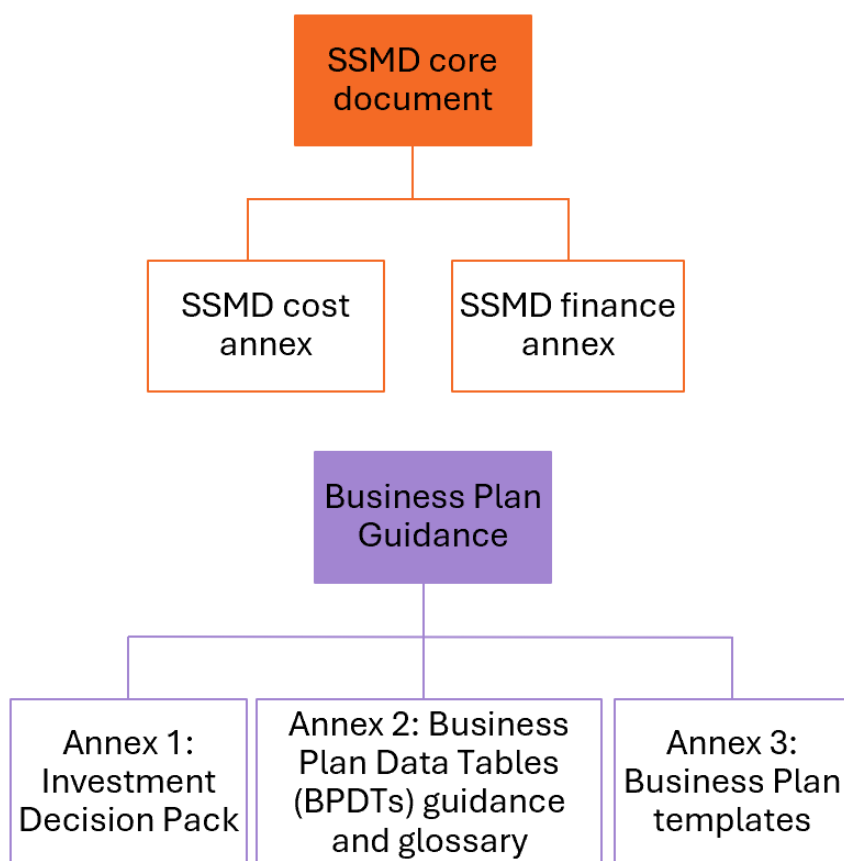
⁷ Chapter 9: [ED3-sector-specific-methodology-consultation-core-document_clean.pdf](#)

continue to have regard to the recommendations of the NIC review as we progress with setting ED3.

Navigating the Methodology Decision

1.5 Our Methodology Decision document suite is set out in Figure 1. The core document contains details of our methodology in relation to the four consumer outcomes (Investing for the Energy Transition, Responsible and Sustainable Business, Smarter Networks and Resilient Networks). It also sets out our methodology for managing uncertainty and the Business Plan Incentive, efficiency and delivery accountability. In Appendix 1 we have set out how we will approach the Impact Assessment of our decisions for ED3.

Figure 1: Document map of Sector Specific Methodology Decision



1.6 This core document should be read alongside the following annexes:

- Annex 1 - Finance Annex - sets out the financial methodology for ED3, describing the approaches we propose to apply to areas such as allowed returns, risk allocation and financeability, without prejudging decisions that will be taken at Draft and Final Determinations

- Annex 2 - Cost Annex - provides an overview of our proposed ED3 cost assessment framework, which is used to benchmark DNOs against each other and establish the efficient level of costs to deliver their activities

1.7 We are also publishing the Business Plan Guidance and Business Plan Data Templates to assist DNOs in preparing their Business Plans.

Stakeholder engagement and consumer voice

1.8 Strong consumer and stakeholder engagement is central to the ED3 framework. In developing the SSMD, we have undertaken a wide range of engagement activities to inform our approach, including public consultations, discussions with government and devolved administrations, deliberative research with consumers and engagement with investors. This engagement has been important in testing our proposals, understanding trade-offs, and shaping the positions set out in this decision.

1.9 Working groups with DNOs and other interested stakeholders have been an important part of this engagement, supporting the development of the SSMD and helping us explore complex issues in more depth. Details of this engagement are published on our ED3 engagement portal, and engagement will continue throughout the remainder of the price control review process.⁸

1.10 Complementing this, we have also established the ED3 Ofgem Panel. This consists of 61 members of the public to support our decision-making going forward and to provide a richer, more inclusive, and more informed consumer insight. We have carried out a first wave of research (Ofgem Electricity Distribution Price Control (ED3) Consumer Panel) which will be published on the Ofgem website on 21 May 2026. This group has provided challenge and evidence to inform the development of the SSMD and will continue to play an important role as ED3 progresses, including as we assess company business plans and move towards Draft and Final Determinations.

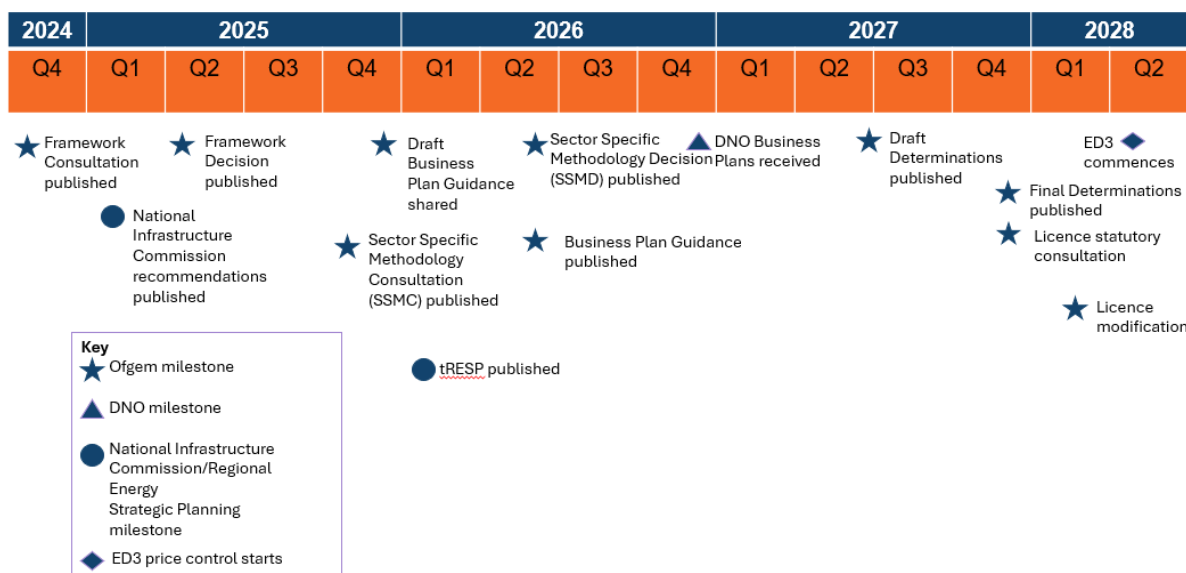
1.11 We also expect DNOs to put consumers at the heart of how they run their businesses, supported by effective and ongoing engagement to inform their business plans and delivery. A key part of this is the role of Independent Stakeholder Groups (ISGs), which are required by us and represent the interests of consumers and stakeholders by providing independent challenge and scrutiny. ISGs play an important role both during the development of business plans and on an enduring basis as companies deliver them. We will continue to engage with ISGs over the course of the price control review to understand and take account of their views, and to support their effective role in ED3.

⁸ [ED3 Engagement Portal - Home](#)

Next Steps: ED3 timeline

1.12 The decision on the methodology is an important step in the process of setting ED3. This decision, along with the Business Plan Guidance will inform the Business Plans we expect to receive from DNOs at the end of this year. The indicative ED3 timetable is set out in Figure 2.

Figure 2: ED3 timeline



2. Investing for the energy transition

In this chapter we set out our methodology decisions on the planning and delivery approaches we expect DNOs to take to meet current and future customers' needs as the energy system transitions to higher levels of electrification. We have decided that DNOs should plan for load related network development consistently and strategically, using the tRESP as a key input. We have also decided that DNOs should adopt a balanced build and flex strategy when developing and delivering their load-related plans and systematically consider flexibility and other non-wires options to maintain delivery readiness without committing consumers to unnecessary build solutions.

In addition, we have decided that DNOs should apply a sensitivity analysis to the tRESP compliant load plan to determine the share of load-related expenditure that is included in baseline funding, and the share that should be managed through uncertainty mechanisms. On this basis, where there is high confidence that additional capacity is required and that it cannot be met by flexibility or non-network solutions then this should be included in the ED3 baseline to ensure timely capacity provision. Where there is lower confidence at this time in the requirement for new capacity, then the work, should it be required, will be enabled through agile uncertainty mechanisms in ED3, once there is more certainty on the need for, and size of, the solution.

This chapter also sets out our decisions on strengthening delivery accountability in ED3 so that funded capacity is delivered or funding is returned to consumers.

SSMC questions

Long-term integrated network plan

- Q1. What are your views on our regulatory guiding principles that will inform the development of accountable investment planning and delivery?
- Q2. Are the proposed objectives for the long-term integrated network development plans appropriate?
- Q3. What are your views of proposed structure and contents of the plan?
- Q4. Do you agree with the proposed use of tRESP outputs in DNOs' network impact assessments?
- Q5. What are your views on the guidelines for proactive investment decision-making across all DNOs?
- Q6. Do you agree that Low Voltage (LV) network reinforcement and unlooping of legacy service connections are suitable areas for a programmatic, area-based approach in ED3? Why or why not?
- Q7. What are your views on the need for national consistency in the delivery of proactive unlooping programmes?

Strengthening delivery accountability

- Q8. What are your views on high-level delivery accountability options and their respective strengths and limitations?

- Q9. Should delivery accountability mechanisms prioritise certainty over flexibility when funding low-regret, proactive investments aligned with strategic value decarbonisation and growth goals?
- Q10. Are additional delivery incentives needed, or can a combination of accountability mechanisms and output-based incentives sufficiently ensure delivery performance?

Adapting for additional investment needs during ED3

- Q11. What are your views on the assessment of the adaptability mechanisms, and should additional criteria be included?
- Q12. How could the adaptability options be refined or combined to better support timely and strategic investment during ED3?
- Q13. How can adaptability mechanisms be designed to ensure DNOs respond quickly to new network needs while maintaining transparency, accountability and value for money?
- Q14. What are your views on the proposed timing of the Regional Energy Strategic Plan (RESP) re-opener windows in years 2 and 4 of ED3?

Conceptual models for ED3 delivery

- Q15. What are your views on the combination of mechanisms presented in the two conceptual models? Do they effectively illustrate how different regulatory tools could be packaged to support strategic delivery in ED3?
- Q16. In the context of ED3, do you consider that we should put more emphasis on Plan and Adapt or Plan and Deliver — to be more appropriate for achieving the guiding principles set out in Paragraph 3.5 of the SSMC? Please explain your reasoning.
- Q17. Are there additional mechanisms or combinations of mechanisms that should be considered to better support strategic, accountable, and adaptable delivery in ED3? If so, how might they complement or improve upon the models presented?

Introduction

- 2.1 Our energy transition is unfolding in stages. The first, now well advanced, has been the move towards predominantly clean electricity by 2030. This phase has been defined by visible ambition and sizeable infrastructure programmes, yet typically remote from consumers' day-to-day experience.
- 2.2 The next phase will be different in character, and more personal in its reach. Electrification of energy demand will be shaped less by a narrow set of large projects and more by millions of individual decisions. Households, businesses, markets and governments will all contribute to this transition over time, through choices that play out incrementally. Taken individually, they may appear routine.

In aggregate, they will be transformative, changing what electricity does and how its networks are used and expanded.

- 2.3 This transition reflects a move towards a system that is cleaner, less exposed to international fuel market shocks, and better aligned with long-term consumer value. At the same time, it introduces a different form of challenge. While the strategic direction is clear, the pace and location of demand growth are more uncertain. That uncertainty is not uniform. In parts of the system, trends are more predictable and can be planned with greater confidence. Closer to consumers, patterns are more diffuse and less predictable. Electrification may therefore be uneven and often clustered at first, shaped by consumer behaviour, technology mix and local conditions. The consequence is that network requirements may not follow a linear progression. The risks of mis-timing investment, whether through delay, over-build or misallocation, are therefore material.
- 2.4 In setting ED3, we aim to strike a considered balance. We need to protect consumers from undue costs today, while ensuring that networks are ready as this more distributed and evolving transition gathers pace. This requires a planning framework that rewards better use of our existing networks under uncertainty, while directing timely investment where system need is clearer. It also requires a delivery framework that strengthens accountability, supports timely execution, and retains the ability to adapt as system needs evolve. This chapter sets out the requirements, regulatory mechanisms, adaptability tools and design choices we have considered to support the planning and delivery of this next phase of the transition.

Planning networks for the energy transition

SSMC summary

- 2.5 In SSMC, we put forward the case for a more proactive, strategically planned approach to network investment, and for DNOs to be more strongly held to account for the delivery of their plans. We said that we were exploring the most effective regulatory approach to meet our objectives for ED3 and that this work would be guided by a clear set of principles.
- 2.6 We consulted on a set of guiding principles to shape our approach to investing for the energy transition in ED3. These were:
- consumer value through the delivery of funded infrastructure
 - alignment of network planning with the tRESP, decarbonisation goals and long-term system needs
 - integrated planning across major investment drivers
 - transparency and accountability through clear metrics and reporting

Decision ED3 Sector Specific Methodology Decision

- adaptability to new information with safeguards to protect consumers
 - supply chain readiness through improved visibility of planned investment
 - regulatory mechanisms that remain efficient and proportionate.
- 2.7 We proposed that each DNO submits a long-term integrated network plan (LINP), treating five-year price controls as staging posts towards 2050 goals. Led by our guiding principles, the objectives we proposed for the LINP were to give a view of holistic network needs to 2050, exploit synergies across major investment drivers to optimise consumer value, phase expenditure to smooth the profile of delivery and provide visibility to the supply chain.
- 2.8 We also proposed a structure and content for the LINP to set out the following:
- the consumer outcomes and regional context
 - the planning pathways and inputs used
 - an integrated view of future network needs across investment drivers
 - a proactive investment decision-making framework
 - an integrated programme of interventions with detail through to the start of ED4 and indicative longer-term interventions thereafter
- 2.9 As strategic planning inputs, we proposed that DNOs use NESO's tRESP outputs within their network impact assessment processes. Recognising that the tRESP would need to be supplemented with additional building blocks to get a full energy projection for their licence areas, we also proposed greater transparency on the other planning inputs DNOs used.
- 2.10 We proposed some proactive investment guidelines for DNOs to identify and prioritise low-regret proactive investment in ED3. We also consulted on two areas where a programmatic, location-based approach could be beneficial: LV network reinforcement and unlooping of legacy service connections.
- 2.11 For LV network reinforcement, we asked whether DNOs should move beyond reactive upgrades towards more proactive, coordinated delivery embedded within long-term planning, with the potential to identify priority zones and deliver coordinated upgrades.
- 2.12 For looped services, where two or more properties share the same connection to the LV network,⁹ we had concerns that these can delay installing EV chargers and heat pumps in homes and noted that there are differences in DNOs' approaches to addressing these. We proposed that all DNOs should adopt a proactive, programmatic approach to upgrade service connections in ED3,

⁹ A typical LV circuit runs from the local substation to the edge of a property, with a service cable then connecting into the cut-out and meter. In some cases that service cable is shared between adjacent premises and could need to be separated before any of the properties are able to install a heat pump or EV charger. Unlooping activities are repeatable works, but the scope and effort required can vary by site due to delivery complexities such as the property type and access constraints.

prioritising high-density looped areas to drive economies of scale. We also proposed consistency across GB in how solutions are deployed and how customer communications, service commitments, conflicts and refusals are handled and reporting metrics are approached.

- 2.13 We proposed setting baseline allowances upfront for DNOs to deliver low-regret proactive investment over ED3, to give funding certainty, support early mobilisation and provide a clear baseline for measuring delivery. We highlighted that upfront funding increases the need for robust accountability and proposed that the price control should include clear expectations and delivery accountability to ensure that funded outputs are delivered in full, on time and to the required standard.

Summary of consultation responses

- 2.14 We received responses from 25 stakeholders covering at least one or more of the Investing for the energy transition consultation questions from DNOs, consumer groups, energy industry representatives, and other stakeholders.
- 2.15 All 24 stakeholders responding on the guiding regulatory principles (Q1) supported the intent, but views diverged on emphasis and implementation. Three DNOs (NGED, NPg and UKPN) argued that consumer value should be based on outcomes rather than the delivery of prescriptive inputs and that DNOs must be able to respond to evolving needs in a changing energy landscape, otherwise there is a risk that consumers pay for a sub-optimal future network. All DNOs asked for clarity on strategic alignment, including which tRESP pathway should be used as the central planning projection, the assurance process and NESO's role in this, and the treatment of local data and priorities.
- 2.16 Citizens Advice wanted more emphasis on cost efficiency and monitoring of consumer value. Several energy industry participants (Energy Systems Catapult, Octopus, OHME and ZEST) had concerns about prioritising asset build over flexibility and non-network solutions and wanted a more balanced approach. A mix of stakeholders (BEAMA, Hitachi Energy, NPg, SPEN and SSEN-D) welcomed improving visibility of the investment pipeline but noted more is needed to support supply chain readiness such as longer-term funding commitments.
- 2.17 Twenty-five stakeholders responded on LINP objectives (Q2) and 18 stakeholders responded to the LINP structure and contents (Q3). Most supported the objectives (20 of 25) and structure (13 of 18) with caveats; the remainder were neutral or mixed, with no outright opposition.
- 2.18 Several stakeholders argued that the LINP should not be a fixed blueprint and must allow adaptability as demand and approaches evolve (UKPN, SSEN-D, NPg and Octopus). UKPN warned that without this, the LINP would either rely on re-openers or lock in sub-optimal investment and preferred a 'plan and adapt' approach. SSEN-D wanted greater adaptability with safeguards so that it can

Decision ED3 Sector Specific Methodology Decision

respond within the cap set by the LINP. NPg similarly wanted an aggregate target for network expansion and sufficient funding to secure the supply chain and adapt when needed.

- 2.19 EDF had concerns about the bill impacts and affordability if capacity is built too far ahead of need. It wanted clearer visibility of key cost drivers and cost projections across a range of futures.
- 2.20 Citizens Advice and energy industry participants advocated for solution neutrality, highlighting that alternatives such as flexibility can advance and support the objectives (The MSC Foundation, ADE:Demand, OHME, Octopus and Energy Systems Catapult). BUUK Infrastructure said that each DNO's LINP should aim to meet network users' needs and support long-term economic growth.
- 2.21 On the proposed LINP structure and contents (Q3), the main feedback from DNOs was for more detail on expectations. UKPN asked for clearer geographic categorisation (preferring licence area-level rather than RESP regions), guidance on document length and whether the LINP will replace the Load Related Expenditure (LRE) annex that was required in RIIO-ED2. NGED wanted clarity on how cost and volume forecasts should be presented by asset type and how the LINP will be used through ED3. SPEN supported the scope but wanted more latitude in how requirements are met.
- 2.22 SSEN-D asked for clarity on whether outcomes-based metrics are qualitative or quantitative (with the latter defined if required), clarity on the scope of interventions it should include for resilience risks and emerging vulnerabilities, the treatment of multi-driver investments and how early ED4 investments fit the accountability framework. NPg wanted a focus on outcomes eg aggregate capacity added and confirmation that the LINP should provide a narrative above the level of detail set out in Engineering Justification Papers (EJPs).
- 2.23 Citizens Advice proposed adding world-class customer service and value for money and explicitly covering innovative solutions such as flexibility as an alternative to network build. Energy UK suggested a tiered, proportionate approach to granularity with detail at extra high voltage (EHV/132kV) and more volumetric planning at high voltage (HV/LV).
- 2.24 Some energy industry participants wanted the LINP to include a dedicated LV operational data and local energy system layer to improve secondary network visibility (British Hydropower Association, Rossendale Valley Energy and The MSC Foundation).
- 2.25 Twenty-three stakeholders responded to the proposed use of tRESP in DNOs' network impact assessments (Q4). Most stakeholders (17) support using the tRESP as a common strategic input with caveats, five stakeholders (ADE: Demand, Energy Systems Catapult, Independent Networks Association, EDF,

OHME and Greater London Authority) had concerns and one stakeholder (Octopus) explicitly opposed.

- 2.26 The DNOs wanted more clarity on the assurance process, pathway selection, and treatment of Strategic Energy Needs. Along with some DNOs, other stakeholders (MSC Foundation, Independent Networks Association, Centre for Sustainable Energy, Greater London Authority and Energy Systems Catapult) warned of local data gaps and the need to supplement tRESP with local evidence and stakeholder input.
- 2.27 Several stakeholders (NPg, Regen, EDF and OHME) had concerns that elements of tRESP are overly optimistic, such as consistent planning assumptions for energy efficiency improvements and deriving heat pump energy demand or pathways for low carbon technology uptake. Octopus did not support the use of tRESP because the final outputs were not available (at the time of the SSMC), that there are data gaps, and that it will be a barrier to delivering a smart, flexible energy system.
- 2.28 Twenty-five stakeholders set out views on the proposed proactive investment guidelines (Q5). The majority (17) supported the position in principle but highlighted that the guidelines and indicators need tighter definitions, context-specific thresholds and robust evidence requirements such as cost benefit analysis, so that application is consistent and replicable. Several stakeholders advocated for principle-based approach rather than prescriptive guidelines to avoid micro-management, limiting to pre-defined circumstances or clashing with the objectives of other price control mechanisms (NPg ISG, NPg and UKPN).
- 2.29 Other stakeholders (Regen, BUUK Infrastructure, ADE:Demand and Octopus) were not convinced that proactive investment is required in all situations and argued the guidelines should not close out alternative non-wires approaches such as flexibility to deliver the capacity when it is needed. Octopus wanted to see DSOs being empowered to improve the utilisation of the existing network through non-wire solutions and set out what network build is necessary.
- 2.30 Nineteen stakeholders provided views on the suitability of a programmatic, area-based approach for reinforcement of the LV network and for unlooping service connections that two or more properties share (Q6). All stakeholders supported DNOs having a proactive unlooping programme in ED3 to reduce the risk of customer delays for installing LCTs, derive efficiencies from repeated works and lower disruption for communities, particularly if activity can be coordinated with other works (including those of other utilities). UKPN flagged a range of issues to consider including permit delays, customer refusal, blocked access, neighbour disputes and late-stage refusals. Citizens Advice wanted clarification on why ex ante allowances would be more effective than volume drivers to fund this work in ED3. SSEN-D, SPEN and NGED noted that a successful unlooping programme will depend on cost-reflective unit costs.

Decision ED3 Sector Specific Methodology Decision

- 2.31 Views on the suitability of a proactive programme for LV reinforcement in ED3 were more mixed. NGED said that a programmatic approach is less practical as customer uptake is difficult to predict and maintaining network compliance requires an adaptive approach. NPg argued that a programmatic approach should not be the default, as full network upgrades are not frequently needed because of prior asset replacement, repairs, reconfigurations and reinforcement; instead, they proposed that targeting individual circuits is often more efficient and appropriate.
- 2.32 All 21 stakeholders that responded supported establishing a national framework for proactive unlooping programmes (Q7). Stakeholders said this was needed to improve the customer experience and confidence. Stakeholders also highlighted aspects to be covered including common definitions, digital mapping of looped services, area selection criteria to deliver value and address fairness, coordination with other utilities, standards for unlooping solutions, clear service expectations, common protocols for customer communications and engagement including disputes and customer refusals, reporting metrics etc. NGED and NPg also highlighted the need for a joined up, national information campaign around unlooping to build customer understanding and trust.

SSMD decision and rationale

Summary of planning decisions

- 2.33 We have reflected on the stakeholder feedback received on the SSMC and the need to avoid locking consumers into premature network build. This is especially pertinent given uncertainty in the pace and location of demand growth and our concern at ensuring network charges remain affordable for customers. These are compelling factors which, taken together, have led us to reconsider how best to proceed in ED3.
- 2.34 We continue to believe it is in consumers' interests that DNOs undertake their strategic network planning using the tRESP as a key input. This is because the tRESP sets out the pathway for achieving the legislative targets for meeting net zero by 2045 (Scottish Government) and 2050 (UK Government), allowing DNOs to understand what the impacts of this decarbonisation journey will have on distribution networks. It also provides a more consistent and transparent basis for planning the networks and so supports the comparative assessment of costs and efficiency across business plans.
- 2.35 However, we also recognise that the evidence base is still evolving and that there is uncertainty over the pace and location of future electricity demand, particularly in the near to medium term. In this context, we consider it essential that DNOs retain the ability to adapt and pace delivery based on emerging evidence on technology uptake and local developments, while maintaining

readiness to deliver capacity consistent with the demand growth associated with the tRESP pathway when it is needed.

- 2.36 Affordability is also a key consideration. If investment in network capacity runs too far ahead of demand growth, the impact on customer bills is amplified and this may be a factor in deterring customers from switching to LCTs, thereby undermining the very demand projections used to justify that investment. To manage this trade-off, we want to see a stronger role for flexibility to first optimise the utilisation of existing network capacities within the planning and delivery framework compared with the approach set out in the SSMC.
- 2.37 Therefore, we have decided that DNOs should develop and include a Build and Flex Strategy in their business plans, explaining how they will use reinforcement and flexibility together to keep networks connection ready without committing consumers to premature upfront build. DNOs will apply this in their optioneering to produce a load-related plan that combines flexibility and network build interventions to meet its tRESP compliant “load projection” developed using tRESP outputs alongside other relevant energy need contributions and DNO-defined building blocks.
- 2.38 In the SSMC, we signalled a more plan-led approach with greater upfront funding certainty, but we no longer think it is right to fully fund load-related plans upfront given uncertainty over the pace and location of future electricity demand. It is also not necessary because ED3 will include agile, adaptable funding mechanisms to enable both additional build and the use of flexibility to be brought forward as the evidence around need strengthens, protecting consumers from premature funding commitments.
- 2.39 To translate the load plans into funding proposals for ED3, we have also decided that DNOs should apply sensitivity analysis to identify the baseline funding required to support physical reinforcement where there is high confidence or low regret in the need and scale of the works. This sensitivity analysis will also identify network interventions in which there is lower confidence, with the expectation that investment to meet these would be enabled, if and when required, through uncertainty mechanisms during ED3 when the need becomes more certain.
- 2.40 Lastly, we have decided to modify the LINP's role to a strategic reference document that integrates the planned interventions across different drivers.
- 2.41 Further details of our decisions on planning for the energy transition are provided below.

Use of tRESP

- 2.42 We expect DNOs to use NESO's tRESP outputs, published in January 2026, as a key strategic input when developing a full load projection for each licence area.

Decision ED3 Sector Specific Methodology Decision

This includes the tRESP pathways, Consistent Planning Assumptions (CPA) and Strategic Energy Needs (SEN), including any relevant post-tRESP SEN updates.¹⁰

- 2.43 tRESP does not, on its own, provide a complete view of future demand and generation. DNOs will therefore need to supplement the tRESP outputs with other relevant energy need contributions eg local area energy plans (LAEPs) and stakeholder input, as well as DNO defined building blocks for core domestic demand, industrial and commercial demand and consumer-led flexibility.
- 2.44 Using tRESP provides a more consistent and transparent basis for network planning, particularly for the most material demand and generation drivers, and supports comparative assessment of costs and efficiency across business plans. Stakeholders were generally supportive of using tRESP as a common strategic input, but some raised concerns about local data gaps and the potential for some elements to be overly optimistic. We note that local data can still inform DNO load projections in a number of ways eg NESO's CPA guidance facilitates DNOs to apply allowed variations or additional granularity where this reflects local data and is well evidenced, and a DNO may record a deviation from the tRESP where it has robust evidence that in a specific instance local developments are more appropriate for the purpose of network planning.
- 2.45 It is a minimum requirement of the BPI that the DNOs use the tRESP outputs and follow NESO's user guidance documents on their application.¹¹
- 2.46 In Paragraphs 3.9 to 3.52 of the ED3 Business Plan Guidance (BPG), we have set out our expectations on the use of tRESP, including which tRESP pathways should be used for the planning projection and how any deviations should be recorded.
- 2.47 Each DNO's use of tRESP will be subject to an assurance assessment. We have set out in Paragraphs 3.112 to 3.154 of the ED3 BPG, the assurance requirements and have provided an assurance template to enable DNOs to submit the required data and supporting information efficiently. DNOs are to submit their completed tRESP assurance submission at the same time as their ED3 business plan submission in December 2026.
- 2.48 The tRESP assurance assessment will be undertaken by NESO. The objective is to check each DNO's implementation of the tRESP outputs against the relevant expectations outlined in the above paragraphs in the ED3 BPG and NESO's tRESP user guidance.¹²

¹⁰ tRESP outputs: [transitional Regional Energy Strategic Plan \(tRESP\) | National Energy System Operator](#)

¹¹ The tRESP outputs are available on NESO's website: <https://www.neso.energy/what-we-do/strategic-planning/regional-energy-strategic-planning-resp/transitional-regional-energy-strategic-plan-tresp>

¹² NESO has three tRESP user guidance documents as follows: tRESP Consistent Planning Assumptions, Methodology and Detailed Design Appendix 4 User Guidance for Specific CPA values; Appendix 4 User guidance to DNOs on use of tRESP Pathways, within the tRESP Pathways Methodology and Detailed Design, and tRESP Strategic Energy Needs User Guidance to DNOs March 2026.

- 2.49 The scope of NESO's assessment will focus on how a DNO has incorporated the tRESP outputs into load projections for their licence areas. NESO will not carry out an assessment of the investment plans that DNOs bring forward in ED3.
- 2.50 NESO's assurance assessment will run in parallel with our assessment of DNOs' business plans, from December 2026 into spring 2027. NESO will present its findings to Ofgem and share individual reviews with the respective DNO. We will consider those findings as part of our business plan assessment.

Build and Flex Strategy

- 2.51 We have decided that DNOs should adopt a balanced build and flex approach in ED3, using flexibility and other non-wires alternatives to help manage the costs of providing additional network capacity while keeping networks connection ready.
- 2.52 We expect DNOs to systematically assess flexibility as part of their network planning and optioneering, to optimise the utilisation of existing network assets and manage peak demand, ahead of committing to physical reinforcement.
- 2.53 A balanced build and flex approach protects consumers while maintaining readiness. It involves using flexibility to manage uncertainty over the timing and location of demand growth but also ensuring timely reinforcement where delivery lead times and risks mean that delay would harm consumers.
- 2.54 This decision takes into account stakeholder feedback to the SSMC that non-wires solutions, including flexibility, are an important part of the toolkit for managing network capacity efficiently (see summary of consultation responses for Q1 to Q5). It also reflects an updated evidence base, including greater uncertainty around demand growth, heightened affordability concerns and uncertainty over how consumer-led flexibility may affect peak demand and network utilisation.
- 2.55 Earlier this year, the UK government updated its ambition for heat pump uptake in the Warm Homes Plan (WHP), replacing the previous aspiration of 600,000 installations per year by 2028 with an ambition for 450,000 annual installations by 2030. Official statistics show there were 51,886 retrofit heat pump installations in 2025.¹³ If around 200,000 installations per year in 2030 are expected to come from new homes, retrofit installations in existing buildings would need to rise to around 250,000 per year by 2030, implying average growth of around 37% per year over the next five years.¹⁴
- 2.56 While the WHP should help to reduce upfront costs, including through targeted support for low-income households, uptake will also depend on the overall bill

¹³ <https://www.gov.uk/government/statistics/heat-pump-deployment-statistics-december-2025>

¹⁴The Future Homes and Buildings Standards are intended to ensure new homes are built with low carbon heating. From March 2028, new homes must comply with the updated standards.

impact. The affordability context has become more challenging. Recent sharp rises in oil and gas prices linked to the conflict in the Middle East risks feeding through into higher inflation, placing even greater pressure on household budgets. This increases the risk that near-term heat pump uptake, and therefore demand growth, is lower than implied by net zero-compliant projections.

- 2.57 We also expect consumer-led flexibility to play a growing role in shaping peak demand and therefore the level and timing of network capacity that is required. Energy retailers report consumer engagement with flexible retail offers (eg smart time-of-use tariffs), although uptake remains relatively low overall at present. At the same time, the impacts of more dynamic or granular price signals, and how these interact with diversity and peak demand, are likely to vary by context and evolve over time. These impacts are therefore understandably challenging to capture robustly, or to integrate consistently into network demand modelling, at present.
- 2.58 Taken together, these factors reinforce the case for a proportionate build and flex approach in ED3. This should involve making fuller use of flexibility and other non-wires solutions (ie alternatives to network reinforcement that do not lock in costly capital expenditure) where this can maintain connection readiness, while proceeding with network build where it is low-regret or where delay would risk network constraints, connection delays or other consumer detriment.
- 2.59 A wide range of stakeholders had views on the role of flexibility set out in SSMC, with consumer groups and energy industry participants arguing that flexibility can be an enduring solution in parts of the network and can help smooth delivery and defer reinforcement decisions until need is clearer, while others emphasised the importance of ensuring reinforcement is delivered in time and that flexibility is not used in a way that undermines longer-term network readiness. Our decision takes these views into account by strengthening the expected role of flexibility while retaining a clear requirement to invest in reinforcement when it is needed.
- 2.60 We have set out our expectations in the ED3 BPG on DNOs' Build and Flex Strategies. The strategy should explain how the DNO systematically considers reinforcement and flexibility options to keep its network connection-ready, including clear triggers and decision criteria across voltage levels, how flexibility potential is assessed and evidenced and when reinforcement should proceed, including how future-proofing is considered where build is selected.
- 2.61 We expect each DNO's Build and Flex Strategy to inform both its upfront plan and its in-period decision making throughout ED3, including how DSOs will use flexibility to manage outages, support timely connections, reduce curtailment and optimise delivery, alongside targeted reinforcement. Further detail on the wider flexibility use cases, incentives and interactions with the DSO role is set out in the relevant sections of the SSMD.

Setting baseline funding and uncertainty mechanisms

- 2.62 As highlighted in the summary of consultation responses to Q1 to Q5, several stakeholders, including some DNOs, energy industry participants and a consumer group, raised concerns that translating network capacity requirements directly into baseline allowances when demand growth is uncertain could lead to unnecessary bill impact, as well as undermine the move to electrification used to justify early build.
- 2.63 In ED3, the introduction of a common pathway and planning assumptions through tRESP improves consistency but it cannot remove the need to manage near-term uncertainty and protect consumers from premature funding commitments. In RIIO-ED2, the risk of overinvestment was partly mitigated by requiring each DNO to put forward its best view of the load-related expenditure. However, this approach did not provide a sufficiently consistent basis for comparative assessment, as the assumptions and evidence underpinning each DNO's best view differed.
- 2.64 To translate tRESP informed load plans into funding proposals for ED3, we have decided that DNOs should apply a sensitivity analysis to identify baseline funding requirements and expenditure that may subsequently come through uncertainty mechanisms. The purpose of this sensitivity analysis is to distinguish between: (a) interventions that remain required within ED3 even if key demand drivers materialise more slowly than projected (high confidence, low regret investment) and (b) interventions that would not be required within ED3 under the sensitivity (lower confidence investment), so that these latter interventions can be triggered if uptake materialises more in line with projections. In applying the decision rule, interventions should proceed in ED3 if delaying investment would create a material risk that capacity cannot be safely and reliably delivered in the timescale required.
- 2.65 We consider this approach provides a proportionate and transparent way to manage the most material near-term downside risks, without requiring DNOs to develop multiple alternative pathways over the near-term (1 to 10 year) horizon. This reflects that, while there are a number of different net zero-compliant pathways, there is relatively little difference between them over the first ten years for the purposes of near-term network planning. The tRESP therefore provides a common short-term pathway, with alternative long-term pathways applying from 2035 to 2050 where pathway divergence becomes more material.
- 2.66 To avoid inconsistent approaches across DNOs, we expect DNOs to develop a common sensitivity methodology and decision rule. The approach should be proportionate and not overly complicated. Our view is that the most significant downside risk in the ED3 period is associated with the pace of domestic heat pump uptake. One simple approach to implementing the common sensitivity could be to apply a two-year lag to the tRESP heat pump building block and use

this to assess the impact on the timing of associated constraints and reinforcement needs within ED3. We will continue to engage with DNOs following publication of SSMD to finalise a common sensitivity to be applied consistently across all licence areas.

- 2.67 Where the sensitivity analysis results in investment needs falling away (ie it identifies lower confidence interventions), we expect DNOs to set out an uncertainty mechanism that is suitable for each category. We consider that, for EHV / 132kV interventions, a contingent funding pot with specified conditions or triggers under which investment would proceed could be suitable. For secondary reinforcement, we are likely to retain a similar approach to RIIO-ED2 through a more automated uncertainty mechanism, such as a secondary reinforcement volume driver. See Paragraphs 2.108- 2.149 for further information.
- 2.68 DNOs should identify the key triggers for contingent mechanisms and the basis on which investment would be expected to proceed within ED3, including the factors that would be expected to materialise to give greater confidence in need.
- 2.69 Overall, in-period mechanisms need to be sufficiently agile to enable timely funding and so are likely to involve a range of uncertainty mechanisms. The full package of load adaptability and output mechanisms will be confirmed at the determinations stage, subject to further engagement and dependent on the quality of business plans received.
- 2.70 In addition to the sensitivity analysis, we have decided that DNOs should consider the plausibility of the tRESP SEN outcomes for needs to be considered for proactive investment ("proactive investment SEN") when determining which interventions from their tRESP informed load plan to include in baseline funding.
- 2.71 DNOs should include baseline funding requests to reinforce for proactive investment SEN where the plausibility of the requirement in ED3 is medium or high and delivery lead times place the reinforcement on the critical path, such that not proceeding in ED3 would mean the need could not be accommodated by the target date.
- 2.72 For proactive investment SEN where the plausibility of need is only medium, the reinforcement must also be low regret; that is where the incremental investment directly linked to the proactive investment SEN is no more than 40% of the overall scheme value, with the majority of the expenditure being required regardless of the SEN.
- 2.73 Where plausibility is low, or where the incremental investment linked to a medium plausible proactive investment SEN is greater than 40% of overall scheme value, we expect DNOs to consider whether there is option value in taking low regret preparatory steps (eg proportionate planning, design and consenting) while deferring material construction commitments so that

investment can proceed using the relevant uncertainty mechanism once the plausibility assessment criteria have been met. For further detail on the plausibility assessment of proactive investment SEN see Strategic Energy Needs in the ED3 BPG.

Long-term integrated network plan

- 2.74 We have decided to retain the requirement for each DNO to develop a LINP. However, given uncertainty in demand growth and the risk of locking consumers into premature network build, we consider its role in ED3 is as a strategic reference document to support transparency and coordination rather than an investment blueprint.
- 2.75 We expect the LINP to:
- give an accessible overview of network development for the main investment drivers, drawing out the interactions and the wider consumer value of taking an integrated approach
 - put ED3 proposals in context of the long-term needs to help illustrate the choices and trade-offs, particularly between near-term efficiency and long-term value for consumers
 - give visibility of the potential investment pipeline to encourage supply chain investment and competition, supporting deliverability and value for consumers
- 2.76 We expect the LINP to sit alongside, and not duplicate, the detailed business plan evidence base, including topic-specific strategies, BPDT and EJP. The LINP should therefore focus on bringing together the overarching narrative and signposting readers to the relevant supporting material, rather than restating detailed justification that is better set out elsewhere (eg within sector-specific annexes such as the LRE annex).
- 2.77 We have set out further detail on our expectations in the ED3 BPG section Long-term integrated network plan.

Proactive unlooping programme

- 2.78 All stakeholders that responded on our SSMC proposal for proactive programme for unlooping strongly supported this. There was also consensus that a nationally consistent approach is needed to ensure a high standard of customer experience.
- 2.79 Accordingly, we have decided that all DNOs should deliver a proactive unlooping programme in ED3. We expect each DNO's programme to be informed by a robust assessment of looped service connections in its licence area and to prioritise the situations where proactive intervention is expected to deliver the greatest value for consumers.

- 2.80 We expect DNOs to also demonstrate they have applied relevant lessons from their RIIO-ED2 delivery experience and that stakeholder and customer research has shaped the programme design and ambition. DNOs should also be clear on their unlooping programme aims for ED3, including the volume of LV service upgrades, cost efficiency and delivery coordination through an area based approach.
- 2.81 At this stage, we consider that the most effective way to deliver a consistently high standard of customer experience for proactive unlooping across Great Britain is likely to be through an enforceable Code of Practice (CoP). The purpose of the CoP would be to ensure DNOs adopt, harmonise and maintain best practice behaviours across their proactive unlooping programmes, so that customers receive a consistent end-to-end experience regardless of where they live, while still allowing operational flexibility in how work is delivered locally.
- 2.82 To establish an enforceable CoP, we would expect to introduce a new licence obligation requiring DNOs to collaborate on developing and maintaining the CoP and to comply with it. We will further develop our thinking on the detailed design of the licence condition, but we currently envisage it would need to set out the purpose and minimum CoP requirements, as well as arrangements for compliance reporting and governance so the CoP can be updated over time to reflect changes in best practice and delivery learning.
- 2.83 We currently expect that the CoP would be submitted to us for approval by the start of ED3, but we will further consider the appropriate timing and set out our proposed approach through draft and final determinations.

Delivering networks for the energy transition

SSMC summary

Strengthening delivery accountability

- 2.84 Our SSMC set out that a strategically planned and funded approach to network investment must be matched by robust delivery. While RIIO-ED2 introduced mechanisms such as the secondary reinforcement volume driver and an ex post review of non-variant load-related expenditure, most network reinforcement allowances are not directly linked to specific delivery outputs or measurable volumes. In ED3, the scale of investment and the increasing importance of timely delivery mean that the potential consumer harm from under-delivery or deferral is greater than in previous price controls. We therefore consider that the regulatory framework must strengthen delivery accountability to ensure that funding translates into tangible outcomes, and to provide confidence to consumers, stakeholders and the supply chain that infrastructure will be delivered efficiently and on time.

Decision ED3 Sector Specific Methodology Decision

- 2.85 We stated that our approach to delivery accountability should: ensure delivery of funded outputs and outcomes; hold DNOs to account for the pace and volume of delivery, with clear consequences for under-delivery; avoid duplication, double counting or gaming; remain proportionate and transparent; and provide clear signals to support supply chain and workforce capacity.
- 2.86 We set out three broad approaches to delivery accountability, recognising that different approaches may be more appropriate depending on the nature of the investment:
- Price Control Deliverables (PCDs), requiring delivery of specific projects or programmes, offering strong delivery certainty and traceability but limited flexibility
 - volume-based measures, tracking delivery of asset volumes from investment plans, allowing some flexibility while maintaining alignment with expected outputs
 - output-based metrics, linking delivery to system outcomes such as capacity or risk reduction, offering greater flexibility but requiring robust metric design and potentially reducing visibility of the delivery pipeline
- 2.87 We highlighted that each approach involves trade-offs between delivery certainty, adaptability and alignment with strategic value, and that no single approach is likely to be optimal across all forms of investment.
- 2.88 We also noted emerging proposals from DNOs for output-based metrics, including measures of additional network capacity and load risk reduction, and sought views on whether such metrics could form part of an accountability framework. We emphasised that our guiding principles prioritise delivery certainty, given the potential consumer harm from under-delivery or deferral, while recognising the need for flexibility to respond to changing system needs. We sought views on how best to balance certainty and flexibility, particularly for low-regret, strategically aligned investment
- 2.89 We considered whether additional delivery incentives may be required to support timely delivery, including financial penalties for under-delivery. We noted that existing mechanisms, such as the TIM and output delivery incentives, may already provide material incentives for delivery, and sought views on whether further incentives would be proportionate or risk adding unnecessary complexity.

Adapting for additional investment needs during the ED3 period

- 2.90 We recognised that ED3 investment requirements will evolve over time as strategic planning inputs and local developments change. We therefore consulted on mechanisms to enable DNOs to adapt to additional investment

needs during the price control period, while maintaining accountability and protecting consumers. We set out two broad categories of mechanisms:

- ex ante uncertainty mechanisms, including re-openers linked to updates in strategic planning inputs (such as RESP) and volume drivers for high-volume, standardised interventions
- ex post mechanisms, allowing DNOs to proceed with additional investment and seek funding adjustments after delivery, subject to review and potential efficiency assessment

2.91 We highlighted that these mechanisms involve trade-offs between speed, certainty, administrative burden and consumer protection, and that different mechanisms may be appropriate depending on the nature and urgency of the investment need.

2.92 We proposed a structured approach to RESP re-opener windows to accommodate material changes in strategic investment needs during ED3, with indicative timing in the early and later stages of the price control to balance responsiveness and regulatory stability. We set out that incremental changes could be managed through existing adaptability mechanisms, while material changes may require formal re-opener processes.

Conceptual models for ED3 delivery

2.93 Finally, we illustrated how delivery accountability and adaptability mechanisms could be combined through two conceptual models for ED3 delivery:

- a 'Plan and adapt' model, which emphasises output-based accountability and flexibility to adjust delivery in response to evolving needs, supported by ex post adjustments and re-openers
- a 'Plan and deliver' model, which emphasises delivery certainty through PCDs and volume-based measures, with limited flexibility and stronger alignment to planned interventions

2.94 We noted that these models reflect different trade-offs between delivery certainty, adaptability, supply chain readiness and efficiency, and that elements of both approaches may be required in practice. We indicated a preference for a more plan-led approach to ensure delivery of funded outcomes, while recognising the need to retain flexibility where appropriate. We sought stakeholder views on these models, and on alternative combinations of mechanisms that could support accountable, timely and future-ready delivery in ED3.

Summary of consultation responses

- 2.95 We received responses from 20 stakeholders across Q8–Q17. These included all five DNOs, alongside consumer representatives (including Citizens Advice and Centre for Sustainable Energy), supply chain organisations and manufacturers (including BEAMA and OEMs), other network operators (such as Network Rail and water companies), and system, policy and market specialists (including Energy Systems Catapult, ADE: Demand and Octopus)
- 2.96 Support for strengthening delivery accountability was strong, with a clear consensus that the scale of ED3 investment warrants a more explicit link between funding and delivery, and that consumers should be able to see clear, measurable outcomes from funded investment.
- 2.97 On delivery accountability mechanisms (Q8), 14 out of 17 stakeholders supported our overall framing. Respondents consistently emphasised that no single mechanism is sufficient and that a combination of tools should be used depending on the nature of the investment. Six stakeholders explicitly supported a hybrid approach. There was clear divergence on the role of prescriptive mechanisms. Citizens Advice and the Centre for Sustainable Energy supported the use of PCDs as a default where interventions are well defined, complemented by volume measures. In contrast, UKPN, NGED and NPg opposed widespread use of PCDs or rigid volume targets, arguing these risk locking in suboptimal solutions and reducing adaptability, and instead supported output-based accountability as the primary mechanism, with PCDs limited to a small number of high-value strategic projects. Network Rail cautioned that volume-based approaches could bias delivery towards simpler, high-volume works at the expense of more complex but critical interventions, while Octopus emphasised that accountability should be framed around system outcomes, such as connections performance and utilisation, rather than predefined asset delivery.
- 2.98 On the balance between certainty and flexibility (Q9), views were more evenly split. 7 out of 12 stakeholders supported placing greater emphasis on certainty for well-evidenced, strategically aligned investments, including Citizens Advice, BEAMA and SSEN-D. These respondents emphasised the need to ensure delivery of low-regret investment and to provide confidence to the supply chain, rather than reflecting a view that overall system needs are certain.
- 2.99 However, 5 out of 12 stakeholders, including UKPN, NPg, ADE: Demand and Octopus, highlighted the risk of uncertainty leading to misdirected or inefficient investment. These respondents emphasised that flexibility is critical in a dynamic context, where demand, technology and connection patterns are uncertain. Several stakeholders, including NGED, SPEN and Energy UK, argued that the appropriate approach is to match mechanisms to investment type,

combining certainty for large, strategic investments with flexibility for more programmatic or uncertain delivery.

- 2.100 On delivery incentives (Q10), views were mixed, but there was a clear theme that additional incentives should be used sparingly. 9 out of 15 stakeholders supported additional incentives or safeguards, including BEAMA, which supported financial penalties for under-delivery, and Citizens Advice, which emphasised the need for stronger protections to avoid consumers paying for undelivered outputs. ADE: Demand proposed a new incentive focused on connections performance, and NPg advocated for a strengthened output-based incentive, with rewards and penalties linked to delivery performance. However, 6 stakeholders, including NGED, SPEN, SSEN-D and Energy UK, argued that existing mechanisms can be sufficient if properly calibrated, and cautioned against introducing overlapping or overly complex incentives. The consistent message was that strengthening delivery should focus on clear, well-designed mechanisms and effective calibration, rather than adding multiple layers of incentives.
- 2.101 On adaptability mechanisms (Q11–Q13), respondents broadly supported the overall framework, but emphasised the need for clarity, proportionality and speed of operation. 11 out of 14 stakeholders supported the proposed options, with Centre for Sustainable Energy, NGED and SPEN supporting the use of a combination of mechanisms, including volume drivers, re-openers and, in some cases, ex post review. There was strong opposition to heavy reliance on ex post mechanisms, with NPg and SPEN arguing these do not provide sufficient funding certainty and risk delaying investment. Across responses, stakeholders emphasised that adaptability mechanisms should:
- be used selectively, focusing on material changes rather than routine adjustments (SSEN-D, NPg)
 - operate quickly and predictably, with streamlined processes and clear evidence thresholds (Energy UK, NPg)
 - maintain transparency and robust governance, including clear triggers and auditability (Thames Water)
- 2.102 A consistent theme was that adaptability mechanisms should not be a substitute for adequate upfront funding, with several stakeholders (including NGED and NPg) stressing that baseline allowances should fund core, low-regret investment.
- 2.103 On RESP re-opener windows (Q14), support was generally positive but not uniform. Nine stakeholders supported the proposed approach or its direction, including NGED and Energy UK, which supported alignment with RESP publication cycles. However, concerns were raised on timing and scope. UKPN and SPEN argued that the proposed windows may be too restrictive or too frequent, and risk distracting from delivery if triggered too early or too often.

Stakeholders such as Energy UK and Thames Water proposed adding supplementary or urgent triggers outside fixed windows to respond to unforeseen developments, such as major new connections or resilience-critical needs.

2.104 On conceptual delivery models (Q15–Q16), stakeholders were clear that the proposed 'Plan and Deliver' and 'Plan and Adapt' models are not mutually exclusive. 10 stakeholders explicitly supported a hybrid approach, combining elements of both models. SSEN-D, NGED, SPEN and Energy UK all argued that different tools should be applied to different investment types, rather than adopting a single model. There was no consensus on whether one model should dominate:

- five stakeholders supported greater emphasis on 'Plan and Deliver', including Citizens Advice and Thames Water, citing the importance of delivery certainty for consumer protection and resilience
- seven stakeholders supported 'Plan and Adapt', including UKPN, NPg and BUUK, emphasising uncertainty and the need for flexibility
- six stakeholders emphasised a balanced or context-specific approach, with no clear preference for a single model

2.105 Stakeholders including Energy Systems Catapult and SPEN questioned the usefulness of framing the decision as a binary choice, arguing that the focus should instead be on the effective design and combination of underlying mechanisms.

2.106 On additional mechanisms (Q17), stakeholders generally did not propose entirely new frameworks but instead focused on refinements to existing tools. There was support for:

- output-based metrics as the core delivery mechanism (UKPN, NPg, Energy UK)
- portfolio or programme-based PCDs for more flexible delivery (Energy UK)
- stronger transparency and reporting, including comparative performance monitoring (Citizens Advice)

2.107 Across all questions, three consistent themes emerged. Stakeholders supported stronger delivery accountability, but emphasised that it must be proportionate and adaptable; favoured a hybrid approach to delivery accountability, applying different mechanisms to different types of load-related investment rather than relying on a single tool; and they stressed that the framework must enable timely delivery under uncertainty, without introducing unnecessary complexity or constraining efficient decision-making.

SSMD decision and rationale

- 2.108 We will adopt a hybrid approach to delivery accountability for load-related expenditure, rather than relying on a single mechanism. This reflects the underlying characteristics of distribution network investment, where interventions vary materially. At higher voltage levels, interventions are fewer, higher in cost, more bespoke, and take longer to deliver. At lower voltage levels, they are more numerous, smaller in scale, faster to deliver, and more standardised and repeatable.
- 2.109 These differences have important implications for delivery accountability. Larger, bespoke projects are less readily scalable, place more concentrated demands on supply chains and specialist workforce and offer limited scope to adjust once committed. Delay or re-scoping can carry significant consequences. They therefore benefit from stronger ex ante commitment and traceability, where mechanisms such as project-specific PCDs can provide delivery certainty.
- 2.110 By contrast, lower voltage interventions are more repeatable and modular. They can be scaled, sequenced, and adjusted more readily, with fewer system-wide consequences. In these cases, volume-based measures and output-based metrics can support accountability while allowing delivery to respond to evolving needs.
- 2.111 This suggests that a single accountability mechanism may not, in practice, accommodate such a range of contexts without either constraining efficient delivery or weakening accountability.
- 2.112 Therefore, at this stage we expect that our framework will combine PCDs, volume-based measures, and output-based performance metrics. This allows accountability to be calibrated to the nature of the investment and the expected impact it will have on network performance, supporting certainty where delivery is complex and less adaptable, while enabling proportionate flexibility where delivery can be more easily scaled and adjusted within the period.
- 2.113 Our approach does not rely on any standalone delivery incentive. The additional measures that we are introducing across network and delivery planning, improved reporting and performance-based accountability are designed to provide a clear and balanced incentive to both identify and deliver efficient network investment, whilst at the same time protecting consumers where delivery falls short, with funding more closely linked to delivered outputs. The approach is intended to limit the extent to which reductions in the level of the expected outputs during the price control can be presented as efficient expenditure, from which companies can otherwise financially benefit.
- 2.114 We will continue to consider whether any additional explicit delivery incentives are necessary, beyond the TIM and output delivery incentives (eg connections), particularly where mechanisms are new and operating under material

uncertainty. Several stakeholders cautioned against layering additional incentives before the effects of new accountability mechanisms are understood, while others supported stronger penalties or rewards in specific circumstances. We will continue to develop our thinking in this area through further engagement.

2.115 At this stage, we set out below our expectations for how load-related expenditure (LRE) delivery accountability and adaptability may apply across different parts of the network. Confirmation of all load mechanisms will be made in our Final Determinations, subject to further engagement and dependent on the quality of business plans received.

Primary reinforcement

2.116 We expect primary reinforcement, excluding larger capacity investments (eg at GSP and at 132kV) and SEN (see 2.139 - 2.146), to be held to account largely through an output delivery mechanism (ODM). This mechanism pairs an output-based performance metric with an aggregate mechanistic PCD, so that delivery of defined outputs is translated directly into transparent revenue adjustments. In doing so, it provides a clear indication of performance against which DNO delivery is measured, while accommodating in-period uncertainty by allowing revenue to adjust in line with the outputs actually delivered.

- output-based performance metric: this is the unit of measurement we will use to assess whether a DNO has over- or under-delivered. The metric is intended to drive a specific outcome, such as timely provision of network capacity or reduction in load risk
- aggregate mechanistic PCD: this is the licence instrument that we will use to adjust allowed revenue in response to under- (and potentially over-) delivery against the metric. In effect, it provides the ability to convert performance against an output metric into a transparent, mechanistic financial adjustment where it is well-justified, including returning funding to consumers where outputs are not delivered

2.117 This approach reflects established principles in our regulatory framework, most notably the Network Asset Risk Metric (NARM). Under NARM, the need for asset health driven replacement and refurbishment is modelled using the Common Network Asset Indices Methodology (CNAIM) and refined through inspection cycles, including inspections undertaken during the price control period, with funding adjusting in line with delivered outputs. Delivery choices can evolve, but accountability remains anchored to the committed output level over the price control period.

2.118 A similar principle can apply here. While the overall requirement for primary reinforcement might be clear, and we expect DNOs to deliver investments in line with their approved plans, there could be some uncertainty over where and when additional capacity will be needed within the period. The output delivery

mechanism allows delivery to respond to that uncertainty, while maintaining accountability to committed outputs, with allowed revenue adjusting in line with what is delivered.

- 2.119 At this stage, we expect the primary reinforcement ODM to be adaptable to forecast changes in network loading during the ED3 period, while remaining bounded by the agreed ex ante funding envelope. This approach is intended to allow DNOs to optimise delivery as evidence evolves, rather than holding them to a fixed list of interventions that may become misaligned with need over time. Where changes are material and require additional investment beyond the agreed envelope, we expect these to be managed either ex post, supported by clear evidence, or through in-period adaptability mechanisms such as the LRE re-opener.
- 2.120 We received three proposals from DNOs for output metrics. We consider that there are both merits and risks with each and will continue developing these concepts further with DNOs, including considering their interaction with cost assessment. To support this, we have enabled our Business Plan Data Tables (BPDTs) such that any of these metric approaches could ultimately be operationalised for ED3. Decisions on output metrics will be communicated in our Draft and Final Determinations.
- 2.121 We expect to set the performance output target with reference to longer-term outlook for the network (eg ED3 period plus 2 years or more). This reflects that the benefits of the energy transition to consumers are realised over the long term. Targets should therefore encourage companies to take a longer-term view of network development, supporting investment decisions that reduce the need for repeated interventions and avoid inefficient deferral, including where this encourages a 'touch the network once' approach.
- 2.122 A key design question is how flexibility interacts with the primary reinforcement ODM. Flexibility is an increasingly important risk-management tool in supporting affordability and navigating uncertainty. It improves utilisation of existing networks by reshaping patterns of network loading, thereby reducing the need for immediate capital investment. It can do this by:
- adding new load to periods when there is spare capacity
 - enabling technologies and behavioural change that reduce peak loading, creating headroom that can then accommodate additional load
- 2.123 Improved utilisation is of growing importance in the context of our energy transition. Many parts of the distribution network operate with spare capacity most of the time. Where electricity consumption does not grow in line with rising network costs, fixed costs are recovered over a shrinking base of megawatt hours, which can place upward pressure on the unit rate of electricity faced by consumers.

- 2.124 However, over-reliance on flexibility carries material risks. Delaying reinforcement can result in higher system costs, reduced resilience, and constraints that impede the pace of the transition. Flexibility is not uniformly available or equally reliable across Britain, and delivery risk increases where assumed flexibility does not materialise at the required time and place.
- 2.125 The framework must therefore preserve flexibility as a genuine substitute where it is efficient and reliable, but it must not become an unbounded substitute for timely reinforcement.
- 2.126 Under RIIO-ED2, companies have considerable discretion to substitute reinforcement with flexibility, with such substitution incentivised through the TIM, for the primary network. This has provided limited visibility for consumers over what is ultimately delivered and has not established a clear boundary on the extent to which flexibility can offer an efficient substitute for funded reinforcement. In ED3, we intend to strengthen this framework so that the role of flexibility is clearer, better evidenced, and subject to appropriate limits.
- 2.127 We therefore expect the use of flexibility to be explicitly funded and incentivised up to the point where there becomes a significant risk that the network cannot be reinforced in time for when it is needed, beyond which network build must proceed. We are requiring, through the ED3 BPDTs, clear separation and transparency of forecasts for reinforcement expenditure and for flexibility and innovative solutions. We will continue to explore whether allowances and controls should be combined within a single mechanism that covers all reinforcement, flexibility, and innovative solutions. At this stage, we do not yet have a sufficiently developed output metric to confirm this design choice. We will continue to develop these options, including in the context of wider considerations on DSO incentives (see 4.230 - 4.233).
- 2.128 The balance between network build and flexibility reflects the need to balance affordability and confidence in timely network readiness. Where that balance ultimately rests will be informed by the Build and Flex strategies submitted by companies as part of their business plans and confirmed in our Final Determinations.

Connections inside price controls

- 2.129 Connections-driven reinforcement expenditure is currently funded through ex ante allowances. Connections expenditure continues to be one of the largest areas of underspend in the first two years of RIIO-ED2. This may reflect a combination of factors, including lower-than-expected uptake of LCTs and changes to the charging framework that have yet to translate fully into network expenditure. More broadly, it highlights the challenge of ensuring that ex ante funding remains aligned with delivered outputs in an area characterised by significant uncertainty.

Decision ED3 Sector Specific Methodology Decision

- 2.130 We will continue to explore the most appropriate way of holding the companies to account in this area, ensuring consumers are adequately protected when funded activities are not ultimately delivered, whilst supporting timely delivery of connections related reinforcement. This could involve extending the scope of the proposed primary reinforcement ODM to include connections related activities.
- 2.131 We will work with DNOs and stakeholders to assess the most appropriate treatment, including how connections-related outputs can be measured and verified, and how accountability mechanisms and incentives interact with connection-related reinforcement. This work will also need to consider any uncertainties associated with connections reform, as sufficient clarity may not be available at the time of business plan submissions.
- 2.132 We will also look to improve reporting on connections reinforcement, with DNOs providing more detailed narrative and evidence on the interactions between connections and other forms of LRE. Final decisions on the appropriate accountability framework for connections related works within the price control will be confirmed in our Final Determinations.

Secondary Reinforcement

- 2.133 Secondary network reinforcement is characterised by a high volume of smaller, repeatable, and short-lead time activities, with less variation in scope and cost than primary reinforcement. While demand at this level remains more dependent on LCT uptake, the nature of work is more standardised, making it more suitable for a volume-based approach.
- 2.134 At this stage, we expect to retain a Secondary Reinforcement Volume Driver (SRVD) for ED3. This reflects consultation responses that a volume-based mechanism remains the most pragmatic and proportionate way to fund and monitor delivery of secondary reinforcement, providing both funding certainty and a clear link between allowances and outputs.
- 2.135 However, we recognise that the current design of the SRVD has limitations and will keep this position under review. It may not fully capture certain types of activity, including voltage-driven interventions or solutions outside the core SRVD categories, such as voltage regulators, tap changers, additional switches or circuit breakers. Where these activities fall outside the defined categories, there is a risk that necessary expenditure may not be adequately funded or reported.
- 2.136 We will therefore continue to consider options to refine the scope and operation of the SRVD, including:

Decision ED3 Sector Specific Methodology Decision

- reviewing and improving the metrics that govern the use of the mechanism, to ensure they better reflect the drivers of secondary reinforcement and network utilisation
- strengthening the coverage of activities, including consideration of how 'other reinforcement activities' should be defined, reported, and funded
- improving reporting and transparency, so that activity delivered outside the core SRVD categories is visible, comparable and subject to appropriate scrutiny

2.137 We also recognise that a greater proportion of ED3 work may involve delivery of new circuits and substations, rather than upgrades to existing assets. This can involve additional cost drivers, which are possibly not well captured by a simple volume-based approach. We will consider how these costs are treated through cost assessment, to ensure that efficient delivery is not constrained.

2.138 The overall position on LRE volume drivers in ED3 remains under review. As noted at Paragraph 2.115, the full package of load adaptability and accountability mechanisms will be confirmed in our Final Determinations.

Large capacity investments and proactive investment SEN

2.139 While much of ED3 investment is programmatic, a subset of investments is large, discrete and strategically defined, with clearly identifiable scope, location and delivery requirements. These include large capacity projects eg at EHV/132kV and above and investments linked to proactive investment SEN identified through tRESP (and in future by RESP).

2.140 For these, we expect to adopt project-specific evaluative PCDs. These would provide a clear link between funding and delivery with defined outputs, timelines and close-out assessment. This approach is most appropriate where there is a higher degree of certainty over what needs to be delivered, and where the scale of investment warrants stronger project-level accountability. Consultation responses broadly supported this targeted use of PCDs, while cautioning against wider application that could reduce flexibility and constrain efficient delivery under uncertainty.

2.141 At this stage, we expect PCDs to be applied selectively, focusing on larger primary network interventions and proactive investment SENs where there is a clear system-wide requirement to deliver specific infrastructure.

2.142 In addition to our approach for setting PCDs for high certainty and significant investments, we also have considered arrangements for when funding needs to adjust in period. For large capacity projects in the load plans that are more uncertain, we are considering putting in place an agile, contingent funding mechanism to release the funding quickly for these projects when pre-defined

investment drivers are triggered, signalling that the need for investment is established.

- 2.143 For proactive investment SEN that do not meet the plausibility criteria for baseline funding at draft and final determinations, but where circumstances change in period, we expect a LRE re-opener process to be used, to enable timely funding assessment and adjustment when the criteria are met. For more information on the criteria and plausibility assessment see Strategic Energy Needs in the ED3 BPG.
- 2.144 Similarly, we consider an LRE re-opener is likely to be needed to enable timely funding for new major projects that may emerge over the course of ED3, arising from future RESP or elsewhere, but which fall outside the scope of other LRE uncertainty mechanisms or output delivery arrangements.
- 2.145 We will set out further detail at Draft Determinations on how we expect any such mechanisms to operate, including how they would provide timely access to additional funding. This is likely to include defined re-opener windows for DNOs to submit applications linked to future RESP outputs, with the potential for a streamlined assessment approach that focuses on efficient costs where submissions are supported by findings from NESO's network planning assurance.¹⁵ We are also considering whether to define windows for other urgent strategic needs that could arise outside of the RESP cycle eg critical national infrastructure requirements, as well as Authority-initiated triggers.
- 2.146 This approach is intended to strike a proportionate balance between responsiveness and control. It should enable faster progression for well-evidenced strategic investments, while ensuring that large and complex projects remain subject to appropriate scrutiny. Final design, including the application of PCDs and adaptability mechanisms, will be confirmed in our Final Determinations, following further engagement and assessment of business plans.

Proactive unlooping programme

- 2.147 As outlined in the Planning networks for the energy transition section, we expect DNOs to develop and deliver proactive unlooping programmes in ED3. We have also considered the most appropriate accountability and uncertainty mechanism for this activity. While continuing with the existing LV services

¹⁵ As part of its RESP role, we can ask NESO to carry out network planning assurance (NPA), which is a targeted review of how distribution networks have used RESP outputs in their network planning. The overarching objective of NPA is to provide assurance that distribution networks' planning has considered the capacity requirements for net zero compliant pathways in line with the direction set by the RESP. The specific scope and timing of NESO's NPA for any given RESP will be decided in future. However, we expect NPA will generally be undertaken through checks that the network has used RESP outputs as set out in the relevant NESO user guidance, alongside any additional guidance issued by Ofgem on how we expect distribution networks to use the RESP outputs.

volume driver, perhaps with a minimum volume, remains an option, we recognise that the range of solutions and delivery approaches may need to adapt, as DNOs scale their operations to deliver a more substantial and sustained programme of work in ED3. The volume driver could create the risk that DNO unlooping programmes are driven by opportunities to outperform against a unit rate, rather than delivering the right solutions in the right places, resulting in sub-optimal outcomes for consumers.

- 2.148 We are therefore considering the introduction of a use-it-or-lose-it (UIOLI) mechanism for proactive unlooping programmes, with capped funding linked to delivery of agreed outputs and with underspends returned to consumers. Whilst this removes the explicit efficiency incentive of the TIM, we consider that this approach may better manage the combined uncertainty in volumes and unit costs and would reduce the risk of under-delivery or delivery of minimum compliant solutions where future-proof solutions sized for future need would deliver better long-term value for consumers.
- 2.149 If we did ultimately decide on a UIOLI as the funding mechanism in this area, we would address the absence of an explicit efficiency incentive through strengthened transparency and monitoring. In any event, we will update current annual cost reporting requirements in this area, enabling improved scrutiny of unit costs and delivery performance. We also expect this improved reporting could be used to inform whether any in-period adjustment to a UIOLI pot might be needed during ED3, including where requirements change or where delivery evidence supports an adjustment.
- 2.150 Final decisions on the approach to funding unlooping programmes and holding companies to account in this area, including details of the operation of any mechanisms will be confirmed in our Draft and Final Determinations.

Supply chain and workforce

- 2.151 Delivering networks for the energy transition will depend not only on regulatory design, but on the capacity of supply chains and workforce to respond at pace and at scale. Recent experience points to emerging constraints that could shape the cadence of future project delivery. More broadly, delivery depends on sustained and credible signals that enable suppliers, contractors and training providers to invest ahead of need and build capability over time.
- 2.152 As set out in our supply chain and workforce policy decisions (Paragraphs 5.250 to 5.262), we are strengthening the conditions for delivery. We are requiring DNOs to set out an execution-ready 10-year Delivery Strategy aligned with their business plans, supported by proportionate delivery risk indicators. We are also enabling targeted mobilisation ahead of ED3 through the remaining RIIO-ED2 re-opener window and strongly encouraging improved market visibility and procurement transparency. Together, these measures are intended to support

Decision ED3 Sector Specific Methodology Decision

timely delivery, strengthen supply chain and workforce resilience, and reduce the risk that capacity constraints limit the pace of investment.

3. Responsible and sustainable business

This chapter sets out our methodology decisions on how DNOs will deliver responsible, sustainable operations and high-quality, fair outcomes for consumers in ED3. We are introducing a step change in connections performance, with clearer definitions, targeted incentives across smaller and larger connections, and a new Upgrades and Access incentive to accelerate LCT rollout at lower voltages. Customer service and vulnerability protections are strengthened through a refocused Broad Measure of Customer Service (BMCS), enhanced Priority Service Register (PSR) transparency, and a requirement for a new Targeted Customer Storm Support Strategy. Consumer insight is being embedded more systematically in decision-making, both for DNOs and ourselves with the introduction of the Ofgem ED3 Consumer Panel.

DNOs will take on an enhanced coordination role to support local net zero delivery, alongside strengthened expectations on environmental performance, collaboration and stakeholder engagement. Independent scrutiny via ISGs is reinforced, and accountability is improved through updated business plan reporting, a consistent approach to demonstrating economic value and the development of a Consumer Value Framework for use in future price controls. Together these decisions ensure clearer, more transparent delivery of outcomes for consumers and the wider economy.

SSMC questions

Redefining connection types

- Q18. Do you agree that the connection types of 'minor' and 'major' should be redefined? If so, do you have thoughts on how they should be redefined, via voltage works required, customer type, a blend of the two, or a split not considered here?
- Q19. Do you have views or suggestions on how redefining connection types, with potentially more types being introduced, will be able to be operationalised at this level of granularity?

Incentives for smaller connections

- Q20. Do you agree with our proposal for Low Carbon Technology (LCT) connections and their associated enabling works to be brought into the connections scope and incentivised, with the potential to set varying working day targets for different connection activities? Why?
- Q21. Do you agree the incentive should be reward and penalty (as per the RIIO-ED2 minor connections incentive)? Why?
- Q22. Do you think any LCT connection incentive should be for domestic, non-domestic, or both? Why?
- Q23. Notwithstanding the proposals we have set out under 'Redefining Connections Types', do you have alternative proposals for what DNOs need to do to speed up

connection times for LCTs, and what incentives (other than those we have discussed in this chapter), obligations and/or funding may be required to support this?

Incentive for larger connections

- Q24. Do you agree changes should be made to the Major Connections Customer Satisfaction Survey (MCCSS) to increase participation and better reflect the customer journey? If so, what changes do you think are required and why?
- Q25. Do you agree with the proposals we have set out for changing the incentives for the RMS for the MCCSS for the purposes of encouraging faster and more transparent connections and improving the quality of offers and post-offer services provided by DNOs? If not, what other proposals do you suggest?
- Q26. Do you think we should financially incentivise the TTC metric in order to accelerate connections and achieve the right outcomes? Are there other changes we should consider? How would any change sit alongside the current incentives?
- Q27. Do you see value in incentivising SLAs/minimum standards? How should it be done and are there any associated risks or impacts?
- Q28. Do you agree that we should not pursue the options we have set out that we would not consider further, ie incentivising flexibility and the SO:TO incentive? Why?
- Q29. Notwithstanding the proposals we have set out under 'Redefining Connection Types', do you have alternative proposals for how to incentivise timely connections and improve the quality of service for larger connections?

Broad Measure of Customer Satisfaction

- Q30. Do you agree with removing the 'Connections Survey' and the LCT related elements from the 'General Enquiries Survey' from the CSS part of the BMCS and putting this into the new smaller connections incentive? Why?
- Q31. Do you agree that the remaining surveys under the BMCS CSS then be split between 'Planned Interruptions', 'Unplanned Interruptions' and 'General Enquiries'? Why?
- Q32. Do you agree with the proposal to also report on and incentivise PSR vs non-PSR survey results for each interruptions survey? Why?
- Q33. Do you have a view on what weightings should be applied to the different surveys now proposed for the CSS part of the BMCS? Why?
- Q34. Do you agree the CSS part of the BMCS should remain a penalty and reward incentive? Why?
- Q35. Do you agree with our proposals to retain the complaints metric as a penalty-only incentive and to leave the weightings applied to each category unchanged? Why?
- Q36. Do you agree with our decision not to take forward the proposals set out in 'options considered but not proposed'? Why?

Consumer Vulnerability

- Q37. What is your view on the PSR Reach metric and whether this should form part of the AVR as a reputational incentive? If we were to continue this metric as a financial incentive, do you think it should continue as a reward/penalty or penalty only and should we change the weighting?
- Q38. What are your views on the Social Value metric and the CSS elements of the CVI incentive. Are there any areas you think we should amend or adapt for ED3?
- Q39. Do you think the targets for the CVI metrics should be made common across DNOs? Why?
- Q40. Do you think the AVR should be carried forward as an ODI-R to ED3, and why? If it is carried forward, are there any changes you think should be made to the structure and content?

Energy Efficiency

- Q41. Do you have any views on our proposal for DNOs to play a bigger role in the delivery of energy efficiency and low carbon measures?

Environmental Framework

- Q42. How should the EAP baseline expectations be revised to drive improved environmental outcomes in ED3 and beyond?
- Q43. What criteria should be prioritised in a structured evaluation of DNOs' EAP for ED3?
- Q44. Is the proposed approach to SF₆ - focusing on reducing both absolute emissions and the total SF₆ bank - appropriate and proportionate?
- Q45. Do you think we should introduce a specific mechanism to hold DNOs to account for delivering on their Fluid Filled Cables reduction targets? If so, what should this take the form of?
- Q46. How can tools like the AER and PCDs be used to strengthen delivery and accountability of the EAPs in ED3?

Consumer Voice/ Research

- Q47. Do you have any comments on the proposed guidance on consumer research set out in Appendix 3?

Enhanced Stakeholder Engagement

- Q48. Do you have any comments on the proposed ISG guidance as set out in Appendix 4?

Accountability for Consumer Outcomes

- Q49. Do you agree with our proposal to retain and adapt SLC50 Business Plan Commitment Reporting? Do you have suggestions for how the reporting should evolve?

Q50. Do you agree that we should proceed with the development of a Consumer Value Framework for ED3 and if so, do you agree with the principles set out above as the basis for developing a CVF?

Connections

- 3.1 The connections landscape is undergoing a period of rapid transition. Demand is growing at unprecedented rate as a more customers seek new connections, upgrades to existing connections and access to the network. This reflects the wider shift towards electrification and the adoption of low carbon technologies (LCTs). As a result, DNOs have to support an increasingly complex range of customer journeys.
- 3.2 In response, Ofgem is undertaking a comprehensive programme of connections reform, including the Connections End-to-End Review (end-to-end review) of the regulatory framework. The end-to-end review is looking at the incentives, obligations and requirements on DNOs as they relate to connections with the objective of ensuring that connecting customers can receive timely connections and with a high-quality, reliable customer experience, regardless of connection type.¹⁶
- 3.3 As part of this, we have reviewed the scope and reach of the existing RIIO-ED2 connection incentive framework, to see how it can be improved to help deliver the expectations and objectives of the end-to-end review throughout the ED3 period. As well as reviewing actual performance metrics, this includes addressing gaps in the visibility, monitoring and scrutiny of connections activity undertaken by DNOs.
- 3.4 Our intent is to embed these expectations into network company behaviours and priorities through incentives, designed to go beyond compliance, and deliver excellent standards of service for connection customers. We consider that well-targeted incentives should provide proportionate signals for networks to plan, deliver, and invest in improving connection processes, thereby giving enduring effect to the ambitions of the end-to-end review.
- 3.5 For ED3, we are introducing a new 'Upgrades and Access' incentive for the Smaller Connections Incentive, intended to improve the process and speed of LCT adoption for consumers at low voltages.
- 3.6 We will also be applying more rigorous monitoring and scrutiny across all parts of the incentive through expanding quantitative metrics for delivery times and applying customer segmentation to satisfaction surveys. Alongside this, we will continue to explore proportionate ways to involve external stakeholders, such as ISGs, in providing additional scrutiny of connections performance.

¹⁶ [Connections end-to-end review: updated proposals and next steps | Ofgem](#)

- 3.7 To increase transparency and accountability, we will be requiring network companies to submit a Connections Strategy as part of their Business Plans, and once in period, to produce a yearly Connections Annual Report covering all connection activity and progress against their strategies. Details of the strategies can be found in the Business Plan Guidance, and we will issue guidance on the structure of the annual report after SSMD. Both these requirements are an expansion of the RIIO-ED2 requirements, where a strategy and annual report were required for major connections only. We will also consider how these reports can support effective stakeholder scrutiny of connections performance.
- 3.8 The rest of this section covers our connections decisions for ED3 in detail, centred on the three areas we consulted on in SSMC, which are:
- redefining the current categories we use to distinguish between connection types
 - reviewing incentives for customers requiring a smaller sized connection
 - reviewing incentives for customers requiring a larger sized connection
- 3.9 The smaller connections section sets out a defined package of policy decisions, reflecting areas where the evidence base is sufficiently developed to support firm conclusions. By contrast, the material in the redefining connections and larger connections sections still requires further work and does not set out our definitive decisions. The larger and redefining sections are intended to clarify proposals raised through our SSMC and working groups to date and provide a direction of travel. We recognise the complexity and interactions with competition in the connections market and will work further with industry to refine proposals and develop robust and deliverable policy positions.

Redefining connection types

SSMC summary

- 3.10 The existing RIIO-ED2 distinction between ‘minor connections’ and ‘major connections’ customers results in a very wide range of connection activities falling within the major category.¹⁷ As a result, at the lower voltage end of the major connections category, some relatively straightforward connections are being grouped alongside much more complex projects and are not benefitting from the quicker service the Minor Connections Incentive drives. Feedback to the end-to-end review highlighted that this can cause confusion for customers due to the way different types of connections are handled and reported. It also

¹⁷ In RIIO-ED2, the Minor Connections Incentive consists of two time-based ODI-F metrics: Time to Quote and Time to Connect. Up to four new single points of connection are captured under it (connection types LVSSA and LVSSB). All other connection activity is captured under the Major Connections Incentive which consists of an ODI-F penalty-only customer satisfaction survey and an ODI-R Major Connections Annual Report.

limits our ability to clearly distinguish and monitor different types of connections within the existing framework, making it harder to understand where issues arise and whether requirements on DNOs are appropriately targeted. These issues risk being exacerbated throughout the ED3 period which will see significant growth in the number of demand connections with diversifying requests, including uptake in LCTs.

3.11 In the SSMC, we proposed to redefine connection types to better reflect and capture different customer experiences with the goal being to improve customer journeys, set standards and allow us better visibility and monitoring over DNOs' connections activity.

3.12 We presented the following two options for redefining connection types:

- **option 1 – splitting connections by voltage work required** (for example 'minor' category for all LV-only works including LV generation, 'medium' category for LV-HV works up to 11kV, and 'major' category for everything above or requiring a transmission impact assessment)
- **option 2 – splitting connections by customer type** (for example domestic, commercial, public/government, industrial energy intensive etc., and with the option to subdivide by voltage work)

3.13 We acknowledged that both options have advantages and disadvantages. A voltage-based split provides a clear, objective way to group connections but makes it harder for non-technical customers to engage with. Meanwhile, splitting by customer-type could be easier for more customers to engage with and help DNOs set customer-tailored milestones along the connections journey. However, this approach could also increase operational complexity and costs, as it would require DNOs to classify and maintain more granular customer and project data, as well as make changes to systems and reporting processes.

3.14 We invited views on whether connection types should be redefined, the options presented and how they could be operationalised.

Summary of consultation responses

3.15 Of the responses received, 26 out of 29 respondents were supportive of redefining connection types. There was consensus amongst respondents that the current approach is too simplistic and fails to capture the diversity of modern connection applications - including the rapid uptake of LCTs - and different customer needs. Respondents argued that this limits customer understanding of what to expect from the connections process and reduces transparency around likely timelines and costs. Many therefore supported the case for introducing clearer and more granular categories, to better reflect different types of connection activity and support improved planning, monitoring and delivery.

Decision ED3 Sector Specific Methodology Decision

- 3.16 Two respondents, SPEN and Scottish Renewables, advocated for no change to existing categories, warning that there would be costs associated with potentially limited benefit to connecting customers. UKPN raised concerns around the impact of any change to existing Relevant Market Segments (RMS) on regulatory reporting and Guaranteed Standards of Performance (GSoPs) which could cause confusion amongst customers. Five respondents agreed with the sentiment behind redefining connection types but felt that customer journeys could better be improved through other means, eg more detailed, tailored information on DNO websites, or incentives on customer satisfaction.
- 3.17 Views on the optimal approach to splitting connection types were mixed across a diverse range of respondents, including, but not limited to, DNOs, trade associations, consumer advocacy groups, private companies and public bodies. Of the stakeholders that indicated a preference for how to split connections, 11, including three DNOs were in favour of option 1: splitting by voltage work required. Stakeholders in favour noted that this is a clear, well-established approach that aligns with existing DNO frameworks and reflects the engineering complexity of connections. Proposals to add more granularity included a 'micro' connections category to capture specifically domestic LCT connections.
- 3.18 Six respondents, however, cited complexity for non-technical customers and a lack of tailoring to individual customer needs and timelines as reasons against a voltage-based split.
- 3.19 Alternatively, three stakeholders indicated a preference for splitting solely by customer type, proposing that non-technical categories would be easier for customers to engage with which could enable improved customer satisfaction and more bespoke connection journeys. However, concerns were raised that this approach would increase the administrative burden on DNOs and incur additional costs which could slow down delivery and ultimately add cost to the consumer. NGED also raised concerns that splitting by customer type could risk breaching their licence obligations on non-discrimination if we were to incentivise these groups differently.
- 3.20 A hybrid-approach to redefining connection types was supported by 47% of the respondents that indicated a preference, by splitting by customer type and then sub-dividing by voltage (as proposed under option 2 in the SSMC), or vice versa. Respondents saw this as striking the right balance between technical complexity and customer need and as potentially the most 'future-ready' approach to continue to meet changing customer needs in a rapidly evolving energy system. Nonetheless, three respondents, NGED, SPEN and Citizen Advice, were concerned that this approach would be the most complex and operationally challenging to implement and would impact comparability with historic data.

SSMD decision and rationale

- 3.21 We have decided to redefine connection types using a hybrid approach. This will see connections split by voltage work required,¹⁸ with this used as the primary means of reporting, with customer type sub-categories then captured in the customer satisfaction surveys.¹⁹
- 3.22 Under this approach, DNOs will be required to code and report customer satisfaction data by customer type, while being incentivised on an overall customer satisfaction measure. This approach provides a clearer, more objective basis for categorising connections than the current 'minor' and 'major' split.
- 3.23 As the range of connections being made continues to grow, having more granular data reported through the customer satisfaction surveys and the Connections Annual Report (CAR) will ensure that we can monitor the extent to which different customers' needs are being met, for example progress against minimum standards. Our specific proposals on the customer satisfaction surveys are detailed below under 'incentives for smaller connections' and 'incentives for larger connections'.
- 3.24 Stakeholder feedback highlighted concerns with the current 'minor/major' split being inconsistently applied and not always reflecting delivery complexity. This change addresses those concerns by introducing sub-categories and ensuring performance is assessed and incentivised on a more comparable and objective basis. By grouping connections according to the nature and complexity of work required, we can better reflect the different delivery challenges faced by DNOs. This supports more meaningful benchmarking, reduces scope for inconsistent classification, and strengthens the link between performance and the service experienced by different customer groups. In turn, this will provide a robust evidence base to determine whether future incentives should target specific customer types and address any identified gaps in the service provided to these specific connections.
- 3.25 Under the Larger Connections Incentive, we will continue to incentivise DNOs on the average customer satisfaction score as per the current Major Connections Incentive design, but we require that they publish data with a split by customer type. Relying on industry's experience of handling different types of customers, the taxonomy used to describe these sub-categories should be developed jointly by all DNOs and submitted to Ofgem for approval. We expect the taxonomy will distinguish between customer groups such as commercial, industrial, public

¹⁸ Smaller connections will cover LV-only works, including upgrades, LVSSA and LVSSB connections. In RIIO-ED2 this is currently captured in 'minor connections'. Larger connections will cover connections involving HV or EHV, as well as LV connections where delivery is more complex or bespoke, ie LV generation. In RIIO-ED2, this is captured by 'major connections'.

¹⁹ The exact taxonomy to be agreed jointly with DNOs post-SSMD.

sector, and others. This will allow us to develop baseline data on different customer types to see which groups may be being served well and others that are currently dissatisfied, with the ability to incentivise based on this in the future. This approach does not require DNOs to differentiate their treatment of customers. Instead, it provides more granular information to help us identify any service shortfalls and support a more consistent quality of service across all customer groups.

- 3.26 We recognise that 'low-voltage other' (referred to as LVAL)²⁰ connections are more closely aligned with smaller connections, given their largely repeatable, low-voltage and transactional nature, and their similarity to LVSSA and LVSSB connections in terms of delivery characteristics and customer expectations. However, for ED3 we are minded to retain LVAL within the larger connections category, recognising the need to build a stronger and more robust evidence base before making a final reclassification. To support this, LVAL connections will be explicitly carved out within the Larger Connections Customer Satisfaction Survey, enabling more targeted monitoring of performance and customer experience. This approach allows us to consider whether LVAL connections would be more appropriately incentivised through the Smaller Connections framework in future price controls, while ensuring continuity and stability in the ED3 incentives.
- 3.27 Additionally, subjecting LVAL services to penalties and rewards under the Smaller Connections Incentive could prove distortionary in market segments where there is evidence of effective competition, further reinforcing the case for retaining LVAL within the larger connections category during the ED3 period. While we remain open to further considering reclassifying LVAL as smaller connections in ED3, a final decision will depend on the identification of appropriate mitigations to address potential distortions in competitive market segments.
- 3.28 We have decided to retain low-voltage generation connections within the larger connections category, recognising that while many LV generation connections are predictable and repeatable, there are cases, such as large commercial or public-sector LV generation projects, that are more bespoke in nature and therefore better aligned with the Larger Connections Incentive. We have also decided to leave unmetered connections within the Larger Connections Incentive.
- 3.29 Finally, having considered it carefully we have decided not to introduce an incentive focused on strategic demand connections at this stage, given the lack of a clear and agreed definition of what constitutes a 'strategic demand

²⁰ LVAL is a catch-all category for low-voltage demand connections that do not fit into the standard LV classes. Examples typically include small housing developments just over the LVSSB threshold and small commercial units.

connection' and the need for further policy development. This potential change, whilst not proposed within SSMC, was discussed at stakeholders at subsequent workshops.

Incentives for smaller connections

SSMC summary

- 3.30 In our SSMC, we identified a gap in the existing RIIO-ED2 Minor Connections Incentive, which currently only applies to new 'quoted connections'. As a result, most Low Carbon Technology (LCT) installations and any associated enabling works are not captured, as these typically take place via existing connections and do not involve a formal quote. With volumes of LCT installations and enabling works expected to increase significantly in period, and to ensure the connections process does not become a barrier to LCT deployment, we recognised this as an area for improvement in ED3 and proposed incentivising small-scale LCT connections at these low voltages.
- 3.31 It was proposed that the core elements of the existing Minor Connections Incentive, including Time to Quote and Time to Connect, are retained for new connections, making it an incentive of two parts (new connections and upgrades to existing connections).
- 3.32 We proposed supplementing the new connections element of the incentive with a metric on service quality performance, as measured through a customer satisfaction survey. Our SSMC proposal was to move the Connections - Customer Satisfaction Survey (currently in the RIIO-ED2 Broad Measure of Customer Service incentive) into this incentive for new Smaller Connections.
- 3.33 For LCT installations that do not require enabling works, we proposed measuring performance against Time to Approve only. This was intended to encourage DNOs to develop auto-approval processes, with the rate of auto-approvals being an important indicator of performance and network data quality as LCT uptake increases.
- 3.34 For LCT installations that require enabling works, we proposed that performance would be measured through time-based metrics, similar to Time to Quote and Time to Connect in the RIIO-ED2 Minor Connections Incentive, ensuring prompt engagement with customers on required works and timely delivery.
- 3.35 The consultation proposed that the incentive should apply to both domestic and small-scale non-domestic LCT connections, to avoid artificial segmentation and to cover the customer types (consumer uptake of LCTs in their homes and small businesses) we want this incentive to deliver for.
- 3.36 We also sought views on our proposal that different magnitudes of target (ie the number of working days within which the activity must be completed) could be

set for different upgrade activities (ie fuse upgrades, unlooping and cut-outs), reflecting the complexity of works, customer circumstances and appropriate stand-still periods where delays are outside of DNOs' control.

Summary of consultation responses

Incentivising LCT connections and enabling works

- 3.37 23 of 24 respondents supported bringing LCT connections and their associated enabling ('upgrades') works into scope of an ED3 incentive. They welcomed the proposal to introduce different activity-specific working day targets, particularly for approval and connection stages, noting that these reflect the different levels of complexity involved.
- 3.38 A strong theme across responses was the value of auto-approval for low-risk LCT installations to improve consistency and reduce delays. 15 respondents highlighted that greater automation, supported by improved network data accuracy, could reduce variability in approval times and help in distress-purchase situations. Four respondents, including Energy Geeks, National Energy Action and SPEN, pointed to smart interim solutions, such as export-limiting or demand-management devices, as enabling installations to proceed while network works follow.
- 3.39 Five respondents, including Energy UK and the Heat Pump Association, also supported wider use of digital self-service tools, particularly within the ENA's (Energy Networks Association) Connect Direct platform. Suggested improvements included enabling low-risk installations to proceed through self-service routes, clearer auto-approval criteria, and software upgrades such as digital queue-management tools.
- 3.40 Seven respondents asked for more consistent and detailed data publication, including information on fuse status, connection readiness and capacity constraints to support better planning and speed up connections.
- 3.41 Five respondents, mainly DNOs, noted that improvements may depend on wider operational enablers, including investment in digital systems, workforce capacity and internal processes. They asked for clarity on how such upgrades would be supported through price control allowances.
- 3.42 Three DNOs, SPEN, SSEN-D, and UKPN, noted that delays can arise from factors outside their control, such as third-party access requirements or customer-side delays. They asked for these circumstances to be reflected through exclusions or use of clearly defined clock-stops, noting precedent in other regulatory areas.
- 3.43 Citizens Advice cautioned that broad or too many standstill provisions ('clock stops') could weaken incentives for innovation or process improvement and argued that any allowances should be narrowly defined.

- 3.44 Four respondents, including Octopus and Renbee, highlighted the need for greater standardisation across DNOs, particularly in connection policies, application processes and auto-approval criteria. They viewed inconsistent practices as a barrier to efficient LCT deployment and supported greater alignment to improve customer and installer experience. Some suggestions, such as nationwide process harmonisation and standardised installer frameworks, were noted as sitting partly outside the price control but were still considered important for improving service quality.
- 3.45 Six respondents, including Citizens Advice, the Heat Pump Association and MCS (Microgeneration Certification Scheme) Foundation, agreed that customer experience should be captured. Four DNOs (NGED, SPEN, SSEN-D and UKPN), supported including customer experience measures but emphasised the need to tailor surveys to the LCT connections market. They noted that installers, rather than end customers, are typically the main point of contact for new LCT connections and suggested using periodic installer surveys instead of job-by-job approaches.
- 3.46 SSEN-D was concerned about applying the same customer satisfaction surveys to enabling works as new connections, given different customer interactions and the risk of survey fatigue. It suggested separating surveys for enabling works from those for wider new connection activities to ensure feedback remains relevant and proportionate.

Incentive structure: reward and penalty vs alternative approaches

- 3.47 15 of 16 respondents supported the principle of a reward-and-penalty incentive provided that the appropriate safeguards are in place. Respondents highlighted that symmetrical incentives should avoid DNOs prioritising speed over quality, particularly for more complex jobs.
- 3.48 SPEN and SSEN-D suggested a gradual introduction of financial incentives with SPEN proposing a reward-only arrangement for ED3, with penalties being introduced in ED4, similar to the introduction of the Minor Connections Incentive in RIIO-ED1. Both suggested a gradual introduction is necessary to build confidence in data, avoid perverse outcomes, and mitigate the risk of financially penalising the DNOs for external dependencies. This was highlighted as an example of the flexibility the mechanism would need over the price control.
- 3.49 EDF emphasised that the incentive must have a material financial impact on DNOs to achieve the desired electrification outcomes. Citizens Advice argued that any reward must not increase consumer bills and suggested a zero-sum design, with rewards funded by penalties incurred on the worst performing DNOs, to maintain consumer protection.
- 3.50 One respondent, Energy Geeks, opposed reward elements entirely, arguing that timely LCT connections should be treated as a basic standard of service

enforced through GSoPs and penalties. It also raised concerns that, because network costs are socialised, consumers should not effectively pay twice through a reward mechanism.

Scope of the incentive: domestic vs non-domestic LCT connections

- 3.51 We received 16 responses to this question.
- 3.52 Some respondents understood our proposals to mean that we were proposing an incentive for all LCT installs, including major connections. However, in the context of the scope of this incentive being for smaller connections, we want to be clear that we were only consulting on LCT installs for domestic and small non-domestic premises.
- 3.53 Views differed on whether the incentive should apply to domestic connections only or also include small non-domestic installations. 13 respondents, including four DNOs, supported including both, noting that smaller non-domestic LCT works can be technically similar to domestic ones.
- 3.54 NGED and NPg preferred limiting the incentive to domestic connections, arguing that these costs are generally socialised. Conversely, non-domestic customers may face different charging arrangements, and their works can involve different technical, commercial and logistical considerations compared to domestic connections.
- 3.55 Both SPEN and SSEN-D favoured defining the scope by electrical characteristics - such as low-voltage single-, two- or three-phase supplies up to around 100 amps - to provide clarity, align with the Common Connection Charging Methodology, and avoid creating arbitrary distinctions.

Additional proposals

- 3.56 Nine respondents out of 14 offered additional suggestions. These included Energy UK suggesting introducing minimum service-standard milestones, National Energy Action suggesting a greater focus on vulnerable customers and area-based retrofit programmes, and ADE: Demand and Octopus both proposing embedding LCT connection performance within a broader DSO-level incentive. The latter was seen as a way to improve transparency, accountability and a whole-system approach, supported by the publication of clear, comparable information across network areas.
- 3.57 To simplify and streamline LCT connections, ADE: Demand and Spruce proposed requiring DNOs to improve their demand calculation methodologies (the assessment used to estimate the additional load a connection will place on the network) to better account for flexibility, co-located technologies, and heat pump loads. ADE: Demand also suggested that demand connections go through a reform process similar to that in electricity transmission. MSC Foundation

suggested DNOs should publish more open data to identify constraint hotspots and prioritise upgrades.

- 3.58 Auto-approvals remained a theme of alternative proposals, with both Energise Barnsley and Energy Geeks suggesting expanding auto-approval thresholds. Energy Geeks suggested using smart meter data and digital network models to avoid manual assessments, considering these changes would significantly reduce delays and remove avoidable inefficiencies.
- 3.59 Although beyond the scope of this incentive, six respondents, including National Energy Action, Regen, SPEN and SSEN-D, emphasised the importance of proactive enabling works (particularly unlooping and low-voltage refurbishment) to support timely installation of heat pumps and EV chargers. They suggested approaches to identifying constraint hotspots and developing scalable solutions for unlooping and LV reinforcement.
- 3.60 Other stakeholders considered that a proactive approach may require Ofgem funding or strategic guidance, as reactive upgrades alone may not meet expected LCT demand during ED3.

SSMD decision and rationale

- 3.61 The core purpose of the Smaller Connections Incentive is to drive faster, more consistent and customer focused delivery of smaller connections at scale, through measurable outputs. The incentive is targeted at low-voltage works only and will be split into two parts comprising of 1) the 'Upgrade and Access' incentive for LCT approvals and upgrades to existing connections and 2) the 'New Connections' incentive for new low-voltage connections.

Table 1: Diagram of the ED3 Smaller Connections Incentive by market segment, showing change from RIIO-ED2 Minor Connections Incentive

	Up to 100amps per phase - No works required	Up to 100amps per phase - Works required	LVSSA	LVSSB
Status of connection	Existing	Existing	New	New
Example of customer type	Installing a small LCT	Installing a small LCT	Single service connection	Small project demand connection, <5 premises

	Up to 100amps per phase - No works required	Up to 100amps per phase - Works required	LVSSA	LVSSB
RIIO ED2 Minor Connections Incentive arrangements	Not covered in ED2	Not covered in ED2	Time to Quote (ODI-F) Time to Connect (ODI-F)	Time to Quote (ODI-F) Time to Connect (ODI- F)
ED3 Smaller Connections Incentive category	Upgrades and Access	Upgrades and Access	New Connections	New Connections
ED3 Smaller Connections Incentive arrangements	Time to Approve (ODI- F) LCT Installer Survey (ODI-F) Connections Annual Report (CAR) (ODI-R)	Time to Upgrade (ODI-F) LCT Installer Survey (ODI-F) Customer Satisfaction Survey (ODI-F) Connections Annual Report (CAR) (ODI-R)	Time to Quote (ODI-F) Time to Connect (ODI-F) Customer Satisfaction Survey (ODI-F) Connections Annual Report (CAR) (ODI-R)	Time to Quote (ODI-F) Time to Connect (ODI- F) Customer Satisfaction Survey (ODI-F) Connections Annual Report (CAR) (ODI-R)

Introducing the Upgrades and Access - Smaller Connections Incentive

- 3.62 We will introduce a new financial reward and penalty incentive for access approvals and upgrades for smaller connections in ED3. The incentive is intended to drive timely decision-making and delivery for small-scale LCT connections and any associated enabling works, where required, as more customers look to connect LCTs.
- 3.63 The aims of this incentive are to reward strong performance, penalise sustained underperformance, and balance behavioural risks by incentivising both access approvals and upgrades to ensure enabling works are not avoided or delayed.

- 3.64 The incentive will include time-based elements to ensure that DNOs deliver these services within similar timeframes for typical customers. As well as LCT installer and customer survey elements to measure satisfaction. While performance will be assessed on an average basis, this can mask variation in individual experiences, including customers who experience longer timeframes. These ‘long tail’ cases present a disproportionate perception risk, with the potential to undermine confidence even where the average performance is aligned across DNOs. We will therefore monitor the distribution of delivery times through regulatory reporting, alongside capturing LCT installer and customer experience through the satisfaction surveys. This will ensure these experiences remain visible and we can act upon them as necessary.
- 3.65 Furthermore, by directly incentivising the time taken to approve access requests, we are encouraging DNOs to create the conditions for more customers to be able to connect their LCTs straight away. This supports wider government policy ambition to increase the pace of approvals, and where achieved, recognises DNOs that have proactively prepared their networks and operational processes for fast and frictionless mass LCT adoption. The Upgrades & Access Incentive is therefore intended to complement and reward system-led improvements the DNOs make, including better forecasting of LCT uptake, anticipatory investment to accommodate near-term demand and generation (for example, upgrading assets with sufficient headroom for subsequent LCT adoption), proactive unlooping and targeted reinforcement, enhanced LV network visibility, and innovation in automation and decision-making.
- 3.66 The introduction of this incentive supports and advances our decision in the end-to-end review to introduce clearer and more consistent minimum standards of service for smaller connection requests.²¹ It provides a mechanism through the ED3 price control to set clear and measurable expectations on timeliness at key stages of the customer journey.
- 3.67 We will continue to develop guaranteed standards for upgrades and access, and work with government to establish the necessary regulatory framework to implement these. We recognise the importance of providing clarity on timing and we will set out further detail as part of the response to the end-to-end review consultation later this year. This includes expected timelines and next steps towards implementation.
- 3.68 Whilst we see the price control as the primary mechanism for driving improvements in performance, guaranteed standards should play a complementary role in establishing baseline expectations for service and protecting customers from unacceptable outcomes. In developing these standards, we will look to build on existing approaches, such as agreed

²¹ Decision 6.1, [Connections End-to-End Review: Updated Proposals and Next Steps](#)

milestones with the customer, and consider how they can be most effectively applied across the customer journey.

- 3.69 The incentive will apply to both domestic and non-domestic customers but will be limited to premises connected by a low-voltage single-phase, two-phase or three-phase service fused at 100 amperes or less per phase and with whole current metering. This scope aligns with existing cost categories and reflects the focus on non-chargeable works typically required for small-scale LCT installs. This boundary was socialised with the ED3 Responsible and Sustainable Business Working Group in March 2026.
- 3.70 We have considered consultation feedback on the potential risks of customers 'paying twice' and the merits of a zero-sum design, including testing the latter with the Working Group. After consideration, we still find it appropriate to introduce a financial incentive as it is targeting improvement, not paying again for the same activity. Any rewards are delivered on a conditional basis through the overall output incentive framework, with any benefit to DNOs being reflective of better outcomes for customers. The incentive will also be subject to caps on overall financial exposure, limiting the impact on consumer bills. We consider this approach proportionate given the scale of improvement required to support increasing levels of connection upgrades and access.

Time to Approve metric

- 3.71 A 'Time to Approve' metric will form a central part of this incentive and will have a reward and penalty element. The Time to Approve metric will be defined as the % of applications that are approved to connect within 24 hours, that do not require works before installation. We will use a percentage-based metric to account for differences in application volumes across DNOs and ensure equitable and consistent treatment.
- 3.72 The objective of this metric is to increase the proportion of applications that receive a timely approval to connect. This will reduce friction for customers and installers, while encouraging DNOs to improve system readiness, data visibility and decision-making capability as outlined in paragraph 3.65.
- 3.73 The incentive will be designed to drive improvements from the start of ED3 and to maintain momentum throughout the period, while penalising sustained underperformance. It will have regard to government's ambition that, for typical homes that do not require DNO upgrades, at least 80% of applications are automatically approved or approved within 24 hours where a manual assessment is needed, as set out in their Warm Homes Plan for heat pump applications.²²

²² P. 78, Chapter 3. Warm Homes Plan, [Warm Homes Plan - GOV.UK](https://www.gov.uk/government/consultations/warm-homes-plan)

- 3.74 We recognise that, beyond a standard automatic approval process, there are alternative ways to approve an LCT connection before works need to be carried out. This can include approving a connection but requiring retrospective works or approving a connection with a load or exporting limiting condition. Whilst these 'conditional approvals' help to deliver on the objective of this incentive, we want to ensure that they are not over utilised to meet 'Time to Approve' targets at the expense of customer outcomes, namely the customer not being able to use their LCT in the way they want. Cases of 'conditional approvals' and how they are appropriately measured, including calibration with the 'Time to Upgrade' metric associated with pre-installation works, will be discussed further in the detailed design stage to account for this risk.

Time to Upgrade metric

- 3.75 For works that are required prior to installation, such as fuse upgrades, service-cable upgrades and cut-out changes, we will introduce a new 'Time to Upgrade' metric to measure the time taken for the DNO to carry out these works.
- 3.76 The objective is to drive timely delivery of these upgrade activities as delays have been shown to materially slow the connection of small-scale LCTs and create an additional barrier for customers adopting LCTs.
- 3.77 Targets will be differentiated by activity type to reflect varying levels of complexity and expected delivery times.
- 3.78 We intend for the Time to Upgrade incentive to capture the full end-to-end time taken to deliver an upgrade, with only very limited exemptions. In a system where upgrades depend on multiple parties, it is critical that processes and handovers are well designed and aligned. Excluding these elements risks weakening the incentives' ability to address key sources of delay.
- 3.79 By capturing the full journey, the incentive will encourage DNOs to drive improvements in coordination, process design and delivery across the end-to-end upgrade pathway.
- 3.80 The detailed design of the metric will continue to be informed by wider end-to-end review implementation, including work to align and standardise DNO processes, and will complement other regulatory measures being developed across the connections framework.

Customer Satisfaction surveys

- 3.81 We will introduce two survey components to ensure we are capturing and measuring the views and experiences of all parties in the process.
- 3.82 We will introduce a new survey for LCT installers to measure satisfaction with the DNOs. This recognises SSMC responses that installers submit applications on behalf of consumers and have direct contact with the DNOs. As such, the

Decision ED3 Sector Specific Methodology Decision

experience of LCT installers needs to be captured. This will be periodic surveying, intended to measure installers' overall satisfaction and minimise the risk of survey fatigue, for example, by avoiding post-job surveys for every application.

- 3.83 Alongside this, we will introduce a survey for customers where upgrade works are required, either pre- or post-installation. Customers will not be surveyed if their application is approved with no works required or conditions attached. Unlike the installer survey, customers will be surveyed post upgrade works. This survey will be segmented by customer type in line with the decision under Redefining Connection Types, paragraph 3.21.
- 3.84 Currently the Customer Satisfaction Surveys are conducted by telephone only. For ED3, we are reviewing the survey methods and channels. Further information on this review is set out in the Broad Measure of Customer Service (BMCS) 'Decision and Rationale' section.

New Connections - Smaller Connections Incentive

- 3.85 The New Connections - Smaller Connections Incentive will include LVSSA and LVSSB, as per the design of the existing RIIO-ED2 Minor Connections Incentive. It will not include LVAL connections, which will be retained in the Larger Connections Incentive (see paragraphs 3.26-3.28).
- 3.86 We will retain the Time to Quote and Time to Connect metrics, as well as different targets for different connection types.
- 3.87 We will transfer the Connections Customer Survey component, currently sited within the BMCS incentive in RIIO-ED2, into the New Connections - Smaller Connections Incentive. This will mean that both components of the customer journey (satisfaction and timeliness) are measured under the one incentive. This survey will be segmented by customer type in line with the decision under Redefining Connection Types, paragraph 3.21.
- 3.88 As per paragraph 3.84, currently the Customer Satisfaction Surveys are conducted by telephone only. For ED3, we are reviewing the survey methods and channels. Further information on this review is set out in the BMCS 'Decision and Rationale' section.

Smaller Connections - Reputational Incentive

- 3.89 For both parts of Smaller Connections Incentive, we will introduce a reputational element. This will consist of a Connections Strategy and a Connections Annual Report as outlined in paragraph 3.7. The Connections Strategy will outline a strategic vision for improving outcomes for customers in ED3 and will be submitted alongside the DNO's Business Plan. The DNO will report progress against its Connection Strategy in the Connections Annual Report (see section 'Connections Strategy' in the Business Plan Guidance).

- 3.90 We will consider introducing a separate league table of DNO performance against key quantitative metrics used in the incentive such as Time to Approve and Time to Quote. This approach is intended to strengthen transparency and accountability and is in the interests of customers as it will allow them to compare how quickly their DNO makes a new smaller connection or carries out a fuse upgrade relative to other DNOs.

Next steps

- 3.91 Next steps for the New Connections- Smaller Connections incentive will focus on reviewing existing targets and performance benchmarks to ensure they remain proportionate and appropriate for ED3. With the move of the Connections Customer Survey into the incentive, further work will be required to develop the survey methodology, target setting and baselining, and to determine quotas.
- 3.92 For the new ED3 Upgrades and Access Incentive, further detailed design and engagement with DNOs and wider stakeholders is required. This includes developing the approach for target-setting and target bands, the symmetry between reward and penalty ranges, and the overall strength and calibration within the output delivery incentive framework.
- 3.93 To help inform this process, we have begun baselining activity, including through the introduction of reporting requirements on LCT connections in the RIIO-ED2 regulatory reporting packs.²³
- 3.94 Specific design risks, including those identified in relation to 'conditional approvals', will be explored further during this next phase of work and factored into the detailed design of the incentive.
- 3.95 For both parts of the Smaller Connections Incentive, these elements will be progressed through engagement with DNOs and stakeholders prior to our Draft and Final Determinations.

Incentives for larger connections

SSMC summary

Additions/alterations to the Major Connections Customer Satisfaction Survey

- 3.96 In response to issues around the scope and participation rate of the Major Connections Customer Satisfaction Survey (MCCSS), in our SSMC we proposed exploring alternative formats for the MCCSS going forward. The principal drivers for modifying the survey incentive were to increase responsiveness and for the

²³ RIIO-2 Regulatory Instructions and Guidance and Regulatory Reporting Packs, [RIIO-2 Regulatory Instructions and Guidance and Regulatory Reporting Packs | Ofgem](#)

survey to provide more impactful and accurate feedback on DNO performance. Early proposals included altering the survey based on different customer types, changing the MCCSS to an annual format for larger and repeat customers, and increasing the frequency of the survey to capture more points of the customer journey. We also considered introduction of a panel review (akin to the DSO panel).

Penalty/reward mechanism for MCCSS

3.97 We proposed amending the current ODI-F penalty-only mechanism applied to the MCCSS metric. The proposed mechanism would have applied differently for contestable and non-contestable work and for competitive and non-competitive Relevant Market Segments (RMS) with the intention to avoid applying price control incentives on DNOs in a way that might disrupt competition in the market for connection services. The proposed mechanism was as follows:

3.98 In competitive RMS:

- contestable activities - does not have MCCSS (no change from RIIO-ED2)
- non-contestable activities - penalty and reward (reputational only in RIIO-ED2)

3.99 In non-competitive RMS:

- contestable activities - penalty-only (no change from RIIO-ED2)
- non-contestable activities - penalty and reward (penalty only in RIIO-ED2)

3.100 The changes proposed were to encourage DNOs to perform over and above their regulated requirements without distorting or discouraging competition from Independent Connection Providers (ICPs) and IDNOs. In particular, we considered that the changes to an ODI-F penalty and reward for non-contestable activity were a positive way to encourage timely connections and better-quality customer service.

Introducing a Time to Connect metric

3.101 We proposed introducing a financial (reward/penalty) incentive for the Time to Connect (TTC) metric, which is currently a reputational ODI reported on as part of the Major Connections Annual Report (MCAR). The proposal would apply an ODI-F framework attached to TTC reporting in addition to, or instead of, the upside incentive in the MCCSS. The intention of this would be to incentivise timely DNO engagement with projects and overall connections delivery. This would mirror the impact of the TTC metric in connecting customers in the current minor connections incentive.

Service Level Agreements and minimum standards

3.102 We proposed exploring a penalty-only incentive attached to minimum standards on activities such as quality of network capacity and constraint information provision at pre-application stage, and delivery of connection offers within defined timescales while ensuring quality and completeness of said offers. This was intended to be introduced in parallel with the work to add benchmarks for key milestones in the Connections End-to-end Review.²⁴ This proposal was a penalty-only incentive so as not to reward DNOs for what already constitutes a regulatory obligation of the licensee. We noted that this proposal would need strong consideration of potential overlaps with GSoPs to avoid penalising DNOs twice for the same behaviour.

Summary of consultation responses

3.103 We received 17 responses that directly addressed the questions we had asked on our SSMC proposals for major connections. An additional nine gave feedback more generally on major connections.

Additions and alterations to the MCCSS

3.104 Out of the 12 who responded to this question, nine agreed that changes needed to be made to the MCCSS both in increasing participation and better reflecting the customer journey. There was limited support for maintaining the MCCSS in its current form, with seven out of 12 respondents explicitly stating that a lack of change could have negative impacts. In particular, current downward trends in response rates were seen as a major area of concern for the future effectiveness of the MCCSS, with SSEN-D, NPg and NGED highlighting survey fatigue among certain key customer types as a notable cause.

3.105 While there was broad agreement to make changes to the MCCSS, there was a diversity in what alternatives would maximise desired outcomes. Respondents put forward a range of views on how changes should be implemented, including different combinations and sequencing of measures, with some favouring multiple interventions being pursued in parallel. There was strong support from industry regarding splitting the MCCSS by customer type, often overlapping with proposals for redefining connection types.

3.106 Two main ways to split survey customer types emerged, mostly proposed by DNOs, either through the proposed redefined connection types or to split customers by the complexity of the project undertaken. This included proposals to take certain low voltage work out of the MCCSS altogether.

3.107 Respondents also suggested distinguishing IDNO/ICP customers as separate customer groups to reflect their different delivery context and interface with DNOs. In particular, IDNO/ICP customers often engage with multiple parties

²⁴ [Connections end-to-end review: updated proposals and next steps | Ofgem](#)

across the connections process, which some respondents argued may increase the number of survey touchpoints and therefore the risk of survey fatigue if not managed carefully. There was disagreement between respondents as to whether the most appropriate approach for more complex customers was to increase the survey frequency at more points across the customer journey, or to utilise panel assessments.

- 3.108 In addition, there was frequent advocacy for greater utilisation of digital tools in the MCCSS process. Many developers were positive about moving away from telephone surveys, mainly because they think digital approaches would increase participation, reduce survey fatigue and capture richer feedback across the end-to-end journey.

Penalty/reward mechanism for MCCSS

- 3.109 The responses we received from developers were largely in favour of the proposed changes to the incentivisation of the RMS. The responses from DNOs were more mixed. While most were in favour in principle of changes to the RMS incentives, some concerns were raised. Further, DNOs that were in favour of changes were not in agreement of what constituted the most appropriate version of the RMS incentives, with most proposing a variation on the proposal from the SSMC. Even though there was limited DNO support for replacing the current MCCSS incentive, using the exact RMS incentives framework proposed in the SSMC was not widely accepted.
- 3.110 For example, NPg agreed for the most part with the SSMC proposals but would alter them so that the MCCSS did not cover any contestable work so as to not distort competition. SPEN proposed for non-contestable work to be reward-only, with penalty-only incentives limited to only non-competitive RMS. UKPN raised a proposal for fully symmetrical ODI-F incentives across all RMS. While there was support for updated incentives, there was no consensus as to a preferred arrangement.
- 3.111 SSEN proposed a hybrid of the proposed RMS incentives, changed to reward-only, alongside penalty-only minimum standards as a preferred solution.

Introducing a Time to Connect (TTC) metric

- 3.112 Responses from DNOs towards TTC incentivisation were largely mixed, with a slight majority against (three of five respondents). Those who were against echoed some of the concerns expressed by those who supported the proposal, suggesting addressing these concerns in the design of the TTC metric may go some way towards a workable consensus on the issue.
- 3.113 The most notable concerns, raised by four DNOs, were the need for any TTC incentivisation to factor in or mitigate the impact of unavoidable third-party delays, the ability to offer flexible connection dates around customer

preferences rather than solely the earliest possible date, and the need to ably represent the diversity of customer types and projects being captured beneath a single metric.

- 3.114 Developers and wider industry bodies were largely in favour of a TTC metric for incentivisation. Over 60% of respondents felt increased accountability around connection times would help ensure the timeliness and certainty of the connection timeframes given to them by DNOs. Another respondent was also hopeful that a TTC metric would help to standardise the format of reporting for DNOs. Concerns were raised, as they were by DNOs, around the ability of DNOs to fully control all of the processes responsible for timely connection delivery. There was also a recurring sentiment that TTC incentivisation would only be a partial solution, and that further changes to how DNOs deliver connections at speed would ultimately be needed.
- 3.115 Three DNOs suggested an alternative to TTC incentivisation that would incorporate SLAs or minimum standards across the customer journey. This was seen as preferred because of the ability to capture performance across a more representative impression of the customer journey rather than solely focusing on the speed of the connection. There were also concerns as to how easy it would be to decide an appropriate 'clock-start' for such a metric, with one proposal being that connection time would be measured only from the completion of the design stage, and another from receipt by the DNO of full payment from the user.

Service Level Agreements/minimum standards

- 3.116 The proposal of penalty-only minimum standards received a mixed response from DNOs. Whilst all DNOs in general accepted the need for introduction of minimum standards across the customer journey, there was less consensus on their incentivisation. There was some support for the proposals in the SSMC as long as there were steps taken to prevent the 'double jeopardy' of such an incentive overlapping with GSoPs. There was an equal strength of feeling in not continuing with minimum standards as they were felt to not be the best solution to achieve the desired outcomes. NGED supported incentivising minimum standards, but only as part of a symmetrical ODI-F framework, eg with a reward-only ODI-F attached to the satisfaction survey and penalty-only ODI-F for minimum standards.
- 3.117 DNOs were reluctant to commit strongly to either side of the issue while the development of minimum standards is still ongoing through the end-to-end review process, and views would become more concrete if the benchmarks were established. UKPN and SPEN also expressed the sentiment that minimum standards are not a mechanism that encourage innovation.
- 3.118 Of 26 responses to larger connections, only 11 responded to the question on the topic of minimum standards. Those who did were largely in favour of minimum

standards but there was not a clear consensus regarding their incentivisation. Four respondents agreed that the proposals would help provide benchmarks for customers and encourage timely connections. Two felt that minimum standards might not provide representative benchmarks across the customer journey for complex projects.

SSMD decision and rationale

Additions/alterations to the MCCSS

- 3.119 Based on the industry feedback and further analysis, we consider it essential that the satisfaction survey generates robust and relevant data. This will enable Ofgem to monitor and scrutinise DNO performance which in turn acts as a meaningful incentive to improve customer outcomes, including service quality and timely delivery of connections.
- 3.120 We have decided to proceed with improving the MCCSS and will change its name to the Larger Connections Customer Satisfaction Survey (LCCSS) in line with changes set out in the 'Redefining Connection Types' section above. While the majority of questions will likely remain universal for all larger connections, the intended outcome is to receive customer type-specific data that informs subsequent survey design in future.
- 3.121 Through the Redefining workstream, we have identified that LVAL works are more closely aligned with smaller connections in terms of their delivery characteristics and typical customer experience. While this suggests a case for moving LVAL into the Smaller Connections Incentive over time, we are minded to retain LVAL within the Larger Connections Incentive for ED3. We consider that it would be necessary to build a stronger evidence base to support the claim that all LVAL connections are more closely aligned to LVSSA and LVSSB connections currently incentivised under the minor category. Additionally, subjecting LVAL services to smaller incentives could risk unintended impacts in market segments where there is already effective competition. The decision on this will be made post-SSMD.
- 3.122 We have also decided to modify the survey questions to cover more stages of the customer journey to better capture the experience of customers who require complex, high-voltage connections. More targeted surveying at key stages of the journey aligns the satisfaction survey more closely with the end-to-end review by expanding coverage beyond narrow transactional points and improving visibility of issues such as communication quality, certainty of timelines, and coordination across parties.
- 3.123 Customers who require multiple connections will at most be surveyed twice in a 12-month period, as opposed to being surveyed for every connection, helping to manage survey burden. In addition, we have decided to change the telephony

format to digital. Customers will be provided with a live survey link that they can use to submit feedback after each key stage of the connections process, allowing views to be captured early. Given the reduced customer pool in larger connections, comprising repeat customers and complex connections, this is likely to reduce survey fatigue and help address the problem of declining response rates. Submitting responses digitally via a live link that can be accessed at any point during the connections process is likely to encourage customers to provide more detailed and carefully considered responses than they might via a telephone survey.

- 3.124 The benefits of this approach include more granular and representative feedback while supporting more accurate assessment of customer satisfaction for repeat and complex customers. These changes are intended to strengthen the feedback loop between customers and networks, ensuring that customer satisfaction data meaningfully informs regulatory oversight and incentives.
- 3.125 Responses gathered across these stages would be aggregated to provide an overall measure of customer experience, rather than creating separate, standalone survey outcomes for each stage.
- 3.126 Detailed design, including the precise approach to aggregation will be developed post-SSMD.
- 3.127 This policy direction is consistent with National Infrastructure Commission's recommendation to:
- incentivise performance across each part of the major connections process through financial rewards and penalties based on clearer performance expectations
 - measure distribution network operator performance robustly
 - offer appropriate rewards for high performance, as well as penalties for poor performance

Connections Strategy and Connections Annual Report (CAR)

- 3.128 To increase transparency and accountability, we will require network companies to set out their approach to larger connections as part of their overarching Connections Strategy submitted with their business plans and, during ED3, to report annually on performance through the Connections Annual Report. This builds on the RIIO-ED2 framework, where requirements were focused on major connections, by placing expectations for larger connections within a single, comprehensive strategy covering all connections activity.
- 3.129 The Major Connections Annual Report (MCAR), which is being rebranded to the Connections Annual Report (CAR), will continue as a reputational ODI, but with an expanded role to support transparency, scrutiny and learning. A wider suite of results will be published, improving comparability across licence areas and

between different aspects of service delivery. DNOs will be expected to provide a clearer narrative on predicted outcomes and continuous improvement actions, alongside progress against their connections strategies. Further detail is provided in the BPG and will also be developed post-SSMD and provided in the form of a guidance.

- 3.130 We have decided not to proceed with a panel-based qualitative assessment of larger connections performance. While stakeholders recognised the potential value of qualitative insights, engagement through the end-to-end review and ED3 working groups highlighted concerns around proportionality, consistency, and the risk of duplicating existing mechanisms.
- 3.131 Instead, we will focus on strengthening and socialising the larger connections customer survey alongside an expanded role for the CAR. This could take the form of a stakeholder forum, like the ISG, providing a structured feedback route without the complexity or burden associated with previous panel assessment proposals.
- 3.132 This socialisation process is intended to support a shared understanding of what survey results are telling us about the customer experience across the end-to-end connections journey, including how performance may vary across different stages of delivery. It will provide a forum to test interpretation of results, explore potential drivers of underperformance, while maintaining clear separation from formal performance scoring and financial determinations.
- 3.133 This feedback mechanism can also inform the potential ramping of the ODI-F incentive over time, strengthening the link between reported performance, stakeholder experience and regulatory consequences. This is further explained in the "Penalty/reward mechanism for LCCSS and socialising" section below.
- 3.134 We believe that these tools will provide a more credible, transparent and end-to-end view of customer experience and delivery performance, while remaining proportionate and practical to implement across all DNOs.

Penalty/reward mechanism for LCCSS and socialising

- 3.135 The Larger Connections Incentive will operate on a penalty and reward basis under the ODI-F, with a design that differentiates between contestable and non-contestable activities to mitigate risks of market distortion.
- 3.136 For competitive relevant market segments (RMS), customer satisfaction outcomes linked to full works will remain outside the ODI-F, reflecting the role of competition in disciplining performance. For non-contestable activities, we will continue to explore whether these should be subject to penalties and rewards or whether the LCCSS should continue to apply on reputational basis to avoid the risk of distorting competition.

Decision ED3 Sector Specific Methodology Decision

- 3.137 For non-competitive RMS, penalties will apply to both full works and non-contestable activities, with the potential for upside rewards available only where performance relates to non-contestable elements.
- 3.138 This approach maintains strong accountability for delivery and service quality, while ensuring that any upside incentive is targeted at areas where DNOs have sole responsibility and control. We consider this structure proportionate and appropriate, encouraging improvements in customer experience without weakening incentives for DNOs to promote effective competition.
- 3.139 Evidence from stakeholders and internal analysis suggests that the penalty-only approach in RIIO-ED2 has constrained the incentive's ability to drive sustained improvement, particularly for non-contestable activities where customers lack alternative providers.
- 3.140 We consider that there is a need for a more targeted and proportionate use of financial penalties and rewards, differentiated by relevant market segment and the presence or absence of effective competition. In non-contestable areas, introducing a penalty and reward mechanism is intended to strengthen incentives for timely delivery and high-quality service, while avoiding distortion of competitive markets where contestability already provides discipline.
- 3.141 We are proposing a graduated 'ramping' approach to the introduction of the ODI-F reward, rather than setting a fixed upside at the outset of ED3. This reflects the significant changes being made to the larger connections' customer satisfaction survey and reporting framework and recognises that data robustness and stakeholder confidence will take time to build. A ramping approach allows the incentive strength to increase progressively over the price control period, in line with improvements in data quality, transparency and stakeholder engagement.
- 3.142 Under this approach, the pace and scale of any ramp-up in rewards would be informed by evidence, including the credibility of survey results, the strength and consistency of performance data, and feedback gathered through the socialisation of survey and reporting outputs. Where data confidence is low and stakeholder feedback is mixed, a more cautious approach to rewards would be appropriate to protect consumer value. Conversely, where data quality is strong, evidence aligns with stakeholder experience, and behaviours are clearly improving, we would expect to be able to adopt a more ambitious incentive position.
- 3.143 Importantly, this is not a final position. We consider ramping to be a pragmatic way to balance the desire to strengthen incentives with the need to ensure that rewards are set at the right level, are proportionate, and represent effective use of consumer value. We are therefore open to hearing alternative views from stakeholders on how the ramping process should operate in practice, including the signals that should justify moving between different incentive trajectories

and how best to link ramping decisions to evidence from surveys, reporting and stakeholder feedback. We will work with DNOs and stakeholders on this in the coming months, and we will set out the initial strength of the ODI-F at the Draft Determinations stage, and the process that would be undertaken in period to adjust this.

Service Level Agreements/milestones and a Time to Connect metric

- 3.144 We have considered whether to introduce separate incentives focused on TTC and minimum SLAs for larger connections. While these remain critical aspects of customer experience and delivery performance, we have decided not to proceed with standalone TTC or SLA incentives, due to the complexity involved in designing, implementing and calibrating separate measures across a diverse range of larger connection projects.
- 3.145 Instead, we will ensure that timeliness of delivery and minimum standards of service are captured and monitored through a strengthened larger connections customer satisfaction survey, supported by reporting through the CAR. By asking customers structured questions across multiple points in the end-to-end journey (including pre-application, quotation, delivery, communication and post-energisation) we will be able to monitor whether DNOs are consistently meeting expected standards throughout the connections process, rather than focusing narrowly on isolated milestones.
- 3.146 This approach enables more precise monitoring of performance across the customer journey and avoids the risk that separate TTC or SLA incentives could drive narrow compliance behaviours. Survey results will provide visibility on whether minimum standards are being maintained across all stages of delivery, with scope for the incentive design to limit rewards where baseline performance is not met in key areas. At the same time, the inclusion of an upside incentive will encourage DNOs to exceed minimum standards and drive continuous improvement in customer experience.
- 3.147 Timeliness will remain a core consideration under this approach. Delivery performance will continue to be captured through the connection delivery elements of the survey and reported through the CAR, allowing Ofgem and stakeholders to assess whether projects are being delivered within appropriate timescales. Weighting within the survey and incentive framework can reflect the importance of timeliness relative to other aspects of service, without the added complexity of maintaining standalone TTC or SLA incentives.

Next steps

- 3.148 We will continue to develop the larger connections framework ahead of Draft and Final Determinations, building on the approach set out in the section above. This includes refining the detailed design of the Larger Connections Incentive.

Decision ED3 Sector Specific Methodology Decision

- 3.149 In particular, we will further develop the suite of incentive components for larger connections, including the customer satisfaction survey and supporting reporting requirements. This will include considering how strengthened minimum standards and outputs from the end-to-end review should be reflected within the framework, and ensuring that financial incentives are calibrated to provide sufficiently strong and balanced signals to drive improvements.
- 3.150 We will also continue to work with DNOs and stakeholders to finalise the approach to data collection and reporting, including the requirement to submit customer satisfaction information by customer type.
- 3.151 Finally, we will use this further development and engagement to confirm the detailed calibration and implementation approach for ED3.

Broad Measure of Customer Service

- 3.152 Reliance on the electricity network is expected to increase during ED3, as more people switch to electric vehicles, heat pumps and other low carbon technologies. In the coming years, the operational and customer landscape will therefore change rapidly, with a more diverse range of customers, use cases and expectations interacting with the network. DNOs must deliver consistently high-quality services that meet the evolving needs of their customers and improve customer service outcomes.
- 3.153 The Broad Measure of Customer Service (BMCS) rewards good service and penalises poor service, ensuring DNOs keep pace with rising consumer expectations and the changing system context.
- 3.154 The BMCS consists of two parts:
- a Customer Satisfaction Survey (CSS): where DNOs are incentivised to continue to improve the quality of customer service
 - a Complaints Metric (CM): where DNOs are incentivised to manage customer complaints efficiently and resolve them satisfactorily
- 3.155 The BMCS was introduced in Distribution Price Control Review Five (DPCR5) which ran from 2010-2015. Performance on both the CSS and the CM have improved since their introduction, demonstrating the effectiveness of the incentive in driving improvements to customer service.

SSMC summary

- 3.156 In the SSMC we proposed the following changes to the CSS and CM to ensure it remains effective, proportionate and fit for purpose.

Customer Satisfaction Survey

- 3.157 For the CSS we proposed to move the 'Connections survey' element of the CSS into the 'Smaller Connections Incentive'. This also included moving some of the interactions currently captured under the 'General Enquiries survey', specifically those interactions that customers have with DNOs when they are seeking to install a low carbon technology through an existing connection.²⁵ We then proposed to rebalance and refocus the remaining CSS surveys, that is the 'Interruptions survey' and 'General Enquiries survey'. This included splitting out 'Interruptions survey' into 1 - 'Planned Interruptions survey' and 2 - 'Unplanned Interruptions survey', and then further splitting each into customers that are on the Priority Service Register (PSR) and those that are not (Non PSR) and measuring and incentivising these scores separately. We considered that this

²⁵ Paragraph 4.85 of the SSMC sets out what these elements are. [ED3-sector-specific-methodology-consultation-core-document_clean.pdf](#)

Decision ED3 Sector Specific Methodology Decision

approach would ensure that, as well as maintaining their PSR, DNOs would also seek to deliver essential services when vulnerable customers need them most.

3.158 In summary, we proposed to split CSS as follows:

- planned interruptions: PSR and Non PSR
- unplanned interruptions: PSR and Non PSR
- general enquiries

3.159 We said we would maintain the CSS as a penalty and reward incentive, and we wanted targets to reflect ambitious levels of performance. Finally, we considered there was a need to broaden the survey channels. In RIIO-ED2 the customer satisfaction surveys are only carried out by phone, and we considered the survey channel should be broadened to better match consumers' communication preferences.

Complaints Metric

3.160 For the CM we said we would retain the metric as a penalty-only incentive and leave the weightings applied to each category unchanged. This was because we thought the CM has been working well and there have been encouraging improvements since its introduction. We also said we would monitor DNO performance against the target score and update this as we progress with the price control setting process.

Summary of consultation responses

3.161 We asked seven consultation questions on our proposals, and received responses from 12 stakeholders, representing a broad range of stakeholder groups including DNOs, Consumer Representatives, Industry Bodies, Gas Distribution Networks (GDNs) and other stakeholders.

Customer Satisfaction Survey

3.162 On our proposal to remove the 'Connections survey' and the LCT related elements from the 'General Enquiries survey' into the new Smaller Connections Incentive, we received 12 responses, of which 11 were in favour and one was a neutral response from Independent Networks Association (INA).

3.163 Respondents expressed strong support for this proposal, with stakeholders noting that moving the Connections survey into the Smaller Connections Incentive would enable better scrutiny and improve the connection journey, it would sharpen the focus on LCT-related elements, reduce overlap and survey fatigue, and enable better alignment for all LCT related work under one incentive. Citizens Advice added that the success of this proposal would however depend on how the incentives are weighted. NPg flagged that, as they do not currently classify LCT work as 'General Enquiries', implementation could affect

performance differently, and this should be considered when setting targets. SSEN-D suggested that the surveys should remain simple and accessible to everyone.

- 3.164 On splitting the remaining surveys under BMCS CSS between 'planned interruptions', 'unplanned interruptions' and 'general enquiries', we received 10 responses of which nine were in favour and one was neutral (INA).
- 3.165 Respondents agreed that splitting the surveys in this manner would improve accountability, provide greater transparency and enable comparison between DNOs. It was noted by stakeholders that planned and unplanned interruptions are fundamentally different and that distinguishing between the two helps to highlight how performance can be impacted by weather, geography, and operational factors. While agreeing to our proposal, Citizens Advice suggested that Ofgem should publish the comparative results of BMCS results promptly, using easy to access data tables and annual reporting. UKPN suggested the addition of new categories to better capture customer experience and to simplify BMCS by removing deadbands.²⁶ NGED welcomed the opportunity to update the CSS survey design across DNOs.
- 3.166 On reporting and incentivising PSR vs non-PSR survey results for each interruptions survey, we received 10 responses of which nine were in favour and one was against (SPEN).
- 3.167 Respondents that agreed thought that PSR customers have distinct needs, challenges and expectations and that tracking these metrics would boost service quality for PSR customers and improve stakeholder confidence. Citizens Advice suggested that careful calibration of targets would be required should a financial incentive be applied to avoid rewarding DNOs for activities they are already required to deliver. NPg sought clarity on how PSR and non PSR categories would be incorporated in BMCS.
- 3.168 SPEN argued against splitting incentives into separate elements, suggesting that keeping them simple and universal promotes consistent service for all customers. However, they did support continued reporting of the split for transparency, as is done in RIIO-ED2.
- 3.169 In response to what weightings should be applied to the different surveys proposed for the CSS, all stakeholders agreed that weightings should change or be considered carefully. We received 10 responses, of which NGED, Citizen's Advice, EnergyUK were in favour of a higher weighting for unplanned interruptions. NPg, NPg's ISG and SPEN were in favour of higher weighting for overall interruptions compared to general enquiries. SSEN-D was in favour of equal split across the three surveys to promote balanced performance across all

²⁶ A deadband is a specified range of performance level where the Output Delivery Incentive for underperformance or overperformance payment is zero.

categories and to avoid DNOs prioritising an individual category. UKPN suggested a detailed granular split by introducing new categories to drive customer experience and service excellence. ADE and INA were neutral.

- 3.170 Stakeholders that suggested that greater weight should be assigned to interruptions (and unplanned interruptions) noted this due to their significant impact on customers, the considerable disruption they cause, their correlation with lower satisfaction scores, and their substantial proportion of total customer contact volumes. Stakeholders also noted that planned interruptions should be weighted meaningfully as planned works in the form of LV upgrades will be increasing considerably during ED3 and beyond, as the networks expand.
- 3.171 On our proposal to retain CSS as a penalty and reward incentive, we received 10 responses of which nine were in favour and one was neutral (INA). Respondents expressed strong agreement, citing that a penalty and reward incentive drives continuous improvement by providing behavioural motivation and it has to date demonstrated success in improving customer service.
- 3.172 Citizens Advice suggested a zero-sum incentive so that the best DNOs would get rewarded and the worst DNOs penalised. This would avoid putting extra cost on the consumers as the reward money would come from the penalties. They also added that despite the high performance from all DNOs, there remains a small group of dissatisfied customers which needed investigation as the current survey did not fully explain their dissatisfaction. Additionally, NPg's ISG suggested that survey channels need to be appraised while SSEN-D added that the BMCS survey questions needs to be reviewed to reflect changing customer expectations. NPg thought that network differences driven by weather and geography should be taken into consideration when setting targets. SPEN stated that as the customer satisfaction landscape becomes increasingly complex the continuation of a penalty and reward incentive is still required to ensure DNOs continue to meet and exceed the level of expected service.

Complaints Metric

- 3.173 On our proposal to retain the complaints metric as a penalty-only incentive and to leave the weightings applied to each category unchanged, we received 11 responses. 10 stakeholders supported the proposal to retain the complaints metric as penalty-only, with no changes to category weightings. We had one neutral response (INA).
- 3.174 Stakeholders considered that a penalty-only approach encourages quick and thorough problem-solving, and as complaints signal a failure in service, enabling rewards is unsuitable. Respondents also noted the existing metric system works well and should remain unchanged to prevent overlapping or excessive penalties.

- 3.175 Additionally, UKPN suggested avoiding continually lowering penalty thresholds and that these thresholds must reflect what is realistically achievable and be evidence based. NGED recommended adjusting targets for complex connection cases and automatic target adjustments for exceptional weather events.

SSMD decision and rationale

Customer Satisfaction Survey

- 3.176 With the growing emphasis on ensuring a positive connection journey for customers, we have decided to adopt our consultation position and move the 'Connections survey' and the LCT related elements from the 'General Enquiries survey' into the 'Smaller Connections Incentive' meaning that both components of the customer journey (satisfaction and timeliness) are measured under the one incentive.
- 3.177 We believe there is benefit in separating the remaining surveys to give greater focus on the experience of different customer types. Thus, we will rebalance and split the remaining BMCS surveys between 'Planned Interruptions' survey, 'Unplanned Interruptions' survey and 'General Enquiries' survey. Given the increasing effort and need to support vulnerable customers, we will further split the reporting of the CSS scores for the 'Planned Interruptions' and 'Unplanned Interruptions' surveys between customers on the PSR and non-PSR customers. However, we do not intend to incentivise these splits separately.
- 3.178 Based on monitoring data for 2024/25, there were no significant differences seen between the two categories for any of the DNOs, and there were some license areas that did not have enough PSR responses to be statistically robust. We therefore do not think separately incentivising PSR vs non PSR will either bring a significant consumer benefit or highlight a difference in the quality of service that can be robustly measured. We will instead maintain a single target score to include PSR and non PSR customers. However, we will publish the scores for PSR, non PSR and combined and ensure these are publicly available. In our view this enhanced visibility through separate reporting of the scores will help drive DNOs to identify specific areas of improvement for consumers in vulnerable situations, as well as enable transparency of scores for wider stakeholders. If we see a discrepancy in the quality of experience received by these customers, then this will inform any decision we subsequently make to intervene.
- 3.179 We will adopt our consultation position and continue to maintain CSS as reward and penalty incentive but will review and calibrate the targets, the weighting of the surveys and the strength of the incentive post SSMD in the lead up to Draft and Final Determinations. As outlined in our consultation, we consider that the CSS has been sufficiently strong to drive companies to make significant performance improvements and that maintaining this incentive should ensure

Decision ED3 Sector Specific Methodology Decision

that DNOs improve their services where this is valued by customers and it is cost effective to do so.

3.180 To increase response rates and reflect current customer expectations, we will adopt our consultation position and review and assess survey questions/ design and survey methods/ channels prior to the start of ED3 price control. DNOs have been working together to research potential changes to survey questions and channels. For the survey channels, DNOs are already working closely with Explain Research (the company currently responsible for carrying out BMCS surveys) to take this forward. The company had conducted similar research for RIIO-ED2 on use of channels for survey purposes and the work for ED3 is currently underway. Survey questions will be reviewed ahead of ED3 starting. Post SSMD, we will reach out to the DNOs to discuss findings and progress.

Table 2: Customer Satisfaction Survey SSMD decision

Survey type	Level target set at	Weighting	Additional reporting requirements
Planned interruptions survey	Combined PSR and non-PSR score	Decision to be made at DDs and FDs	Separate reporting of PSR and Non-PSR scores
Unplanned interruptions survey	Combined PSR and non-PSR score	Decision to be made at DDs and FDs	Separate reporting of PSR and Non-PSR scores
General Enquiries survey	n/a	Decision to be made at DDs and FDs	n/a

Complaints Metric

3.181 We have decided to adopt our consultation position and retain the CM as a penalty only incentive and will review the strength and targets for the incentive through Draft and Final Determinations.

3.182 We will leave the weightings applied to each category unchanged from RIIO-ED2, as set out below.

Table 3: Complaints metric categories and weightings

Categories	Associated weightings
Complaints unresolved after 1 day	10%
Complaints unresolved in 31 days	30%
Repeat complaints	50%
Number of Energy Ombudsman decisions that go against each DNO	10%

Consumer vulnerability

3.183 Our approach to consumer vulnerability in ED3 is intended to ensure that DNOs understand the needs of consumers that might be vulnerable in certain circumstances, and that they provide these consumers with additional support to achieve the best outcome for them. We will do this through a range of measures, such as requiring DNOs to have a high-quality Vulnerability Strategy, applying a Consumer Vulnerability Incentive (CVI) on their performance, enhancing DNO reporting on their performance through the Annual Vulnerability Report (AVR) and potentially introducing new mechanisms through the BPI Early Proposals. We are also ensuring the DNOs are incentivised to provide high standards of customer service through the Broad Measure of Customer Service (BMCS), where DNOs will report on the customer satisfaction of both Priority Services Register (PSR) and non-PSR customers during planned and unplanned interruptions.

3.184 Later in this section, we summarise the proposals we set out in the consultation and stakeholder views on these, ahead of confirming our decision. However, in addition to this it is important to also describe the wider context which has influenced our decisions on how DNOs should meet the needs of vulnerable consumers in ED3. This is set out in the next section.

Understanding vulnerability in a wider context

Wider Ofgem position on vulnerability

3.185 Our Multiyear Strategy,²⁷ published in 2024, established Ofgem's Consumer Interest Framework (CIF), which sets out four main pillars for consumer interest:

- fair prices – that allow people and businesses to meet their essential needs

²⁷ [Multiyear Strategy sets out Ofgem's vision for delivering clean, affordable and secure energy system | Ofgem](#)

- quality and standards – particularly for the most vulnerable
- low-cost transition – in line with achieving net zero by 2050 and other Government targets
- resilience – with sufficient supply to meet the country’s needs

3.186 Pillar two, 'quality and standards - particularly for the most vulnerable', is further detailed in our 2025 Consumer Vulnerability Strategy.²⁸ This Consumer Vulnerability Strategy provides a single framework for improving the outcomes for vulnerable consumers, setting out four themes of how this will be achieved. In the context of setting out the role of DNOs in looking after vulnerable consumers, themes three and four are especially important, because they both relate to workstreams that directly feed into the ED3 price control. These themes are:

- theme 3 - Driving improvement in customer service for vulnerable groups:
 - Consumers in vulnerable situations should be provided with tailored communications that are easy to understand, and should be able to engage with their energy company with ease and not face exclusion based on their circumstances
- theme 4 - Encouraging positive and inclusive innovation:
 - Consumers in vulnerable situations should have access to inclusively designed innovative solutions that deliver the benefits of the transition to a digitalised, decarbonised and decentralised energy system

Citizens Advice Report

3.187 A recent report from Citizens Advice²⁹ shows increased consumer contact since 2020, with call volumes broadly linked to storm-related outages. The report set out a number of recommendations for government and industry to improve communication before, during and after an interruption, and support provided in those circumstances.

3.188 The report highlighted support for vulnerable consumers, noting that while DNOs provide and report on this support, it is largely voluntary and not directly incentivised under RIIO-ED2. Their evidence suggests vulnerable consumers are not consistently contacted or supported. Citizens Advice recommends a new GSoP for those dependent on electricity for medical needs, requiring DNOs to provide alternative power or practical solutions during interruptions.

3.189 With growing reliance on electricity for heating and hot water, the report argues current arrangements should better support vulnerable consumers. Key recommendations include:

²⁸ [Consumer Vulnerability Strategy | Ofgem](#)

²⁹ [Lights Out: improving people’s experience of power cuts - Citizens Advice](#)

- PSR reach - introduce a common 100% target across licensees, with stronger incentive reward if more licensees reach the target, to promote collaboration and best practice
- support during interruptions - improve transparency and standardisation of Annual Vulnerability Reports (AVRs), develop common outcome-based metrics, and for Ofgem to publish comparative summaries of DNO performance

3.190 The report also highlights risks to vulnerable consumers from communication failures, particularly with the transition to digital landlines by January 2027. It recommends a:

- new vulnerability category - identify consumers at risk of losing communication access and include them on the PSR by February 2027
- multi-sector PSR - government-led development of a shared PSR across energy, water and telecoms to improve data sharing and coordination

Storm Arwen Re-opener

3.191 Finally, we note the outcomes of the Storm Arwen Re-opener (SAR), which stated that networks' response to storms should be considered for ED3. Storm Arwen caused widespread disruption to the UK in November 2021 and the subsequent review into networks response to this storm identified five areas of improvement: i) network resilience; ii) planning and preparation; iii) handling of incidents; iv) communication and support during the incident; and v) ongoing support after the incident.³⁰

3.192 Within the RIIO-ED2 price control, we allowed DNOs to make an application for additional funding related to this storm, known as the SAR. In the RIIO-2 Final Determination of the re-opener applications,³¹ it was decided to not award funding related to customer care and welfare, as it was considered not to meet the recommendations. However, it was acknowledged that this topic should be explored further in ED3.

SSMC summary

3.193 The current package of vulnerability measures established in RIIO-ED2 is centred on the CVI, where DNOs can receive either a reward or penalty based on their performance.

3.194 The CVI places a requirement on DNOs to support vulnerable consumers through ensuring eligible people are registered on the individual DNO's PSR and

³⁰ [Storm Arwen Report | Ofgem](#)

³¹ [Final Determinations on RIIO-2 re-opener applications 2024: Electricity Transmission, Electricity Distribution and Gas Distribution | Ofgem](#)

provide services to vulnerable consumers in respect of fuel poverty and support in the energy transition. The CVI consists of the following metrics:

- PSR Reach (weighted 40% of the incentive)
- Social Value of fuel poverty services (weighted 20% of the incentive)
- Social Value of low carbon transition services (weighted 20% of the incentive)
- Customer Satisfaction with fuel poverty services (weighted 10% of the incentive)
- Customer Satisfaction with low carbon transition services (weighted 10% of the incentive)

3.195 In addition to the CVI, we also required DNOs to submit a Vulnerability Strategy as part of their RIIO-ED2 business plan submission. In this the DNOs set out their approach to protecting consumers in vulnerable situations and the additional support they will provide these consumers.³²

3.196 Both the commitments made in the Vulnerability Strategies and DNO's progress against the CVI targets are reported in an Annual Vulnerability Report (AVR). The AVR is a requirement under a licence condition (SpC 4.6), but it also serves as a reputational incentive as a transparent method of holding companies to account for delivery.

3.197 In SSMC we said we wanted to explore how the constituent parts of the CVI and AVR could be adapted for ED3 to ensure the scope of the incentive can effectively support consumers in vulnerable situations. These are:

- PSR Reach
- Social Value
- Customer Satisfaction Survey
- Annual Vulnerability Report

3.198 We also asked whether the targets for PSR reach and social value should be made common across DNOs or if they should remain bespoke.³³

PSR Reach

3.199 The PSR Reach metric incentivises DNOs to establish and maintain a PSR. Targets for maximising reach are set as a percentage of eligible households, using a common methodology for calculating the targets and data from the 2011 census. Performance in RIIO-ED2 shows that DNOs are close to reaching a performance ceiling within this metric - with some already exceeding their year five targets. As a result, we queried if retaining a financial and symmetrical incentive for PSR Reach would be justified. We therefore asked a question on

³² [RIIO-ED2 Business Plan Guidance | Ofgem](#)

³³ Note the CSS metrics are already based on common targets.

whether this metric should form part of the AVR as a reputational incentive. We also asked that if the metric is retained as a financial incentive, whether it would be more appropriate to move from a symmetrical penalty/reward incentive to a penalty-only, or reduce the weighting of 40% of the overall incentive.

Social Value

- 3.200 The two Social Value metrics (fuel poverty and low carbon transition) are measured through a common Social Value Framework (SVF) and utilise a Social Return on Investment (SROI) methodology to determine a Net Present Value (NPV). This process calculates the wider social benefits that are being delivered through services provided either by DNOs themselves or associated partners.
- 3.201 As a starting point, we said the current SVF and SROI methodology provides consistency in calculating wider value and ensures targets are set in a transparent and standardised way. We therefore said this framework and methodology will have a continued place in ED3, but noted stakeholders had suggested the SROI Rulebook (developed for CVI in RIIO-ED2) could be updated to ensure DNOs are delivering services that are effectively meeting consumer needs and to improve operational delivery. We therefore welcomed views on how this can be evolved for ED3.
- 3.202 Early anecdotal feedback suggested some challenges in delivering low carbon transition services and that changes to the scope of the social value metrics is needed. This could include combining the two metrics or expanding the scope to include other areas. As we had only received reporting data from one assessment year so far, we did not consult on these changes specifically but asked for a range of views on these metrics and if there was any feedback more generally. We also asked if the targets should be made common for these two metrics in ED3.

Customer Satisfaction Survey (CSS)

- 3.203 The CVI includes a separate CSS for each of the Social Value Metrics (fuel poverty and low carbon transition) and is intended to ensure DNOs are providing a high-quality service which is meeting the needs of consumers. The scores are calculated separately for each metric but have the same target which is an average score of 9 out of 10.³⁴
- 3.204 We understood from stakeholders that there are challenges in the uptake of the survey responses, especially from customers receiving low carbon transition services. To enable us to assess if the CSS metrics are fit for purpose or if any changes are needed, we asked for a range of views and feedback on this.

³⁴ Note for RIIO-ED2 there is also a CSS under BMCS, which is focusing on connections and general enquiries.

Common targets for CVI metrics

- 3.205 We also said that bespoke targets were set in RIIO-ED2 to encourage DNOs to deliver ambitious plans for vulnerable consumers. DNOs should still be ambitious in their vulnerability strategies, and we asked if common targets would be a better approach to increase standardisation amongst DNOs. For PSR Reach, we said that if this metric is retained in ED3, DNOs should continue to use the common methodology for calculating and reporting PSR reach, and that numbers should be forecasted using 2021 census data. As the targets are set as a percentage of eligible households, we asked if targets should be made common across DNOs, as opposed to bespoke targets set in RIIO-ED2.
- 3.206 We also asked if the social value should be made common across DNOs. It should be noted that the CSS metrics for both fuel poverty and low carbon transition are already common across DNOs.

Annual Vulnerability Report (AVR)

- 3.207 In RIIO-ED2 we added a reputational incentive to the AVR, by requiring the DNOs to publish the reports on their website. This was to ensure DNOs are held accountable to the commitments made in their Vulnerability Strategies, for progress against the CVI targets and for meeting the baseline expectations. We therefore proposed the AVR should be carried forward as an ODI-R in ED3 and asked if there are any changes needed to structure and content.

BPI: Early Proposals

- 3.208 At SSMC, we invited DNOs to submit early proposals for new, ambitious and progressive commitments and/or mechanisms that could be incorporated into the ED3 price control (see Appendix 2 for further details of the early proposals received). We included vulnerability as one of the areas of focus for these proposals.

Summary of consultation responses

PSR Reach

- 3.209 We received 13 responses to whether the PSR Reach metric should form part of the AVR as a reputational incentive, instead of being retained as a financial incentive. Overall, four stakeholders (two DNOs, one Independent Stakeholder Group and one industry body) agreed the metric should move to an ODI-R, with six stakeholders disagreeing (three DNOs, two consumer bodies and one GDN). Although the DNOs were split on whether the PSR Reach should continue as financial or reputational, all DNOs agreed the current scope should either be supplemented with, or replaced by, a qualitative element.

Decision ED3 Sector Specific Methodology Decision

- 3.210 NGED supported a move to an ODI-R but thought there should be an increased focus on innovating and that communication should be tailored to customers' needs. This position was also largely supported by NPg, which stated that the PSR Reach metric should be refocused on customer experience and data quality, rather than the number of eligible consumers signed up to the PSR. They further stated the quality of service is better captured under BMCS. The ISG response also supported this position, and thought that quality and depth of service offer, and data quality, should drive greater impact for vulnerable consumers.
- 3.211 For those stakeholders that disagreed with a move to a reputational incentive, both SSEN-D and SPEN stated there should be a focus on those with the greatest vulnerability and support need. UKPN suggested this metric should be refocused on support based on categories of vulnerability and needs codes and introduce a new metric on data quality (in addition to regular data cleanse), to align recorded needs with actual circumstances.
- 3.212 UKPN and Citizens Advice stated the importance of the PSR Reach metric and that there should be a focus on incentivising strong performance. Citizens Advice proposed splitting this metric out as a standalone ODI-F with a reward and penalty and further stated DNOs should aim for 100% reach. They also highlighted the detriment to eligible consumers not being on the PSR. Energy UK also thought that should it continue as an ODI-F, this should be on the basis of offering both rewards and penalties, and be moderately weighted. Nearly all responses supported some form of standardisation of targets and that consistency in service delivery should be pursued to avoid variations between DNOs. There was also wide support for focusing on the quality of service provided for PSR customers.
- 3.213 Other views suggested a move from ODI-F to a Use It or Lose It (UIOLI) allowance to fund DNO activities, as this would lead to better outcomes for consumers.
- 3.214 On the weight of the incentive, only two stakeholders stated the weighting of 40% should be reduced.
- 3.215 Both Citizens Advice and Centre for Sustainable Energy called for a shared multi-sector PSR and improved data sharing.

Social Value

- 3.216 In SSMC we invited stakeholders to share their views on the two Social Value metrics and the two Customer Satisfaction metrics within CVI. Thirteen stakeholders responded to this question and there was broad support (nine of 13) for retaining Social Value metrics. This included all DNOs, consumer representatives and industry bodies. Only four stakeholders took a more neutral approach but provided some views on how it could evolve in ED3. There were no responses against.

Decision ED3 Sector Specific Methodology Decision

- 3.217 In addition to retaining the Social Value metrics, all DNOs agreed the SVF and SROI Methodology (including the SROI Rulebook) should be reviewed, but there were some differing views on standardisation. SSEN-D, UKPN and SPEN stated the governance around the use of partner data and discount factors should be stronger, to allow for a more consistent application of the methodology.
- 3.218 Although we did not consult on whether to combine the social value metrics for fuel poverty and low carbon transition into one single metric, DNOs did provide some views on this, although these views varied. UKPN, NPg and NGED were in favour of combining fuel poverty and low carbon transition, stating fuel poverty interventions are often a prerequisite for low carbon transition installations and the interconnected challenges should be acknowledged. They thought that one metric would enable DNOs to provide a more cohesive service, which will also simplify the process. This view was also supported by the ISG for NPg.
- 3.219 SPEN advocated for the two metrics to remain separate and stated that although there is some overlap between the two and elements that extend to both metrics, they have distinct deliverables. They also stated that retaining two separate metrics would increase the scope of customers supported.
- 3.220 Although we did not consult on the frequency of assessments for CVI, three stakeholders stated there should be a move to annual assessment, instead of the current year two and year five assessments. NPg highlighted that this assessment frequency was set because CVI was a new incentive in RIIO-ED2 and that given the success so far, the incentive should be available at the close of each regulatory year. SPEN also stated there should be an alignment with other reporting metrics, that an annual assessment and reward provide a better understanding of what benefits can be provided through these services at the point of investment, and that an annual frequency would reduce any risk of retrospective effects, such as funding limitations occurring during the price control. The ISG for NPg also said an annual assessment should be considered.
- 3.221 Two stakeholders proposed changes to the funding mechanism. Citizens Advice proposed to split out the PSR Reach metric to a standalone incentive and retain the social value and CSS metrics as a zero-sum design, to more closely align with the dynamics of a competitive market (where a company attracts customers at the expense of other companies). NEA proposed the social value should also be funded through a UIOLI mechanism and argued that this funding (as used in the Vulnerability & Carbon Monoxide Allowance in the Gas Distribution price control) has led to more collaboration between Gas Distribution Networks (GDNs) and that a financial incentive mechanism in CVI has led to less ambitious vulnerability strategies.

Customer Satisfaction Survey (CSS)

3.222 For customer satisfaction, there was wide agreement to retain a survey to ensure customers receive a good service within the social value metrics, but that the current format should be reviewed and updated. UKPN highlighted the challenges in the current approach which related to survey uptake and how this increased the risk of results not being statistically robust. NGED thought new methods of surveying customers, as well as the timing of the survey should be looked into, to ensure it is fit for purpose. Citizens Advice also agreed with this view, stating the importance of capturing customer satisfaction, but that alternative methods of collecting views should be explored, as the current CSS format can be seen as a blunt tool. NPg stated that limited accessibility in format is reflected in low uptake of the survey and thought there should be more accessible feedback channels to ensure representation from a wider range of vulnerable consumers. Other stakeholders said the metric should align with BMCS to avoid double counting similar satisfaction indicators and that low uptake could be improved by utilising different feedback channels.

Common targets for CVI metrics

- 3.223 We had 10 responses to this question, with seven stakeholders stating they supported this move. This was supported by DNOs, industry bodies and consumer groups. Two stakeholders (consumer representatives) remained neutral. Only one DNO (UKPN) specifically stated they were against common targets for the social value metrics only.
- 3.224 Those stakeholders that were in favour of common targets, stated that alignment across DNOs could create more opportunities for collaboration and that common targets would provide additional benefits for customers, as it would promote fairness and consistency. Two stakeholders also stated that targets should be calculated according to the size of the licensee.
- 3.225 For the two stakeholders that maintained a neutral position, they stated that there should be greater collaboration between DNOs on vulnerability in general, to reduce the postcode lottery effect, and that DNOs are less likely to share best practice if mainly assessed on common metrics. Citizens Advice stated there should be more stretching and dynamic targets for ED3 to ensure that consumer outcomes are prioritised and that everyone that is entitled to support from DNOs receives it. They also stated a zero-sum incentive would be preferable, as it recognises that DNOs already receive allowances for vulnerability support.
- 3.226 Only UKPN stated they disagreed with moving to common targets for all metrics but was supportive for a move to common targets for PSR reach. For the social value metrics, UKPN stated that these should remain bespoke to reflect different demographics and partner availability in different regions. They also said there could be merit in introducing a 'minimum level of service' to ensure a baseline level of service is provided. They also added that there should be a link between ambitious targets and rewards, so if there is an aim for DNOs to set ambitious

targets, this should be either reflected through the CVI with bigger rewards for stretching targets or through the BPI.

Annual Vulnerability Report (AVR)

- 3.227 We had 10 responses to the question of whether to agree with retaining the AVR as a reputational incentive, with all stakeholders agreeing apart from one stakeholder that maintained a neutral position.
- 3.228 To enhance the AVR as a reputational incentive, most DNOs (four out of five), stated that feedback should be provided to DNOs on the AVR, both from Ofgem and other stakeholders.
- 3.229 On structure and content stakeholders provided suggestions for improvement, which mainly related to standardising content and format. SSEN-D suggested including collaborative activities and that this could be done through a joint submission, which sets out the performance against key common metrics and a separate annex detailing individual commitments. UKPN stated there should be improved guidance to enhance comparability but also suggested the focus should be on outcomes such as social value and customer satisfaction. NPg stated the importance of presenting key statistics and case studies to demonstrate delivery, however baseline requirements should be reviewed to streamline the length and complexity and to enable efficiency in the production. SPEN agreed with streamlining the content and highlighted it should be focused on areas directly related to the CVI. NGED further stated that a standard industry framework should be introduced.
- 3.230 Other stakeholders also supported more consistency in these reports and suggested further guidance on length and complexity would be beneficial, with a standardised one-page cover sheet. Several responses also highlighted the complexity of the reports and therefore that further guidance is needed to ensure the value added is proportionate to the resources needed to produce them.

BPI: Early Proposals

- 3.231 We received seven early proposals related to vulnerability.³⁵ These are listed below:
- Enhanced Storm Support (SSEN-D) - standardised storm support, ensuring a consistent level of service nationwide

³⁵ Following submission of the early proposals, the first two proposals have now been merged into one proposal, which includes a Targeted Customer Storm Support Strategy (TCSSS) and a Storm Support Performance Report (SSPR) against common storm support activities.

Decision ED3 Sector Specific Methodology Decision

- Customer Storm Support Strategy (SPEN) - development of a Customer Support Storm Strategy tailored to local challenges and prioritising vulnerable customers such as medically dependent, isolated, or those on less reliable networks
- Service Based PSR (SSEN-D) - consistent framework of targeted support, and development of a common set of service-based commitments for each PSR needs code
- Enhanced Customer Service Segmentation (NGED) - framework for customer segmentation and granular insight to vulnerability to enable proportionate and consistent approach in support
- PSR Data Quality Metric (UKPN) - assess data integrity and ensure those on the PSR are the right people and align recorded needs with actual circumstances
- Enhancing customer satisfaction (UKPN) - multi-channel CSAT to better capture feedback and include a wider range of consumers
- PSR Tell us once (UKPN) - simplify PSR registration process and utilise a portal for data sharing, coordinated by DNOs

SSMD decision and rationale

3.232 Supporting vulnerable consumers has become increasingly more important, and therefore we have decided to carry forward and further strengthen the package of measures for vulnerable consumers in ED3. We set out our decisions below on the areas we consulted on and the further areas of focus for ED3.

Consumer Vulnerability Incentive

PSR Reach

3.233 We will continue to incentivise DNOs to sign up eligible customers to the PSR, and numbers should be forecasted using the 2021 census data. We are exploring how to best ensure a data quality element can be introduced to effectively support people in vulnerable circumstances. Targets will be common for all DNOs, and this will be set at Draft and Final Determinations.

3.234 We consider an incentive remains appropriate for the PSR reach metric as we recognise there will be an increase in the expected numbers of eligible consumers, based on the 2021 census data. This, alongside any introduction of a data quality element, will require DNOs to continue to focus on ensuring their information is up to date and correct. We consider DNOs should be measured against a common target as the PSR reach is now an established metric, and we want to ensure consistent support and avoid regional disparities. DNOs should also be able to share knowledge and learnings to bring the level of reach up across all DNOs.

Decision ED3 Sector Specific Methodology Decision

Social Value

- 3.235 We will continue to incentivise DNOs to provide services under the social value metrics and will work with stakeholders to explore how the SROI methodology should be updated. Further work is also required on scope, ensuring consistency in reporting and target setting, however, we are minded not to introduce common targets for this metric.
- 3.236 The Social Value metric of the CVI has to date worked well and we want DNOs to continue to deliver this support to vulnerable consumers. At this time, we do not intend to introduce common targets for these metrics, because we recognise the delivery of these services is based on the availability of partner organisations within the different regions. We also recognise the needs of the consumers within the different regions may vary and therefore we think it's more appropriate DNOs set individual and ambitious targets for these metrics. We heard from stakeholders that there should be more standardisation within the targets, so we will as a starting point look at how the SVF, the SROI methodology and how targets are calculated can be standardised.

Customer Satisfaction Survey

- 3.237 We are still considering if we want to take forward the CSS element of the CVI and are exploring the UKPN early proposal on 'Enhancing customer satisfaction'. We will continue to work on this and will set out a decision in Draft and Final Determinations.
- 3.238 The exact scope, strength, weighting, targets and frequency of reporting for the CVI will be set in our Draft and Final Determinations.

Annual Vulnerability Report

- 3.239 We will continue to require DNOs to collate and publish an Annual Vulnerability Report. This will report on DNO's progress against the commitments set out in their Vulnerability Strategy, as well as their progress against the targets under CVI. This will remain an ODI-R, and we will provide further guidance on structure and content of reports, and how the voice of the ISG is captured within the reporting. We consider the AVR has worked well to date and holds DNOs accountable for delivery of their strategies. Stakeholders also supported the continuation of this ODI-R. We will also explore the need and format of a framework for feedback from Ofgem and other stakeholders.

Vulnerability Strategy

- 3.240 To set out how they will support vulnerable consumers, DNOs will be required to submit Vulnerability Strategies as part of their business plans. We have set out below the four areas of focus that we consider companies should address in their strategies. These areas build on those set out for RIIO-ED2. Further

information on the Vulnerability Strategy is also set out in the Business Plan Guidance accompanying this document.

3.241 For RIIO-ED2 we introduced three primary areas of focus: i) vulnerability to loss of supply; ii) being in, or at risk of, fuel poverty; and iii) risk of being left behind in the energy system transition. For ED3 we have decided to increase this scope and have four areas of focus, namely:

- PSR reach and support
- social value - fuel poverty and low carbon transition
- support during a storm or interruption
- those medically dependent on supply

3.242 These areas have been developed through further analysis and work on vulnerability, both internally through the workstreams on climate resilience, the SAR and the early proposals which has formed part of the BPI, and externally through the report from Citizens Advice and responses to the SSMC. The areas relating to PSR reach and support and social value is carried forward from RIIO-ED2, as we consider these to continue to be important in ED3. For the additional areas in ED3 - support during storms and interruptions, and medically dependent on supply - these have been identified as important areas DNOs should also address within their vulnerability strategies, because of the expected increase in storms and severe weather events, and DNOs responsibility in delivery of supply. We also consider DNOs to be in a unique position to hold data on both PSR customers and fault data on the network, which enables them to identify affected customers more easily and facilitate the support to vulnerable consumers in a more targeted way. We consider that defining the four areas of focus for DNOs' strategies provides clear parameters for them to define their approach to supporting vulnerable consumers.

3.243 To support the four primary areas of focus in ED3, we have also set out eight key outcomes for vulnerability. These have been developed from stakeholder responses to the SSMC, discussions in working groups, through proposals submitted under the BPI, the SAR and the report from Citizens Advice. The outcomes are listed below:

- maximise the number of eligible people that are signed up to the PSR through promoting and maintaining the PSR
- ensure the right people are on the PSR and DNOs take all appropriate steps to understand the specific requirements of PSR customers so that they can tailor the services accordingly
- provide support to those in fuel poverty and at risk of being left behind in the energy transition
- provide support to those on the PSR during interruptions

Decision ED3 Sector Specific Methodology Decision

- provide additional protection to those medically dependent on supply by understanding the requirements and arrangements that are in place to support them during loss of supply, and facilitate this support if not already in place
- identify areas where collaboration will lead to improved consumer outcomes
- ensure the support provided is of a high standard and that feedback is captured in a meaningful way
- ensure DNOs report on progress against commitments and targets in a transparent and consistent way

3.244 For the areas related to PSR and social value, these are largely carried forward from RIIO-ED2 and will mainly be delivered through the CVI, although we will explore how the early proposals can either complement or be implemented into the current package of measures. DNOs should submit proposals for delivering against these in their Vulnerability Strategies. For the two new areas of focus - 'support during a storm or interruption' and 'medically dependant on supply' - we have provided further information below, and we will consider how these can be best achieved and any potential funding for these areas at Draft and Final Determinations, once we have received the business plans.

Support during a storm or interruption

3.245 Providing support to vulnerable consumers during an interruption is imperative and ensuring that support is tailored, appropriate and reaches the right people is key. The DNOs' Vulnerability Strategies should set out how DNOs will support vulnerable consumers during an interruption. Separate to the Vulnerability Strategy we are also introducing a new requirement for DNOs to submit a Targeted Customer Storm Support Strategy (TCSSS). The vulnerability strategy should set out how the DNO will support vulnerable consumers during interruptions more widely (including if that interruption is caused by a named storm), and the TCSSS should set out what additional support will be provided where the interruption has been caused by a named storm. Further details are set out in the ED3 Business Plan Guidance published alongside this document.

3.246 In addition to this, we also expect DNOs to provide excellent customer service in engaging with vulnerable consumers and in the support provided, particularly during an interruption. Through the BMCS, DNOs will therefore report on the satisfaction of PSR and non-PSR customers separately, both for planned and unplanned interruptions (see Broad Measure of Customer Service for further details on customer satisfaction for planned and unplanned interruptions).

Medically dependent on supply

3.247 DNOs should fully understand the different requirements and forms of vulnerability that customers on the PSR may have, and tailor the service they

provide to those customers appropriately. This will include a particular focus on those that are especially vulnerable in the event of an interruption to the supply. The Vulnerability Strategies submitted by the DNOs should therefore address how they will support and facilitate provisions for ensuring (as far as reasonably can be expected) they meet the needs of those that are medically dependent on supply. This area is closely linked to the quality of data DNO's hold on PSR customers. By using this information, they should take every reasonable step to understand the specific needs of PSR customers, which will enable DNOs to effectively facilitate support to the consumers that are medically dependent on supply.

Targeted Customer Storm Support Strategy

- 3.248 In addition to the Vulnerability Strategies for ED3 we are also asking DNOs to submit a Targeted Customer Storm Support Strategy (TCSSS) as part of their business plans. Further details are set out in the ED3 Business Plan Guidance published alongside this document. We recognise the increased impact storms are having on consumers, particularly those that are vulnerable, and therefore consider it important for DNOs to set out specific commitments for these situations. This will set out how the DNO will support vulnerable consumers during storms.
- 3.249 We will expect DNOs to report on progress and performance through a storm support performance report. These requirements are largely based on the early proposals from SPEN and SSEN-D on storm support and we will work with DNOs and wider stakeholders on these reporting requirements.

BPI Early Proposals

- 3.250 We would like to see elements of all seven proposals, progressed as part of the package of measures for vulnerability in ED3 and which will support the delivery of the four primary areas of focus and the objectives set out above. Although as noted at Appendix 2 at this stage we would only expect four to be considered for rewards under the BPI. These are the Enhanced Storm Support from SSEN-D, the Customer Storm Support Strategy from SPEN, the PSR Data Quality Metric from UKPN and the Enhancing customer satisfaction also from UKPN.
- 3.251 The three proposals relating to PSR, customer segmentation and multi-sector PSR, received from SSEN-D, NGED and UKPN, raise important questions beyond the electricity distribution price control and relate to other sectors and the development of a more holistic approach to data collection, segmentation and prioritisation for vulnerable customers across utilities. For this reason, we would not expect to see these proposals rewarded through the BPI but will keep this position under review and will continue to work with the DNOs and wider stakeholders to progress the development of the PSR.

3.252 Once we have received the package of proposals through the Vulnerability Strategies, the Targeted Customer Storm Support Strategies and any outcomes following the BPI early proposals, we will take a view of support to vulnerable consumers holistically and set out in our Draft and Final Determinations our final positions on any potential additional funding, incentives and targets required.

DNO role in low carbon technology and energy efficiency rollout

SSMC summary

3.253 In the SSMC we reflected on the likely course of the energy transition and the implications this will have for DNOs' roles in the future. While the deployment of heat pumps, solar photovoltaic (PV), battery storage, EV charge points and other (predominantly electric) low carbon technologies has been slower than expected in some cases, the direction of travel is clear (for example, March 2026 saw the most solar PV installations since 2012 at 27,607).³⁶ This continued deployment presents challenges for network planning and connections. This transition, coupled with a more planned approach to system design and operation, will see DNOs taking on a more prominent role in system planning, consumer engagement and partner co-ordination.

3.254 We also reflected on responses to our Framework Consultation where many respondents expressed a view that DNOs should play a greater co-ordination role to support the rollout of energy efficiency (EE) measures. In the SSMC we built on this concept and set out our view that for the transition to be effective and low cost, with wider network benefits maximised, the rollout of low carbon technologies may need to be carried out in a more planned and coordinated way and that DNOs were potentially well-placed to enable this.

3.255 As well as 'enhanced co-ordination', we also discussed the possibility of DNOs playing a substantial role in ensuring the effective delivery of energy efficiency and low carbon measures where there would be a network benefit, with any activity integrated with network upgrade programmes to maximise the benefits of a coordinated and area-based approach.

Dedicated consultation on DNO role in LCT and EE rollout summary

3.256 We recognised that the activities described above could represent a significant change to DNOs' roles. Therefore, we published a dedicated consultation on this topic on 3 March 2026, titled 'DNOs' future role in supporting low carbon

³⁶ Department for Energy Security and Net Zero statistics for March 2026. [Solar photovoltaics deployment - GOV.UK](#)

technologies and energy efficiency'.³⁷ This considered possible roles DNOs could adopt in ED3 to support the effective rollout of LCTs and EE measures.

- 3.257 Part consultation, part call for input, it asked respondents to consider a set of activities we described as 'Enhanced Coordination' roles and another, broader, set of activities described as 'Expanded Roles'.
- 3.258 Under 'enhanced co-ordination', we suggested that positive progress made as part of RIIO-ED2 around data sharing and stakeholder engagement could be built upon. In practice, we suggested a set of adjustments to the requirements of Special Condition 9.13 - System Optimisation Output could be an effective way of strengthening data sharing and stakeholder engagement so that under ED3, DNOs and their local stakeholders work together in a more collaborative manner.
- 3.259 Under the 'expanded role' section, we explored at a much higher level a range of additional activities DNOs could potentially adopt to support the rollout of LCTs and EE measures. This included considering the possibility of DNOs funding, and being responsible for installing, LCT and EE measures into domestic properties and potentially retaining some form of ownership or control of these assets to enable them to be used optimally.
- 3.260 Other activities were also considered, with a set of three illustrative archetypes used to elicit discussion. Our view has been that any expanded role for DNOs would require them to work in partnership with other actors (eg local government, installers, energy suppliers, innovators). Importantly, our view was that any expanded role would have to demonstrate local network or system benefits for all consumers, to be viable. If, after reviewing responses to this consultation and undertaking our own analysis of the likely benefits of any expanded role, we determined it could be valuable for DNOs to adopt some or all of these activities, we committed to piloting these approaches and consulting on the details of these pilots.

Summary of consultation responses for the two consultations

SSMC

- 3.261 We received 24 responses to our question, as well as four additional general comments of relevance to the topic, from a highly varied set of stakeholders. There was general agreement on the value of a more co-ordinated, joined-up approach in the delivery of LCTs and EE measures, but there were reservations on DNOs taking on additional responsibilities.

³⁷ 'DNO Low Carbon Technology - Energy Efficiency role in ED3' - [DNO Low Carbon Technology - Energy Efficiency role in ED3 | Ofgem](#)

3.262 These valuable insights informed the scope and focus of our subsequent dedicated consultation. However, given we asked one relatively high-level question on this topic as part of SSMC, and had made clear our intention to consult in detail in winter 2025/2026, many respondents submitted brief responses which deferred providing detailed responses until the dedicated consultation.

Dedicated DNO LCT and EE consultation

3.263 We received responses from 72 individuals or organisations representing a broad spectrum of interests. This included responses from all of the DNOs, several GDNs and energy suppliers, devolved government, local and combined authorities, organisations representing community energy groups and vulnerable consumers, trade associations/industry bodies, and multiple expert energy-focused organisations (eg NESTA, Energy Systems Catapult, Energy Saving Trust).

3.264 There was strong support for the rationale and scope of enhanced co-ordination (94% strongly or somewhat agreeing with the proposals), with agreement from a broad spread of respondents including DNOs, trade associations/industry bodies, suppliers and local authorities. The most common rationale being that DNOs have visibility of local constraints and place-based co-ordination can help reduce overall system cost and disruption.

3.265 That said, many respondents, including LEMA and Agility Eco, pushed for this framework to go further and be outcomes-led, arguing that co-ordination must be demonstrably linked to tangible improvements. Support was also often conditional: stakeholders generally favoured a clear boundary where DNOs coordinate, convene and share information, but do not take on direct delivery functions (eg NGED, Energy UK). Several respondents, including Citizens Advice, E.ON, EDF, argued that enhanced co-ordination could risk DNOs becoming distracted from core responsibilities if requirements become too wide-ranging or administratively burdensome.

3.266 There was strong support for strengthened Community Collaboration Plans and a recognition that existing Collaboration Plans³⁸ have not driven consistent positive outcomes (though examples of good practice exist). As a result, there is support for Community Collaboration Plans but with a clear emphasis on outcomes, proportionality and avoiding duplication. Likewise, stronger engagement with local authorities was widely supported (~80% support), provided expectations are clear, proportionate and aligned with existing local processes. Throughout, the most consistent recommendation was that

³⁸ Collaboration Plans form part of the existing Smart Optimisation Output. The Plan should describe how the DNO will collaborate with stakeholders and work in partnership with stakeholders to support the development of local and regional net zero strategies.

monitoring should prioritise quality and measuring the effect of collaboration (eg evidence that engagement changes planning decisions, improved connection outcomes, drove better use of flexibility) rather than simple compliance with license obligations.

- 3.267 Data was identified as a key constraint on effective local planning, with respondents highlighting gaps in low voltage granularity, inconsistent formats, limited interoperability and poor usability. There was strong consensus that strengthening the System Visualisation Interface (SVI)³⁹ would be a core enabler of enhanced co-ordination - particularly if it improves the usability, consistency and accessibility of data, enabling better co-ordination and place-based planning in ED3. DNOs publishing additional non-network datasets was supported, provided they act as coordinators rather than dataset owners, and this activity is proportionate.
- 3.268 Respondents were also generally supportive of integrating enhanced co-ordination with NESO's RESP processes, and many converged around a shared complementary model such as RESP setting strategic direction at a higher level, while enhanced co-ordination supplies bottom-up, granular local insight to strengthen the evidence base underpinning RESP. Stakeholders stressed that success depends on clarity of roles, consistent data standards and coordinated engagement.
- 3.269 Most respondents supported IDNOs having a role that is broadly similar to DNOs regarding enhanced co-ordination.
- 3.270 Views were much more mixed regarding an expanded role (Strong Agree: 14%; Somewhat Agree: 38%; Neither: 14%; Somewhat Disagree 8%; Strong Disagree 25%). Most DNO responses expressed a view that there could be a greater role for them to play, but that this support was contingent on them not having direct delivery roles and the scope and scale of any role being carefully designed. However, UKPN were strongly in favour of DNOs developing an expanded role whereas NGED strongly disagreed with this change in role.
- 3.271 Those supportive of an expanded role, including Welsh Government, Community Energy England, UK100, often made their support conditional on clear boundaries being put in place to prevent DNOs from undertaking certain activities, such as installing LCTs or EE measures. Many respondents, including Welsh Government, MCS Foundation, IAA and Renbee, challenged Ofgem to consider consumer protections as part of any expanded role as a priority. Stakeholders supportive of an expanded role tended to be charities, think tanks or respondents keen to test approaches via pilots, whereas strong disagreement

³⁹ The System Visualisation Interface forms part of the existing Smart Optimisation Output. It is a section of the DNOs website and open data portal that should provide access to a package of forward-looking, open and accessible digital network tools.

was more common among suppliers and GDNs (eg Good Energy, Wales and West Utilities, Cadent).

- 3.272 A majority of respondents (67%) who express a clear view support assessing proposals through a system benefits approach, but many stress that this should explicitly account for consumer impacts, equity and affordability.
- 3.273 Regarding the illustrative archetypes used to prompt discussion in the consultation, stakeholders tended to favour approaches where DNOs enable and co-ordinate rather than directly deliver. Amongst the archetypes 'laying the groundwork' was most supported, with 'widening participation' second and 'focused intervention' attracting the most objection.
- 3.274 Across responses, recurring concerns include whether DNOs have the capability and incentives to take on more interventionist roles, whether an expanded role would distract from core responsibilities, and whether other actors are better placed to deliver these functions. Other concerns raised include around the risks of DNO ownership or control, potential bill impacts, consumer protection and potential market distortion. Interpreting support is complicated by the fact that some 'Expanded Role' supporters mainly describe enhanced co-ordination-type activities, while some disagreement appears driven by more ambitious interpretations (for example, direct installation), which the consultation largely discounted.
- 3.275 There was very strong support for pilots, with agreement spanning local authorities, DNOs, energy suppliers, trade association/industry bodies, community energy organisations and GDNs. However, there were a diversity of views about what these pilots should explore and which entities should be involved. Two of the energy suppliers who responded (Good Energy and EDF) were clear that they saw little to no benefit in DNO pilots. Respondents generally preferred pilots that are place-based and partnership-led, and that focus on testing enabling functions - such as co-ordination, data improvements and targeting - rather than DNOs taking on direct installation, ownership, or consumer-facing roles. Many argue pilots should explicitly prioritise low-income or vulnerable households.
- 3.276 Specific pilot proposals often aligned with respondents' preferred level of ambition for expanded role activities, though there are exceptions, and several stakeholders expressed interest in participating.
- 3.277 Support for an expanded role for iDNOs was mixed and with only 26 responses. Several respondents, including the INA and Green GEN Cymru, opposed any expanded iDNO role (31%). Those who did support an expanded role for iDNOs argued this position on the basis that iDNOs should perform the same roles as DNOs.

SSMD decision and rationale

- 3.278 We have decided that the DNOs' role should evolve to include 'enhanced co-ordination', this is consistent with our proposals in SSMC and the subsequent dedicated consultation. We expect to implement this change by updating the guidance associated with Special Condition 9.13 Smart Optimisation Output for the beginning of ED3.
- 3.279 This will see Collaboration Plans become Community Collaboration Plans with a greater focus on DNOs identifying their key stakeholders, setting out how they plan to engage with stakeholders, what effect their engagement has had on DNO network planning and encouraging DNOs and their key stakeholders to enter into Scheduling and Co-ordination Plans. We will expect reporting against Community Collaboration Plans to be included as part of DNOs' overall regulatory reporting.
- 3.280 In developing the guidance we will also consider the role that the ISGs might play in assessing the quality of DNOs' stakeholder engagement efforts in this area.
- 3.281 The updated Smart Optimisation Output guidance will also see DNOs presenting data sets their stakeholders have identified as beneficial, alongside valuable DNO network data in accessible, interoperable formats to support DNOs and their stakeholders to work collaboratively.
- 3.282 DNOs will also be required to provide technical support, tools or software to support local authorities and other local actors in their regions to deliver effective decarbonisation plans that align with network need and network investments.
- 3.283 DNOs will need to publish their first Community Collaboration Plan and updated data sets on 1 May 2028, with detailed guidance to be developed over 2027. In the meantime, we have included draft guidance for Community Collaboration Plans and updated Smart Visualisation Interface guidance in the BPG to support DNOs' business planning.
- 3.284 We have decided that it would be valuable to develop a set of pilots testing aspects of an expanded role as part of ED3. We have reached this decision after considering responses to the expanded role portion of our consultation (including the strong support for pilots from stakeholders) and reviewing significant internal and external analysis.
- 3.285 Exploratory analysis on network and system benefits suggests there are potential marginal benefits of an area-based roll-out over an uncoordinated, demand-led approach. DNOs may be well placed to co-ordinate or deliver an area-based approach linked to their wider work programmes.
- 3.286 The most significant benefits modelled are from bill savings for those receiving technologies and carbon savings for the system from the technologies replacing

gas use. However, further analysis of wider system and resilience benefits is needed, particularly in relation to the possible benefits of battery storage.

- 3.287 Given the varied nature of consultation responses and the range of modelled benefits and risks, we will need to continue exploring what future opportunities there could be for a wide-ranging expanded role. We will do this through further stakeholder engagement and potential consultation on the development of pilots in ED3. Any pilots would aim to clarify the real-world benefits and delivery challenges associated with any potential expanded role.
- 3.288 We will work with SPEN and UKPN to develop the two pilot proposals they submitted as Business Plan Incentive early proposals and welcome similar proposals from other interested DNOs and their partners. These pilots aim to demonstrate the effectiveness of partnership working, the ability of DNOs to identify priority locations, and whether these, and any efficiency benefits, can be realised. We intend to develop these pilots and initiate them during the remainder of ED2.
- 3.289 However, these pilots are currently limited to two DNOs, and their design pre-dated our consultation and a full understanding of evidence gaps. We therefore propose additional piloting within ED3. We will work with the DNOs and other stakeholders to scope and design these pilots and mitigate any disruption to overall business planning.

Environmental framework

- 3.290 The ED3 environmental framework will support the DNOs to develop and implement effective strategies to mitigate the environmental impact of their distribution network and its related business activities.
- 3.291 The DNOs have generally met or exceeded their annual targets in RIIO-ED2 in areas such as reducing their Business Carbon Footprint (BCF) and SF₆ leakage. However, we consider that consistent targets and reporting formats could benefit performance comparison across the DNOs, while the resource-intensive review of individual Annual Environmental Reports (AER) limits its effectiveness as a reputational incentive.
- 3.292 This section covers the following key elements of the ED3 environmental framework:
- scope of the Environmental Action Plans (EAPs)
 - EAP - standardised metrics and SMART targets
 - EAP - identifying and prioritising actions
 - structured evaluation of EAPs
 - sulphur hexafluoride (SF₆) emissions
 - oil leakage from fluid filled cables (FFC)

- undergrounding Use-it or Lose-it Allowance
- biodiversity
- AER

Scope of the Environmental Action Plans (EAPs)

SSMC summary

3.293 In our SSMC, we proposed to retain all but one of the EAP impact areas from RIIO-ED2, with refinements to reflect evolving responsibilities and stakeholder feedback. We intended to remove electricity losses from the scope of the EAP as responsibility for loss optimisation will move to the DSO in ED3, while recognising that DNOs will continue to report on this as part of the BCF in their AER.

Summary of consultation responses

- 3.294 We received six responses to our proposals on the EAP scope. Five stakeholders were broadly supportive of the proposed environmental framework and EAPs but identified areas for further development. In contrast, SPEN's Independent Net Zero Advisory Council (INZAC) considered the proposed EAP scope too narrow and at risk of becoming increasingly misaligned with emerging sustainability frameworks.
- 3.295 Respondents generally supported retaining the core impact areas as they reflect the key environmental priorities for ED3. NGED agreed with the removal of electricity distribution losses, while SSEN-D supported retaining polychlorinated biphenyl (PCB)-related reporting, noting its continued relevance beyond the legislative deadline.
- 3.296 Four respondents said the EAP scope and related targets should more explicitly align with longer term decarbonisation and sustainability goals, while remaining adaptable to evolving technology and policy. NPg proposed that baseline expectations should be founded on a systems based approach and cautioned that isolated, static targets were no longer sufficient. Energy UK said commitments should explicitly align with net zero trajectories, while SPEN said baseline expectations should include DNO carbon reduction and science-based targets. INZAC argued that excluding broader sustainability considerations risked leaving material gaps and failing to future-proof the price control.
- 3.297 Stakeholders also suggested ways to strengthen the EAP so it delivered meaningful outcomes. SPEN proposed broadening pollution prevention expectations (eg covering more oil-containing assets) and integrating emerging risks (eg invasive species and per- and poly-fluoroalkyl substances (PFAS)), and said the EAP should be treated as a cross-cutting strategy embedded across the wider business plan and supporting annexes. SSEN-D welcomed our recognition

Decision ED3 Sector Specific Methodology Decision

of marine biodiversity considerations, while NGED suggested placing greater emphasis on risk based approaches to target interventions where they deliver the greatest environmental benefit.

SSMD decision and rationale

3.298 We have decided to retain the RIIO-ED2 core EAP impact areas in ED3, except for electricity losses (for the reasons set out in Paragraph 3.293). We have also strengthened baseline expectations by requiring DNOs to maintain or update appropriate science-based targets (SBTi) for reducing their Business Carbon Footprint (BCF) in line with net zero, and to develop and maintain a policy for the use and environmental risk management of PFAS in ED3 and beyond.

3.299 The ED3 EAP will cover four themes and associated impact areas:

- climate change mitigation
- BCF, including Scope 1, 2, and 3 emissions
- SF₆ emissions and transition planning
- net zero networks (SBTi-based)
- embodied carbon in infrastructure and materials
- pollution and nuisance reduction
- polychlorinated biphenyl (PCB)-related pollution
- oil pollution (including Fluid Filled Cables (FFC))
- air pollution
- PFAS policy
- noise pollution
- responsible resource use
- resource use and waste reduction
- supply chain sustainability
- circular economy
- supporting nature
- natural capital and biodiversity (including marine biodiversity)
- visual amenity impacts

3.300 Our decision to require SBTi-based net zero targets reflects our expectation that EAPs should align with, and support, longer term decarbonisation and sustainability commitments. While the SBTi methodology is being revised, we consider it provides a common, comparable basis for measuring progress and strengthening accountability, and it can be integrated across business plans to support strategic delivery. We will continue to engage with stakeholders post SSMD to clarify the appropriate approach for EAPs, recognising that targets may need to be updated following changes to the SBTi Standard.

- 3.301 The introduction of a baseline requirement for the DNOs to develop and maintain a PFAS policy reflects growing interest in the environmental impacts of 'forever chemicals'. DNOs' PFAS policies should support understanding of PFAS sources and materiality across networks and supply chains, assessment of environmental risks and how these will be managed, and the approach to PFAS use and alternatives over ED3 and longer term. We encourage DNO collaboration to identify and address shared PFAS challenges. For oil pollution, fluid filled cables will remain the primary focus, but DNOs should also address non-FFC oil leakage where it represents a significant environmental challenge in ED3.
- 3.302 We have retained our position not to expand the EAP scope to include intersecting social and economic impacts to avoid duplicating existing mechanisms and diluting the EAP's environmental focus. This does not prevent DNOs from considering environmental impacts on social and economic outcomes through the design and delivery of ED3 programmes. We have also decided not to include invasive species management within natural capital and biodiversity where it falls outside existing biodiversity legislation, although DNOs may choose to fund such initiatives privately.
- 3.303 While the EAP scope is defined to support consistency, we continue to expect DNOs to respond to additional material environmental impacts where these arise from regional context, community priorities, local planning, or legislative requirements. We encourage DNOs to embed EAP commitments across their ED3 business plans to reduce the risk of siloed decision making and support a holistic, strategically aligned approach to decarbonisation, the environment and sustainability.

EAP - standardised metrics and SMART targets

SSMC summary

- 3.304 In our SSMC, we proposed to revise ED3 EAP baseline expectations to strengthen delivery of environmental outcomes. We considered introducing standardised, common metrics for DNOs to support meaningful cross-company comparison and improve data consistency. In addition, we proposed that DNOs set Specific, Measurable, Achievable, Relevant and Time bound (SMART) targets for each EAP area, underpinned by clear baselines, annual milestones and evidence based justification for the ambition of target levels.

Summary of consultation responses

- 3.305 In response to our SSMC, all DNOs, alongside Energy UK and SPEN INZAC, supported strengthening baselines through clearer and more comparable metrics and target setting. Stakeholders also broadly supported the introduction of standardised metrics to improve consistency and comparability, but

Decision ED3 Sector Specific Methodology Decision

emphasised the need for clearer guidance on definitions, scope, baseline expectations and reporting requirements.

- 3.306 Energy UK supported stronger baselines to harmonise reporting across companies. UKPN and SPEN similarly requested clearer descriptive guidance on the selected metrics and baseline expectations to help DNOs develop more comparable EAP targets and benchmarks and to support improved oversight and accountability. NGED considered that comparability depends on consistent underlying datasets and methodologies, and stated that some proposed metrics were insufficiently responsive to demonstrate the impact of interventions. SSEN-D highlighted challenges in agreeing a common circularity metric and suggested that defining this too early could inhibit innovation.
- 3.307 SSEN-D, NGED, SPEN and SPEN INZAC broadly supported the introduction of SMART targets, however, stakeholders raised concerns about the level of prescription for the framework and the feasibility of annual milestones. SPEN broadly supported annual milestones, while NGED favoured SMART targets with longer trajectories. These networks nevertheless noted that progress on some metrics may depend on multi-year investment and may be affected by factors beyond DNOs' control. SPEN also suggested clearer guidance is needed on how to report progress in developing areas. NGED did not support a requirement for extensive justification for target levels as set out in our SSMC, citing administrative burden and limited additional value.
- 3.308 NPg, Energy UK and SPEN INZAC considered that baseline expectations should be more dynamic and adaptable to remain effective across ED3 and beyond. Energy UK proposed evolving baselines into dynamic, output tracked commitments aligned with net zero trajectories, focusing incentives on continuous improvement rather than static compliance. NPg suggested a systems based approach with adaptable baseline expectations that can respond to evolving technologies, interdependencies and policy landscapes, rather than isolated and static targets. SPEN INZAC supported going beyond measuring BCFs by requiring clearer net zero targets.

SSMD decision and rationale

- 3.309 We have decided to strengthen the ED3 environmental framework by requiring DNOs to use a set of common, standardised metrics as the basis for target setting and performance monitoring across the EAP impact areas set out in Paragraph 3.299. These metrics are intended to improve the consistency and comparability of reporting across DNOs, supporting transparency and accountability.
- 3.310 Where possible, DNOs should apply common and consistent scopes, definitions, thresholds and methodologies. To ensure we set appropriate metrics with sufficient clarity, we will continue to engage collaboratively with

stakeholders post-SSMD to determine minimum expectations for metric definitions, reporting boundaries and methodologies. We acknowledge that the timely setting of baseline expectations is critical for the DNOs' development of their EAPs, and we intend to deliver guidance over the summer of 2026 so that business plans and EAPs can be standardised as much as possible.

- 3.311 We will require DNOs to set SMART targets for each EAP impact area, underpinned by clear baselines and transparent, evidence-based trajectories. DNOs should also set out high-level delivery plans, governance and assurance arrangements, and any material risks or exogenous factors. To support cross-DNO comparison, DNOs should adopt an absolute target and, where appropriate, a normalised (relative/intensity) companion metric. Where DNOs adopt additional metrics, these should not conflict with the standardised metric set.
- 3.312 For mature and controllable impact areas, DNOs must include annual milestones to enable progress tracking during ED3. We recognise that annual milestones may be more challenging where delivery depends on multi-year investment cycles or factors outside a DNO's control, or where progress may be non-linear. Where annual milestones are not appropriate, DNOs must explain why, provide a trajectory with interim checkpoints (which could include tolerance bands), and set out how progress will be evidenced consistently year-to-year using the standardised metrics and reporting boundaries, including narrative commentary on any deviation from the trajectory. We will also require proportionate, independent assurance for key metrics (eg BCF, SF₆ and FFC), with appropriate assurance standards to be agreed collaboratively.
- 3.313 We will consider relatively immature areas and/or metrics (eg circular economy and PFAS) to be emerging areas of environmental interest. As such associated metrics will be development metrics in ED3, and we will require DNOs to undertake a consistent reporting pilot before and during ED3, with a commitment to converge on a single common approach by year 3 of ED3.

EAP - identifying and prioritising actions

SSMC summary

- 3.314 In our SSMC, we proposed that DNOs adopt a more structured and transparent process for identifying and prioritising environmental actions, to strengthen the strategic value and effectiveness of the EAP. We also proposed that DNOs should set out the measures they could take for each EAP impact area, reflecting sector wide best practice and DNO specific opportunities, and then assess these measures against clear rationalisation criteria to determine which actions to take forward in its EAP.

Summary of consultation responses

- 3.315 Of the eight stakeholders who responded on this issue, seven agreed with our proposed position or supported it in principle, subject to amendments, while NGED disagreed with the prioritisation of best practice measures.
- 3.316 NGED and Sustainability First supported the principle of using best practice to inform EAP baselines. However, NGED suggested best practice could be developed more efficiently through industry co-ordination (eg via the ENA) rather than being required of each DNO individually.
- 3.317 Views diverged on how prioritisation criteria should be applied. NGED argued DNOs should be able to undertake their own materiality assessment rather than applying our proposed criteria, citing additional burden. Friends of the Lake District supported criteria that reflected stakeholder value and alignment with wider objectives. However, Sustainability First and UKPN raised concerns about practical implementation. Sustainability First cautioned against a mechanistic, tick-box approach and suggested criteria should be treated as illustrative, while UKPN proposed placing greater emphasis on immediacy of impact and breadth of benefits and warned that qualitative actions (including behavioural and policy levers) should not be eclipsed by a focus on quantitative indicators.
- 3.318 Respondents also commented on expectations for justifying EAP targets. SPEN noted that environmental justification may be less quantifiable in some areas and asked us to work with DNOs to develop proxy metrics, guiding principles and independent assurance where direct quantification is difficult. UKPN similarly called for clearer definitions of cost effectiveness and environmental benefits, including how these should be measured. SSEN-D highlighted the value of using recognised frameworks as a baseline, noting that established approaches can help demonstrate a structured and credible environmental approach. In contrast, NGED did not support requiring justification for target levels, describing this as an undue administrative burden with limited additional value.
- 3.319 Sustainability First asked for clarity on whether EAPs are intended to remain accessible stakeholder documents or evolve into regulatory submissions and indicated a preference for detailed material to sit in supporting documents rather than the EAP itself.

SSMD decision and rationale

- 3.320 We have decided to require DNOs to collaboratively develop and implement a common, structured and criteria based approach to identifying and prioritising EAP actions. For each EAP impact area, DNOs must set out how they have identified the potential measures available in ED3 and how they have applied common prioritisation criteria to determine which actions are taken forward. This is intended to improve transparency and cross-DNO comparison, while

Decision ED3 Sector Specific Methodology Decision

recognising differences in regional context, starting positions and deliverability constraints.

- 3.321 DNOs must also work together to identify sector best practice, to support knowledge sharing and establish a sector wide reference baseline. In explaining their prioritisation choices, DNOs should demonstrate alignment with this best practice or clearly justify any departures, for example, to reflect local context or innovation.
- 3.322 For each impact area, DNOs must provide a concise list of potential measures that could be deployed in ED3. This must include both sector wide best practice measures and measures reflecting DNO specific opportunities (for example their regional context, asset base and operating model). Measures may include, where relevant, proven technologies, engineering solutions, operational improvements, administrative practices and collaborative initiatives, and DNOs may include additional measures where justified.
- 3.323 DNOs must evaluate potential measures against a clear and transparent set of common criteria, developed collaboratively. These criteria could include (among others):
- materiality of impact (environmental benefit associated with the action)
 - cost-effectiveness (cost relative to the expected environmental benefit)
 - regional relevance (appropriateness given environmental characteristics of the licence area)
 - mitigation maturity (progress to date and whether the action addresses a gap or emerging issue)
 - practicality and feasibility (technical feasibility and operational deliverability in ED3)
 - stakeholder value (alignment with stakeholder priorities)
 - immediacy of impact (when the benefits are expected to be realised)
 - secondary benefits (how the measures will benefit other aspects of the Business Plan)
 - alignment (consistency with environmental and sustainability goals, net zero targets, cross-sector priorities, local planning or legislative requirements)
- 3.324 For each impact area, DNOs must clearly explain (using the common prioritisation criteria and best practice) the measures prioritised in the EAP, the most appropriate alternative measures not prioritised or taken forward and the reasons for these choices, and how these align with wider environmental and sustainability objectives. To avoid an overly onerous or mechanistic approach, DNOs should apply only the criteria that are relevant to the impact area, while providing a coherent narrative of trade-offs and rationale.

- 3.325 DNOs must provide a proportionate evidence base to support their prioritisation decisions including, as appropriate, baseline performance data, benchmarking, stakeholder input, feasibility considerations, and cost and risk information. Where non-monetary benefits are difficult to quantify, DNOs should set out a transparent qualitative justification and, where possible, use proxy metrics or structured principles.
- 3.326 While we acknowledge that the content of EAPs may be detailed and complex, we expect the DNOs to ensure that the EAPs are, in so far as is possible, accessible for stakeholders to engage with.

Structured evaluation of EAPs

SSMC summary

3.327 In our SSMC, we proposed to introduce a structured evaluation framework to assess the DNOs' ED3 EAPs in a consistent and transparent way, while recognising differences in regional context and starting points. We suggested this evaluation would consider each DNO's EAP:

- ambition
- environmental track record
- evidence base
- credibility
- value for money
- alignment with environmental goals
- responsiveness to regional context and
- stakeholder engagement and transparency

Summary of consultation responses

- 3.328 In response to our SSMC, eight stakeholders broadly supported our proposed approach to the structured evaluation of Environmental Action Plans (EAPs) in principle. All DNOs, together with Energy UK and Sustainability First, supported a structured approach but highlighted challenges in how we would define, prioritise and apply the evaluation criteria.
- 3.329 NGED and SPEN welcomed the use of structured criteria to improve consistency and transparency, while SSEN-D and UKPN considered the proposed criteria to be broadly appropriate. Sustainability First emphasised the importance of an Ofgem led evaluation, noting that stakeholders are not well placed to assess performance across the sector and that regulatory scrutiny should help ensure EAPs receive sufficient senior attention.
- 3.330 Stakeholders also asked that evaluation remains proportionate and supports fair comparisons. NGED said the most important criteria should be weighted to

give these greater prominence, while UKPN requested clearer guidance on how criteria would be operationalised (for example, what we mean by “ambition”) and suggested considering additional criteria on the immediacy of impact and breadth of benefits. Energy UK recommended focusing assessment on evidence of delivery and outcomes rather than narrative reporting.

- 3.331 SSEN-D and SPEN highlighted the need for fairness and clarity when comparing companies in different contexts. SSEN-D said comparisons should reflect differing geographies and starting points and cautioned that uniform approaches could disadvantage companies that have already made progress in particular areas. SSEN-D also requested clarity on how evaluation criteria would link to investment assessment materials, and proposed using an existing credible framework, such as an ISO 14001 certified Environmental Management System, as a baseline to support comparability and confidence in delivery.

SSMD decision and rationale

- 3.332 We will undertake a proportionate, structured review of the DNOs' ED3 EAPs as part of our wider business plan assessment. This is intended to improve consistency, comparability and transparency of DNOs' environmental commitments, and to strengthen the reputational incentive associated with EAPs, while remaining proportionate to the scale and maturity of evidence available at the time of submission.
- 3.333 Our review will focus on assurance and cross-DNO comparison rather than acting as a technical environmental assessment. In addition to comparative assessment of DNOs targets and levels of ambition, we will assess whether EAPs:
- are presented using standardised metrics and common reporting approaches to enable meaningful cross-DNO comparison
 - include SMART targets supported by clear baselines and trajectories and a proportionate evidence base
 - clearly explain how actions and targets have been prioritised, including key trade-offs and rationale, and how the plan reflects regional context and deliverability constraints.
- 3.334 We acknowledge stakeholder calls for greater clarity on evaluation criteria, but we are not setting out further methodological detail at this stage to ensure our approach remains proportionate and can be applied to the final content and structure of EAP submissions. In developing their EAPs, DNOs should have regard to the example prioritisation criteria in Paragraph 3.324, which is likely to inform our review. We will continue to develop our approach through stakeholder engagement.

- 3.335 To ensure our review is targeted, we intend to use the standardised metrics as the core comparator. We will apply additional scrutiny to higher-risk or higher-impact areas where stakeholder concern is significant or where performance may vary materially across DNOs, for example, SF₆ and oil leakage from fluid filled cables (FFC).
- 3.336 We also consider Independent Stakeholder Groups (ISGs) have an important role in scrutinising the quality and ambition of individual DNOs' EAPs. We therefore expect DNOs to enable ISGs to engage in, and provide views on, the development and review of EAPs as part of business planning. We will require DNOs to set out the proportionate internal and external assurance they have undertaken for the EAP commitments, including the conclusions of expert critique.

Sulphur hexafluoride (SF₆) emissions

SSMC summary

- 3.337 SF₆ is a potent greenhouse gas used in electrical switchgear due to its excellent insulating properties. However, its environmental impact is a key area of stakeholder concern. While SF₆ leakage rates have fallen in most licence areas since 2018/19 and are generally below the maximum annual leakage rate typically guaranteed by manufacturers (0.5%), leakage rates have increased in some networks.
- 3.338 In our SSMC, we considered that there may be opportunities, particularly at EHV for improved asset management to reduce leakage. Given that only a small number of licence areas are reporting higher leakage rates, we indicated that a proportionate, collaborative review of DNOs' EAP proposals may be more effective than a sector wide incentive. Consistent with our objective to reduce overall SF₆ emissions, we also consulted on strengthening baseline expectations by requiring DNOs to adopt an SF₆ emissions reduction target alongside a target to reduce the total SF₆ bank held in network equipment. This would align with the wider policy trajectory (including DEFRA's review of F-gas regulations) to phase out SF₆ in the electricity networks.

Summary of consultation responses

- 3.339 In response to our SSMC, three stakeholders supported our approach as drafted, seven supported it in principle but proposed amendments, and one stakeholder preferred an alternative approach.
- 3.340 SSEN-D, Energy UK and BEAMA supported our dual focus on reducing both absolute SF₆ emissions and the total SF₆ bank. They considered this proportionate and argued it would improve transparency, comparability and longer-term accountability. They also noted that focusing only on leakage rates

could mask growth in the overall SF₆ bank as networks expand, and that tracking both absolute emissions and bank size better reflects environmental impact. BEAMA also suggested financial incentives to reduce SF₆ emissions, similar to the Insulation and Interruption Gas (IIG) emissions ODI in RIIO-ET3.

- 3.341 While supporting the direction of travel, NGED, UKPN, SPEN, Sustainability First, Schneider Electric, Hitachi Energy and another stakeholder questioned how the approach would operate in practice during ED3. They generally viewed reducing the SF₆ bank as a suitable long-term objective but highlighted potential constraints in ED3, including asset lives, limited availability of SF₆-free alternatives at certain voltages, supply chain readiness and data limitations. The Greater London Authority also highlighted spatial constraints in urban areas that could limit technology choices. Several of these respondents cautioned that binding or short-term bank-reduction targets could drive inefficient early replacement. Hitachi Energy proposed that decisions should consider whole life environmental impacts (life-cycle assessment) rather than focusing solely on the presence of SF₆.
- 3.342 Several respondents also emphasised the need for clearer expectations and stronger data. SSEN-D, BEAMA, Schneider Electric and another stakeholder considered that clearer regulations, metrics expectations and long-term trajectories are needed to unlock investment and support supply-chain planning, while Energy UK and Hitachi Energy advocated for policy decisions to remain technologically neutral. Sustainability First, NGED, and SPEN emphasised the importance of robust and consistent SF₆ reporting, including clearer definitions of the asset bank, better differentiation of controllable and uncontrollable losses, and improved leakage detection and measurement.
- 3.343 NPg preferred an alternative sequencing, arguing that reducing the total SF₆ bank is premature and should be framed as a longer-term aspiration, with ED3 focusing on minimising leakage through enhanced asset management. NPg supported installing SF₆-free equipment where technically and economically feasible, but suggested monitoring progress through ED3 and targeting more comprehensive implementation in ED4 and beyond. NGED and Sustainability First similarly stressed that leakage reduction and strategic planning should be the immediate priority, with bank reduction requiring a step change beyond ED3.

SSMD decision and rationale

- 3.344 We have decided to strengthen baseline expectations for how DNOs address SF₆ in ED3. We will require DNOs to have a dual focus on reducing absolute SF₆ emissions and improving management of the total SF₆ bank held in on-network equipment to support transparent, comparable plans and drive improvement over time.

- 3.345 Each DNO must set out in its Business Plan and EAP a comprehensive SF₆ strategy for implementation in ED3 and beyond. This must explain how it will manage its SF₆ emissions and inventory, including its approach to leakage risk management, improving monitoring and measurement across all SF₆ equipment, and a longer-term transition away from SF₆. To ensure that performance is credible and comparable, the DNOs must set out how they will treat practical issues (such as top-ups, monitoring sealed units, equipment failures and recovered gas, and the use of virgin and recycled SF₆), and implement end-to-end asset-level tracking of SF₆ inventory and emissions (installation, top-ups, recovery and decommissioning), supported by periodic assurance.
- 3.346 DNOs must include targets covering absolute SF₆ emissions (kg and tCO₂e) and the total SF₆ bank (kg). We recognise that the on-network bank may plateau or even increase due to network growth to enable a low carbon transition, supply chain constraints and technology maturity/availability. However, non-binding targets and trajectories for the SF₆ bank will promote consistency and comparability in this forward-looking area. Both the SF₆ emissions and total bank targets should be presented with clear baselines and trajectories across ED3. Where annual milestones are used, DNOs should explain how these reflect the feasibility and deliverability of actions over the period, recognising that technology readiness may vary by voltage level and that network growth may affect near term inventory levels. DNOs should also report more granular leakage data by voltage level and as a percentage of the on-network bank. We will continue to engage with stakeholders post-SSMD to finalise metrics, methodologies, scope and definitions, including considering supplementary measurements of leakage in addition to top ups.
- 3.347 For new installations and material switchgear interventions, SF₆-free solutions should be the default where commercially available and technically and economically feasible, while recognising there may be specific circumstances where continued SF₆ use remains necessary (eg due to space, safety or technical constraints). For new material switchgear investments and other new SF₆ interventions, we will require DNOs to develop paired options submissions for a primary SF₆-free solution and a secondary SF₆ solution. This submission should include a whole life narrative, comparative trade-offs and an evidence based assessment of lifecycle emissions.
- 3.348 Where a DNO proposes SF₆ use in new installations or material interventions, it must provide clear justification and sufficient supporting evidence to enable Ofgem's engineering and cost assessment, particularly where there is a material cost differential. This includes providing optioneering evidence and relevant cost and engineering assumptions to enable assessment of whether proposals represent efficient and economic choices that deliver long-term consumer

value. This requirement is intended to ensure that procurement decisions are robust, transparent, and aligned with the direction of travel.

- 3.349 We recognise that policy related to SF₆ is evolving and could tighten during the ED3 period, including through the potential phaseout of SF₆. Therefore, DNOs should also demonstrate how their strategy and procurement choices are robust to plausible policy tightening. Where changes in legal requirements materially affect efficient costs or deliverability, we will consider how best to secure efficient and economic outcomes for consumers through ED3 uncertainty mechanisms where relevant.
- 3.350 At this stage, we are not deciding whether to introduce a specific financial incentive or Price Control Deliverable (PCD) for SF₆ in ED3. We will keep the potential use of additional tools under review, including considering targeted measures at Draft Determinations where evidence indicates baseline expectations and reporting are insufficient, where market readiness and data maturity support a more formalised approach, or in response to wider policy developments. We will remain mindful of avoiding inefficient early replacement of assets.

Oil leakage from fluid filled cables (FFC)

SSMC summary

- 3.351 Fluid filled cables (FFCs) use a non-conductive dielectric fluid to improve their insulation and cooling properties, with older designs containing oil. Stakeholders are concerned about the environmental impacts of oil leakage arising from ageing assets, changing ground conditions or third-party damage. In RIIO-ED2, all DNOs committed to reduce oil top-ups through leakage-reduction targets (in percentage and litres) and set out the kilometres of FFC they would replace during the price control.
- 3.352 In the SSMC, we sought views on how to accelerate FFC replacement and reduce oil leakage in ED3, including strengthening baseline expectations through more stretching targets for reducing oil top-ups (litres) and increasing FFC replacement (km). We also asked whether additional measures are needed to hold DNOs to account for delivery against these targets, such as a penalty-only incentive or a specific price control deliverable (PCD).

Summary of consultation responses

- 3.353 In response to our SSMC, Sustainability First supported introducing an FFC PCD, while SSEN-D, SPEN, UKPN and Energy UK supported a mechanism in principle but proposed amendments. NGED and NPg did not support introducing a dedicated FFC mechanism in ED3.

Decision ED3 Sector Specific Methodology Decision

- 3.354 SSEN-D argued that a PCD could ringfence funding and strengthen accountability, but stressed that any approach should be proportionate and retain flexibility to reprioritise delivery towards the highest risk circuits as circumstances change. SPEN supported a targeted, normalised mechanism to increase confidence, and outlined options using leakage and/or removal targets, while emphasising fairness and the need to address inconsistencies in reporting. Energy UK suggested combining the transparency of an ODI-R with a modest financial penalty/reward.
- 3.355 In contrast, NGED considered the Annual Environmental Reports to be the most appropriate means of holding companies to account and opposed a new mechanism, including a penalty-only approach or an FFC PCD. NPg considered a dedicated mechanism potentially premature and counterproductive, citing duplication with existing oversight and a risk of incentivising siloed planning rather than integrated asset decision-making.
- 3.356 Several stakeholders highlighted design risks and mitigations for an FFC mechanism. SPEN, NGED and UKPN emphasised that metrics and targets should reflect different starting positions and avoid windfall penalties/rewards from exogenous events such as third-party damage. UKPN cautioned that externally imposed km removal targets with penalties could distort replacement priorities away from the highest risk locations, while SSEN-D reiterated that any PCD should avoid rigidity and enable reprioritisation to the circuits presenting the greatest risk to the network and environment. Reflecting year-to-year leakage volatility, NGED and SPEN supported greater use of leading indicators such as km reduction or removal, with leakage and top-ups monitored alongside. Energy UK also suggested minimum annual milestones and independent environmental audits to support scrutiny.

SSMD decision and rationale

- 3.357 We have decided to strengthen ED3 baseline expectations to accelerate the removal of FFCs and to reduce the environmental risk they pose while they remain in service.
- 3.358 In their EAPs, DNOs must demonstrate a clear trajectory towards removing all FFCs from their networks. This should be supported by SMART targets for the removal of FFC in ED3, an evidenced baseline and annual milestones to monitor delivery progress against commitments. We will use standardised metrics; kilometres of FFC in service and kilometres removed (reported annually and cumulatively across ED3) as the leading indicators for monitoring progress. DNOs must also set out an evidence-based pathway beyond ED3, with interim targets, to deliver the complete removal of all FFCs. This approach reflects RIIO-ED2 performance evidence that current arrangements are not yet delivering the reductions required.

Decision ED3 Sector Specific Methodology Decision

- 3.359 DNOs must also set out their strategic approach to managing oil pollution risk in ED3, including SMART targets and annual milestones for the volume of fluid used to top up cables as an indicator of risk and impact. We will consider requiring additional EAP reporting on fluid recovered following oil leakages, including volumes recovered and a narrative of incidents and remediation actions, and we will continue to engage with stakeholders post-SSMD to align common definitions, methodologies and the level of granularity needed for effective monitoring of delivery.
- 3.360 We will require DNOs to evidence a dynamic risk-based approach to identifying and prioritising FFC removal and pollution mitigation that aligns with established asset risk management. This should focus efforts on high-risk, high-impact areas, consider factors such as proximity to sensitive areas, history of failures and environmental consequences of failure, and avoid perverse outcomes and siloed planning. DNOs must also demonstrate how FFC activity is treated across environmental and wider asset replacement frameworks to avoid double counting and double funding, including how environmentally driven FFC activity is treated relative to NARM and how prioritisation is demonstrably linked to environmental risk and outcomes.
- 3.361 We will retain reporting and monitoring of the standardised metrics through the DNOs' Annual Environmental Reports and will continue to consider whether FFC specific incentives (including PCDs and penalty only ODI-Fs) are needed to drive delivery. We will decide this through our Draft and Final Determinations.

Undergrounding Use-it or Lose-it Allowance

SSMC summary

- 3.362 In our SSMC, we sought views on whether to allow the flexible use of the existing undergrounding UIOLI allowance to deliver a range of landscape enhancement measures and nature-based solutions to reduce the visual impact more efficiently.

Summary of consultation responses

- 3.363 In response to our SSMC, SSEN-D, NGED, SPEN and Sustainability First supported increasing the flexibility of the UIOLI undergrounding allowance, while NPg and Friends of the Lake District disagreed.
- 3.364 SSEN-D and SPEN noted that nature-based solutions can help address visual impacts, and NGED encouraged a more holistic approach to maximise environmental benefits. SSEN-D considered that nature-based solutions could complement traditional engineering approaches and deliver cost-effective outcomes with wider environmental and social benefits, including biodiversity

enhancement, flood prevention, carbon sequestration and improved community spaces.

- 3.365 NPG did not support extending the allowance scope to wider nature-based solutions or landscape enhancement beyond visual amenity. It argued that undergrounding delivers visual benefits, network resilience benefits and potentially capacity benefits, and can leverage synergies across investment streams, whereas landscape enhancement delivers lower overall benefits to the network and consumers despite costs being socialised. Friends of the Lake District was strongly against more flexible use of the allowance in ED3, stating that rising costs mean the allowance is needed for physical removal of overhead lines and cable laying. It was concerned that funding nature-based solutions, without an increased allowance, would reduce funding for undergrounding and dilute visual amenity and climate resilience benefits.
- 3.366 On scope, NGED, SSEN-D and Friends of the Lake District proposed extending visual amenity funding beyond designated landscapes such as National Parks, National Scenic Areas (Scotland) and National Landscapes (England). SSEN-D suggested developing criteria to identify locally valued non-designated areas (for example, scenic coastal routes or historic viewpoints), and the Greater London Authority asked whether the allowance could apply to new overhead lines creating amenity issues in dense urban areas. SSEN-D also suggested extending the current stakeholder led approach by enabling DNOs to proactively identify and propose projects in designated areas, with subsequent stakeholder engagement for review and approval. It considers this would accelerate delivery where timely intervention could reduce environmental impacts and improve resilience.
- 3.367 Friends of the Lake District supported continued reporting of undergrounding outputs and expenditure through ED3 Annual Environmental Reports and a standardised dashboard.

SSMD decision and rationale

- 3.368 We have decided to increase the flexibility of the undergrounding UIOLI allowance in ED3 so DNOs can deliver landscape enhancement measures that address visual amenity impacts. However, to ensure solutions actively reflect local circumstances and priorities, we will require DNOs to engage constructively with relevant stakeholders through the existing review processes when determining how best to use the allowance. This approach will support measures such as habitat restoration, screening or planting schemes and nature-based solutions, while continuing to enable undergrounding where that remains the best option for stakeholders.
- 3.369 While undergrounding can also deliver resilience and capacity benefits, the primary purpose of this allowance is to facilitate visual amenity improvements.

Decision ED3 Sector Specific Methodology Decision

We support leveraging synergies across investment streams, however, the allowance is not intended as a mechanism to replace overhead lines with underground cables where the primary driver is network resilience or increased capacity. While we acknowledge that these improvements may only be realised locally, the increased flexibility should allow visual amenity benefits to be delivered efficiently in a greater number of cases.

- 3.370 Following the SSMD, we will engage with stakeholders on whether to expand the geographical scope beyond National Parks, Areas of Outstanding Natural Beauty and National Scenic Areas. In RIIO-ET3, we expanded the Landscape Enhancement Initiative UIOLI allowance to include Environmentally Sensitive Areas, Heritage Coastlines, National Nature Reserves and Sites of Specific Scientific Interest. These areas are similarly designated for conservation and can overlap with the current scope. While we recognise visual amenity impacts can arise in non-designated areas, including urban environments, we do not intend to extend the scope beyond landscapes that already have protected status.
- 3.371 We will also engage with stakeholders on the risks and benefits of allowing DNOs to proactively identify and propose projects under the allowance, including how this would interact with other funding streams and how stakeholders' views would be meaningfully reflected in the review of these projects.

Biodiversity

SSMC summary

- 3.372 In our SSMC, while acknowledging the importance of biodiversity and the role DNOs can play in enhancing natural capital, we did not propose to include stretch targets beyond existing statutory requirements in ED3.
- 3.373 This position was in alignment with the approach taken in other sectors under RIIO-3, with the requirement to deliver Biodiversity Net Gain for projects requiring planning consent already a step change in environmental outcomes compared to RIIO-ED2. We also considered it challenging to determine what level of environmental improvement beyond legislative requirements would be considered proportionate or represent good value for consumers.

Summary of consultation responses

- 3.374 Following our SSMC, we received six responses on this issue. One stakeholder supported our proposals in principle, three disagreed, and two provided additional feedback.
- 3.375 Energy UK supported our proposal not to require biodiversity stretch targets in ED3 EAPs, provided this does not prevent voluntary targets being adopted where stakeholders request them.

- 3.376 SSEN-D and SPEN INZAC considered our approach regressive and insufficiently reflective of the role DNOs could play in addressing biodiversity loss. They also argued it could become increasingly misaligned with the integrated approaches to sustainability expected under emerging UK and international frameworks. Sustainability First raised concerns that framing biodiversity actions primarily around legal compliance could underuse the place-based nature of networks and limit opportunities for wider environmental benefit.
- 3.377 SPEN suggested we should encourage outperformance beyond minimum compliance, while NPg questioned the consistency of our approach given our proposals to increase flexibility of the undergrounding UIOLI allowance.

SSMD decision and rationale

- 3.378 While we continue to acknowledge the importance of biodiversity, for the reasons set out in Paragraph 3.373, we have decided to retain our SSMC position to not introduce stretch targets beyond statutory requirements. We consider that it is for UK, devolved and local governments to set statutory expectations for biodiversity, and we are not well placed to determine what would be best practice beyond these legislative requirements.
- 3.379 We note that our position does not prevent the DNOs using other funding sources, including private foundations, to undertake additional biodiversity initiatives which go beyond statutory requirements.

Annual Environmental Reports (AER)

SSMC summary

- 3.380 Annual Environmental Reports (AERs) are a core element of the environmental framework, intended to provide transparency, enable stakeholder scrutiny and act as a reputational incentive for DNOs' environmental performance.
- 3.381 In our SSMC, we proposed to strengthen delivery and accountability by introducing an Ofgem led annual review of AERs to provide independent scrutiny, increase visibility of DNOs' implementation of their EAPs, and enhance the reputational incentive. Furthermore, we considered whether PCDs should apply where DNOs put forward high-value environmental proposals in their EAPs.
- 3.382 We also proposed standardised dashboards for each impact area to improve usability and comparability of delivery by presenting key metrics in a consistent format and considered sector-wide synthesis of AER findings (for example through summary reports or league tables) to make AER outputs more accessible to stakeholders.

Summary of consultation responses

- 3.383 In response to our SSMC, four stakeholders supported strengthening the AERs and using PCDs as proposed. A further five respondents supported the direction of travel in principle, but sought changes to the scope, implementation role and design of these measures.
- 3.384 Stakeholders generally supported strengthening the AER as the primary mechanism for transparency and accountability of EAP delivery, including an Ofgem led annual review and more standardised reporting to improve comparability. NGED, SPEN and Friends of the Lake District supported using a performance dashboard to facilitate accountability and comparison across companies, and SPEN also proposed a short summary report for non-technical audiences. SSEN-D recommended consolidating environmental reporting requirements under the AER to reduce duplication. Sustainability First strongly supported a more active Ofgem role in AER review, stating that stakeholders are not resourced to interrogate cross-company performance consistently, and that summary reports and league tables would help focus senior attention and enable more effective challenge.
- 3.385 Views on environmental PCDs were more mixed and centred on proportionality and flexibility. SSEN-D and SPEN supported selective, targeted PCD use and argued PCDs should be limited to material, discrete projects (with a materiality threshold), and avoid undue burden, restricting flexibility, or penalising factors outside a DNO's control. Energy UK supported using the AERs as the central evidence base for tracking PCD linked commitments and suggested that embedding EAP milestones within PCDs could strengthen delivery accountability without adding unnecessary complexity.
- 3.386 By contrast, NPg and NGED did not support PCDs, considering that the AERs sufficiently enabled scrutiny and comparability of DNO delivery. Some respondents also highlighted potential interactions of environmental PCDs with other mechanisms, suggesting these could undermine integrated planning and NARM fungibility. UKPN cautioned that ring fencing allowances could reduce DNOs' ability to innovate and respond efficiently during ED3.

SSMD decision and rationale

- 3.387 We have decided to retain the requirement for DNOs to publish AERs as a core element of the ED3 environmental framework. The AER will remain the primary mechanism to provide transparency, enable stakeholder scrutiny and create a reputational incentive for DNO environmental performance.
- 3.388 We will review DNOs' ED3 AER submissions to strengthen delivery accountability and improve the effectiveness of the reputational incentive. We recognise that, while AERs enable transparency, comparing performance across DNOs can be challenging and resource intensive. Our review will provide

independent scrutiny and increase the visibility of the DNOs' delivery against EAP commitments across the sector. We will consider how this work aligns with, or is incorporated into, wider Ofgem oversight of ED3 (including the Annual Reports). We will also consider how we use our review to provide additional transparency for stakeholders, and to incentivise and respond to DNOs' delivery performance during the ED3 period.

- 3.389 To improve accessibility and comparability, we will introduce standardised performance dashboards. These will support clearer assessment of progress and cross-DNO comparison by presenting actual performance against EAP commitments and trajectories against milestones, enabling sector wide monitoring (including identifying outliers and areas for improvement), and making AER information easier for stakeholders to interpret. We will consider the use of leading indicators and relative metrics to strengthen comparability further, and we will continue to engage with stakeholders post-SSMD on the detailed design of the dashboards, building on the common EAP metrics.
- 3.390 We will also engage with stakeholders post-SSMD on whether any additional outputs (such as an annual summary report and/or comparative performance tables) are needed to further facilitate scrutiny and comparison, and whether these would add material value beyond the Ofgem led annual review of AERs, performance dashboards, and Ofgem's Annual Reports.
- 3.391 Finally, we have decided that Price Control Deliverables (PCDs) may be used selectively to strengthen accountability for high-value environmental proposals (over £15m) included in DNOs' EAPs, where proposals are sufficiently discrete and measurable. In response to concerns about rigidity, we consider this approach to be targeted and proportionate, using PCDs only where they clearly add value beyond the AER based reputational incentive. Where PCDs are used, we will seek to minimise reporting burden through standardised reporting approaches where possible. Where we decide to use PCDs, these will be set out in our Draft and Final Determinations.

Consumer voice/research

- 3.392 The consumer voice is an essential part of the ED3 process and for the decision-making process. Following from the ED3 Framework Decision,⁴⁰ we set out three strands to consumer research in SSMC:
- guidance on consumer research commissioned by companies when developing their business plans
 - identify areas of collaborative research where DNOs can commission research jointly to ensure consistency in key areas of interest

⁴⁰ [ED3-Framework-Decision.pdf](#)

- commission our own enduring research programme to inform decision-making and provide consumer insights on key trade-offs

SSMC summary

- 3.393 In the SSMC, we provided draft guidance on consumer research, which set out how we expect consumer research to be carried out, how it should be evidenced and how we expect research to be presented in the business plans.
- 3.394 To increase transparency in this process, we proposed DNOs should submit a research log alongside their business plans where they demonstrate why the research topic was chosen, a topline of findings, how they have engaged stakeholders such as the ISGs and how findings have influenced the development of the business plans. We proposed this guidance to form part of the Business Plan Guidance (BPG).

Summary of consultation responses

- 3.395 We received 12 responses to this question and all stakeholders agreed with the proposed approach and welcomed early sight of the draft guidance. There was consensus on the guidance, but the responses included details on how it could provide further clarity.
- 3.396 All DNOs proposed further clarity on collaborative research and stated both collaborative research and Ofgem-led research should be clearly scoped and developed with DNOs to avoid duplication. One DNO stated this guidance should align with the BPG and called for further clarification through this process.
- 3.397 Other stakeholders emphasised the importance of building on existing research as a starting point and demonstrating value for money. There was also agreement that research should be transparent and accessible to enable stakeholder scrutiny. Citizens Advice agreed with the driver for collaborative research, but called for this to be the main approach, rather than individual research, to ensure cost efficiency and to avoid duplication.

SSMD decision and rationale

- 3.398 We have included an updated version of the consumer research guidance in the BPG.⁴¹ We think this guidance strikes the right balance between being sufficiently prescriptive on methods and techniques, how the research is commissioned and how the findings from the research have impacted the decision-making and business plan development. We recognised some points could be made clearer and we have made some further amendments where

⁴¹ BPG Chapter 2 and Appendix 1

there is a need and based on stakeholder feedback. We have also provided a Research Log to be completed by DNOs and submitted alongside their Business Plans, which will be used to set out the evidence detailed in the guidance.

- 3.399 On collaborative research, we understand the importance of DNOs working together where possible to maintain consistency in approach and ensure cost efficiencies. Where there are areas where either all or some DNOs intend to conduct research, we think it would be appropriate for DNOs to commission this jointly. However, we also recognise the role that consumer research has in informing the development of individual business plans. We therefore consider it appropriate that DNOs firstly consider research areas on a regional level and share this with other DNOs as appropriate. Should there be areas that overlap, we expect DNOs to commission this jointly.

Ofgem panel research

- 3.400 Since our Framework Decision, we have set up a Ofgem consumer panel consisting of 61 members of the public to support our decision-making going forward and to provide a richer, more inclusive, and more informed consumer insight.
- 3.401 Wave 1 focused on increasing panellists' knowledge about the energy system and to provide a common understanding, to enable the panellist to set out clear principles for investment in ED3. The full report, titled Ofgem Electricity Distribution Price Control (ED3) Consumer Panel, is being published on 21 May 2026 on the Ofgem website.
- 3.402 Following the research piece undertaken in wave 1, we will identify specific areas of ED3 that could form part of wave 2. We will ensure this research complements research commissioned by the DNOs collaboratively and avoid duplication where possible. This will further ensure that the consumer voice is embedded throughout ED3.

Enhanced stakeholder engagement

- 3.403 The Independent Stakeholder Groups (ISGs) will be an important stakeholder engagement forum for DNOs and will provide challenge to DNOs both in developing their business plan and throughout the price control.

SSMC summary

- 3.404 In the SSMC we set out the proposed approach to stakeholder engagement and proposed to be more specific about the membership and scope of the Terms of Reference (ToR). We also set out and consulted on the guidance on ISGs. This is

largely based on the guidance set out in the RIIO-3 BPG,⁴² with some further additions for ED3.

Summary of consultation responses

- 3.405 We received 15 responses to the question on the ISG guidance, and most stakeholders (12 responses) welcomed early sight of the guidance and largely agreed on the content. None of the responses disagreed with the guidance, but all stakeholders proposed some amendments or further clarifications to the wording.
- 3.406 All DNOs agreed there should be consistency in approach to ISGs but called for further clarification on scope and expected outputs of the ISG. NGED proposed a governance model where each DNO will have a dedicated ED2 Monitoring Group (ED2MG) and an ED3 ISG to focus on development of the business plan, with the ED2MG feeding into the ED3 ISG. This is to avoid the risk of the ISG diluting their ability to provide meaningful challenge by over-stretching their remit.
- 3.407 SPEN queried how a consumer champion differs from the core purpose of the ISG and instead suggested the ISG ensure the DNO engages widely with key stakeholders, seeks input from statutory bodies and that the membership should include expertise in customer insight, needs, expectation and engagement, and could be supplemented by a special advisor as needed.
- 3.408 Other stakeholders raised the importance of transparency, both in how the ISGs are appointed and in the information that is made available. Citizens Advice stated that ISGs should not be the only source of scrutiny and the overall level of transparency and consistency should increase, especially relating to bill impact and value for money, which should include baseline funding aimed to address consumer vulnerability. They also called for Ofgem to consider independent national performance panels, established prior to ED3, as part of the decision-making process and have open hearings to be used more widely.

SSMD decision and rationale

- 3.409 The guidance on ISGs has been built on the guidance set out in the RIIO-3 BPG, with some added elements and clarifications for ED3. We have taken this approach as we consider it's important to maintain consistency in approach to ISGs across sectors. The guidance we set out in the SSMC will therefore form part of the ED3 BPG, but following feedback from stakeholders, we have made some further amendments for clarity where needed.

⁴² [RIIO-3 Business Plan Guidance.pdf](#)

- 3.410 Several stakeholders raised the scope and remit of the ISG. Whilst we think the current guidance is sufficiently balanced between setting some boundaries on the scope and remit of the ISG and providing flexibility on where the companies and the ISG could agree an approach, we recognise the enduring role of the ISG is new both in RIIO-3 and ED3. We therefore want to work with the ISGs and other stakeholders on how we can best provide clarity on what the ISG's enduring role would look like, including what minimum data and metrics the ISG should receive. We also recognise the significance of the Warm Homes Plan and a potential expanded role for DNOs in energy efficiency and LCT. In this process, we may consider ISGs having on-going challenge, scrutiny and monitoring roles to support the energy transition.
- 3.411 Following feedback from stakeholders, we have also decided to soften the requirement to have a consumer champion as a member on the ISGs, especially due to potentially limited resources. We do think it is important for statutory consumer bodies to have the opportunity to engage with the ISGs and have therefore stated that ISGs should seek to facilitate this engagement where this is requested.

Accountability for consumer outcomes

- 3.412 In setting out and delivering their business plans, it is important that DNOs have regard for the wider value created by their activities and the investments that they make. This is especially important with increased network investment to support electrification.
- 3.413 In the ED3 Framework Decision, we said we would build on established mechanisms in RIIO-ED2 to ensure that DNO commitments, delivery progress and decisions are communicated consistently and transparently. This will support DNOs in demonstrating the wider value they provide in a more comparative way and allow stakeholders to better hold companies to account. It will also ensure DNO priorities and decisions are aligned with the wider ED3 consumer outcomes and increase transparency, where commitments go beyond regulatory requirements.

SSMC summary

- 3.414 In the SSMC, we consulted on two strands of work in this area: i) the development of the scope and guidance in respect of Standard Licence Condition 50 (SLC 50), which relates to business plan commitment reporting; and ii) the development of a Consumer Value Framework (CVF).
- 3.415 We proposed to retain SLC 50 for ED3, requiring DNOs to submit an annual report against their business plan commitments. However, we also proposed to update the guidance to ensure further transparency and accountability for wider outcomes and key consumer outcomes.

3.416 Leading up to SSMC, we engaged with stakeholders on the development of a CVF and we decided to consult on a set of principles that could be used as the foundations for any further work in this area. These are listed below:

- the purpose of the Consumer Value Framework (CVF) would be to enable Ofgem and DNOs to provide a consistent and transparent approach to communicating the value created by DNOs' business plans in a way that is understandable to consumers and wider stakeholders
- the CVF should link the value created by DNOs to the ED3 Consumer Outcomes and Ofgem's Consumer Interest Framework
- the CVF should explain the potential value created by DNO business plan proposals in a consistent way across the sector, using simple common metrics and then track the delivery of this value in period
- the CVF should be proportionate in terms of complexity and application; and consistent with its purpose and uses in its evolution and application
- the CVF should not be an entirely new and unique approach but build on existing tools used in the electricity distribution and/or other sectors, with appropriate adaptation and/or enhancement

Summary of consultation responses

SLC 50 Business Plan Commitment Reporting

3.417 On the question of whether we should retain the SLC 50 business plan commitment, we received 10 responses and all stakeholders agreed we should retain the annual reporting requirement against business plan commitments.

3.418 Regarding the evolution of supporting guidance, responses largely related to the consistency in reporting and that the guidance therefore should be updated to ensure reports are submitted in a more standardised way and that it should include information that will allow stakeholders to track performance in a more transparent way.

3.419 DNOs provided different views on how the guidance could be adapted for ED3. SSEN-D highlighted the importance of the reports including information stakeholders need to track performance and agreed consistency in format could support this, but that there should also be space to include narrative from DNOs. They further said that the strategies and reports for ED3 should be reviewed to avoid duplication. NPg also thought it is important for the reports to be comparable, whilst allowing space for regional reporting. They also stated reporting efforts should be proportionate. Furthermore, they said there should be a clear distinction between mandatory and voluntary commitments.

3.420 SPEN also focused on the importance of ensuring the reporting requirements are streamlined, to avoid unnecessary regulatory burden, and NGED suggested

clarifying the RAG rating methodology to facilitate more consistent ratings for the delivery of the commitments. They also thought this provides an opportunity for greater alignment in using common metrics as a basis for reporting performance, however cautioned against this being too prescriptive.

- 3.421 UKPN stated there should be greater clarity on the commitments and any requirements within the Business Plan Incentive (BPI). They specifically raised that if commitments are tied to rewards in the BPI, there should be greater clarity on rewards proportionate to ambition of the commitment, benchmarking across DNOs, calibration of commitments, if a commitment is achieved ahead of schedule and assurance on progress. NPg also raised that the guidance should reflect any future linkages to rewards under the BPI. NGED stated there should be a process for updating the commitments between business plan submission and delivery of commitments.
- 3.422 Citizens Advice stated the reports should include spending and bill impact alongside commitments to effectively evaluate consumer outcomes. They further stated that Ofgem should have a greater role in bringing these reports together and regularly publish comparison between DNOs. One industry body stated there should be a common digital template and dashboard for publishing reports in a more consistent, transparent and comparable way.

Consumer Value Framework

- 3.423 For this question, we received 12 responses. Nine stakeholders agreed we should proceed with the development of a CVF and three remained neutral. No stakeholders disagreed with the SSMC position but raised some concerns on risks.
- 3.424 All DNOs agreed with the principles we consulted on and stated a CVF must be clear, consistent, meaningful and credible. SSEN-D highlighted the risks of a CVF becoming too complex, challenges related to monitoring and inconsistencies in how value is defined. UKPN also built on this point, stating that the development of a CVF should first establish the purpose and problem to be solved, the intended audience and how consumers will inform definitions of value.
- 3.425 Whilst the DNOs in general were cautious about a CVF being used for assessing business plans, NGED proposed going further, stating that a CVF should also be used as a tool in decision-making and support choices on investment and the regulatory assessment. NGED also submitted their proposals for a CVF as part of the early proposals process.
- 3.426 Other stakeholders varied in their support of a CVF. One GDN stated it should be expanded to other sectors. One industry body highlighted the benefit of a CVF in bridging a gap in communication but is dependent on consensus among DNOs and added that any additional complexity is likely to reduce its value. Another

industry body stated a CVF should have a role in strategic planning and include benefits, social value and resilience outcomes, and therefore suggested it should adopt a whole-system perspective. One consumer group further stated that a CVF should include an impact assessment to identify how different vulnerable groups could be impacted.

- 3.427 For the stakeholders that remained neutral, they overall agreed with the purpose of a CVF but remained cautious about the implementation. Citizens Advice stated that efforts and resources should first focus on current reporting arrangements, improving regulatory mechanisms and the communication of DNO performance. Two ISGs also remained cautious, stating the benefits for consumers were unclear and that the current principles lack clarity on what value a CVF is likely to provide and if it will include metrics that matter to consumers.

SSMD decision and rationale

SLC 50

- 3.428 We will retain SLC 50 in ED3 and ensure the requirement for DNOs to report on commitments set out in the business plans is updated and compatible with ED3 priorities. Following on from this, we will update the SLC 50 guidance document to ensure the content of these reports are more consistent, transparent and enables stakeholders to hold companies to account in a more comparable way. This may involve introducing greater consistency in the reporting of performance against certain regulatory measures and incentives as well as wider commitments.
- 3.429 This requirement will make it easier for stakeholders to understand DNO performance across key metrics and track this performance year on year. It will also provide evidence of where commitments go beyond regulatory requirements or price control mechanisms. It should be noted here that we will not explicitly incentivise stretching ‘commitments’ (see further details on our BPI decision at Chapter 7). However, in setting out their strategies across a variety of different areas, we will still expect DNOs to establish metrics to determine the effectiveness of their actions, as well as firm commitments to implement or undertake specified activities to effectively deliver their strategies.

CVF

- 3.430 We think there is likely to be merit in introducing a framework for DNOs to articulate the wider value they deliver in a more consistent and standardised way. We will therefore ask the DNOs to proceed with the development of a single, consistent CVF for future price controls, to be developed during the ED3 price control, using the principles consulted on in SSMC (and set out in paragraph 3.416 above).

3.431 We expect the next phase to include development of an outline framework, which can be tested with stakeholders during ED3. This piece of work should be progressed by DNOs collaboratively, potentially through the Energy Networks Association (ENA). Ofgem should be consulted at key stages of the process and input will need to be sought in a structured way throughout, from a variety of stakeholders, including for example ISGs, Citizens Advice and industry bodies.

Common methodology for economic growth

3.432 Ofgem has a statutory duty to have regard to the promotion of sustainable economic growth.⁴³ This is particularly relevant in the context of the substantial increase in network investment anticipated during ED3 to support electrification. Following our call for early proposals at SSMC, SPEN submitted a proposal to introduce a common methodology for assessing the impact of DNO business plans on wider economic growth.⁴⁴

3.433 We have asked SPEN to work collaboratively with the other DNOs to develop and agree a common methodology to articulate how ED3 business plans support sustainable economic growth. This approach should be agreed between the DNOs and with Ofgem prior to business plan submission, such that the DNOs can then implement it and report on a common basis in their business plans. In developing the methodology, we expect the DNOs to follow the guidance set out in Chapter 9 of the ED3 business plan guidance.

⁴³ The Growth Duty (Economic Growth (Regulatory Functions) (Amendment) Order 2024) means that we must have regard to the desirability of promoting economic growth. Government has also recently indicated its intention to make the promotion of economic growth itself one of three principal duties: [The Ofgem Review final report | Department for Energy Security and Net Zero | April 2026](#).

⁴⁴ SPEN's proposal is to build on the methodology used to assess the economic impact of their RIIO-ET3 business plan.

4. Smarter networks

This chapter sets out our methodology decisions on how we will support the development of a smarter and more efficient electricity distribution system in ED3 through three core areas: data and digitalisation, innovation and an evolving Distribution System Operator (DSO) function.

To support effective digitalisation, we will be requiring DNOs to develop relevant strategic outcomes, participate in the Data Sharing Infrastructure (DSI) and undertake a targeted approach to enhancing asset visibility. We have decided that interoperability and coordination activity will be led by the domain coordinators established under the Energy Digitalisation Framework. We have also set out our approach to strengthening delivery accountability and improving reporting on the use of AI.

On innovation, we have decided to maintain the current eligibility criteria for the Network Innovation Allowance (NIA) and outlined our approach to assessing and setting NIA allowances. We will also be extending the deployment fund introduced in RIIO-3 to DNOs to ensure successful innovation that delivers value to consumers can be deployed at scale.

For the DSO role, we have decided to adopt a more balanced approach between the network reinforcement and the use of flexibility. We will be encouraging companies to use flexibility to optimise the capacity of existing network assets ahead of investing in physical network reinforcement. We have also confirmed our expectations for DSOs to manage voltage and optimise losses on their networks. Finally, we have outlined our aims for the DSO incentive framework, which will focus on rewarding key outcomes that deliver value for consumers.

SSMC questions

- Q51. Do you agree with our proposed approach on all five themes? Why?
- Q52. Do you agree with the need and role of the independent expert panel on interoperability? Why?
- Q53. Do you agree that DSAPs should include outcome-linked digital spend? Why?
- Q54. Do you agree that we should maintain the current NIA Eligibility Criteria? Why?
- Q55. Do you agree with our suggested approach for assessing and setting NIA? Why?
- Q56. Do you have examples of projects that weren't able to deploy in RIIO-ED2 due to the lack of funding, or that you anticipate wouldn't be able to deploy in ED3 without the extension of the Deployment Fund to cover DNOs in ED3?
- Q57. Do you perceive a lack of coordination and direction as an issue for the deployment of innovation in the ED sector, and do you think a similar intervention to the TID is needed to resolve this?
- Q58. Do you agree that further incentivisation is needed within the price control for innovation that doesn't primarily benefit networks? Do you have evidence to support this?

- Q59. Do you have any feedback on what kind of mechanism would best provide this incentive, while ensuring that networks are only rewarded for actual delivery of consumer or system benefit?
- Q60. Do you agree with our proposed scope for the DSO's role in network planning for ED3, including leading long-term integrated development planning and enhancing forecasting? How should DSOs ensure that future iterations of these plans align with emerging strategic inputs such as the Regional Energy Strategic Plan (RESP) and Strategic Spatial Energy Plan (SSEP) when they become available?
- Q61. How should DSOs best coordinate with other parties (eg NESO, local authorities, iDNOs, gas networks) to deliver whole-system outcomes through network planning? Are there specific governance or data-sharing arrangements that should be strengthened?
- Q62. What additional data, digital tools, or visibility improvements are needed to enable DSOs to deliver proactive, spatially targeted network planning in ED3? Please provide examples of gaps or best practices.
- Q63. How should DSOs incorporate flexibility services and connection process improvements into their network planning approach to ensure timely, efficient, and predictable connections? Should this be incentivised, and if so, how?
- Q64. Do you agree that changes are required to the CEM tool to implement our proposed approach in ED3? Are any other changes needed?
- Q65. How can we best ensure that flexible connections aren't deployed at the expense of network reinforcement?
- Q66. How can we best ensure that DER/CER are not prevented from accessing wider flexibility markets due to the use of ANM or lack of NESO-DSO coordination?
- Q67. Are further incentives required to incentive and encourage the use of flexibility in line with our approach for ED3?
- Q68. Do you agree with the proposed voltage management responsibilities, for DSOs? Are there any aspects you disagree with, or any additional responsibilities we should consider?
- Q69. In your view what would be appropriate metrics or KPIs by which the success of delivery of these responsibilities could be measured? For each of these metrics or KPIs, should this target be codified in a licence condition or otherwise incentivised?
- Q70. How can we support DSOs in getting access to useful 3rd party voltage data from assets such as EV chargers?
- Q71. Do you support our proposal to include the reduction of reactive power injection on the transmission from distribution networks? Are there additional implications of this on the operation of distribution networks we should consider?
- Q72. For each of the options outlined for Providing Flexibility what are the advantages and disadvantages, and which would be your preferred option, including any that we have not considered?

- Q73. Do you have any comments on the proposal for the creation of a new incentive for the provision of flexibility through demand reduction?
- Q74. Do you support the requirement for a published voltage management strategy from each DSO, with an annual reporting requirement?
- Q75. Do you agree with the proposed working-level definition of loss optimisation as a cost-based, system-wide approach to managing distribution losses?
- Q76. Do you support Ofgem's focus on loss optimisation over loss reduction in ED3? Why?
- Q77. How should we embed loss optimisation into ED3 and what are some of the challenges with this?
- Q78. What mechanisms should be used to monitor and assess DNOs' impact on network losses, and how can loss optimisation be embedded into planning, operational, and investment decisions under ED3?
- Q79. Do you believe there is a case for introducing financial or discretionary incentives to encourage active loss optimisation by DSOs? If so, what form should these incentives take (eg direct financial, reputational, discretionary rewards), and what risks or complexities should be considered?
- Q80. Are there additional strategic or policy measures you believe should be considered in ED3 to manage losses?
- Q81. Do you agree that the proposed aims for the DSO incentive framework appropriately reflect the core functional areas for ED3 (flexibility services, network planning, voltage and loss management)? Are there any additional priority areas that should be included, and how should these be measured?
- Q82. How should the incentive framework evolve to reflect the DSO's more proactive role in network planning, operational use of flexibility, flexibility market development, and whole-system coordination?
- Q83. Are the current parameters (Stakeholder Satisfaction Survey and Performance Panel) an effective way of measuring DSO performance? How do you view the role of Regularly Reported Evidence (RRE) in complementing these assessments?
- Q84. How can the DSO Incentive be designed to complement, and not duplicate, other mechanisms such as the Connections Incentive, BMCS and the Interruptions Incentive Scheme?

Data and digitalisation

SSMC summary

- 4.1 In the SSMC we proposed five core outcome-driven objectives which built upon initiatives we introduced in RIIO-ED2: strategic outcomes and internal capability, Data Sharing Infrastructure (DSI) participation, interoperability and coordination, ethical and proportional use of AI and asset visibility and dynamic data.

Decision ED3 Sector Specific Methodology Decision

- 4.2 Strategic outcomes and internal capability: we proposed that DNOs should set a number of strategic outcomes and link each digital investment in their business plans to one or more of these outcomes. We also asked DNOs to report progress against these outcomes in their Digitalisation Strategy and Action Plans (DSAPs) and link digital spend to measurable benefits.
- 4.3 DSI participation: we indicated our intention to consult on mandatory use and participation in the DSI via a licence requirement in late 2026. We also asked DNOs to make appropriate investments to utilise the DSI effectively in their ED3 business plans.
- 4.4 Interoperability and coordination: we proposed to establish an advisory panel which would identify priority datasets where interoperability would create the greatest benefits and work alongside DNOs and NESO on implementation. We emphasised that the membership of the panel should be independent, varied and expert.
- 4.5 Ethical and proportional use of AI: we proposed to require DNOs to provide continuous reporting on their AI use in their business plans and DSAPs. This would include their overarching AI strategy and governance measures, and use case information like purpose, risk and expected or realised benefits.
- 4.6 Asset visibility and dynamic data: we proposed that DNOs should provide a baseline of their current static and dynamic asset visibility across key asset classes. We also proposed that they should develop a strategy for improving asset visibility and report on the progress of this strategy in subsequent DSAPs. For dynamic visibility, we asked DNOs to justify a targeted asset visibility strategy through cost-benefit analysis rather than taking a blanket approach. We also proposed that these actions should fully integrate with Flexibility Market Asset Registration (FMAR) requirements.
- 4.7 Based on feedback from stakeholders across all five themes, we placed greater emphasis in the SSMC on qualitative and outcome-focused reporting. This approach was intended to minimise the risk of compliance-driven “box-ticking” exercises and to ensure that DNOs demonstrated the value and impact of their activities. It also provided more flexibility for DNOs to approach the objectives with what they consider the most effective strategies for delivering the objectives.

Summary of consultation responses

Strategic outcomes and internal capability

- 4.8 20 of 21 responses to this theme were supportive or broadly supportive. Stakeholders widely agreed that linking digital spend to outcomes was essential to ensure transparency and deliver customer value and agreed with our position on internal capability building.

- 4.9 The most common feedback theme was support for greater standardisation and clearer expectations in DNO reporting. Four stakeholders (EA Technology, UKPN, Smarter Grid Solutions, SPEN) supported the development of a consistent industry methodology, with three of them (excluding SPEN) recommending an endorsed template for DSAPs or business plans. Five stakeholders (NPg ISG, Energy UK, Ohme, SPEN and NESO) also suggested clearer expectations on DNO reporting in a variety of areas including DSO responsibilities, post-implementation reviews and linking digitalisation benefits to whole-system cost efficiency.
- 4.10 Three DNOs (SPEN, NPg, SSEN-D) raised concerns about linking digital spend to measurable outcomes, noting that many digital benefits are intangible, spread across initiatives or realised beyond a single price control period. They recommended allowing non-quantifiable outcomes in DSAPs and assessing outcomes holistically at portfolio level.
- 4.11 Five stakeholders (Smarter Grid Solutions, SPEN, UKPN, NPg, SSEN-D), provided feedback on our approach to internal capability building to note that not all specialist or solution-specific digital skills are cost effective to maintain in-house. They highlighted the need for the flexibility to use external expertise and adopt blended resourcing models.

DSI participation

- 4.12 The feedback showed strong support for the DSI as a platform and for our proposal to consult on a licence condition. 20 of 21 responses to this theme, including all five DNOs, supported or broadly supported our SSMC approach. Stakeholders noted that the proposed requirements would accelerate the shift towards more standardised and reliable mechanisms that would enable the sector to plan, operate and invest more effectively.
- 4.13 SPEN and NESO gave feedback on the importance of co-ordination and early engagement with DNOs, TOs, other licensees in DSI development and encouraged proactive engagement within the sector and across other sectors. NPg's response similarly stressed the importance of regulatory co-ordination and a "DSI-first" approach to avoid duplication with other initiatives.
- 4.14 We also received various suggestions concerning the scope and design of the DSI and its surrounding governance. This included encouraging a focus on real-time operational data, adopting a digital spine approach, addressing contractual barriers, and ensuring that governance does not compromise pace or agility.

Interoperability and co-ordination

- 4.15 There was general consensus on the need for greater collaboration within industry to improve the interoperability of data and 18 of 22 responses to this theme supported or broadly supported our overall approach. However, there

was a significant amount of scepticism on the potential effectiveness of a new advisory panel.

- 4.16 Nine stakeholders highlighted the complexity and fragmentation of the energy system's digitalisation governance landscape. Of these, seven stakeholders broadly supported our approach but highlighted the need for wider architectural alignment. The remaining respondents cautioned that a new panel could introduce additional layers of governance which could delay rather than accelerate delivery. Four of these stakeholders (Elexon, NESO, Smarter Grid Solutions, SSEN-D) also supported a stronger mandate or new licence obligation for the panel, with Elexon arguing that advisory bodies risk becoming "talking shops" which could delay critical decisions.
- 4.17 There was also significant support for ensuring the panel has wide, impartial and expert membership with six responses explicitly endorsing this element of our proposal. They also made suggestions for representation from across the sector including DNO and TO expertise, innovators, and individuals with experience implementing other interoperability mechanisms such as CIM.
- 4.18 Finally, there was varied feedback which included recommendations to ensure the panel itself maintained the right focus and scope on areas where it would deliver positive outcomes for industry. Examples included setting realistic timelines, progress monitoring and prioritising real-time operational datasets.

Ethical and proportional use of AI

- 4.19 We received positive feedback on our proposals, with 17 of 18 responses to this objective supporting or broadly supporting our approach. They widely supported Ofgem's Ethical AI Guidance, recognising it as providing a strong and balanced framework for setting DNO responsibility. Seven stakeholders, including all DNOs, explicitly noted that our proposals struck an appropriate balance between fostering innovation and managing risks.
- 4.20 Five stakeholders (Citizens Advice, Greater London Authority, Smarter Grid Solutions, NPg, SPEN) made recommendations for areas which they believe require greater expectation setting. This included the use of sensitive or commercial information and DNOs' use of AI in customer service.
- 4.21 Energy Geeks strongly disagreed with our approach, stating that our proposals widely underestimated the transformative potential of AI. They considered that DNOs should use AI not just for forecasting, but for dynamic and automated network reconfiguration and to break down operational silos.

Asset visibility and dynamic data

- 4.22 We received broad support for our approach from 17 of 18 respondents. Four stakeholders (UKPN, SPEN, SSEN-D, NPg) specifically endorsed the targeted, cost-benefit approach to dynamic data over blanket visibility, with UKPN and

NPg highlighting that this approach aligns with their existing asset visibility decision-making process.

- 4.23 A common theme across the responses was the need for greater harmonisation and collaboration across the energy sector. Five stakeholders (UKPN, NESO, NPg, SPEN, Elexon) emphasised the importance of co-ordination between stakeholders including DNOs, NESO, the Market Facilitator, Ofgem and DESNZ. However, views varied on what harmonisation should entail and how it should be implemented.
- 4.24 Three stakeholders (UKPN, SPEN, SSEN-D) also noted that information and sharing protocols outside DNOs' control were limiting the ability to gain full visibility. They recommended that wider legislative and sector changes were required to enable compliance with this objective and to more widely maximise the value of digitalisation.

SSMD decision and rationale

- 4.25 In the SSMC we proposed five outcome-driven objectives for data and digitalisation, building on our RIIO-ED2 framework. Consultation responses broadly supported our approach and the continued focus on outcomes, transparency and consumer value. As a result, we are broadly continuing with our proposals on four of the five objectives, while making material changes to our approach to interoperability and coordination.
- 4.26 Since publication of the SSMC, DESNZ and Ofgem jointly published the Energy Digitalisation Framework in March 2026.⁴⁵ The purpose of the Framework is to increase the coordination of digitalisation activities in the energy sector. The Framework introduces a data domain model under which related groups of energy data are organised into defined categories, each overseen by a designated domain coordinator. Domain coordinators are responsible for providing coherence within their domain through promoting common standards, ensuring data quality and supporting alignment between individual initiatives and the wider energy sector. DNOs will continue to deliver their own digitalisation initiatives, but will be expected to align these with the relevant data domains, standards and overall direction developed by each domain coordinator. We will also continue to work alongside the coordinators and DNOs to use the Framework to inform our regulatory approach. At this stage, the Framework has informed the revised approach to the interoperability and coordination objective, which is discussed in more detail below.
- 4.27 We are also expanding and clarifying our requirements for implementation and delivery. This includes clarification on how licensees should define and evidence outputs and benefits of digitalisation initiatives, the purpose and scope of DSAPs

⁴⁵ [Energy digitalisation framework: a vision for a coordinated and connected energy system - GOV.UK](#)

and the practical requirements for asset visibility and dynamic data. We are also considering the introduction of a reputational incentive to ensure greater transparency and consistency around the reporting of outputs, further supporting our focus on delivery.

- 4.28 In line with the shift towards enhanced capability, transparency, coordination and interoperability, we also recognise the need to modernise the way periodic regulatory data is submitted to Ofgem. By the end of ED3, we aim to transition to a standardised, digitally enabled data architecture, supporting more dynamic, timely and consistently updated data submissions. We will work with the DNOs to deliver this within this timeframe.

Strategic outcomes and internal capability

- 4.29 We confirm that DNOs must define a set of strategic digital outcomes and link each material digital investment in their Business Plans to one or more of these outcomes. They must report progress against these outcomes through existing mechanisms such as DSAPs and regulatory reporting.
- 4.30 We recognise that some digital benefits are directly measurable while others are enabling, cross-cutting or realised over longer time horizons. DNOs must therefore provide a proportionate benefits realisation approach that includes:
- quantitative metrics where attribution is credible
 - qualitative or maturity-based indicators where benefits are systemic, provided these are supported by auditable evidence and provide an accurate picture of scale
- 4.31 To strengthen delivery certainty and to support effective cost assessment and delivery incentives, business plans must set out clearly what is being delivered for the digital allowances requested. Further details are provided in the Business Plan Guidance, but the principle is that for each material digital programme or workstream, DNOs must define:
- the scope and scale of activity
 - the intended outputs and deliverables
 - the delivery milestones and timeframes
 - the measurable indicators of delivery and benefit
- 4.32 DNOs must map the costs of material digital programmes to defined outputs in the relevant Business Plan data tables. This is to ensure transparency of what costs correspond to, to reduce the risk of ambiguity, and to support the operation of totex incentives and delivery assurance.
- 4.33 DNOs should continue to build internal digital capability where efficient to do so. We recognise that not all specialist or solution-specific skills are cost-effective

to maintain in-house. DNOs may use blended resourcing models, including external expertise, where this is justified and provides value for money.

DSI participation

- 4.34 We have decided to retain our position to introduce a licence condition requiring DNO participation in the Data Sharing Infrastructure once it is operational.
- 4.35 Prior to this, we continue to expect DNOs to prepare themselves appropriately for implementation of the DSI. DNOs should engage proactively with DSI development and adopt a DSI-first approach to datasets that fall within DSI scope and capability. Where an alternative approach is proposed, we expect DNOs to provide a clear justification and demonstrate how duplication is avoided.
- 4.36 We confirm our intention to expect DNOs to make preparatory investment for the DSI in the business plans. DNOs should set out the capability and investment required to utilise the DSI effectively and clearly identify where specific investments relate to the DSI either directly or indirectly. DNOs should also demonstrate, at a broader portfolio level, a DSI utilisation strategy including how it will integrate with the DSI and how it will align with wider strategic goals.
- 4.37 The strong support from stakeholders, including DNOs, reinforces our view that DSI participation should be a priority. Clear regulatory requirements will provide certainty for investment planning and accelerate a shift towards standardised data exchange.
- 4.38 We have taken on board feedback on the importance of wider participation and early engagement. We will work closely with NESO as Interim Coordinator to ensure that licensees have appropriate opportunities to shape DSI development ahead of Minimum Viable Product (MVP) launch. We also acknowledge feedback on the governance and functionality of the DSI. We agree the DSI should prioritise standardised, real-time operational data and must be developed at pace with governance that enables co-ordinated system operation. We will continue to consider this feedback during DSI development.

Interoperability and coordination

- 4.39 We have decided not to establish the independent advisory panel proposed in the SSMC. Instead, interoperability and coordination activity will be led by the domain coordinators established under the Energy Digitalisation Framework. NESO, as core energy system domain coordinator, will lead on cross-DNO standards, priority datasets and implementation monitoring. RECCo, as consumer domain coordinator, and Elexon, as behind-the-meter asset and (provisionally) metering domain coordinator, will lead in their respective domains. DNOs remain responsible for delivery within their licence areas.

- 4.40 The domain coordinators will produce and maintain, in agreement with DESNZ and Ofgem:
- a priority dataset roadmap
 - minimum interoperability specifications covering data models, semantic definitions, exchange patterns, metadata and security classification
 - proportionate conformance arrangements designed for rapid implementation
 - implementation monitoring that escalates systemic matters to the Digitalisation Delivery Group
- 4.41 We expect the domain coordinators to undertake this role in a way that enables timely delivery of interoperability improvements, with an initial focus on the areas where standardisation and data sharing can deliver the greatest near-term whole-system and consumer value.
- 4.42 We accept the feedback that a standalone panel would have introduced additional governance layers into an already crowded landscape. We also acknowledge the more general feedback which raised concerns about fragmented digitalisation governance and the lack of architectural alignment.
- 4.43 We consider that the latter concerns will be addressed through the Energy Digitalisation Framework which establishes a coordinated and system-wide approach to digitalisation governance. Similarly, the Architectural Reference Framework, which is being led by NESO and will be consulted on in August 2026, will provide technical direction which will improve architectural alignment. In line with these changes, we consider that assigning responsibility for interoperability to the domain coordinators aligns this work with emerging coordination efforts, reducing governance complexity and providing clear ownership and accountability for delivery.

Ethical and proportional use of AI

- 4.44 We have decided to proceed with the approach that we proposed in our SSMC. DNOs must provide transparent reporting on their use of AI within business plans and DSAPs, including purpose and scope of use cases, proportionate governance and accountability arrangements, risk assessment and expected or realised benefits. The feedback we received confirmed that the Ethical AI Guidance provides a good framework for responsible AI use in ED3. It sets clear expectations around proportionality, transparency and accountability while remaining sufficiently flexible to enable DNOs to take advantage of the growing range of AI enabled applications across their networks.
- 4.45 We acknowledge feedback suggesting areas for stronger expectation setting from Ofgem or issues which should warrant particular focus from DNOs, including AI use in customer service and the handling of sensitive or commercial information. We agree that DNOs should apply proportionality to balance AI

against competing priorities. AI should be treated as a tool to deliver operational, consumer and efficiency benefits within a wider range of DNO capabilities rather than as an end in itself. However, we also consider that existing licence conditions and digitalisation obligations, when supplemented by the Ethical AI Guidance, provide an appropriate and effective framework to support responsible AI use without the need for additional prescriptive requirements.

- 4.46 We also note the feedback that our approach underestimates the transformative potential of AI. We recognise and expect that, as capabilities develop, AI will play an increasingly important role in driving efficiencies and enhancing decision-making across network operations. We consider our proportionality-based approach will support this evolution in a way that allows DNOs to take full advantage of AI based on their perceived needs, while also ensuring consumer protection. Effective risk management is a benefit for consumers, as it helps ensure that AI-enabled solutions are deployed in a way that is reliable and delivers enduring value.

Asset visibility and dynamic data

- 4.47 We confirm our targeted, cost-benefit approach to asset visibility and dynamic data. ED3 builds on the RIIO-ED2 network visibility foundation, which focused on proportionate monitoring of DNO-owned distribution network assets, particularly at Low Voltage level, to improve operational awareness and reduce reliance on planning assumptions. Under ED3, licensees must maintain and enhance this internal network visibility foundation and demonstrate how visibility improvements support improved modelling, forecasting, flexibility procurement and operational decision-making. DNOs must:

- provide a baseline of static and dynamic visibility across key distribution network asset classes
- justify targeted visibility investments against defined operational and planning use cases
- integrate asset visibility strategies with FMAR requirements where relevant

- 4.48 Effective asset visibility includes practical access to relevant data. Where operationally relevant data is held by third parties, including suppliers, OEMs, aggregators or flexibility providers, Business Plans must set out how appropriate data access will be secured and sustained to support defined use cases. This includes addressing contractual barriers and ensuring ongoing access where required. Asset visibility in ED3 refers primarily to distribution network assets operated by the licensee, and, where justified, to connected assets where access to data materially improves modelling quality or system coordination. Blanket monitoring of all connected assets is not expected.

- 4.49 Licensees must also describe how they will manage and improve the quality of priority datasets. This includes relevant data quality dimensions such as

accuracy, completeness, timeliness, consistency and traceability, together with the controls used to monitor and improve these dimensions over time. Improvements must be demonstrably linked to enhanced decision quality and consumer value.

- 4.50 Where material operational or investment decisions rely on analytical, forecasting or optimisation models, DNOs must describe proportionate model assurance arrangements. This should include validation and calibration, performance monitoring, version control, change management, and arrangements to detect and manage model drift where relevant.
- 4.51 We recognise that the detailed scope, standards and governance arrangements for registering assets connected to the DNO network outside Flexibility Market Asset Registration (FMAR) may evolve following the Enhancing asset visibility consultation and Energy Digitalisation Framework. We are therefore not mandating specific technical solutions at this stage. Licensees should explain how proposed investments align with the current framework and anticipated direction of travel. Further guidance will be provided as policy development concludes.

Dedicated consultation on Enhancing asset visibility summary

- 4.52 Our dedicated consultation on Enhancing asset visibility: Distribution Network Operator options⁴⁶ was published on 12 December 2025 and closed on 6 February 2026. It considered possible approaches to implementing a common asset registration framework to enhance static asset visibility, including the scope of assets and data, potential licence requirements, and arrangements to support effective data exchange and interoperability.
- 4.53 Part consultation, part call for input, it asked respondents to consider whether there is a case for change and policy intervention. It also sought views on the options presented, including which option stakeholders preferred and what changes could enhance them.
- 4.54 Each of the options set out in the consultation was framed with ED3 as a potential delivery vehicle, recognising its role in enabling investment and implementation where policy intervention is justified. The options explored different delivery and governance approaches for achieving a common approach to asset registration.
- 4.55 The consultation included ten questions in total, with three questions on the overarching case for change and priority use cases, three questions on the proposed scope and key delivery considerations, and four questions on the options assessment and preferred approach.

⁴⁶ [Enhancing asset visibility: Distribution Network Operator options | Ofgem](#)

- 4.56 As a result of this dedicated consultation, we expect to consult again on this policy area in the summer, aiming for a final decision by the end of this year, subject to policy development and stakeholder feedback. ED3 requirements for static asset visibility that depend on the outcome of this work will remain flexible and option-neutral until that policy process concludes. Further detail on expectations for Business Plans, including how DNOs should assess and cost how existing asset registration arrangements could interface with potential centralised delivery models, is set out in the ED3 Business Plan Guidance.

DSAP scope, consistency and regulatory reporting

- 4.57 We confirm that DSAPs are intended to provide transparency, stakeholder engagement and coordination in relation to licensees' current and future products and services relating to data and digitalisation. DSAPs must enable stakeholders to understand the products and services, the status of their delivery, the nature and status of actions in the Digitalisation Action Plan, and how success and performance are measured, including performance reporting in updates.
- 4.58 We have decided not to introduce a single mandatory DSAP template. DSAP Guidance is principles-based, and it is important that presentation remains flexible while enabling comparability for stakeholders across licensees.
- 4.59 We will continue to require DSAP content that meets the expectations set out in DSAP Guidance, including clear presentation of products and services and their status, clear visibility of actions and progress status, and unambiguous performance measures and performance reporting over time.
- 4.60 We clarify that DSAPs are not intended to be the primary vehicle for ED3 price control delivery assurance. Monitoring of delivery against ED3 allowances, including mapping of costs to defined outputs and deliverables, milestone tracking for funded programmes, and cost transparency will be implemented through Business Plan requirements and associated data tables, supported by ongoing regulatory reporting. DSAPs should reference and align with this information where relevant, without duplicating it.

Reputational incentive

- 4.61 We are also considering the introduction of a reputational incentive to ensure greater transparency and consistency around the reporting of outputs, further supporting the effective delivery of our five data and digitalisation objectives. Under this approach, DNOs' progress would be subject to a comparative, transparency-based assessment. It would consider how effectively DNOs are implementing their digitalisation strategies and progressing against priority areas. The results of this assessment would be made public, creating reputational signals that will incentivise performance above minimum compliance. We consider that transparency and comparability can encourage

continuous improvement and help ensure delivery keeps pace with the level of digitalisation needed to progress towards Net Zero goals.

- 4.62 We will continue to explore options for how assessment will be carried out in practice, including which bodies could contribute to or undertake it. We will work closely with DNOs to develop this approach further and ensure alignment with the Energy Digitalisation Framework. We expect to provide more detail on design and implementation in the Draft Determinations.

Innovation

SSMC summary

- 4.63 In our SSMC, we set out our intention to retain the Network Innovation Allowance (NIA), keeping its current scope to “facilitate the energy system transition and/or benefit consumers in vulnerable situations”.
- 4.64 In order to better assess and set NIA, we consulted on the following principles:
- be more prescriptive in terms of the information we request from DNOs in their Innovation Strategies, including asking them to set out more clearly how their NIA is spent;
 - set NIA as a percentage of base revenue, allowing networks to request more with a strong justification, and provisionally retaining part of their allowance if shortcomings in their strategy were identified; and
 - use Stage A of the BPI to ensure completeness of information provided, and Stage C to penalise plans that are not of acceptable quality.
- 4.65 We also consulted on various interventions to increase the deployment of innovation, including:
- expanding the Deployment Fund that is being introduced in RIIO-3 to also include DNOs;
 - setting up a forum for DNOs co-ordination on deploying innovation; and
 - whether further incentivisation is needed for DNOs to develop and deploy innovation that doesn't directly benefit them.

Summary of consultation responses

- 4.66 We received 22 responses from a range of stakeholders, including DNOs, consumer representatives, industry bodies and third-party innovators.

NIA eligibility

- 4.67 The majority of stakeholders (14 out of 20) agreed with maintaining the current eligibility criteria, recognising NIA's agile nature and support for early-stage innovation.

Decision ED3 Sector Specific Methodology Decision

- 4.68 Four respondents suggested broadening the NIA eligibility criteria. The Camlin Group argued that the current scope excludes system-wide innovation, and Smarter Grid Solutions requested that the eligibility criterion around vulnerable consumers be expanded to any consumer benefit. SSEN-D and UKPN stated that the scope should include areas such as climate resilience, cyber, workforce and skills, voltage management, data sharing, supply chain resilience and energy efficiency.
- 4.69 Additionally, the Energy Geeks stated that the scope of NIA should be expanded to allow third-party innovators to access the fund directly, and Hitachi Energy disagreed with the current criteria on the basis that current innovation projects have not returned value to consumers and are not being deployed as business as usual.
- 4.70 Finally, Citizens Advice recommended strengthening NIA eligibility with an explicit requirement for early consumer engagement or a clear, evidenced link to future consumer benefit where direct engagement is not available.

NIA assessment and funding level

- 4.71 Most stakeholders (12 out of 15) supported our approach for assessing and setting the NIA, particularly the direction of travel towards greater consistency, comparability and transparency in how companies plan, govern and report innovation activity.
- 4.72 Respondents emphasised that any new information and reporting requirements should avoid creating undue administrative burden or becoming overly prescriptive, and called for clear reporting aims, common templates/formatting, and proportionate requirements.
- 4.73 On setting NIA as a percentage of base revenue, respondents agreed with our approach but requested clarity on the percentage level, how companies could justify an uplift above the baseline, and the design and operation of any withholding or retention mechanism.
- 4.74 While respondents were supportive of linking information requested with BPI Stage A, views were more mixed on the use of BPI Stage C. Some supported its use to incentivise higher-quality strategies, while others cautioned that a stronger quality assessment could risk deterring ambition.
- 4.75 Those stakeholders that disagreed with the approach did so due to broader concerns about the innovation framework, citing network companies' role as "gatekeepers" to innovation and calling for structural reforms such as greater independent oversight or alternative delivery models for NIA administration.

Innovation deployment

Decision ED3 Sector Specific Methodology Decision

- 4.76 On extending the Deployment Fund to DNOs, all respondents supported this, with most networks providing examples of projects that they were not able to deploy in RIIO-ED2 due to a lack of deployment funding or would struggle to do so in ED3.
- 4.77 On co-ordination and collaboration, views were mixed across the 16 respondents. Six respondents stated that co-ordination challenges exist but are not systemic or not the main barrier to deployment, and preferred strengthening or making better use of existing industry forums and processes rather than creating a new intervention. EA Technology supported a more formal deployment-focused forum to address cross-network barriers such as data, standards, interoperability.
- 4.78 The remaining nine respondents did not consistently support either approach, some identified co-ordination and direction gaps but favoured light-touch measures (such as thematic steering and shared artefacts), while others focused primarily on barriers beyond co-ordination, including limited transparency of deployment outcomes, price control time-horizons and value capture, funding gaps and risk–reward misalignment, intellectual property and knowledge-transfer constraints affecting fast-following, and supply-chain readiness and lead-times.
- 4.79 On further incentivisation, most respondents (11 out of 14) stated that further incentivisation could be beneficial, arguing that without additional incentives, innovations delivering wider consumer and system benefits risk being under-prioritised. Respondents suggested that any mechanism should be outcomes-based, with rewards paid ex post and contingent on independently verifiable delivery of consumer or system benefits, with clawback or penalties where benefits are not realised or deployment does not follow successful trials. Other proposals included using deployment funding and fast-follow incentives to accelerate replication, alongside common metrics/methodologies (and, in some cases, independent assessment) to ensure consistency and value for money.
- 4.80 Three respondents (Hitachi Energy, NPg and NGED), stated that further incentivisation was not needed, with NGED giving examples of consumer-benefitting projects that they had delivered under the existing framework. Citizens Advice noted that any new incentive should consider bill impacts, as well as cross-sector divergence if it only applied to the ED sector.

SSMD decision and rationale

NIA eligibility

Decision ED3 Sector Specific Methodology Decision

- 4.81 We have decided to maintain the current NIA eligibility criteria. Most respondents agreed with this approach, which also ensures consistency with the approach taken for RIIO-3.
- 4.82 In terms of responses calling to broaden the scope, we note that most of the areas identified already fall under the current criteria if they are innovative, and in further engagement with stakeholders we did not receive sufficient further evidence that a broadening of the scope was necessary.
- 4.83 Regarding early engagement with consumers, we believe requiring this for every NIA project would be unduly burdensome, and that this is covered through the Business Plan setting process. In terms of better considering and measuring consumer benefit, we will continue to explore this through our iteration of innovation reporting and new requirements set out in our Business Plan Guidance.

NIA Assessment and Funding Level

- 4.84 We have decided to retain our SSMC position on assessing and setting NIA, and have set the baseline NIA for DNOs at 0.4% of their RIIO-ED2 base revenue. This broadly reflects what the average DNO currently receives and will give DNOs early certainty on the minimum amount of NIA they will receive.
- 4.85 Retentions to this will only be made if there are significant concerns around a DNO's Innovation Strategy, and remedial actions will be set in our Draft and Final Determinations for any withheld amount to be released.
- 4.86 DNOs will have the opportunity to request an uplift to this amount. In assessing whether an uplift is justified, we will consider their Innovation Strategy, and particularly their planned areas of work, strength of their innovation delivery mechanisms, as well as past performance and deployment of innovation. Further details on what information should be provided in the Innovation Strategy is set out in our Business Plan Guidance.
- 4.87 We have decided to retain our SSMC position of linking information requested in Innovation Strategies with Stage A of the BPI but have decided to not link the quality of the innovation strategy with BPI Stage C, however, the quality of Innovation Strategies will be taken into account when considering whether retentions or uplifts might be appropriate. Further details of our BPI decisions are provided in Chapter 7.

Innovation deployment

- 4.88 We have decided to extend the Deployment Fund to DNOs in ED3, given the strong support from stakeholders and examples provided of innovations that lacked appropriate funding routes in RIIO-ED2 or would struggle to deploy otherwise during ED3.

Decision ED3 Sector Specific Methodology Decision

- 4.89 On co-ordination and collaboration, we will continue exploring how existing mechanisms can be strengthened and more closely monitor these to assess whether they are fit for purpose, before determining whether additional mechanisms are needed.
- 4.90 We have decided not to proceed with the introduction of a new incentive at this time, as we have not received sufficient evidence to suggest that this would be in the interest of consumers. While many stakeholders were generally supportive of more incentivisation, further engagement did not provide the level of specificity and gap identification that introducing a new incentive would require. We also believe existing interventions, such as the introduction of the Deployment Fund and additional scrutiny, should go towards addressing some of these issues.
- 4.91 We remain committed to ensuring innovation deployment is supported and that barriers are addressed. We will continue exploring what more can be done in this area based on the suggestions we have received.

Distribution System Operator

- 4.92 In the SSMC, we proposed the following core objectives for the Distribution System Operator (DSO) function in ED3:
- network planning - lead proactive and strategic network planning to ensure the system is prepared for growing and evolving demand, and coordinate with whole-system actors
 - flexibility services - efficiently procure and dispatch flexibility services to manage intermittency, network operations and local constraints, but not using them as a substitute for necessary network reinforcement
 - voltage management - actively manage voltage levels to maintain power quality and reduce energy consumption to deliver consumer and system benefits
 - losses optimisation - minimise technical losses to reduce costs and environmental impact
- 4.93 In total, we asked 21 questions across these four core objectives. We also sought views and input on how we could amend the RIIO-ED2 DSO incentive framework for ED3. The sections below set out in turn a summary of the areas we consulted on in relation to the DSO function, the stakeholder responses, and our resulting SSMD decision and associated rationale.

DSO Network Planning

SSMC summary

- 4.94 In the SSMC, we proposed that in ED3 the DSO should become a strategic system planner, not just an operator. This is a shift driven by:
- increasing demand due to the electrification of heat and transport, noting significant uncertainty around the pace and scale of LCT uptake (especially heat pumps)
 - rising Distributed Energy Resources (DER)/Consumer Energy Resources (CER) penetration
 - increasing system complexity and uncertainties
 - the introduction of strategic planning inputs such as the tRESP, enduring RESPs, and Strategic Spatial Energy Plans (SSEP)
- 4.95 We said DSOs would be expected to lead forward-looking planning decisions over multi-decade horizons, ensuring that flexibility is deployed appropriately and capacity is ready ahead of need.
- 4.96 We proposed the scope of the DSO's responsibilities in network planning for ED3 should support the creation of long-term integrated network plans (LINPs), enhance their forecasting capabilities, collaborate across the energy system and facilitate more efficient connections.

Summary of consultation responses

- 4.97 In total, we received over 30 stakeholder responses, reflecting a broad range of perspectives from across the energy sector. Respondents included DNOs, NESO, gas networks, energy suppliers, consultancies, trade associations, charities and consumer bodies.
- 4.98 Overall, stakeholders broadly supported the proposed strengthening of the DSO role in network planning under ED3, including the responsibility for long-term integrated development planning, enhanced forecasting and alignment with emerging strategic inputs such as the RESP and SSEP.
- 4.99 While the direction of travel was welcomed, many respondents, including all DNOs, NESO, Energy UK, Citizens Advice and Energy Systems Catapult, emphasised the need for a clearer definition of roles and responsibilities between DSOs, DNOs, NESO and other actors to avoid duplication, inefficiency and conflicting planning outputs. Stakeholders also stressed the importance of maintaining adaptability within planning frameworks to respond to evolving local conditions, connections activity and uncertainty.
- 4.100 There was strong consensus that delivering whole-system outcomes requires improved and more structured coordination between electricity networks, gas networks, local authorities, NESO and independent network operators.
- 4.101 Many stakeholders, including three DNOs (UKPN, NPg, SSEN-D) and Cadent, highlighted regional planning tools such as RESPs and Local Area Energy Plans

(LAEPs) as critical coordination mechanisms, while noting risks around fragmented engagement, inconsistent data requests and unclear governance. Clearer guidance from Ofgem, standardised processes and defined accountabilities were widely requested.

- 4.102 Responses from DNOs (NGED, UKPN, SSEN-D, NPg) and other stakeholders like ADE Demand, NESO, Citizens Advice highlighted data, digitalisation and network visibility as fundamental enablers of proactive and spatially targeted planning. Persistent gaps in low voltage visibility, limitations in data quality and access, and inconsistent modelling approaches were common themes.
- 4.103 Stakeholders broadly supported the development of improved digital tools, enhanced low voltage monitoring, better data lifecycle management and the use of common standards and the Data Sharing Infrastructure. Overall, stakeholders supported Ofgem's ambition for more proactive, data-driven and whole-system network planning in ED3, while calling for pragmatism on data maturity and clarity in governance and coordination arrangements.

SSMD decision and rationale

- 4.104 In ED3, accountability for network planning will span both DNO and DSO functions. DSOs will be responsible for planning for future load growth and distributed generation (particularly from electrification and low carbon technologies), and ensuring that local system insights and uncertainties are effectively integrated into wider DNO work programmes on asset health, climate resilience and load. The DSO's role will be critical for feeding into the development of business plans (specifically the Build and Flex Strategies and LINP), and to support effective ongoing planning in period.
- 4.105 To achieve this, DSOs should build on the progress made in RIIO-ED2 to deliver further improvements in forecasting capability, modelling and network visibility. These should form the foundational requirements for effective network planning.
- 4.106 Improved network visibility across all voltage levels, including low voltage networks, should be used to support both planning and operational decision-making. It should be used to enhance their ability to identify constraints earlier, assess flexible and other non-build innovative solutions, and plan anticipatory reinforcement where justified.
- 4.107 Strengthening modelling and analytical capabilities means developing more accurate, granular and dynamic forecasting methodologies, particularly for low carbon technologies and distributed energy resources. DSOs will need to use forecasting to identify near-term and long-term network needs that will feed directly into network planning.
- 4.108 DSOs must maintain optionality within network plans, avoiding premature or inefficient investment decisions where future demand remains uncertain. By

enhancing their forecasting, modelling and network visibility capabilities, DSOs should produce robust, data-driven planning outputs that enable them to respond effectively to emerging trends and system changes. As a result, DSOs should be instrumental in supporting the decisions on where optimisation of assets (and the use of flexibility) can be used versus where reinforcement is required. More detail on how DSOs should use flexibility in ED3 is provided in the Flexibility **Error! Reference source not found.** section below.

- 4.109 Planning decisions should be carefully sequenced and adaptable in response to evolving system conditions, new data and emerging system insights. This approach must ensure that network development is timely, efficient and proportionate, reducing the risk of over-investment, stranded assets or delayed connections.
- 4.110 As both DSO and DNO capabilities will be relevant to network planning, we expect DSOs and DNOs to coordinate effectively and establish clear roles and responsibilities, which may vary based on organisational arrangements.
- 4.111 Whole system coordination should also be a core part of the DSO network planning role in ED3. DSOs must take a proactive and systematic approach to coordination across the energy system. This includes working closely with NESO, transmission operators and other system actors to ensure alignment of planning assumptions and investment decisions. Further clarity on the role of NESO and DSO/DNOs and the application of strategic planning outputs is provided in Chapter 2 - Investing for the Energy Transition.
- 4.112 DSOs must deliver effective coordination at transmission–distribution interfaces, including identifying and progressing joint or alternative solutions where appropriate. This includes coordination with transmission owners at key planning stages on the assessment of transmission interface needs (eg early-stage alignment on potential new Grid Supply Point locations) and effective cross-DNO coordination on inter-regional impacts of network developments. They must also engage with local authorities and other stakeholders to ensure that location-based insights and local system requirements are reflected in network planning. This coordination should improve whole system efficiency, reduce duplication and ensure that investment decisions are optimised across system boundaries.
- 4.113 DSOs must demonstrate in their ED3 Business Plans how their approach to network forecasting, improved visibility and whole system co-ordination enables efficient decision making under uncertainty and delivers value to consumers. Information on what should be included in the Distribution System Operator Strategies for ED3 is set out in the BPG. Overall, the DSO's approach to network planning should deliver efficient, resilient and consumer focused outcomes.
- 4.114 Through these requirements, we are establishing a more adaptive, coordinated and intelligence-led network planning framework for ED3. DSOs will play a

central role in managing uncertainty, optimising network development and delivering the energy transition at a fair cost to consumers.

Flexibility

SSMC summary

4.115 In the SSMC we proposed that flexibility should remain a critical tool for managing the distribution network in ED3, but should no longer be used to defer network reinforcement. This was proposed as part of the intention for DNOs to proactively plan and build their network, to ensure capacity stays ahead of need and the distribution network does not become a blocker for DER and CER uptake.

4.116 We did, however, outline several important use cases for flexibility in ED3, including:

- managing faults and outages, reducing the risk of customers losing access to the network
- supporting rapid connection times where the network cannot be reinforced fast enough
- reducing the curtailment of low carbon generation
- within-period optimisation of the delivery of planned reinforcements
- where flexibility is identified as a permanent, cost-effective alternative to network reinforcement

4.117 In order to deliver these use cases, we sought stakeholder views on whether the Common Evaluation Methodology (CEM) tool, which DNOs use to make decisions and determine prices for using flexibility, may need to be updated.

4.118 We also sought views on whether further incentives for flexibility will be required, or if existing incentives such as the Interruptions Incentive Scheme (IIS), BMCS and connections incentives will be sufficient to ensure DNOs deploy flexibility where it is efficient and economical.

4.119 Finally, we sought views on flexible connections. Specifically, how to ensure these are not deployed at the expense of network reinforcement, and that Active Network Management (ANM) schemes aren't preventing assets from accessing wider flexibility markets.

Summary of consultation responses

4.120 In total we received 31 responses relating to flexibility. These came from a broad range of stakeholder groups including DNOs, flexibility providers, trade associations, independent energy experts, not-for-profit industry bodies and a consumer group.

- 4.121 We received mixed feedback on our overall position that flexibility should not be used to defer network reinforcement. Four responses were broadly supportive, whereas seven responses (including six from the flexibility sector) were broadly critical. A further seven had mixed feelings about the position and others felt more detail was needed to form a firm view.
- 4.122 Reasons given by those who were broadly supportive of the SSMC position highlighted the importance of ensuring the network is ready for increasing demand and does not create a barrier to connections or consumer LCT adoption. Responses also emphasised the scale of network build that will be required over the coming decades, and the importance of reducing consumer costs over the long-term.
- 4.123 Those who were critical of the SSMC position, considered that we were undervaluing the potential for flexibility to be an enduring solution, and cited that our approach would add to affordability concerns, especially if reinforcement is committed to on the basis of uncertain demand growth projections, and risk losing momentum in the growth of local flexibility markets. In particular, responses highlighted the option value flexibility can provide by deferring decisions on reinforcement until there is more certainty over need, and the ability for flexibility to act as an enduring solution in areas of the network where constraints are forecast to only occur infrequently. Two other responses emphasised the value of flexibility to optimise the timing of reinforcement delivery and smooth the build profile.
- 4.124 We received 16 responses relating to the CEM tool, 15 of which agreed that it needs to be updated to implement our proposed approach to flexibility in ED3. The remaining response, from NPg, suggested that the need for the CEM tool may be diminished if flexibility is no longer being used to defer reinforcement, and the value of other use cases will be determined by incentives. It did suggest, however, that more consistent treatment of how DNOs value demand turn-up would be beneficial. Six responses also suggested that industry or the Market Facilitator should be able to provide input into this process.
- 4.125 Twenty-three responses provided a view on whether further incentives are required to encourage the use of flexibility in line with our approach for ED3. Of these, 13 responses, including from UKPN, SSEN-D and Elexon, suggested that further incentives would be needed to ensure DSOs are incentivised to use flexibility to deliver consumer value, with many highlighting that existing incentives do not cover all proposed flexibility use cases. NGED suggested that specific new incentives may not be required, but that clear dedicated funding routes for flexibility would be. In contrast, three responses, including SPEN and NPg, felt that most flexibility use cases would already be incentivised elsewhere, although SPEN also stated that these may not fully reflect the benefits of flex and so further incentivisation may be needed.

- 4.126 In terms of the specific areas where further incentives are needed, suggestions from responses included: market standardisation, maximising the flexibility available to the wider system, developing demand turn-up markets and accelerating connections. Two responses also suggested encouraging DSOs to offer more long-term contracts to boost participation in flexibility markets, by retaining incentives for projects that continue into future price control periods.
- 4.127 Four responses, including Citizens Advice and SSEN-D, suggested that incentives should be based on the positive outcomes delivered through flexibility, rather than rewarding the use of flexibility in and of itself.
- 4.128 We received 19 responses relating to connections, of which six responses (including all DNOs) suggested that the risk of flexible connections being deployed at the expense of network reinforcement was low, citing the fact that most flexible connections are interim measures, with permanent curtailable connections only offered on customer request. Four responses did, however, suggest that DSOs should target reinforcement to minimise the curtailment of assets on flexible connections, with two also suggesting specific incentives to reduce curtailment may be needed.
- 4.129 In order to ensure the network planning approach of each DSO delivers timely, efficient and predictable connections, three responses suggested introducing a dedicated connections incentive for DSOs, although two others noted the risk of double counting with the existing connections incentive.
- 4.130 To ensure DER/CER are not prevented from accessing wider flexibility markets, nine responses (including all DNOs) suggested that greater coordination between NESO and DSOs is needed, with five responses highlighting a particular need for improved data exchange. Two responses suggested that restrictions on assets under ANM participating in national markets should be removed altogether, with a further four suggesting assets under ANM should only be prohibited from participating in markets under certain system conditions.

SSMD decision and rationale

- 4.131 Since the publication of the SSMC, the evidence base for widespread proactive reinforcement has weakened. While it remains critical that the distribution network is ready for rising demand from electrification, there is increasing uncertainty around projections for future demand growth, in particular for the uptake of heat pumps. This, coupled with ongoing consumer affordability challenges, means that we believe the balance of risks has now shifted, leading us to re-assess our position on the use of flexibility.
- 4.132 In light of this changing evidence base and stakeholder feedback, we have decided that a more balanced approach to the use of flexibility alongside network reinforcement is needed. In ED3, DNOs should make full use of flexibility and other smart alternatives to optimise the capacity of existing

network assets ahead of investing in physical network reinforcement, but not to the extent that reinforcement, where it is necessary, cannot be delivered in time to accommodate increased demand.

- 4.133 We believe that this approach will reduce costs for consumers in the short and long-term by reducing the risk of overbuild. Alongside the uncertainty around the pace of LCT adoption, there is also significant uncertainty about the impact new technologies will have on peak demand (eg due to consumer-led flexibility). By first optimising existing capacities, decisions to proceed with reinforcement can be made when DNOs are better placed to 'right-size' the network where new capacity is required. Additionally, the amount of flexibility on the system in general is growing, and this approach will enable DNOs to identify more areas of the network where flexibility can be a cost-effective enduring alternative solution to network reinforcement.
- 4.134 It is still vital that network capacity is ready for when it is needed and that connection delays (especially for consumer LCT adoption) are avoided. Therefore, DNOs should not seek to deploy flexibility past the point that reinforcement can reasonably be delivered in time for when it is needed. Further detail on how DNOs should balance targeted investment with the use of flexibility on the primary and secondary networks is provided in 'Chapter 2 - Investing for the Energy Transition.'
- 4.135 We have also decided to continue with the other use cases for flexibility outlined in the SSMC, as key enablers to achieving the overarching objectives for the DSO function of reducing consumer costs and accelerating positive consumer outcomes like decarbonisation and resilience.
- 4.136 This means that in ED3, we expect DSOs to be able to reduce the frequency and duration of planned and unplanned outages affecting both demand and generation customers. While this is a use case for flexibility, for planned outages in particular, it could also be achieved through other DSO activities such as enhanced monitoring, forecasting and planning.
- 4.137 We also expect them to be able to use flexibility to offer accelerated connection dates and reduce the curtailment of assets connected to their network, where doing so results in overall positive net benefit for consumers. This could, for instance, be due to bill reductions from lower whole system costs, or from reduced carbon emissions, but should be considered through a clear cost-benefit analysis.
- 4.138 While some of these use cases will already be incentivised elsewhere in ED3, others will not. Specifically, while minimising outages affecting demand customers is already incentivised through IIS, this incentive is not designed to fully cover the impact of outages on generation customers. Similarly, while the connections incentives encourage timely connections, they do not incentivise

reducing the curtailment of assets on curtailable connections. More detail on the DSO incentive framework is provided later in this chapter.

- 4.139 We have decided that the CEM tool will need to be updated to reflect the new flexibility use cases for ED3, so that they can be consistently valued. DNOs have begun working on this process with input from Ofgem, such that a version can be ready in time to inform business plan development. We recognise stakeholder feedback around allowing industry or the Market Facilitator to provide input into this. While the first round of updates are being conducted at pace, we will consider how to take this feedback forward for future development of the tool.
- 4.140 In ED3, we expect DSOs to build on the work done in RIIO-ED2 to grow their flexibility markets. While the common methodology should continue to be used in ED3 to determine the ceiling price for flexibility procurement, we also expect DSOs to be reducing the actual cost of procuring flexibility wherever possible, as well as increasing the volumes they can deliver, by improving the liquidity and maturity of their markets.
- 4.141 In order to do this, we expect DSOs to build on the work from RIIO-ED2 in ensuring their markets are transparent and accessible to a wide range of participants, including smaller scale providers. They should also continue to ensure their markets are designed to be standardised and interoperable wherever practical to facilitate revenue stacking, including for any new markets that will be created to deliver the new flexibility use cases.
- 4.142 DSOs should continue to ensure up-to-date information about their markets is easily accessible, including in alignment with market facilitator activities. This information should ensure current and prospective market participants can understand the market opportunities available and how to participate in them.
- 4.143 DSOs should also continue to work with stakeholders on an ongoing basis to identify any opportunities to improve access to their markets and the usefulness of data provided.
- 4.144 Additionally, DSOs should explore and scale-up innovative approaches to flexibility procurement where these can help grow the volumes available to them or reduce the cost of procurement. They are also encouraged to grow participation in their markets by proactively engaging potential flexibility providers, such as new large demand customers connecting to the network. This should not, however, lead to preferential treatment for any particular provider, and clear and consistent procurement rules should always be followed.
- 4.145 We believe greater emphasis on coordination and operational data sharing between NESO and DSOs is required in ED3 to improve whole system outcomes and the ability for DERs and CERs (especially those under ANM) to access national markets.

- 4.146 In ED3, we therefore expect DSOs to improve their ability to coordinate with NESO on operational timescales, including with proportionate exchange of more dynamic and granular network and market data. This coordination should enable NESO and DSOs to take better account of activity on each other's networks and make more effective dispatch decisions that improve whole system outcomes.
- 4.147 We also expect DNOs to engage fully with the Market Facilitator and undertake enabling and implementation activities to support transmission-distribution coordination, including those related to primacy rules, risk of conflict reporting and the dispatch API. To facilitate this, companies should continue to develop their internal capabilities and any digital tools needed, in a proportionate and cost-effective way.
- 4.148 We are also considering incentivising enhanced whole system coordination across operational and planning timescales through the DSO incentive (more detail further down in this chapter).

Voltage Management

SSMC summary

- 4.149 In the SSMC, we proposed that the DSO function be expanded in ED3 to include responsibilities for voltage management. We set out three specific responsibilities of:
- Improving Monitoring – understanding voltage headroom and legroom on the primary network, and voltage issues at customer premises, using LV monitoring capability installed in RIIO-ED2 enhanced with smart meter data and data from third-party assets
 - Enhancing Management – improving ability to control voltage across the primary network and, where required, the secondary network, to ensure voltage remains within statutory limits and to eliminate interruptions of LCTs and curtailment of DERs where this is due to voltage issues Additionally, reducing reactive power injection onto the transmission network with the aim of keeping reactive power within an envelope of 0.9 lead to 0.9 lag at the distribution/transmission boundary
 - Providing Flexibility – using temporary voltage reduction to provide a flexibility service to NESO, for which we proposed DSOs be rewarded through a newly introduced incentive
- 4.150 We set out initial proposals for targets and performance metrics, and sought stakeholder feedback on appropriate KPIs to measure the success of the delivery of these responsibilities.

4.151 Additionally, we proposed that DSOs publish a voltage management strategy as part of their business plan submissions, detailing how the responsibility would be implemented.

Summary of consultation responses

4.152 There were 23 responses which answered all or in part the questions on voltage management.

4.153 Stakeholders overwhelmingly agreed that the proposed voltage management responsibilities for the DSO role, particularly around Improving Monitoring and Enhancing Management, are appropriate. They viewed voltage optimisation as a major opportunity for DSOs to improve efficiency, unlock network headroom, and support low-carbon connections, provided that solutions remain non-prescriptive and avoid undue asset stress (eg tap changers).

4.154 Across responses, stakeholders highlighted that effective voltage management depends on robust LV visibility, smart meter data access, and clearer system-wide data-sharing protocols, including from third-party assets such as EV charge points. Persistent issues with smart meter data completeness, privacy, and interoperability were seen as barriers requiring coordinated sector-wide solutions.

4.155 Stakeholders stressed the importance of clear, outcome-focused KPIs, but warned against metrics that drive unintended consequences or overlap with other incentives. Suggested themes included:

- improved LV visibility coverage (DNOs)
- percentage of transformers with dynamic voltage control (EA Technology)
- progress towards lowering average voltages towards ~230V (Energy Geeks)
- transparent reporting within a unified Distribution System Operability Strategy (NGED)

4.156 There was broad recognition that KPIs must reflect trade-offs between losses, voltage optimisation, and reinforcement.

4.157 There were mixed perspectives on reactive power requirements, while NESO supported codifying reactive power envelopes, other stakeholders, including the DNOs, cautioned that a blanket 0.9 power factor envelope risked:

- higher tap-changer wear
- inefficient flexibility use on LV networks
- curtailment impacts

4.158 Stakeholders, including DNOs, instead recommended a whole-system framework, incentivising DSOs to manage reactive power locally while enabling DERs to provide services to NESO when beneficial.

Decision ED3 Sector Specific Methodology Decision

- 4.159 Most respondents supported creating an incentive for providing flexibility through voltage-based demand reduction, seeing it as low-cost, low-carbon, and beneficial system-wide. A majority of stakeholders raised caveats including that any incentive must:
- avoid undermining existing flexibility markets
 - recognise limits on DSOs' internal benefit under the Totex framework
 - ensure whole-system value outweighs any distortions
- 4.160 Some stakeholders, specifically ADE Demand, Centrica and Enoda, opposed the incentive, arguing it could skew operational decisions and reduce confidence in open flexibility markets.
- 4.161 An annual Voltage Management Strategy was broadly supported, most stakeholders backed the proposal for an annual strategy, welcoming:
- transparency on DSOs' plans, spending, and trade-offs
 - clearer visibility for customers, Ofgem, and wider stakeholders
 - alignment across networks through standardised reporting
- 4.162 A minority, specifically Enoda and Pure Leapfrog, warned that annual mandatory reporting could become burdensome and overly prescriptive, advocating instead for a more flexible, framework-based approach.

SSMD decision and rationale

- 4.163 We have decided to proceed with introducing voltage management as a new responsibility of the DSO role in ED3, involving the delivery of key outcomes. We believe that the increasing complexity of managing voltages on the distribution network makes this a necessity.
- 4.164 As set out in the SSMC, the foundation of this responsibility will be improving DSOs' understanding of voltage and voltage issues on their networks and enhancing their ability to manage voltage in response. This will be done through the delivery of the Improve Monitoring and Enhance Management outcomes (see sections below). These are based on revisions to what was set out in the SSMC.
- 4.165 With these in place, we expect DSOs to deliver additional outcomes with benefits to customers and to the system as a whole. These outcomes are in addition to a modified Provide Flexibility outcome as set out in SSMC.
- 4.166 As discussed below, we will be considering which aspects of these outcomes should be incentivised through the DSO incentive framework.
- 4.167 DSOs will be required to determine how best to deliver these outcomes, managing the complex trade-offs both between the outcomes themselves and with other related DSO functions such as losses optimisation.

Decision ED3 Sector Specific Methodology Decision

- 4.168 How outcomes are delivered is likely to vary across different network locations, network conditions, times of day, and times of year.
- 4.169 Determining how best to deliver voltage management outcomes in a way which maximises benefits to their customers will be the basis of the voltage management strategies which DSOs will be required to include as part of their DSO strategies to be submitted along with business plans. This will also require exploration of how delivering these outcomes will be balanced with wider outcomes such as total network capacity, network headroom, and losses reduction. We have set out in the BPG more detail on the requirements for these strategies, including the performance metrics and KPIs which the success of delivery of the outcomes will be assessed against.
- 4.170 DSOs will also be expected to report annually on the progress made towards delivering their strategies. We believe annual reporting is proportionate given the scale and pace of improvements expected over ED3.
- 4.171 To aid in the development of these voltage management strategies, we will share a quantitative analysis of the impact of different voltage reduction approaches (eg long-term reduction to provide conservation voltage reduction (CVR) benefits and temporary reduction to provide flexibility services).

Foundational Outcomes

- 4.172 The foundational outcomes, Improve Monitoring and Enhance Management, are critical to tackling the increasing complexity of managing voltage on the distribution networks.
- 4.173 To deliver the Improve Monitoring outcome, DSOs will have to leverage new and existing data sources to gain a complete picture of voltage on their networks. This will likely include:
- using existing LV monitoring supplemented with smart meter data and data from third-party assets to improve awareness of voltage issues on the distribution network and potential impacts on the transmission network
 - from this, better understanding the voltage headroom/legroom available across primary substations including flexibility capacity
 - additionally, leveraging analytics to predict deviations and loss events to optimise network operation
- 4.174 To deliver the Enhance Management outcome, DSOs will need to improve their ability to control voltage on both the primary and secondary networks, including:
- improving the ability to control voltage across the primary network, keeping voltage within statutory limits, and optimising voltage levels across the network through installation of improved voltage control and communication links to control rooms

Decision ED3 Sector Specific Methodology Decision

- installing voltage control on secondary networks where this can be justified, eg on feeders where greater control would unlock voltage headroom on the primary network

4.175 We believe that full rollout of voltage control across the primary network will not be achieved in a single price control period due to resourcing requirements, therefore in ED3 the focus should be on delivering rollout on:

- newly installed or upgraded primary substations
- existing primary substations where new voltage control capability is required to solve existing or imminent voltage issues
- newly installed or upgraded secondary substations unless the additional cost of voltage control outweighs the benefit to customers
- existing secondary substations where voltage control capability is an economically efficient approach to solve existing or imminent voltage issues
- upgrades to the network above the primary substation level where these are required to tackle voltage issues

Customer Outcomes

4.176 The customer outcomes have been selected to deliver benefits directly to customers from better voltage management, both in terms of reducing bills and in improving the customer experience with new and existing connections of LCTs.

4.177 The Reduce Customer Bills outcome aims to provide direct savings to customers through bill reductions. To deliver this outcome DSOs should consider:

- optimising voltage supplied to customers to provide bill reductions through conservation voltage reduction (CVR)
- aiming to bring the voltage supplied to the average customer down from the higher end of the allowable range to closer to the middle of the allowable voltage range. Where this approach is appropriate, DSOs should determine what is a reasonable average voltage reduction target in each of their network areas

4.178 The Improve Customer Experience outcome aims to improve the customer experience of new and existing connections of LCT assets. To achieve this DSOs should consider:

- managing voltage to reduce connection constraints and curtailment of DER exports

Decision ED3 Sector Specific Methodology Decision

- ensuring voltage always remains within the permitted variation around the nominal voltage range at customer premises (even where deviation from this is permitted in statute or statutory guidance) to eliminate interruptions of operation of LCTs such as EV chargers and PV inverters

Whole-system Outcomes

4.179 The whole-system outcomes have been selected to deliver benefits to the wider system through management of voltage on the distribution network and the impacts of the operation of the distribution network on the transmission system.

4.180 The Provide Voltage Flexibility outcome will be met through the delivery of the Voltage Flexibility Service. We expect this service will operate as follows:

- as part of the 9am day-ahead forecast, NESO will provide instruction on which settlement periods they wish DSOs to modify demand via voltage control in, and in which network areas those modifications should be made.
- unless subsequent indication is received from NESO, DSOs will modify voltage for the settlement periods indicated

4.181 To achieve this, DSOs may need to improve their control room and other capabilities.

4.182 We expect a Grid Code modification may be required to operationalise this service. This would not affect the existing Operating Code No.6 - Demand Control (OC6) requirements.

4.183 The Increase System Resilience outcome requires DSOs to take action at transmission-distribution (T-D) boundary to control real and reactive power flows. We expect this will include:

- upgrading control room capability to call on power factor control of distribution-connected generation, and addition and enforcement of reactive power envelopes in connection agreements
- coordination with NESO to determine whole-system solutions suitable for individual GSPs, for example installation of power factor correction equipment on the distribution side, and the creation of new markets for DSOs to provide resilience services to NESO

4.184 We believe that modifications to Bilateral Connection Agreements (BCAs) between NESO and DNOs may be an appropriate solution to encoding operational envelopes for real and reactive power at the T-D boundary. In addition to this, a Grid Code modification may be required to provide a reliable long-term solution.

4.185 Ahead of any modification to either BCAs or the Grid Code we expect DSOs and NESO to work together to evaluate solutions for individual GSPs, particularly to

determine the most cost-effective balance of interventions on each side of the T-D boundary.

Losses

SSMC summary

- 4.186 In the SSMC, we proposed that the role of the DSO in managing network losses should shift from a narrow focus on loss reduction toward a broader, more strategic principle of loss optimisation. This recognises that losses are influenced by multiple interacting factors including asset design, load growth, DER penetration, operational decisions and consumer behaviour.
- 4.187 DSOs would be expected to integrate losses more explicitly into network planning, operational control and cost-benefit analysis, using improved LV visibility and forecasting to understand where losses occur and how best to manage them.
- 4.188 Loss management must therefore consider the trade-offs between cost, carbon, system efficiency and consumer value, making use of flexible services where appropriate and ensuring that any measures aimed at lowering losses do not undermine wider system needs.
- 4.189 This positions loss optimisation as a core part of DSO decision-making in ED3, closely linked to smarter network planning, flexibility procurement and improved data visibility across the distribution system.

Summary of consultation responses

- 4.190 In total we received 15 responses from a wide range of stakeholders across the energy sector, including network operators, NESO, suppliers, consultancies, trade bodies and consumer groups. This breadth of representation means views reflect both the operational experience of managing losses on the networks and broader perspectives focused on consumer outcomes, system efficiency and longer-term strategic considerations.
- 4.191 Across the responses, stakeholders broadly supported a shift away from a narrow focus on absolute loss reduction towards a more holistic, system-wide approach to managing losses, recognising the need to balance efficiency, affordability, resilience and decarbonisation. However, there was a clear split in views on emphasis and implementation.
- 4.192 Several stakeholders, including three DNOs (SSEN-D, SPEN and NPg) and other stakeholders like Energy Geeks and Sustainability First, expressed concern that the framing of loss optimisation could weaken the regulatory expectation to keep losses as low as reasonably practicable. These respondents argued that losses are inherently undesirable and that optimisation should not legitimise higher losses without robust justification. They stressed the continued importance of

Standard Licence Condition 49 as the core obligation and cautioned against creating confusion between loss reduction and loss optimisation.

- 4.193 Others strongly supported the optimisation framing, arguing that rising electrification and increased power flows mean losses will inevitably increase in absolute terms and that optimisation better reflects real-world system trade-offs. These stakeholders emphasised whole-system impacts, including benefits across other energy vectors, consumer cost impacts and carbon outcomes, noting that some activities which increase electricity network losses can still deliver net system benefits.
- 4.194 There was strong consensus that improved data and visibility are prerequisites for any effective approach to loss management. Stakeholders repeatedly highlighted gaps in low voltage network visibility, limitations in current loss measurement methodologies and inconsistencies in modelling approaches across networks. Energy Geeks and Sustainability First argued that peak losses, rather than annual averages, are more material to system costs and should be prioritised, but some noted that robust data is currently lacking.
- 4.195 On embedding loss optimisation into ED3, respondents broadly favoured integrating consideration of losses into planning, operational and investment decision-making through cost-benefit analysis rather than creating standalone targets. Mandatory inclusion of losses in investment appraisal frameworks was widely supported, alongside clearer and more consistent valuation of losses, including carbon impacts aligned with net zero objectives.
- 4.196 Stakeholders provided a range of views around incentivising losses. Stakeholders including UKPN, SPEN, Energy UK, Citizens Advice and NPg, agreed that a simple mechanical financial incentive linked to measured losses would be inappropriate in ED3 due to measurement uncertainty and the influence of external factors such as customer behaviour. Reputational incentives alone were widely seen as insufficient. Many supported a discretionary or performance-based approach, potentially through the existing DSO performance panel assessment, with some calling for clearer signalling that more direct financial incentives could be considered in a future price control once measurement improves.
- 4.197 Several stakeholders like Sustainability First, NGED, Energy Geeks and UKPN, also highlighted the importance of innovation, flexibility and coordination with system planning. They argued that loss considerations should feature more explicitly in innovation funding and wider system planning processes to reinforce a whole system approach.

SSMD decision and rationale

- 4.198 Increased deployment of electric vehicles, heat pumps and distributed energy resources is expected to lead to higher and more dynamic flows across

distribution networks. Managing losses in this context requires networks to consider when and where losses are material to costs and system performance, including at peak periods, rather than focusing solely on annual average reductions. The existing obligation under Standard Licence Condition 49 will be carried forward from RIIO-ED2 into ED3.

- 4.199 Loss optimisation is intended to support better quality decision making, not to legitimise inefficient outcomes or remove accountability for loss performance. We expect DSOs to take all reasonable steps to reduce losses and to keep losses as low as is practicable, recognising that some level of loss is inherent in the operation of electricity networks. Where losses increase, companies will be expected to demonstrate that this is justified by clear and proportionate wider system benefits such as improved network utilisation, reduced reinforcement costs or enhanced flexibility.
- 4.200 We expect DSOs to set out a clear loss optimisation strategy within their ED3 business plans. This should explain how losses are considered alongside other operational and investment objectives, and how companies make transparent and consistent trade-offs between loss reduction and wider system outcomes.
- 4.201 This includes situations where reducing losses may increase costs elsewhere on the system, or where accepting marginal increases in losses delivers greater overall benefits, for instance, through reduced reinforcement costs, improved voltage management or enhanced network utilisation. DSOs must demonstrate that their approach is grounded in the long-term interests of consumers and that losses are kept as low as is reasonably practicable within an optimisation framework.
- 4.202 We expect losses to be consistently and robustly reflected in the appraisal of investment and operational choices, including through the application of the CEM tool, building on existing Ofgem CBA principles. This will support greater consistency across networks and ensure that decisions appropriately reflect energy costs, carbon impacts and whole system effects in line with energy transition objectives.
- 4.203 This approach also supports proportionate and transparent decision-making and avoids the risks associated with mechanical targets where outcomes are influenced by factors outside network operators' control, such as customer behaviour and technology uptake.
- 4.204 The growth in electrification and network utilisation over ED3 strengthens the case for a proactive and optimisation-led approach to managing losses. We expect DSOs to materially improve their capability to understand, measure and monitor losses across their networks. This includes both technical and non-technical losses. For technical losses, this includes improving modelling, forecasting and understanding of how losses vary with network loading, voltage levels and the uptake of low carbon technologies. For non-technical losses,

Decision ED3 Sector Specific Methodology Decision

DSOs must treat these as avoidable inefficiencies and demonstrate active measures to identify and reduce them, including collaboration with suppliers and industry parties and the use of effective monitoring and reporting frameworks.

- 4.205 Embedding loss considerations into innovation activity and system planning supports a whole system approach and ensures that losses are assessed alongside flexibility, network utilisation and decarbonisation outcomes.
- 4.206 We will continue to consider how loss outcomes should be incentivised as part of the wider DSO roles and responsibilities, including through performance-based, qualitative or discretionary approaches, and how this could evolve into more direct mechanisms in future price controls as data quality and system understanding improve.

DSO incentive framework

SSMC summary

- 4.207 In the SSMC we did not propose any specific changes to the DSO incentive for ED3, but rather sought views on how the DSO incentive framework should adapt to reflect the new roles and expectations for DSOs.
- 4.208 We proposed that, at a high level, the DSO incentive framework in ED3 should aim to:
- promote enhanced forecasting and long-term planning
 - promote whole-system coordination across transmission, distribution and local energy systems
 - support the maturation of flexibility markets, ensuring accessibility, liquidity and transparency
 - support DSOs to deliver greater operational efficiency to support lower system costs and improved reliability
 - encourage outcome-based performance, moving beyond process metrics
- 4.209 We also sought views on what changes may be needed to the DSO incentive assessment process (currently conducted using the stakeholder survey and performance panel), what changes may be needed to the Regularly Reported Evidence (RREs) and how to avoid duplication with other incentives that DSO activities can influence (eg IIS, BMCS and connections).

Summary of consultation responses

- 4.210 In total we received 15 responses which provided views on the DSO incentive framework, coming from a broad range of stakeholders including DNOs, flexibility providers, trade associations, industry experts, water companies and a consumer group.

- 4.211 We received 21 responses on our proposed aims for the framework, of which 11 agreed they appropriately reflect the core functional areas for the DSO role in ED3. In contrast, three responses expressed disappointment around a diminished emphasis on flexibility in the proposed incentive framework.
- 4.212 Many responses provided suggestions for additional priority areas that should be considered in the DSO incentive. Seven responses, including three DNOs (NGED, UKPN and SSEN-D), suggested additional aims relating to connections were needed, in particular on maximising grid access and reducing generation curtailment. Five responses (including NESO, NGED and UKPN) suggested the incentive should encourage cross-network collaboration and the realisation of system-wide benefits.
- 4.213 Two respondents suggested voltage and losses should be explicitly included in the incentive aims. Some DNOs wanted more direction through the incentive framework on how to prioritise voltage and losses, or said that these two activities should not be treated separately given the inherent interactions and trade-offs between them.
- 4.214 Two responses (both from the water sector) suggested the DSO incentive should aim to encourage DNOs to provide additional support and resilience for critical services such as water.
- 4.215 We received 14 responses to the question about the effectiveness of the current parameters used to assess DSO performance. Overall, respondents were more positive about the performance panel than the stakeholder survey. Seven responses felt the performance panel has been broadly effective, while only three felt that the stakeholder survey has been.
- 4.216 Three responses (from UKPN, NGED and ADE Demand) felt that both the performance panel and stakeholder survey have been broadly effective and should be continued, although NGED did also suggest reforms to more closely align the assessment structure with the DSO roles, and introduce more quantitative measures.
- 4.217 On the other hand, the response from Octopus indicated that both parameters were broadly ineffective, due to the panel being overly dependent on information provided by DSOs and insufficient oversight from Ofgem.
- 4.218 In addition, seven responses (including NPg and SSEN-D) felt that the stakeholder survey was broadly ineffective. Reasons given were that not all topics have clear stakeholders who can be approached, results can be skewed by stakeholders answering questions on which they have limited knowledge, respondents' interests may be misaligned with consumers, DNOs having too much power in deciding who it's sent to and limited scrutiny from Ofgem.
- 4.219 Eight respondents, including SPEN-D and NGED, suggested more outcome-based quantitative performance metrics, which focus on objectively measurable

consumer benefits delivered, should be used for the DSO incentive. Similarly, NPg suggested that the DSO incentive was currently too subjective, although SSEN-D felt that DSO activities are still too changeable for a fixed set of key output metrics to be clearly defined.

- 4.220 Six responses suggested that RREs should have a clearer and expanded role in the performance panel to strengthen the rigour of the assessment. Additionally, UKPN suggested a stronger role for RREs in ED3 as a stepping stone to direct quantitative incentivisation of key DSO metrics.
- 4.221 We received 12 responses on how to ensure the DSO incentive does not duplicate other incentives. Most responses agreed on the importance of avoiding duplication, although three did not feel this was currently a significant risk. Suggestions given for how to avoid duplication included: designing the DSO incentive to complement DNO incentives by considering different aspects of the same activity, making evidence used in other incentives inadmissible for consideration in the DSO incentive and requiring DSOs to submit a reconciliation statement showing where financial benefit for projects has been received.

SSMD decision and rationale

- 4.222 We have decided to retain the high-level aims for the DSO incentive framework set out in the SSMC and will also consider how it can support the objectives of voltage management and loss optimisation outlined previously in this chapter.
- 4.223 We would like the DSO incentive to reward the outcomes and consumer value delivered through DSO activities, rather than rewarding inputs and processes. This means that while some of our aims for the framework may be best achieved through incentivising them directly, others may be better considered as enabling activities to be encouraged through incentives on the outcomes they deliver.
- 4.224 For example, in ED3 we expect DSOs to continue to develop and grow their flexibility markets in order to increase the scale of outcomes they can deliver and reduce the cost of procurement. However, we see this as an enabling activity and so would introduce an incentive on the outcome delivered through those markets, rather than a direct incentive on market maturity. Furthermore, we believe that DSOs will be incentivised to reduce the cost of procuring flexibility (eg by increasing liquidity in their markets) in order to benefit from the Totex Incentive Mechanism (TIM) sharing factor.
- 4.225 Some outcomes relating to DSO activities will already be incentivised elsewhere in ED3. Specifically, we think that reducing the impact of outages affecting demand customers is already incentivised through IIS and accelerating connections through the connections incentives, but we will keep this under review as the design of these incentives is being finalised.

4.226 However, the following DSO activities are not incentivised elsewhere, and so may require incentivisation through the DSO incentive:

- reducing curtailment of low carbon generation
- reducing the impact of outages on generation
- using flexibility to maximise the use of existing network capacity
- reducing whole-system costs through greater coordination
- voltage management
- loss optimisation

4.227 On the first two points, we believe there can be consumer benefits from increasing the MWh of electricity generation on the system, for instance through lower power market costs and reduced carbon emissions. Incentivising DNOs to reduce the curtailment of low carbon generation and the impact of outages on generators would encourage them to go further in delivering these objectives. This is in the context of increasing generation capacity connecting to the distribution network, and a likely increase in planned interruptions while reinforcement programmes are being delivered. These benefits, however, can vary situationally and would need to be considered in context. An incentive should aim to only reward actions that increase renewable capacity where this results in positive net benefits to the system and consumers as a whole.

4.228 For reducing the impact of outages on generation we are exploring introducing incentives on Generator Minutes Lost and Generation Lost (similar to Customer Minutes Lost and Customer Interruptions in the IIS incentive). As part of this we will need to consider whether it should apply to all generation or just low carbon generation, and how to account for the actual impact of outages (eg the difference between an outage affecting a solar farm at night versus in the day).

4.229 If we were to introduce an incentive on reducing curtailment (eg through the use of demand turn-up), we would need to consider interactions with existing regulations such as the Access and Forward-Looking Charges and Significant Code Review.⁴⁷ For both curtailment and generation outages, at a minimum we think improved reporting on performance (eg through RREs) will be required in ED3.

4.230 In RIIO-ED2, companies are incentivised to substitute primary reinforcement with flexibility through the TIM. We are considering whether this is still appropriate in ED3 given concerns about a lack of visibility over the use of allowances and the risk of funding for the same reinforcement being requested in multiple price control periods. As part of this, we are developing a load accountability mechanism to ensure funded primary reinforcement is either delivered or funding is returned in full back to consumers (more detail in Chapter

⁴⁷ [Access and Forward-Looking Charges Significant Code Review: Decision and Direction | Ofgem](#)

2 under 'Delivering networks for the energy transition'). Flexibility could potentially be included within this mechanism, enabling companies to use more flexibility where appropriate, but with the necessary controls and reporting in place.

- 4.231 However, alternative options are being considered and in the event that flexibility is not included in the load accountability metric, and if the incentive to procure flexibility through the TIM were removed, DNOs may not be suitably incentivised to grow their flexibility markets and thus deliver the benefits that a more flexible system can bring. We would therefore consider introducing a new incentive (alongside baseline funding) related to using flexibility to maximise the use of existing network capacity, in order to encourage companies to be more ambitious.
- 4.232 An incentive would also allow adaptability in period if there are areas where companies receive reinforcement funding allowances, but subsequently determine can be effectively managed through flexibility. In these instances, the reinforcement funding that is no longer needed would be returned through the load accountability mechanism, but companies could receive reward through the incentive.
- 4.233 Any incentive would need to be carefully designed to ensure it does not incentivise DNOs to defer reinforcement past the point it can reasonably be delivered in time for need.
- 4.234 On losses, we recognise the potential consumer benefits associated with improved optimisation of network losses, including through reduced system costs and improved efficiency of network operation. While we have considered the case for introducing quantitative incentives on losses in ED3, we consider that developing a robust and proportionate quantitative mechanism may be challenging within this price control period due to limitations in data consistency, attribution and baseline setting.
- 4.235 In ED3, we therefore intend to place greater emphasis on qualitative and discretionary approaches to assess how effectively DSOs are considering and managing losses as part of their planning and operational decisions, such as through the performance panel. We also expect DSOs to improve the availability and quality of relevant losses-related data through RRE reporting. This will support improved transparency and provide a stronger evidence base to inform the potential development of more direct, quantitative incentives on losses in future price control periods.
- 4.236 For voltage management, we are considering which aspects of the responsibilities should be rewarded through an incentive, in particular delivery of the customer and whole-system outcomes. For example, an incentive could assess and reward performance on average voltage reduction at the customer boundary, service provision (including flexibility) to NESO at the

Transmission/Distribution boundary, and LCT headroom unlocked from voltage actions. Any incentive in this area would need to avoid incentivising behaviour which was suboptimal for customers.

- 4.237 Finally, for whole system coordination, we think there are benefits to encouraging greater coordination between DSOs, TOs and NESO in network planning and operation. As much of these benefits would be felt as cost savings for other system actors and not felt directly by DNOs, we consider that an incentive may be needed to encourage companies to go further. Any incentive on this should be focused on the consumer benefits delivered through enhanced coordination. We will also need to consider the equal importance of the other system actors (eg TOs, NESO) engaging in whole-system collaboration, which will not be fully within the DNO's control.
- 4.238 Given the interconnected nature of many of the DSO activities listed above, we are also considering whether some of them would be better incentivised through high-level outcome-based metrics which cut across multiple activities.
- 4.239 These overarching outcome-based metrics would be designed to capture the high-level system objectives we want DSOs to facilitate the delivery of, and over which they have a reasonable degree of control.
- 4.240 For instance, an incentive on reducing the carbon intensity of the DNO's network would encourage them to accelerate connections, reduce curtailment and outages affecting low carbon generation, facilitate LCT rollout (eg through timely network build) and effectively use flexibility. Similarly, an incentive on network utilisation could encourage companies to accelerate connections, use flexibility to avoid overbuilding the network and facilitate LCT rollout.
- 4.241 However, as system outcome metrics are inherently more complex, we will need to consider external factors outside of the DNO's control that could impact them, and whether suitable mitigations can be put in place to avoid windfall gains or unfair penalties.
- 4.242 We will continue to explore the feasibility of a more outcome-based incentive in this area and may consult further depending on our conclusions. In the meantime, we will continue to engage with stakeholders on the merits, downsides and potential impacts of such an approach on other parts of the price control, including the DSO incentive and elements of business plans. We will consider these views alongside relevant early proposals submitted by the DNOs, as we consider options.
- 4.243 When determining the role of the stakeholder survey and performance panel in the DSO incentive in ED3, we will take SSMC feedback into account. If we are to retain the performance panel, then we will provide clearer guidance about how it should consider quantitative evidence and the scale of benefits delivered, to strengthen the quality of the assessment.

Decision ED3 Sector Specific Methodology Decision

- 4.244 If we are to retain the stakeholder survey, we will seek to target it at the areas it is most appropriate, as some areas (eg losses) are unlikely to have obvious stakeholders that can be approached for feedback. We will also consider how to mitigate the risk of stakeholder interests being misaligned with those of consumers.
- 4.245 We would also like to introduce more quantitative assessment metrics to the DSO incentive, to ensure it is as objective as possible and focused on the ultimate consumer value being delivered. Where appropriate, data collected as RREs in RIIO-ED2 could form the basis of some of these incentives. We will also consider what data is most appropriate to collect through RREs in ED3 given the new activities being introduced. For areas where we are not sufficiently confident in our metrics or targets to use a purely quantitative assessment, then we may look to use the performance panel to make a holistic assessment of performance against our draft metrics that can factor in nuance and methodological limitations.
- 4.246 We will continue to engage with stakeholders on all of these design considerations for the DSO incentive and will set out the detail in full at Draft Determinations.

5. Resilient networks

This chapter sets out our methodology decisions on how resilience will be embedded across network operation and investment in ED3.

We have decided to retain a single network-level NARM target, and we are introducing proportionate reporting for new asset categories to test methodologies ahead of any ED4 inclusion. On climate resilience, we are setting a long-term goal, continuing work on stress testing, and have decided to introduce Climate Resilience Metrics and Indicators (CRMIs) to support monitoring and development.

For reliability, we are sharpening the focus on customers disproportionately affected by interruptions, confirm a revision to the Worst Served Customer definition, and are updating the Value of Lost Load (VoLL). We will continue to assess wider reliability measures ahead of Draft and Final Determinations.

We have decided to introduce a targeted resilience re-opener, triggered only by material external changes and supported by robust evidence of efficient costs. We are streamlining cyber reporting and confirm our intention to align more closely with the Cyber Assessment Framework, reducing burden while strengthening compliance with Network Information Systems (NIS) regulations. Finally, on supply chain and workforce planning we confirm the decision to require DNOs to submit a 10-year Delivery Strategy aligned to their overall Business Plan.

SSMC questions

Resilient networks - Introduction

Q85. Are there additional risks, dependencies or policy areas that we should consider strengthening network resilience in ED3 beyond those set out in this chapter?

Network Asset Risk Metric (NARM)

Q86. What are your views on setting outputs on additional asset classes not currently reported in NARM?

Q87. What are your views on our proposed approach to increasing our reporting on non-NARM assets to improve our understanding of asset health?

Q88. What are your views on our approach to enhancing data assurance on the data input into the NARM? Are there alternative ways we could enhance our data assurances processes?

Q89. What are your views on introducing subsidiary targets in NARM to hold DNOs accountable to their Business Plans? Are there other ways we could hold DNOs accountable?

Q90. Do you agree with our approach to enabling the future effects of climate change on asset deterioration to be modelled in NARM? Why?

Climate Resilience

- Q91. What are your thoughts on our phased approach to stress testing which seeks to provide greater clarity on investment costs and rationale whilst building up capabilities to support government in setting national resilience standards/goals?
- Q92. What are your reflections on the stress testing methodological framework for the first phase (see Climate resilience stress testing methodological framework annex)? Does it align with your expectations of the responsibilities of a DNO and current capabilities? Can you foresee any support or changes that might improve its effectiveness? Do you have any views on priorities for future phases of work?
- Q93. Do you agree with our proposed granular approach to categorising climate resilience investment to hold DNOs to account? What are your views on the suggested categories (ie direct, incremental, load, non-load, operational, reactive, incremental and transformational)? How can we ensure that this works effectively alongside other approaches in ED3, notably LRE and asset health proposals? What are the risks and challenges?
- Q94. Do you agree that strengthening the rationale for investments is required to allow for differences in local contexts between networks and that our proposed approach to improve guidance for climate resilience strategies and business plans is the best way to do this? Do you agree that we need a clear link between CRS and LINDPs and what are your thoughts on how we can do this?
- Q95. Do you think we have struck the right balance between early action and building long term capability? Can you identify any other areas for early action on climate resilience?
- Q96. Do you agree with our approach to introduce Climate Resilience Metrics and Indicators (CRMI) at the start of ED3 and use the learnings to shape future decisions (either for future price controls or via a re-opener)?
- Q97. Do you have any views on the proposed CRMI Framework (Climate Resilience Metrics and Indicators (CRMI) Annex)? Do the CRMI Framework objectives and attributes reflect what's needed to measure climate resilience? Are there specific metrics or indicators we should consider?

Reliability

- Q98. What is the impact of short interruptions on consumers and are certain regions or customer groups more affected? Do you expect the severity of these impacts to change over the ED3 period? If so, in what way and why?
- Q99. What drives short interruptions and how can these be reduced? Could innovation, data analytics, and enhanced network visibility play a role in reducing the frequency and impact of short interruptions? If so, how?
- Q100. Do you agree that a formal mechanism should be introduced to recognise and address the experiences of customers significantly impacted by short interruptions? If so, what form should this mechanism take (eg enhanced reporting, adjustments to existing incentives, or alternative mitigation approaches)?

- Q101. Are long-duration outages becoming a more significant concern, and could a targeted IIS incentive or penalty for 12+ hour events effectively address this? How could such a mechanism work and are there system or data barriers to implementing it?
- Q102. How should multiple unplanned interruptions be defined (qualifying criteria similar to WSC?) and monitored over time, and could targeted incentives or reputational tools help improve outcomes for customers who are persistently affected?
- Q103. Do you agree we should review the extreme weather event thresholds for IIS to determine whether they are still appropriate in light of the changing climate? If so, do you have a view on the possible approaches we have set out, and why.
- Q104. If our review of the extreme weather event threshold does result in a change in the threshold for IIS, how do you think we should manage the interaction with GSoPs?
- Q105. Should the IIS be amended to reflect the expected increase in planned interruptions from the increase in network investment in ED3? If so, how, and how can this be done whilst ensuring that customer impacts are effectively mitigated?
- Q106. Beyond the UIOLI mechanism, what additional regulatory or operational measures could be introduced to ensure sustained and equitable improvements for WSCs?
- Q107. Is the current threshold for defining WSCs still appropriate? If not, what principles should guide any revision to ensure it remains fit for purpose?
- Q108. Is it appropriate to update the VoLL for ED3? Do you think price control mechanisms that utilise VoLL should use a more dynamic value? If not, how should the results of the study feed into a revised uniform figure?

Resilience re-opener

- Q109. Do you agree with our proposal approach to introduce a resilience re-opener? Why?

Cyber

- Q110. Do you agree with our proposed approach to cyber resilience in ED3, and do you have any suggestions for improvements? Why?

Supply chain and workforce

- Q111. Do you agree with our proposal to require a ten-year Delivery Strategy (ED3+ED4) that embeds supply chain and workforce plans? Are the content expectations complete and proportionate? Where should we be more/less prescriptive and why?
- Q112. Do you agree that DNOs should publish annual equipment and people volumes for ten years to provide better market visibility? What minimum granularity would be most useful to suppliers and training providers?

- Q113. Do you agree that Delivery Strategies should be in scope of BPI Stage A and Stage C? What evidence and criteria should we emphasise in assessing quality and credibility?
- Q114. Should we introduce a supply chain and workforce monitoring framework for ED3 and future price controls? What metrics and reporting frequency would provide the greatest value while remaining proportionate?
- Q115. What do you consider essential for these mobilisation re-opener windows in RIIO-ED2 to be effective in supporting timely ED3 delivery? For example, how should we specify eligible activities (eg design, surveys, factory deposits), require evidence of supplier commitments, or introduce minimum thresholds for submissions? Are there other measures that would make these windows more useful in accelerating mobilisation and reducing ED3 delivery risk?
- Q116. How can DNOs demonstrate active engagement in industry and government-wide initiatives such as DESNZ's upcoming industry-led Electricity Networks Sector Growth Plan, the Transmission Operators skills alliance, and OCEJ's Clean Energy Workforce Strategy? What steps should Ofgem take to ensure DNOs play a leading role in these programmes?
- Q117. What is the current level of UK content and social value in supply chains for distribution network investment?
- Q118. Are there features of the price control framework that create barriers to sourcing from UK suppliers or SMEs? How could Ofgem enable greater social value in a way that protects consumers, ensures value for money, and remains compliant with trade obligations?

Network Asset Risk Metric

SSMC summary

- 5.1 Network and asset resilience is a core component of network regulation, as strong asset stewardship underpins the stability and reliability of energy networks. As the energy system becomes more integrated and dynamic, asset management decisions are becoming more complex, making a robust understanding of network health essential.
- 5.2 In RIIO-ED2, the primary regulatory tool for assessing asset health is the Network Asset Risk Metric (NARM). Built on the basis of an evaluation of Probability of Failure (PoF) of an asset and the Consequence of Failure (CoF), NARM quantifies asset risk and the consumer benefits of interventions, helping to simplify decision-making, support investment justification, and hold DNOs accountable for their asset management practices.
- 5.3 Significant progress was made in improving data consistency and comparability in NARM reporting during RIIO-ED1 and implemented in RIIO-ED2, including:
- development of the Common Network Asset Indices Methodology (CNAIM)

Decision ED3 Sector Specific Methodology Decision

- publication of the Good Practice Guide (GPG)
 - implementation of Information Gathering Plans (IGP)
- 5.4 In the SSMC, we recognised that NARM remains a vital tool and explored an expansion of its scope. However, we also acknowledged the challenges of incorporating new asset categories and the associated risks to framework robustness, alongside the continued importance of high-quality asset data.
- 5.5 To protect and strengthen the integrity of NARM, we proposed to:
- ring-fence the sixty-one asset categories currently in the NARM framework and introduce a secondary framework for new asset categories
 - improve reporting on non-NARM assets to enhance understanding of asset health
 - strengthen NARM data assurance through the introduction of audits
 - introduce subsidiary NARM targets to hold DNOs more accountable to their business plans
 - enable the future effects of climate change on asset deterioration to be modelled in NARM, should such evidence emerge
- 5.6 Stakeholders were invited to consider and provide feedback on these five areas.

Summary of consultation responses

- 5.7 We received 16 responses representing a wide range of major stakeholder groups, including DNOs, consumer representatives, industry bodies, network operators in other sectors, and another utility service provider.

Setting outputs on assets not currently captured in NARM

- 5.8 With 14 responses to Q86, there was strong stakeholder support for setting outputs on additional asset classes that are not currently captured by NARM. Respondents broadly agreed with the principle of expanding NARM coverage beyond the existing framework, recognising the potential benefits for transparency, consistency and improved management of asset health.
- 5.9 DNO responses were more detailed in the how new assets could be adopted into NARM, so we have separated the responses into DNO and non-DNO categories for the benefit of the reader.

DNO responses

- 5.10 There was broad support for expanding NARM to new assets, but DNOs emphasised that any expansion of NARM should be phased and proportionate, with a clear agreement on protecting the integrity of the existing sixty-one asset categories. DNOs noted that currently nine new CNAIM models are being developed, which could cover an additional twenty-six asset categories.

However, views differ across the DNOs regarding which assets could be adopted into NARM or a secondary framework.

- 5.11 Four DNOs generally supported a secondary framework ("NARM Beta") for new asset categories with immature models. They argued that these should not be incentivised through rewards and penalties until the models are proven; however, if incentives were to be applied, wider deadbands could be used, within which no penalties or rewards would be triggered. They viewed the secondary framework as a proving mechanism that allows testing and learning without undermining the existing sixty-one asset categories.
- 5.12 DNOs also cited data issues for the current RIIO-ED2 non-NARM assets. Several noted that for some categories, such as LV cables, asset condition data does not exist for one or more DNOs, and that collection may be uneconomic or difficult to obtain.
- 5.13 While supportive of a secondary framework, SPEN cautioned that adding a second layer of NARM outputs could increase complexity in an already challenging regulatory area and potentially reduce DNOs' flexibility to trade and rebalance risk across different asset categories when managing emerging in-period risks.
- 5.14 NPg did not comment on the proposal of a secondary framework. Its response implied support for a single framework but emphasised that any expansion must be consistent with the underlying need for robust asset condition data.
- 5.15 In the absence of asset condition data, models may rely more heavily on age and fault data, which diverges from current CNAIM principles. This could result in models behaving differently and introducing greater uncertainty into metrics, meaning NARM may not be underpinned by robust, risk-based output setting. Some DNOs suggested utilising the Information Gathering Plans (IGPs) more fully in ED3 to support enhanced data collection for new assets.
- 5.16 NGED and UKPN supported the use of volume drivers for non-NARM asset classes where risk models cannot practically or suitably be developed. NPg opposed the use of volume drivers, arguing that this could inhibit a DNO's ability to deliver on its core obligations.

Non-DNO responses

- 5.17 One electricity transmission owner supported improving the functionality of NARM but felt resolving existing issues should take priority. We believe this is in relation to the NARM incentive arrangements for the ET, GT and GD sectors.
- 5.18 A gas distribution network operator recognised the advantages of broadening the scope of NARM but only if robust mechanisms are established to facilitate effective trading between asset categories. A water company supported

incorporating additional asset classes into NARM, believing this would be beneficial to consumers.

- 5.19 EA Technology cautioned against introducing full NARM outputs for all new asset categories immediately, citing limited condition data and varying confidence across DNOs. Another supported using a testing ground to develop risk models linked to specific interventions. A third agreed with expanding NARM to include LV assets, civil structures and environmental mitigation assets, but stressed that reporting should remain proportionate and focused on material categories.
- 5.20 Citizens Advice supported setting outputs on additional asset classes, with a clear emphasis on including LV services to ensure accountability where programmatic LV reinforcement is proposed. They argued that RIIO-ED2-funded LV monitoring means data should be sufficient and want as much replacement/refurbishment as possible captured under NARM to maintain asset health efficiently.

Increasing reporting on non-NARM assets

- 5.21 Q87, which asked about increasing reporting on non-NARM assets, received 14 responses. Views were mixed, but generally there was cautious support, with a clear division between DNO and non-DNO stakeholders.
- 5.22 DNO responses showed limited support. UKPN and NGED did not support increasing reporting on non-NARM assets, citing limitations in meaningful reporting. They argued that the data required would be too difficult and expensive to collect and that additional reporting would provide minimal value.
- 5.23 Other DNOs supported increasing reporting but limiting this to where viable models already exist or where simplified NARM-based approaches are feasible. SPEN suggested that standardised approaches should continue to be developed outside the constraints of ED3. It also noted that for some assets, a 'fix-on-fail' or 'time-based' replacement strategy may be the most effective intervention for asset health, meaning the collection of additional data would not be meaningful.
- 5.24 In contrast, consumer groups, industry bodies and other organisations broadly welcomed increased reporting. They emphasised the value of improved visibility even where risk modelling is infeasible, with some highlighting LV services as a priority. A couple of non-DNO respondents also stressed that asset health data alone is insufficient and should be paired with criticality assessments or full risk-based indicators.

Data assurances

- 5.25 We received 11 responses to Q88, with all respondents supporting stronger data assurances in NARM. Respondents recognised the importance of NARM being underpinned by high-quality, transparent data and noted that robust assurance would improve confidence in the resulting outputs.

Decision ED3 Sector Specific Methodology Decision

- 5.26 On the scope of assurance, many respondents expressed conditional support, emphasising that audits must be proportionate. Stakeholders stressed that assurance activity should focus on the most material, critical and high-impact areas, with clear criteria agreed in advance. Respondents also called for Ofgem to provide clear, collaborative guidance, and for auditor methodologies to be standardised and familiar with DNO systems and CNAIM.
- 5.27 SPEN argued that an inspection-focused audit would only give partial assurance of the NARM framework. They suggested adopting a process-orientated audit approach instead, aligned with Ofgem’s Data Assurance Guidance (DAG).
- 5.28 There was no clear preference on who should carry out the audits, however, several responses implicitly supported external auditing. SSEN-D proposed a model of one external audit and two internal audits per price control. Another respondent welcomed independent validation but noted that cross-DNO audits could reveal inconsistencies.
- 5.29 On timing and frequency, DNOs favoured a single mid-period audit rather than annual audits, citing the resource intensity involved. Some DNOs suggested aligning the audits with the business plan submission for the next price control. Two respondents also noted that audits should take account of DNO inspection cycles.
- 5.30 Stakeholders also raised broader considerations. Many emphasised that audits should complement existing tools and frameworks such as CNAIM, IGPs, the GPG and the DAG. Several respondents highlighted the opportunity to make fuller use of IGPs during ED3 to support data-quality improvement. Suggestions included extending IGPs to document data population issues, including new commitments on key inputs, and continuing annual reporting to track improvements.
- 5.31 UKPN requested clarity on the implications of audit outcomes and proposed linking audit performance to the evidential requirements expected for the next price control review. For example, strong audit performance could reduce or remove the need for full Engineering Justification Paper requirements.
- 5.32 Citizens Advice supported the principle of enhanced data assurance for NARM but requested a clear, evidence-based rationale before endorsing independent audits that would be funded by consumers. SSEN-D noted that audits are costly and resource intensive, so any framework must deliver value for money.
- 5.33 Another respondent reiterated support for strengthening the assurance regime but expressed concern that the current proposals lack clarity on requirements, frequency and funding and the specific deficiency Ofgem is seeking to address.

Subsidiary targets

- 5.34 We received 10 responses to Q89 on whether subsidiary targets should be introduced into NARM in ED3 to hold DNOs accountable to their business plans. Just over half of respondents were against this approach. Respondents noted that business plans represent a company's best-informed position at the time of submission, but conditions, circumstances and investment drivers inevitably evolve through the price control. As a result, DNOs may deviate from planned work to address emerging risks and needs on the network to efficiently manage their networks.
- 5.35 Stakeholders further argued that flexibility is a core strength of the NARM mechanism. They cautioned that the introduction of disaggregated targets could undermine effective risk trading by driving sub-optimal investment and 'target chasing'. Stakeholders emphasised that this would conflict with DNOs' obligation to manage the network holistically, noting that network companies rely on broader engineering data and processes to address emerging risks - NARM is not the sole risk-management tool.
- 5.36 Stakeholders also warned that fixed sub-targets could increase the frequency and burden of re-openers. They suggested that such targets might also reduce the DNO's willingness to extend NARM to further asset categories, due to the delivery risks they could impose.
- 5.37 Respondents highlight that Ofgem already has accountability mechanisms through the annual reporting process and closeout mechanism. These allow Ofgem to assess whether delivered or undelivered work is justified. They argued that the existing reporting packs already provide sufficient oversight, with data disaggregated by asset type and voltage level, offering transparency to identify and challenge unjustified deviation from plan.
- 5.38 BEAMA acknowledged the need to balance holding DNOs to account for delivering their business plans with allowing sufficient flexibility to reprioritise when new information becomes available. This respondent suggested that subsidiary targets could help ensure minimum levels of intervention are maintained in high-priority categories.
- 5.39 UKPN recognised Ofgem's aim of aligning the incentive with submitted plans. It presented a framework to balance in period flexibility and links to the original business plan. This proposed applying subsidiary targets at the voltage-level grouping. It also suggested that these sub-targets could have wider deadbands, while the overall NARM target retains the same deadband, thereby avoiding the risk of undermining the benefits of the output framework. UKPN added that NARM should be complemented by a load capacity mechanism, with PCDs reserved for a limited number of high-value projects.
- 5.40 Citizens Advice and Energy UK expressed support for subsidiary targets. Energy UK believed they could help track delivery if applied selectively and flexibly. Citizens Advice endorsed the logic on the basis that it would extend Ofgem's

“plan-and-deliver” model to asset risk outputs, thereby holding DNOs accountable for their business plans.

NARM and climate change

- 5.41 There was strong support for our proposal to enable the modelling of future weather-related deterioration in NARM. Stakeholders agreed that incorporating the forecasted impact of potentially more extreme future weather in NARM is essential for resilience, where robust evidence becomes available. One stakeholder shared that modelling deterioration within CNAIM provides a consistent, methodology-based route to reflect climate impacts across specific asset classes.
- 5.42 Respondents also recognised that current evidence is limited, and further work is required to understand whether climate change is expected to affect asset deterioration rates, CNAIM results and, consequently, investment needs.
- 5.43 SPEN supported the overall ambition but expressed concerns that the proposed climate deterioration factor would not meet the core objective. They explained that the collaborative work with the Electricity Network Association's technical working group has developed the capability to adjust future ageing rates within CNAIM to represent chronic climate change effects. However, this approach effectively accelerates aging artificially rather than modelling real asset climate risk. They instead suggested applying location-specific adjustments to future PoF, while acknowledging grading risk over time has limitations. They further suggested this could be combined with IIS reliability measures to form an effective climate resilience metric.
- 5.44 EA Technology supported the proposal, with caveats, emphasising that external hazards, such as flooding or high winds, should continue to be addressed through resilience metrics.
- 5.45 Citizens Advice supported the direction of travel but felt the proposals did not go far enough. It called for Ofgem to strengthen its in-house modelling capability and to begin deriving evidence-based, geographically sensitive deterioration rates. It argued that this capability will be essential for holding networks to account for future asset health performance and for challenging expenditure in future price controls.
- 5.46 Friends of the Lake District did not support this approach, highlighting that extreme weather impacts are already visible on above-ground assets and that Ofgem's work should focus on quantifying these effects.

SSMD decision and rationale

Approaches for non-NARM assets

- 5.47 Through stakeholder engagement, we have explored a range of approaches for incorporating new asset categories into NARM for ED3, while recognising that any decision on their inclusion will directly affect the scope of assets that remain outside the framework. Our engagement has considered options from a do-nothing approach, to fully integrating new assets within the existing NARM incentive. However, stakeholder feedback and the evidence available to date indicate that many of the new asset categories lack the data quality and model maturity needed to support reliable, risk-based outputs.
- 5.48 Several assets such as conductors, batteries and chargers, rely more heavily on age, fault or defect data, rather than condition-based data, which diverges from current CNAIM principles. Confidence in model robustness also varies across network companies, reflecting uneven data coverage and the mixed, often non-comparable nature of the assets themselves.
- 5.49 Our minded-to position is therefore that new asset categories should not be incentivised through NARM in this price control, unless there are proven data quality and robustness for those assets. Instead, we propose applying proportionate reporting requirements in ED3 to test and prove new models, which we will then review for ED4.
- 5.50 We will also explore further controls and funding arrangements for non-NARM asset replacement and refurbishment expenditure, such as PCDs and volume drivers. Assets we are particularly interested in are for LV and HV cables. These assets, which together account for around 9% of RIIO-ED2 asset replacement expenditure, are not currently within the scope of DNO modelling and may never be well-suited to it. This is because their failure risk is not consistently driven by observable condition or age-related deterioration rather than progressive, model-predictable deterioration.
- 5.51 This approach ensures continued transparency without exposing consumers to the risks associated with premature incentivisation. We will review this following the ED3 Business Plan submissions before presenting a final position at Draft Determinations for the treatment of assets remaining outside the NARM framework.

NARM target setting

- 5.52 We consider the continuation of a single, network-level NARM target to remain appropriate for ED3 at this stage. This approach provides DNOs with the necessary flexibility to respond to emerging risks and operational needs without being constrained by sub-targets that could limit effective risk trading or incentivise the wrong behaviours. While we expect DNOs to manage their asset health dynamically, we do not expect material deviation from business plans during the period.

Decision ED3 Sector Specific Methodology Decision

- 5.53 We will rely on the established accountability framework including annual monitoring, reporting and closeout to monitor delivery, and challenge and address any concerns. Following review of ED3 business plan submissions, if evidence emerges that particular workloads require stronger oversight, we may present a position at Draft Determinations for further controls across these workloads.

Data assurances

- 5.54 Our emerging view is that future NARM audits should consider a broader set of inputs than asset condition data alone. Focusing solely on condition data would provide only partial assurance of NARM outputs and a more comprehensive review of the full suite of NARM inputs is likely to be required to give confidence in the results. We also see value in making fuller use of IGPs in ED3 to strengthen data quality and support assurance activities.
- 5.55 At this stage, our preferred approach is for external audits to take place in the middle of ED3, aligned with the submission of business plans for the subsequent price control. This timing would ensure that the data underpinning those plans has been subject to independent review. However, further engagement with stakeholders is needed to refine the scope and design of these audits. 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. A final position will be presented at Draft Determinations.
- 5.56 We are establishing an Asset Health Inspectorate (AHI) to provide independent, risk-based assurance that asset health funding is delivering appropriate asset condition and long-term resilience. We expect to use NARM data to inform targeted audits and inspections, the AHI is anticipated to assess asset management systems, supporting data and on-site condition, and monitor remediation where issues are identified. This will complement NARM audit activity and existing reporting, strengthening confidence in investment decisions.

NARM and climate change

- 5.57 Our decision is to allow the capability for modelling climate-related deterioration within CNAIM as it is important to enhance our understanding of asset risk. However, we acknowledge that the evidence base needed to quantify climate-driven deterioration does not yet exist, and further analytical work is required before any adjustments can be relied upon in an incentive framework.

Climate Resilience

SSMC summary

- 5.58 In RIIO-ED2, Ofgem established climate resilience as an emerging regulatory priority, but the tools and processes available at the time were limited in scope and largely qualitative. RIIO-ED2 focused on the introduction of Climate Resilience Strategies (CRS) and early work to improve network understanding of climate-driven risks.
- 5.59 During RIIO-ED2 and early ED3 development, both stakeholders and Ofgem achieved significant progress in laying the foundations for stronger climate-resilience regulation. This included:
- establishing and maturing the Climate Change Resilience Working Group (CCRWG)
 - producing the Climate Resilience Stress Testing Methodological Framework (Phase A)
 - progressing principles for CRMI development, including draft objectives and attributes
 - increasing visibility of climate-related impacts, risks and dependencies through CRS and network engagement
- 5.60 These steps helped build a shared understanding of vulnerability to acute and chronic climate hazards and informed the ED3 proposals for a more structured regulatory approach.
- 5.61 Building on this foundation, the ED3 SSMC set out a more structured framework centred on four pillars:
- introducing phased stress testing to understand resilience to acute climate hazards
 - developing Climate Resilience Metrics and Indicators (CRMI) to measure resilience consistently
 - creating a granular investment categorisation framework to improve transparency and accountability
 - strengthening guidance to link long-term climate risks to business plan justification
- 5.62 These proposals aimed to move ED3 from high-level ambition toward a more systematic and evidence-based approach to climate resilience.
- 5.63 The SSMC recognised that climate resilience must become a core component of ED3, but also acknowledged the complexity involved in doing so credibly. While network companies were broadly supportive of the direction of travel, three major challenges emerged:

- granularity gaps – stakeholders noted that Phase A stress-testing outputs⁴⁸ remained too high-level to directly inform investment decisions
- framework integration risks – respondents emphasised the need to avoid inconsistent categorisation, duplication between CRS, Long Term Integrated Network Development Plans (LINP) and BPDTs, and misalignment with existing mechanisms such as Interruption Incentive Scheme (IIS) or asset health
- capability and proportionality constraints – stakeholders stressed that data, modelling capability and resources vary across DNOs, and that approaches must evolve iteratively to remain deliverable

5.64 To manage these challenges, we proposed a phased approach in SSMC, with early implementation focused on building capability, improving definitions and ensuring the credibility of the framework before linking metrics or stress-testing outputs to financial mechanisms.

Summary of consultation responses

5.65 We received a total of 14 stakeholder responses to the seven climate resilience questions in the SSMC, covering DNOs, industry bodies, consumer groups and other stakeholders. Across these responses, stakeholders engaged constructively with Ofgem’s proposals for stress testing, investment categorisation, improved guidance and CRMI.

5.66 For question 91 on phased stress testing, respondents including all DNOs supported the proposed phased approach as an appropriate structured starting point, recognising that it provides a pathway to a stable long-term goal supported by flexible delivery. Views were largely consistent across stakeholder groups. However, six stakeholders raised timing misalignment between Phase A and ED3 decision cycles and highlighted the need for integration with resilience re-openers. Other feedback emphasised the importance of clear definitions, improved modelling, interdependency assessment, and avoiding terminology and benchmarking inconsistencies.

5.67 For question 92 on stress testing methodological framework, all respondents welcomed the framework as a clear and structured basis for Phase A, with all DNOs recognising this framework as a starting point and endorsing the proposed phased approach. Eight stakeholders including all DNOs highlighted concerns that Phase A outputs were too high-level (national/DNO-wide), requesting

⁴⁸ Phase A stress testing represents the initial stage of [Ofgem’s climate resilience stress testing methodological framework](#), designed to establish a high-level, sector-wide evidence base on network vulnerability under future climate scenarios. Outputs are produced at an aggregated (eg licence-area) level to evaluate network fragility and risk to climate hazards through a common approach, and inform the overall scale of potential resilience needs, rather than to directly determine specific investment decisions.

greater granularity, including asset-level and locational detail. Five stakeholders including consultancies such as Rhizome and academic respondents stated that oversimplifications could limit the usefulness of outputs for investment planning, recommending methodological enhancements such as multi-hazard integration, probabilistic modelling, expert elicitation and AI/ML tools. Critical national infrastructure representative, Thames Water, emphasised the need for stronger interdependency modelling and coordination across sectors. Other respondents, including infrastructure operators such as Cadent, highlighted data and methodological limitations, including the use of historic data. Stakeholders also commented on integration with existing tools, proportionality and timing constraints.

- 5.68 For question 93 on granular investment categorisation, all respondents inclusive of the DNOs supported a more granular categorisation framework for climate resilience investment. Six stakeholders (all DNOs and Cadent) emphasised the need for clear and aligned definitions across BPDTs, RIGs and other reporting frameworks. Five stakeholders warned that excessive complexity could increase administrative burden or distort benchmarking. Other points included the importance of distinguishing direct versus incremental costs and ensuring categories link coherently to performance incentives and prioritisation of critical services.
- 5.69 For question 94 on improved rationale, all respondents agreed that stronger guidance is needed to support consistent, transparent and proportionate justification of climate resilience investments. Six stakeholders stressed the need for flexibility to account for local context and avoid over-prescription. Five stakeholders strongly supported clearer alignment between CRS and LINPs. Several respondents including academics and consultancies recommended allowing multiple justification approaches, including adaptation pathways, scenario-based analysis and localised risk assessments.
- 5.70 For question 95 on early action and long-term capability, all respondents agreed that Ofgem's approach broadly strikes the right balance between immediate action and longer-term capability-building. Five stakeholders prioritised clearer definition of resilience levels and a more structured long-term programme. Four stakeholders, including SPEN and other DNO respondents, cautioned against acting too quickly where data and modelling remain immature, emphasising the trade-off between early action and robust evidence and supporting adaptive and iterative pathways. A smaller number of stakeholders, including DNOs such as NPg, highlighted additional early-action opportunities such as improved fault reporting, mandatory data provision and trialling adaptation options to build evidence and inform future decision-making.
- 5.71 For question 96 on CRMI implementation, all respondents agreed with introducing CRMI at the start of ED3 on a learning basis. Six stakeholders emphasised CRMI should initially serve as a monitoring rather than funding tool.

Decision ED3 Sector Specific Methodology Decision

Five stakeholders highlighted the need for outcome-focused metrics (avoiding reliance on CI/CML proxies), while four stakeholders stressed the importance of normalisation to ensure comparability across networks. Three stakeholders emphasised adaptability and iterative improvement. A small number, including Rhizome, proposed innovative methodologies such as equity-weighted indicators.

- 5.72 For question 97 on CRMI framework, all respondents supported the framework objectives but called for refinements to ensure clarity, consistency and practical implementation. Six stakeholders including all DNOs highlighted the need for clear definitions and measurable metrics. Five stakeholders called for broader scope covering all CRMI types, strategic, operational, asset-level, adaptive capacity and impact/outcome indicators and compound climate hazards. Four stakeholders reiterated the need for normalisation across networks, and three stakeholders stressed alignment with existing standards (eg ETR132/138⁴⁹) and integration with stress-testing outputs.

SSMD Decision and Rationale

Long term climate resilience goal and stress testing

- 5.73 The first phase of stress testing, phase A, establishes the foundational evidence base for ED3 planning and future phases of stress testing. The Met Office provided DNOs with fragility curves and return period analysis in line with the stress testing methodology framework published alongside the ED3 SSMC. These outputs are at an aggregated, licence-area level to provide a common reference point across network companies. DNOs should provide more granular data and evidence to inform specific interventions within business plans. We expect the stress-testing outputs to be embedded directly within the CRS where practical.
- 5.74 We recognise the importance of ensuring a sufficient level of consistency in approaches across DNOs to support comparability and robust assessment. While we are not prescribing a single methodology at this stage, we expect DNOs to align, where possible, on core elements such as hazard definitions and categorisation, climate scenarios, and key analytical assumptions and framing. This includes adopting a consistent use of climate scenarios, as set out in the CRS section of the BPG, to ensure that risks are assessed across a sufficient range of plausible future conditions.

⁴⁹ ETR132 and ETR138 refer to Engineering Technical Reports published by the Energy Networks Association, providing industry guidance on improving the resilience of electricity networks to storm impacts (ETR132) and flooding risks at substations (ETR138). ETR132 and ETR138 refer to Engineering Technical Reports published by the Energy Networks Association, providing industry guidance on improving the resilience of electricity networks to storm impacts (ETR132) and flooding risks at substations (ETR138).

Decision ED3 Sector Specific Methodology Decision

- 5.75 We expect that approaches will develop over time. As sector understanding matures, methodologies should increasingly converge, supported through ongoing engagement and capability development. Ofgem will continue to work with network companies to consider how to enhance the stress-testing methodology following ED3 business planning, including expanding climate hazard scope, strengthening modelling granularity and informing decision making under uncertainty.
- 5.76 We recognise that delivering effective climate resilience outcomes, including a mature stress testing regime, will require continued development of capability across DNOs, including in areas such as climate risk assessment, modelling, and decision-making under uncertainty.
- 5.77 We expect DNOs to demonstrate a clear trajectory of capability development over time, moving towards more integrated and risk-based approaches to climate resilience planning and decision-making. We will continue to work with industry to develop a capability maturity approach, including identifying best practice and supporting greater consistency across the sector. We intend that this will lead to the development of a more structured framework to support their assessment of capability and inform their development over the period, and enable discussion with the ISG. DNOs would be expected to progress from more ad hoc approaches towards increasingly integrated, forward-looking and system-wide management of climate risks.
- 5.78 We are not currently proposing to incentivise capabilities as part of ED3, however, this will remain under review and an update will be provide as the Draft Determination stage on how we proceed, to ensure capabilities are been appropriately developed across the period.
- 5.79 A mature stress testing regime should accommodate a broad climate hazard coverage and identify options and prioritisation for specific asset-level interventions. An iterative, phased approach to stress testing will be taken to enable lessons learnt to inform the further iterations. Network companies should develop a common stress testing framework for a mature stress testing regime during the ED3 period via the CCRWG. This should be developed in line with Ofgem requirements and submitted for approval. This will form the basis of a maturing stress testing regime that supports future decisions on long-term climate-resilience goals.
- 5.80 For ED3 we have set the goal to maintain at least current levels of network resilience under future 2080 climate conditions. We recognise that there is no single, established baseline of current resilience, however, this goal reflects the need to avoid a degradation of service as climate hazards intensify. We acknowledge that this goal may require iteration as analytical capabilities improve and ensures alignment with policy direction on future resilience

outcomes develops. Ofgem will work with Government, alongside network companies, to evolve and develop these goals and ensure this alignment.

Holding DNOs to account on climate resilience

- 5.81 Ofgem has developed a shared set of definitions to support a consistent understanding of climate-resilience concepts across the sector. These are set out in Appendix 3 of the BPG. The definitions are intended to reduce ambiguity in how climate hazards, risks and impacts are described, ensuring that differences in drafting or terminology do not obscure material differences in risk, need or approach. While they do not prescribe methodologies or introduce additional policy requirements, they provide the basis on which Ofgem will assess the coherence, robustness and comparability of company narratives and evidence.
- 5.82 Climate-resilience investments under ED3 will apply to acute climate hazards only. Chronic deterioration will continue to be addressed through existing NARM and BAU frameworks. Flood mitigation will remain a hazard-specific category, alongside two new ED3 categories: storm resilience and extreme heat resilience.
- 5.83 Storm Arwen-related commitments will continue to be captured through the BPDT and are now integrated within the Climate Resilience section; however, this worksheet only includes inputs for costs and volumes in RIIO-ED2. No costs or volumes associated with the Storm Arwen PCD should be reported in ED3. This tab aims to support clearer linkage between Arwen-specific delivery and DNOs' ED3 CRS submissions, allowing a complete view of storm-related investment and outcomes to be assessed.
- 5.84 In developing their climate resilience proposals, DNOs should take a structured, risk-based approach to managing climate impacts under uncertainty and provide well justified proposals, including for proposals for low regret options which:
- are expected to deliver value under current conditions and provide benefits in addressing future climate risks
 - have low upfront costs (and may have limited benefits today) but potential future benefits are high
 - are robust (performing adequately across a wide range of future climate conditions) or adaptive (where plans can be adjusted as new information on climate risks emerges)
- 5.85 Where there are significant potential impacts from increasing frequency and severity of extreme weather on customers, critical services and system operation, DNO interventions should take proportionate action to mitigate these risks, balancing the cost of action with the potential impacts of inaction.
- 5.86 In doing so, DNOs should demonstrate how proposed interventions:

Decision ED3 Sector Specific Methodology Decision

- reduce exposure or vulnerability to high-impact climate risks
- perform under different plausible future scenarios
- support efficient, resilient network development over time
- ensure that the timing and phasing of delivery is appropriate in light of uncertainty, including whether the intervention is best undertaken within ED3 or through a phased or adaptive approach across future price controls

5.87 This approach recognises that effective climate resilience requires a portfolio of interventions, combining well evidenced near-term actions with targeted measures where early intervention delivers long-term value for consumers. This should include a mix of operational, capital, and capability-based interventions, alongside improved data, monitoring and decision-making processes.

5.88 Inevitably, as the electricity network will be upgraded over many years due to assets coming to the end of their lives, or due to demand growth, it will be appropriate that climate risks are considered both as a hazard across today's network, and explicitly for the expected lives of replacement and new assets.

Improved rationale for investment

5.89 Stakeholders supported a more structured framework to improve transparency, comparability and accountability in climate-resilience submissions. For ED3, we are setting clear definitions, scope boundaries and evidential expectations which will be set out in the BPG, rather than relying on prescriptive categorisation. This approach maintains regulatory clarity by focusing on acute climate hazards and by avoiding overlap with chronic climate impacts addressed through asset-health mechanisms.

5.90 DNOs should clearly link proposed investments to identified climate hazards and impacts, setting out how interventions are sequenced and justified in light of climate risk, uncertainty and alternative options.

5.91 Ofgem will assess climate-resilience proposals on a case-by-case basis, supported by the principles and minimum evidence requirements set out in the BPG. Where proposals are multi-driver (for example, driven by load growth alongside climate resilience), relevant elements may be subject to the general cost-assessment approach.

5.92 Climate-resilience needs vary significantly across licence areas. The framework set out in the BPG supports consistent identification and articulation of climate hazards, risks and vulnerabilities, while allowing proposals to be judged on local evidence and circumstances rather than abstract comparators.

Climate Resilience Metrics & Indicators

5.93 We will introduce CRMIs from the start of ED3, accompanied by a structured learning period during which data will be gathered, methodologies refined, and

expectations clarified through engagement with DNOs. This will allow both Ofgem and licensees to test approaches, address implementation challenges, and build robust evidence base before any formal assessment or incentive application. A principles-based methodology has been agreed with networks, and a metric shortlist and detailed method will follow.

- 5.94 CRMIs address a recognised absence of sector-wide climate resilience measurement. Stakeholders supported early introduction with iterative refinement. Annual reporting will strengthen transparency, support the development of forward-looking performance indicators, and build capability for future price controls. Future phases of stress-testing should ensure alignment with CRMI for consistency across regulatory tools.

Review incentives and standard development

- 5.95 We have reviewed and assessed the appropriateness of the IIS thresholds for severe weather exceptional events as discussed under the Severe Weather Exceptional Event Threshold subheading under the Reliability section of this chapter (see paragraphs 5.158-5.163).

In-Period mechanism and future price controls

- 5.96 We will implement the resilience re-opener for ED3 as proposed in the SSMC. Climate resilience will form one component of the wider resilience re-opener and will be triggered and assessed independently of other resilience strands such as cyber resilience, supply chain resilience, and workforce resilience. This ensures that climate-specific requirements can be addressed proportionately without constraining or delaying action in other areas. The re-opener may be triggered by:

- new climate-related standards or regulatory requirements
- the need to translate emerging analysis from stress testing into investment decisions
- significant changes in climate science or projected climate hazard frequency/severity

Reliability

SSMC summary

- 5.97 In our Framework Decision, we confirmed our retention of the following mechanisms, with potential refinements to targets, incentive rates and definitions:
- the Interruptions Incentive Scheme (IIS) - financial output delivery incentive (ODI-F)

- Worst Served Customers (WSC) - UIOLI
- 5.98 In our SSMC, we set out considerations for the following elements of reliability:
- short interruptions (<3 minutes)
 - long-duration unplanned interruptions (>12 hours)
 - multiple unplanned interruptions
 - planned interruptions
 - severe weather exceptional event (SWEE) threshold
 - WSC
 - Value of Lost Load (VoLL)
- 5.99 We recognised that the averaging of Customer Interruptions (CIs) and Customer Minutes Lost (CMLs) across a DNO's licence area can obscure the disproportionate impact on customers who experience long-duration or repeated unplanned interruptions. We also noted that the current IIS does not incentivise a reduction in the frequency of short interruptions as they are excluded from the mechanism. We consulted on whether formal mechanisms should be introduced to target these areas that are either not currently incentivised or are where the actual impact on certain customers is not clear due to the way the IIS mechanism works.
- 5.100 With the changing climate, we considered if the current SWEE threshold, over which DNO performance is excluded from the IIS mechanism, is still fit for purpose. The SWEE threshold is currently set at 8 times daily mean faults at HV and above. The specific threshold, or 'trigger value', is calculated for each individual licence area using the number of such faults in that licence area over a 10-year period.
- 5.101 We raised the link between the SWEE threshold and severe weather Guaranteed Standards of Performance (GSoP), and whether the SWEE thresholds and GSoPs should remain aligned. The GSoP thresholds are set as category 1 (more than 8 times but less than 13 times daily mean faults at higher voltage) and category 2 (more than 13 times daily mean faults at higher voltage). Each of these categories has different targets for restoring power to customers - for category 1 the target is within 24 hours, and category 2 is within 48 hours. If these targets are exceeded, then DNOs are expected to pay mandatory payments to customers. For the purposes of IIS, all category 1 and category 2 events are currently excluded as they both exceed the SWEE threshold of 8 times daily mean faults at HV and above.
- 5.102 Given increased network reinforcement expected in ED3, we reviewed whether changes to the planned interruptions aspect of the IIS are required. We also reviewed the definition of WSC, which is defined in RIIO-ED2 as a customer who experiences 12 or more unplanned interruptions (each lasting three minutes or longer) at the distribution higher voltage level over a three-year regulatory period,

with a minimum of two such interruptions per year. We asked stakeholders for input on whether there is potential for additional regulatory or operational measures to be implemented outside of the WSC UIOLI allowance which funds network improvements for customers who meet the WSC definition.

- 5.103 Finally, we had previously instructed the ENA to undertake a new study to update the VoLL figure and in our SSMC consulted on how an updated figure may best be incorporated for ED3.

Summary of consultation responses

General responses

- 5.104 A number of respondents provided general commentary on the reliability section of our SSMC.
- 5.105 Camlin Group submitted its support of retaining the IIS mechanism and strengthening the scheme in ED3 to ensure that the IIS adequately reflects the increasing dependency of a decarbonised and digital society on supply continuity, and that DNOs act proactively to meet the evolving needs of consumers.
- 5.106 Two stakeholders raised the need for structured engagement and communications between DNOs and other utility companies regarding interruptions. One of these stakeholders suggested that such expectations could be embedded within the DSO incentive or BMCS. Another stakeholder also suggested GSoPs be written to accommodate the interactions between DNOs and other utilities.
- 5.107 Citizens Advice suggested we consider how low-carbon tech and battery storage may enable trade-offs between incentives and funding for preventing interruptions and restoring interruptions to be managed in a cost-efficient and equitable way. They also suggested establishing a minimum standard of reliability which customers can expect, regardless of location.
- 5.108 UKPN and NPg put forward their considerations on other areas not consulted on in SSMC, including how IIS targets could be calculated and the strength of the overall IIS incentive.

Severe weather exceptional event threshold

- 5.109 Most stakeholders (11 out of 13) broadly agreed that the SWEE threshold should be reviewed but there were varying views as to what type of review should take place.
- 5.110 UKPN was supportive of a review but stated the starting point for the review should not be on the assumption that the threshold should increase. NGED was against redefining the threshold but open to refreshing the trigger values (ie the

number of daily mean faults at HV and above that sets the SWEE threshold), noting that recalculating the trigger values should self-correct for climate events. NGED considered that if a factor, such as climate change, is causing more faults, higher volumes of faults associated with these events will lead to a higher daily average, which in turn would result in higher trigger values.

- 5.111 SPEN strongly rejected the proposal to increase thresholds on the assumption that outages will increase in line with rising climate severity as this pre-supposes that events are exclusively linked to climate change factors and assumes that networks will either deteriorate or fail to maintain customer resilience expectations through a changing climate. While SPEN agreed that thresholds should be updated, they should be done so to reflect latest multipliers as networks are operationally sized to deal with their underlying fault rate, not climate factors or any other measure of resilience.
- 5.112 Thames Water was also in agreement with reviewing the SWEE threshold. It was supportive of using historical outage data and forward-looking climate projections to establish dynamic thresholds that adapt to evolving conditions.
- 5.113 All DNOs were in favour of retaining the HV fault count as the basis for the threshold. UKPN and NPg specifically noted its clarity, especially during a live and dynamic event, and SPEN raised that moving away from the longstanding use of fault counts to determine the threshold would break continuity and introduce uncertainty in the mechanism.
- 5.114 SSEN-D suggested that the threshold level should exclude faults where no customers are interrupted (ie, zero-CI faults).
- 5.115 SPEN, NPg and SSEN-D suggested incorporating a gradual exclusion criteria or tapered approach whereby severe weather events that exceeded lower thresholds would result in a lower level of exclusion from IIS (eg 50% relief), rather than an all-or-nothing approach as currently set.
- 5.116 DNOs highlighted that any changes to thresholds would require recalculation of historical IIS performance to ensure appropriate targets and benchmarking are used for ED3. SPEN and Energy UK also raised that threshold adjustments should be tested against historic events to assess their impact and ensure proportionality.
- 5.117 NPg and NGED agreed that publishing data regarding exceptional events would lead to greater transparency, and NGED suggested including the number of events alongside CI/CMLs as proposed. However, SSEN-D disagreed with publishing CI and CML values to include SWEEs, stating that no two storms are the same.
- 5.118 Citizens Advice suggested that we consider how the climate resilience work, including the NARMs and climate stress testing, would interact with updating the incentive. Noting it may be that the increased scrutiny upon the climate

resilience of current and future assets complements new targets for reliability in more extreme weather.

- 5.119 Regarding alignment between the SWEE threshold and GSoPs, most stakeholders (five out of eight) stated that the two should be aligned. SSEN-D, NGED and UKPN all noted that alignment between the SWEE threshold and GSoPs provides clarity both for DNOs and customers to understand what level of service DNOs are expected to deliver during a severe weather events.
- 5.120 NPG suggested it may be appropriate to decouple GSoP from IIS, though noted retaining administrative simplicity is important for the speed of GSoP payments following any event. SPEN considered that GSoPs are already decoupled from IIS.
- 5.121 Where a change may be required, UKPN considered that it should not be difficult to update the GSoPs due to their statutory nature as this was successfully managed in both DPCR5 and RIIO-ED1. NGED proposed that data up to 2025/26 be used to provide sufficient time for the implementation through parliament.
- 5.122 Energy UK suggested that, where SWEE thresholds change, ED3 should provide a transition period and clear guidance set out on compensation triggers and exclusions. Consumer clarity on the change could be improved by publishing simple explanatory materials alongside the price control.
- 5.123 Thames Water suggested GSoPs should provide higher compensation for critical infrastructure and that the GSoP threshold for restoring supply to critical national infrastructure should be reduced to three hours. Another stakeholder suggested commercial customers or alternative indicators such as whether wastewater infrastructure has been kept online during storms could be introduced.

Long duration unplanned interruptions (>12 hours)

- 5.124 Most stakeholders (eight out of 11) agree that a more targeted incentive should be implemented for interruptions lasting longer than 12 hours. Four stakeholders suggested an add-on to IIS or increasing the penalty applied could improve performance. Consumer groups suggested re-weighting unplanned interruptions in BMCS to improve customer support.
- 5.125 NPG disagreed with introducing a more targeted incentive, considering long duration unplanned outages are already sufficiently incentivised in IIS. UKPN noted that, while supportive of an incentive mechanism in this space, there is a limit to what can be done to improve performance before there is a requirement for a significant change in how the industry operates, such as the need to move to a multi-shift workforce.

Decision ED3 Sector Specific Methodology Decision

- 5.126 Four stakeholders noted the wording in the SSMC was ambiguous regarding whether reference to long duration unplanned outages included or excluded those occurring during severe weather exceptional events.
- 5.127 UKPN suggested that upfront funding should be provided and to tighten GSoP standard from 12 to 10 hours, while Thames Water suggested that the GSoP threshold for restoring supply to critical national infrastructure should be reduced to three hours. NPg raised that if there is a case for additional infrastructure to mitigate an increasing customer sensitivity to extended interruption durations, then the ENA Engineering Recommendation P2 standard should be reassessed and changed if it is supported by a robust cost benefit assessment.
- 5.128 Citizens Advice suggested adding a new GSoP for DNOs to provide temporary alternative power solutions (mobile generators, battery packs, portable charging equipment) to households most in need during prolonged outages. It also proposed introducing a minimum standard for reliability could inform a specific incentive for longer duration outages.
- 5.129 SSEN-D and NPg noted that there are cases where DNOs choose to implement a long-term fix in the initial repair, which may mean customers are off supply for longer during the initial interruption, but is more likely to prevent further interruptions than implementing a short-term solution which will still require further work. NGED also raised that long duration interruptions are generally associated with parts of the network that have smaller numbers of customers and should any changes to the incentive be proposed, it would have to recognise the smaller group of customers which would be impacted by such a change.
- 5.130 BEAMA raised that the publication of long duration unplanned interruption data would be useful as it is currently unclear whether the frequency of long duration interruptions is increasing. NPg noted that decisions should be data-led in evaluating whether interruptions exceeding 12 hours are becoming a more significant concern, both in terms of actual performance and customer engagement.
- 5.131 Citizens Advice and SSEN-D suggested further analysis be carried out regarding the profile and geography of consumers who are more likely to experience long duration outages and dedicated customer research into the topic of long-duration interruptions. They also raised this analysis should include the relative importance of addressing this alongside other aspects of reliability (such as short interruptions).

Short interruptions

- 5.132 On the impact of short interruptions, all stakeholders broadly agreed that most customers experience minor inconvenience. They also agreed that certain groups are disproportionately affected by short interruptions, namely vulnerable

customers, LCT customers such as smart homes with a lot of smart technology, utilities including wastewater treatment and emergency services (rescue teams). We've been engaging with several companies in the water sector throughout the consultation process who have highlighted and explained the impact that short interruptions, and interruptions more generally, can have on wastewater sites.

- 5.133 Stakeholders generally expected an increase in short interruptions in ED3 with NPg considering the impact to individual customers will remain the same in ED3, though the extent of the customer base experiencing short interruptions will change. DNOs and one other stakeholder raised that potential increases in short interruptions should be considered in the context of other customer outcomes, noting that some short interruptions occur where technologies are rolled out across the network to prevent longer duration interruptions (those greater than three minutes). Rhizome raised that increasing frequency of 'grey sky' days (moderate winds, wet snow, heat-humidity combinations, persistent rainfall) can influence the incidence of short interruptions and other short-duration outage metrics. They recommended that climate resilience assessments and demand forecasting should explicitly account for changes in the frequency and characteristics of grey-sky events, not only headline extreme events.
- 5.134 Stakeholders agreed that the drivers of short interruptions can fall into the following three categories:
- introduction of automated systems that cause short duration interruptions instead of longer interruptions
 - transient faults (vegetation, fauna, weather, etc)
 - operational needs, for example in locating faults or temporary generation connections
- 5.135 Stakeholders also broadly agreed that the use of existing technologies, innovation or enhanced network visibility, particularly improved LV visibility, would help reduce short interruptions.
- 5.136 The majority of stakeholders (11 out of 15) agree that a mechanism should be introduced for short interruptions, though there was a mixed response on the preferred implementation method. Four stakeholders suggested introducing a new financial incentive, including UKPN and NGED who submitted early proposals on short interruptions under the BPI incentive (see Chapter 7). Four stakeholders suggested adjusting existing mechanisms to account for short interruptions, such as expanding IIS to include short interruptions or introducing a similar mechanism to the WSC UIOLI to address customers experiencing frequent short interruptions. Five stakeholders considered that enhanced reporting of short interruptions would be beneficial, three of which recommended publicly reporting data.

- 5.137 Three DNOs, although in favour of some form of mechanism, did not consider a financial mechanism should be implemented for short interruptions in ED3. They considered that there is no clear evidence that this is an issue where customers value investment for over other reliability issues and that altering IIS could dilute the effectiveness of the existing incentive. They suggested that further customer research into reliability and investment priorities and willingness to pay was required before implementing a financial mechanism. NPg's ISG was unsure about an effective structure for financial incentives for short interruptions but set out that all short interruptions at all voltage levels should be recorded.
- 5.138 Northumbrian Water suggested setting out and implementing a clear resilience standard that energy network companies are expected to deliver. They considered clarifying this standard would help water companies and Ofwat to have a common understanding of the level of power resilience that should then be provided by water companies rather than DNOs.
- 5.139 Four stakeholders raised the issue of voltage spikes and dips when responding to the SSMC. One of these stakeholders raised that voltage spikes and dips should be covered by any short interruptions mechanism. The other three stakeholders either directly referred to voltage spikes and dips as well as short interruptions when providing evidence of the impact of short interruptions on customers or raised willingness to provide evidence of the impact of voltage spikes and dips on customers.

Multiple unplanned interruptions

- 5.140 The majority of stakeholders (eight out of 10) agreed targeted incentives or reputational tools could improve outcomes for customers persistently affected, though there was a mixed response on the preferred implementation method. Two stakeholders considered reputational reporting would be useful, with NPg suggesting this information could be captured in the WSC Annual Reports. One stakeholder suggested either increasing weighting in IIS or introducing a new metric.
- 5.141 SPEN and SSEN-D considered that multiple unplanned interruptions are already sufficiently incentivised between IIS, WSC and the multiple interruptions GSoP and so thought that additional mechanisms were not required.
- 5.142 Citizens Advice raised that a multiple interruptions mechanism should look at planned interruptions as well as unplanned, considering multiple planned interruptions still have a negative customer outcome. They also welcomed more analysis regarding the profile and geography of consumers who are more likely to experience multiple interruptions, and the costs of options for better supply and support.
- 5.143 UKPN and NGED submitted early proposals on multiple unplanned interruptions under the BPI incentive. UKPN's early proposal outlined how upfront funding

could be made available for multiple unplanned interruptions at LV level to install LV reclosers and fault location monitors on circuits where LCT or higher risk PSR customers are impacted, and the introduction of a points-based mechanism (similar to NARM) to reduce the number of repeat interruptions experienced by customers at HV level. NGED's early proposal outlined a new incentive to reward DNOs for reducing the number of customers experiencing multiple CI-relevant interruptions.

- 5.144 Friends of the Lake District considered undergrounding could play a role in reducing the impact of multiple unplanned interruptions.
- 5.145 Regarding the definition of multiple unplanned interruptions, two stakeholders considered that more definition beyond WSC was required, with Energy UK suggesting setting the definition on a rolling basis, such as the number of events per premise over 12 months. NPg and SPEN considered that altering the definition of WSC would be sufficient.

Worst Served Customers

- 5.146 There was general agreement across stakeholders that the WSC mechanism has been beneficial, with Friends of the Lake District recognising projects bringing benefits to areas in its locality. However, three stakeholders suggested that additional regulatory or operational measures could be introduced to ensure sustained and equitable improvements for WSCs.
- 5.147 Energy UK suggested the introduction of targeted area-based programmes with ring-fenced delivery milestones for the WSCs. They considered that Ofgem could also combine investment, vegetation management, and automation measures, with progress audited annually. Finally, they raised that community engagement could be used to prioritise solutions and monitor service equity.
- 5.148 Citizens Advice considered that the UIOLI mechanism does not offer sufficient protections and suggested removing WSC and introducing a minimum national standard for reliability at both HV and LV level.
- 5.149 Thames Water recommended DNOs carry out enhanced stakeholder engagement, particularly with Critical National Infrastructure operators, to ensure that improvement plans reflect whole-system resilience priorities. They also suggested the introduction of financial penalties for failure to deliver service improvements in high-risk zones, and a dedicated performance metric to capture DNO progress, including a specific measure for power supply reliability and resilience in WSC areas.
- 5.150 In terms of the retained WSC mechanism for ED3, most stakeholders (seven out of 10) were broadly in favour of expanding or revisiting the criteria for WSC. Four stakeholders, including three DNOs, considered it could potentially be widened to include interruptions at LV level. NGED suggested reducing qualifying criteria

over time, such as reducing the minimum number of interruptions in any one year to one interruption.

- 5.151 Energy UK considered thresholds should reflect evolving patterns of interruptions and vulnerability and the criteria should remain simple enough for customers to understand and for DNOs to operationalise. Thames Water considered that any revision should be guided by principles that consider impact on critical services, such as water treatment, wastewater and healthcare facilities, alongside traditional measures of reliability. In addition, it raised that thresholds should account for frequency and cumulative duration of interruptions, rather than single-event metrics, to capture the real-world impact on consumers and critical infrastructure.
- 5.152 Two DNOs suggested introducing additional measures for customers that do not quite meet the WSC criteria. NPg suggested considering 'anticipated WSC', ie those who have not yet met the criteria but are likely to do so if interventions are not made. UKPN suggested providing funding for a 'poorly served customer' group meeting reduced criteria (eg three interruptions of any length at any voltage). Citizens Advice considered that broadening the WSC criteria makes it harder to assess WSC funding proposals and there is a risk that an incentive which targets prolonged or repeated interruptions rewards outputs from investment already paid for by consumers under the UIOLI mechanism. Broadening WSC would therefore increase the risk of over-rewarding DNOs.
- 5.153 Two DNOs were against implementing further reporting requirements for WSC, given the reporting requirements implemented under RIIO-ED2. Citizens Advice suggested Ofgem could alternatively provide a summary based on WSC Annual Reports to allow for easier comparison across DNOs.

Planned interruptions

- 5.154 Most stakeholders (seven out of nine) agreed with amending IIS to account for increased investment in ED3. This included all DNOs, who raised concerns that the current target-setting methodology for planned interruptions would result in repeated penalties throughout ED3. NGED noted that one approach could be to reduce the weighting of planned interruptions within the IIS performance. UKPN considered that the incentive rate for planned interruptions should be set to zero, which was also supported by SPEN though only if a suitable alternative incentive could not be developed.
- 5.155 Five stakeholders, including four DNOs, recognised the importance of continuing to incentivise DNO performance during planned interruptions in BMCS. Four stakeholders provided alternatives to the SSMC suggestion of strengthening the focus on planned interruptions in BMCS. Of these stakeholders, Citizens Advice suggested keeping planned interruptions in IIS but with a zero-sum design. Thames Water suggested keeping planned interruptions

in IIS and proposed that the cost of interruptions under IIS should rise proportionally with additional outages impacting the same customers, keeping in line with a "touch the network once" approach. NPg's ISG suggested keeping planned interruptions in IIS as well as including it in BMCS. SPEN suggested amending IIS to account for increased investment and introducing an 'improving CML per CI' or 'avoided CML' mechanism.

Value of Lost Load

- 5.156 The majority (seven out of eight) stakeholders agreed that VoLL should be updated in ED3. NPg's ISG considered that VoLL should be replaced with customer damage functions, considering VoLL is not really a value as it is a function of both time and customer type.
- 5.157 Three DNOs were in favour of keeping a single VoLL figure. Two DNOs highlighted a dynamic value would be more reflective of the impact, though both noted that the complexity of implementing this should be weighed against the expected benefit of moving from a single VoLL. Energy UK considered that retaining a single figure for core mechanisms could be beneficial where operational complexity is a concern, while dynamic values could be used in analysis and planning.

SSMD decision and rationale

Severe weather exceptional event threshold

- 5.158 Following the publication of the SSMC we initiated a review of the SWEE threshold and focussed on if the mean daily fault threshold was still at the appropriate level for exclusion from the calculation of the IIS rewards/penalties.
- 5.159 As set out in our SSMC, we considered it appropriate to review the SWEE threshold as weather events previously considered to be rare and extreme are expected to become the 'new normal'. As the frequency and intensity of these weather events increase, unless investment for resilience actions also increase, we expect these thresholds to be exceeded more often which will negatively affect customers level of service. If the number of events that exceed the threshold increase, this would mean more interruptions would be excluded from the IIS. By excluding these events, recovery is only incentivised by GSoPs, and there is a question as to whether this is driving the best performance from DNOs. This may have been sufficient for events that were once rare, but as severe weather events become more frequent and customers rely more heavily on electricity in their everyday life, this may no longer be acceptable.
- 5.160 We note the points raised by stakeholders regarding the SWEE threshold and its methodology. In particular, we note NGED's argument that the methodology for setting the threshold self-corrects as the average number of faults is updated to reflect most recent data and those from SPEN that increasing the threshold

assumes that networks will either deteriorate or fail to maintain customer resilience expectations through a changing climate. These points and others raised considering either an expected increase in faults due to climate events or a potential decrease in faults due to improved resilience, and how these may interact with one another, will all be considered as we progress with the review.

- 5.161 We have not yet concluded our review of the SWEE threshold, however we are considering that it may be appropriate to raise the SWEE threshold to 13x daily mean faults at HV and above (referred to as category 2 severe weather events), if there is sufficient evidence of an increase in frequency of severe weather events exceeding 8x daily mean faults at HV and above (known as category 1 severe weather events). Further work is needed on the implications of any change to the SWEE threshold and the outcomes any change would deliver. We are also conscious a change to the SWEE threshold would impact target setting and may have implications to other decisions we are yet to take (such as any long duration unplanned interruptions mechanism). We will continue our work on reviewing the SWEE threshold over the coming months, and in doing so will work closely with DNOs and wider stakeholders. We will set out a decision in our Draft and Final Determinations.
- 5.162 On other proposals relating to the SWEE threshold, we consider that setting a gradual exclusion criteria for events not meeting the SWEE threshold would not further incentivise resilience and instead could drive negative customer outcomes as DNOs would be less incentivised to restore customers as quickly as they currently do. DNOs should reinforce assets where they are likely to fail under minor weather events to minimise the likelihood of disruption and work to restore customers quickly and efficiently where interruptions do occur, we will therefore not develop this option further.
- 5.163 Finally, we will continue to review the value of publishing data on severe weather events, particularly as we develop support during a storm or interruption as a new primary area of focus for vulnerability for ED3. We consider publication of data may help customers better understand DNO performance during severe weather events, though we will take into consideration SSEN-D's point that publication of SWEE-related CIs and CMLs could cause confusion on the basis that different severe weather events can cause varying impacts across licence areas and unintentionally result in inappropriate comparisons across DNOs.

Long duration unplanned interruptions (>12 hours)

- 5.164 As noted in our SSMC, the IIS framework has delivered sustained improvements in CI and CML metrics, but the averaging of these across a licence area can obscure the disproportionate impact on customers who experience long duration interruptions. We consulted on whether long duration interruptions are becoming more of a concern, particularly in the context of greater electrification,

and whether a targeted IIS mechanism could effectively address the issue that long duration outages can be obscured by the averaging mechanisms in IIS.

- 5.165 As noted in the above section, we are continuing to review the SWEE threshold and are conscious that any change in this threshold can subsequently impact the number of CIs and CMLs associated with long duration unplanned interruptions. Therefore, any alterations to this aspect of the incentive must be considered proportionally to SWEE threshold impacts. We will continue to review how we may want to further incentivise the reduction of customers impacted by long duration unplanned interruptions in the context of the SWEE threshold. We will continue our work on this over the coming months, and in doing so will work closely with DNOs and wider stakeholders. We will set out a decision in our Draft and Final Determinations.
- 5.166 We understand the point raised by DNOs that there are some cases where a long duration interruption may occur in the first instance in order to fully resolve the issue. However we still consider that such interruptions have significant impacts on customers given further electrification across GB, and think improvements could still be made to enable the swift reconnection of these customers. We acknowledge UKPN's proposal to reduce the GSoP to restore customer supply from 12 to 10 hours. However, we consider this proposal will not address our concern for those customers experiencing long duration interruptions as it would primarily address those experiencing interruptions for between 10 and 12 hours rather than the customers interrupted for greater than 12 hours.
- 5.167 For clarity, long duration unplanned interruptions refer specifically to those under normal weather conditions, ie any interruption that is not excluded as a severe weather exceptional event under IIS. However, we are conscious that perhaps more could be done to reconnect customers whose supply has been interrupted for a number of days where this is connected to a severe weather event. As a result, we will also engage with DNOs on whether further provisions or incentives may be needed to support the swift reconnection of customers experiencing these types of lengthy outages.
- 5.168 Finally, we welcome suggestions from consumer groups and wider stakeholders on providing temporary or alternative solutions for customers. In particular, we note the recent report from Citizens Advice on power outages detailing the impacts of interruptions on vulnerable consumers and suggestions on how to improve the domestic consumer experience of power cuts.⁵⁰ We are considering this further in our Consumer vulnerability section alongside our 'support during a storm or interruption' vulnerability area of focus for ED3.

Short interruptions (<3 minutes)

⁵⁰ [Lights Out: improving people's experience of power cuts - Citizens Advice](#)

- 5.169 Through our SSMC we asked for information on the impact of short interruptions on consumers, whether certain regions or customer groups were more affected and whether the severity of these impacts may change over the ED3 period. We also asked what drove these short interruptions and whether a formal mechanism should be introduced to address these impacts.
- 5.170 On review of stakeholder responses, it is apparent that there are certain customer groups that are disproportionately affected by short interruptions compared to that of the average customer. In particular, we have received responses noting the disproportionate impact short interruptions have on vulnerable customers, wastewater treatment and emergency responses. Therefore, we have decided that the impact of short interruptions on these customer types warrants further information on how DNOs intend to improve the impact on such customers. At this time, however, we are not considering including short interruptions within the IIS, as we do not think this would have the desired impact on those customers that are disproportionately affected by short interruptions. This is because it would incentivise reducing short interruptions for all customers, rather than enable specific focus on those most affected.
- 5.171 As a result, to enable a direct approach for the customers most impacted by short interruptions, we are asking DNOs to submit a Reliability Strategy alongside their Business Plans. The Reliability Strategy will identify the customers that are being disproportionately impacted by short interruptions, and how each DNO intends to minimise the impact of such interruptions on those identified customers in the ED3 period. Guidance on the Reliability Strategy is set out in the Business Plan Guidance accompanying this SSMD. We will also review the current reporting of short interruptions across DNOs to ensure the figures provided are comparable so that appropriate baseline performances are available for the consideration of potential future mechanisms.
- 5.172 Separately, we note several stakeholders referenced voltage fluctuations within their responses to short interruptions. For the purposes of short interruptions in this context, voltage fluctuations will remain outside of scope. However, we do recognise that voltage excursions are an issue impacting customers similarly to that of short interruptions. Under the DSO incentive, we are introducing Voltage Management voltage management as a new responsibility of the DSO role in ED3 (see paragraphs 4.163-4.185). DNOs should consider aiming to bring the voltage supplied to average customer down from the higher end of the allowable range to closer to the middle of the allowable voltage range to provide direct savings to customers through bill reductions. DNOs should also consider ensuring voltage always remains within the permitted variation around the nominal voltage range at customer premises to improve customer experience of new and existing connections of LCT assets.

Multiple unplanned interruptions

- 5.173 In our SSMC we recognised that, while average reliability metrics have improved across the sector, some customers continue to experience repeated unplanned interruptions. We consulted on how multiple unplanned interruptions should be defined and monitored over time and asked if targeted incentives or reputational tools could help improve outcomes for customers who are persistently affected.
- 5.174 We received support from stakeholders to improve customer outcomes in this area and consider that the impact of multiple unplanned interruptions on certain customer types warrants further information on how DNOs intend to improve the impact on such customers. We disagree with points raised by SPEN and SSEN-D that multiple unplanned interruptions are already sufficiently incentivised under IIS as there is no mechanism included to incentivise DNOs to ensure individual customers are not repeatedly interrupted. We welcome willingness from UKPN and NGED to address customers impacted by multiple unplanned interruptions as demonstrated through their early proposals.
- 5.175 As a result, to enable a direct approach, we are asking DNOs to submit a Reliability Strategy alongside their Business Plans, which will identify the customers that are being disproportionately impacted by multiple unplanned interruptions, and how the DNOs intends to minimise the impact of such interruptions on those identified customers in the ED3 period. Guidance on the Reliability Strategy is set out in the Business Plan Guidance accompanying this SSMD. We will also work with DNOs to improve their monitoring and reporting of customers experiencing multiple unplanned interruptions at all voltage levels and to set out the average number of interruptions customers are experiencing in their licence areas.
- 5.176 We have not set a definition for multiple unplanned interruptions as we expect that the frequency at which a customer is considered disproportionately impacted will vary across licence areas. Instead, we expect DNOs to set out at what frequency or frequencies they consider their customers become disproportionately impacted. Multiple interruptions will remain focused on unplanned interruptions as we will continue to review the impact of planned interruptions separately post-SSMD (see paragraphs 5.184-5.188).

Worst Served Customers

- 5.177 In the SSMC we consulted on whether the definition we have for WSC was still appropriate and if any additional regulatory or operational measures beyond the UIOLI mechanisms could be introduced to ensure continued improvements for WSCs. On review of stakeholder responses, we recognised the general support for maintaining the mechanism for ED3 and we have reviewed the criteria to determine a WSC.

Decision ED3 Sector Specific Methodology Decision

- 5.178 For ED3 we have decided to amend the definition of a WSC, reducing the requirement of at least two interruptions per year, down to one interruption per year. As a result, the definition for WSC for the purposes of ED3 is a “customer experiencing on average at least four higher voltage interruptions per year, over a three year period (ie 12 or more over three years, with a minimum of one interruption per year)”.
- 5.179 We have reduced the minimum number of interruptions per year to one as we consider that the total number of interruptions experienced over the period is enough to warrant intervention through the UIOLI mechanism. We also consider that customers should not be excluded from such upgrades due to the minimum requirement in one year.
- 5.180 We maintain the view that the IIS incentivises DNOs to carry out investment to improve reliability at lower voltages (where the cost of this work is often lower) and that the WSC mechanism should remain focused on higher voltages. This will maintain the boundaries between the IIS and the WSC mechanism and lead to more efficient solutions to network reliability than if we were to include faults on the LV network within the WSC mechanism.
- 5.181 We believe that as the overall customer reliability is improved between both IIS and the WSC mechanism, the threshold to define a worst served customer should reduce over time. The introduction of a new 'anticipated WSC' or 'poorly served' group could therefore be premature and could take focus away from those experiencing the worst levels of reliability.
- 5.182 We will maintain the WSC Governance Document, which requires DNOs to publish the WSC methodology and annual reports. We agree with stakeholders that additional reporting streams would add a disproportionate level of regulatory reporting burden. However, we recognise that additional information in the WSC methodology and annual reports to document customer outcomes will improve issues identified regarding transparency. We will continue to review the WSC Governance Document to clarify what information should be covered in the WSC methodology and annual reports post publication of this SSMD.
- 5.183 While we recognise that a national minimum standard for reliability would in theory give additional clarity to customers and minimise disparity, we consider that it may inadvertently act as a benchmark that could constrain ambition. This could lead to some DNOs reducing their performance to the minimum level rather than continuing to exceed it.

Planned interruptions

- 5.184 In our SSMC we consulted on whether the IIS should be amended to reflect the expected increase in planned interruptions, whilst noting the possibility to strengthen the focus on planned interruptions through BMCS.

- 5.185 We have decided that the impact of planned interruptions on customers will remain incentivised under a reliability metric in ED3.
- 5.186 We note the responses from the DNOs that the current target-setting method for planned interruptions may result in an unavoidable increase in penalties with the expected increase in planned works during ED3. However, we still consider that DNOs should remain incentivised to ensure customers are not unduly interrupted for excessive periods of time and therefore do not agree that the weighting on planned interruptions in IIS should be reduced to zero without a sufficient alternative in place.
- 5.187 We are still considering what this incentivisation might look like, with the current options including: reviewing the weighting of planned interruptions in IIS, reviewing the rolling baseline, or moving planned interruptions to a new metric such as minimising the planned CML per CI. We will continue work on this over the coming months, and in doing so will work closely with DNOs and wider stakeholders. We will set out a decision in our Draft and Final Determinations.
- 5.188 Finally, the customer experience of planned interruptions will also continue to be incentivised in the BMCS CSS. Further information on this is provided in the Customer Satisfaction Survey section (see paragraphs 3.176-3.182).

Value of Lost Load (VoLL)

- 5.189 In the SSMC we consulted on whether it was appropriate to update the VoLL for ED3.
- 5.190 In 2025, we commissioned the Energy Networks Association (ENA), to undertake an economic study to establish a new VoLL figure. This study has now been completed, with the findings presenting two distinct options for the values for use in IIS calibration.⁵¹ The first option set out a dynamic VoLL while the second arrived at a single VoLL of £24,040.
- 5.191 Based on the findings from the ENA study, we have decided to use the VoLL estimate of £24,040/MWh for the purpose of setting a value for the IIS. We consider that a single VoLL is most appropriate for use in this incentive given the clarity of a single VoLL and the consistent use of single VoLLs across our price controls. Single VoLLs have been used since the estimation of a VoLL figure established in the 2013 London Economics study which provided the VoLL figure used in RIIO-ED1 and formed the basis of the figure used in RIIO-ED2, creating a regulatory precedent. We have also applied a single VoLL figure in RIIO-3.
- 5.192 The IIS VoLL differs to that of the VoLL chosen for Energy Not Supplied (ENS) in RIIO-ET3 due to alternative calculation methods. The ENS VoLL was derived by looking at the average of VoLL estimates over season, day of week, and time of

⁵¹ [Value of Lost Load Study in Great Britain – Energy Networks Association \(ENA\)](#)

day, for an unplanned interruption as interruptions on the transmission network are less impacted by seasonality, ie interruptions are often due to equipment malfunctions rather than severe weather. The IIS VoLL was derived by calculating the cost of interruptions that have occurred on the distribution networks and then taking a weighted average of these costs using the number of customers interrupted as weights. This method was applied for IIS as distribution level interruptions are more impacted by seasonality and have further ability to respond to and reduce the risk of certain interruptions.

- 5.193 We note NPG's ISG's view that VoLL should be replaced, but we do not agree with their proposal as we consider VoLL remains a useful tool to translate IIS performance to incentive rates and there has been a consistent use of VoLL across price controls since RIIO-1, which has to date worked well.

Conclusion

- 5.194 We recognise that further work is required across a range of areas within reliability, and particularly for the IIS. We intend to continue to collaboratively work with stakeholders on these areas and expect to run working groups throughout the remainder of 2026 and into 2027. This work will cover not only those areas that have been left open for further consideration above, but will also include IIS methodology, target setting and the strength of the incentive. We will also consider any implications or requirements for GSoPs.
- 5.195 Through responses to the SSMC and further engagement with relevant stakeholders, we received feedback on the interaction between DNOs and other utilities, including Critical National Infrastructure, and the wider implications that interruptions have for these customers. We consider that it is the responsibility of both DNOs and these utilities to work together, and DNOs should continue to engage with such stakeholders to minimise knock-on disruption where possible. We recognise regular communication in advance of known interruptions or weather events that are likely to lead to interruptions is beneficial for both DNOs and utilities. Consistent engagement helps them to understand the wider impact of the interruption and enable both DNOs and utilities to consider the best method of addressing and minimising the impacts where possible.
- 5.196 A number of stakeholders also raised suggestions on how exactly DNOs may address reliability issues, such as technologies which could be deployed and utilised. We welcome these suggestions and expect DNOs to consider all alternatives when investing to improve customer outcomes, whilst ensuring the appropriate cost-benefit of available options. We also recognise that the effectiveness of IIS in both minimising the impact of interruptions and minimising expenditure should drive innovative approaches to achieving the best outcome for customers.

5.197 Finally, we are aware of ongoing work led by DESNZ and commissioned by NESO to identify High Impact Points of Failure (HIPFs) on the gas and electricity distribution network. Should any HIPFs be identified during this process, DNOs are to submit any projects and the estimated investments required to ensure the HIPFs meet the set standard as defined by the framework in their Business Plans.

Resilience re-opener

SSMC summary

5.198 At SSMC we set out proposals to introduce a single, consolidated resilience re-opener for the ED3 price control period. This would replace the multiple, more narrowly defined resilience re-openers used in RIIO-ED2, with the aim of simplifying the framework while retaining appropriate flexibility to respond to evolving risks and external requirements.

5.199 We explained that the resilience re-opener is intended to address material changes in circumstances where an adjustment to funding may be required. This could be because of new or significantly revised government led resilience policies, standards or requirements that emerge during ED3.

5.200 We emphasised that the re-opener is not intended to fund resilience activities that are foreseeable at the time of business plan submission, or initiatives that are largely within the control of network companies to plan for and deliver. Where risks and requirements are sufficiently certain, we expect these to be reflected in baseline business plans and assessed through the ex-ante price control process.

5.201 We also set out that the resilience re-opener would sit within the wider suite of ED3 uncertainty mechanisms and would be applied in a targeted and proportionate way, balancing the need for adaptability with protection for consumers.

Summary of consultation responses

5.202 We received 14 responses to the SSMC questions on the resilience re-opener, from distribution network operators, industry bodies, consumer representatives, other stakeholders.

5.203 A clear majority of respondents supported the introduction of a resilience re-opener in ED3. This included all five responding DNO groups (SSEN-D, NGED, SPEN, NPg and UKPN), Citizens Advice, Energy UK, and NESO. Stakeholders recognised the value of a mechanism to manage uncertainty arising from evolving external resilience risks and requirements. Many respondents, including most DNOs and the consumer group, supported consolidation into a

single re-opener as a means of simplifying the regulatory framework relative to RIIO-ED2.

- 5.204 A large proportion of respondents (including all five DNOs and Citizens Advice) agreed that the re-opener should focus on changes driven by external factors, particularly new or revised government policy, standards or regulatory requirements related to resilience. Several of these respondents emphasised that the re-opener should not be used as a substitute for baseline funding. They stressed the importance of network companies continuing to plan for foreseeable resilience needs through their business plans.
- 5.205 A smaller number of respondents (including two DNOs and a non-network stakeholder) argued for a broader scope, suggesting the re-opener should also accommodate industry led standards or emerging best practice. In contrast, a few respondents (including Citizens Advice and other DNOs) cautioned that an overly broad scope could increase uncertainty, weaken incentives for robust ex ante planning, or risk duplicating baseline funding mechanisms.
- 5.206 Several respondents (including three DNOs and NESO) called for clarity and transparency around the triggers, scope and assessment process for the re-opener. These stakeholders highlighted the importance of timely and predictable decision making to ensure that urgent resilience requirements can be addressed efficiently where needed. Views were mixed on specific design features, such as whether materiality thresholds should apply and how frequently the re-opener should be available. No single approach attracted majority support, though many respondents emphasised the need to balance flexibility with proportionality and administrative burden.
- 5.207 Across respondent groups, there was a consistent theme that the resilience re-opener should complement, rather than replace, baseline allowances and established asset management or resilience activities. This view was expressed by all responding DNOs and Citizens Advice. Several respondents stressed that predictable or well understood risks should continue to be addressed through upfront funding and delivery mechanisms, with the re-opener reserved for genuine external uncertainty.

SSMD decision and rationale

- 5.208 We have decided to introduce a resilience re-opener for ED3, as proposed in the SSMC.
- 5.209 We believe Government-led resilience policy and standards are an area of genuine uncertainty over the ED3 period. Introducing a resilience re-opener supports our statutory duties to protect the interests of existing and future consumers, including by ensuring networks remain secure and resilient in the face of evolving external risks, while also providing appropriate safeguards against consumers bearing unnecessary or avoidable costs.

5.210 The resilience re-opener will form part of the wider ED3 uncertainty mechanism package and will be applied in a way that balances flexibility with consumer protection. It will be used only where there is clear evidence of a qualifying change in external requirements, stemming from a change in government requirements, and where the proposed costs are efficient and justified. We will provide further detail on the design and operation of the resilience re-opener as part of Draft Determinations and will engage with government and stakeholders in advance of these proposals.

Cyber

SSMC summary

5.211 In the SSMC we outlined our objective for ED3 to build on progress made to date in RIIO-ED2 in complying with the Network Information Systems (NIS) regulations and to reduce the regulatory burden given the sector's increasing maturity.

5.212 To help ensure alignment with the NIS and set clear expectations across all sectors, we proposed to build on the progress made in the transmission and gas distribution sectors and adapt policies and documentation used as part of the RIIO-3 Business Plan Guidance.

5.213 In the SSMC, we proposed to:

- Combine Information Technology (IT) and Operational Technology (OT) cyber resilience applications into one holistic Cyber Resilience Business Plan (CRBP), which aligns with NIS
- set all cyber resilience allowances at the outset of the ED3 price control using two funding mechanisms:
 - Totex: for evaluative PCDs where there are clear need cases, proposed delivery schedule, and costs, with PCDs capped at 16 to align with Cyber Assessment Framework CAF principles, and costs subject to the TIM
 - Use-it-or-lose-it: where business need and specific needs case for a proposed project is justified however uncertainty remains over the preferred option, schedule and cost
- require network companies to continue to report on allowances annually
- discontinue holding a fixed cyber resilience midperiod re-opener whilst Ofgem retain the ability to introduce new re-opener windows within ED3

Summary of consultation responses

5.214 We received 10 responses to our consultation proposals on cyber resilience. Respondents broadly supported the main principles underpinning our proposals as described below.

- 5.215 Alignment with NIS Regulations and CAF: There was strong agreement that NIS compliance should remain the primary driver of cyber resilience investment and stakeholders welcomed the continued use of the CAF as the basis for planning and reporting.
- 5.216 Holistic Cyber Resilience Business Plan: All respondents endorsed the move to a single, combined IT/OT plan, noting that this will streamline submissions, reduce duplication, and provide clarity on linkages to wider business plans.
- 5.217 Upfront allowances and funding certainty: There was broad support for awarding most cyber allowances upfront and shifting from predominantly UIOLI allowances in RIIO-ED2 to predominantly ex ante allowances linked to PCDs and subject to the Totex Incentive Mechanism, as stakeholders considered this would increase delivery confidence and support more efficient planning of multi-year projects.
- 5.218 Reduction in Reporting Burden: Respondents welcomed proposals to simplify reporting and avoid unnecessary duplication and provided further suggestions such as consolidating PCD and NIS annual reporting and adopting a proportionate approach to monitoring.
- 5.219 Stakeholders raised several points for consideration. These are set out below.
- 5.220 Re-opener mechanism: Stakeholders supported retaining the ability for Ofgem to trigger a cyber re-opener. However, one stakeholder pushed back on the removal of the fixed mid-period re-opener and other stakeholders caveated their support for the removal of the fixed window as being contingent on Ofgem managing allowances sensibly. There was broad recognition that UIOLI allowances may not be adequate to manage significant uncertainties such as legislative changes (including the Cyber Security and Resilience Bill) or significant changes to threat profiles.
- 5.221 UIOLI allowances: Stakeholders supported the principle of UIOLI allowances for smaller, uncertain projects but requested clarity on assessment criteria, reporting requirements, and the scale of funding available. Several respondents cautioned that a capped UIOLI allowance may not provide sufficient flexibility for non-NIS improvements or emerging technologies.
- 5.222 Scope and boundaries: Several responses requested clearer guidance on how BAU activities and non-NIS improvements should be presented. Respondents asked for clearer guidance on the delineation between funding streams for cyber resilience, IT and telecoms, digitalisation, and physical security as well as improved submission templates.
- 5.223 PCDs: Respondents supported reducing the number of PCDs and were keen to ensure any PCDs are proportionate and clearly linked to deliverables. However, views varied on whether PCDs should be retained at all. One stakeholder

recommended aligning PCDs to CAF objectives rather than principles (ie to have a maximum of five rather than 16).

SSMD decision and rationale

5.224 Our aim is to ensure that ED3 delivers a robust, efficient, and adaptable framework for cyber resilience, supporting compliance with NIS regulations while enabling network companies to respond effectively to evolving threats and legislative requirements.

5.225 Given the significant support, we confirm we will have a single business plan that brings together IT and OT and we will aim to align the price control with NIS/CAF to reduce the regulatory burden.

Re-opener mechanism

5.226 In line with our original position and majority stakeholder feedback, we intend to retain the cyber re-opener, but only where we trigger it ('authority-triggered re-opener'), with no fixed window. We consider that the ability to manage significant changes is important and holding a fixed window is likely to restrain, rather than enable, that flexibility.

Use-It-Or-Lose-It allowances

5.227 We recognise the feedback provided on our proposals. We have decided to keep the proposed cap at 20% of Totex cyber allowances to ensure that it is a relatively small pot of funding dedicated to projects that have a clear needs case but no clear deliverables. Several stakeholders requested we are clearer on the reporting mechanisms for UIOLI. We will engage with DNOs on the reporting mechanisms as part of producing the associated documents for ED3.

Scope and boundaries

5.228 We recognise these requests and have added information on the following into the Business Plan Guidance:

- treatment of BAU or operational costs, which should be included in the CRBP but clearly aligned to the relevant projects and included with the Cyber Resilience Investment Document (CRID)
- treatment of non-NIS cyber costs, which we will consider within the CRBP where DNOS can demonstrate a clear and well justified link for investment in an asset that is not subject to the NIS but will deliver risk reduction to assets that are subject to the NIS
- we have added a table breaking down the suggested business plan areas for different types of projects between cyber resilience, IT and telecoms, digitalisation, and physical security

- the CAF Enhanced Profile is a floor, rather than a ceiling, and that we expect DNOs to be actively pushing to further reduce cyber risks, where this is proportionate and economically efficient
- DNOs should include information on how they have prioritised risks within the risk methodology section

5.229 Additionally, we have updated CRID template, to better align with the Engineering Justification Papers, whilst retaining the cyber specific information necessary.

Price Control Deliverables

5.230 We recognise the concerns raised by multiple stakeholders with the burden caused by having large numbers of PCDs. We consider that, in line with RIIO-3, capping the number of PCDs at 16 to align with the 16 CAF Principles will allow us to track delivery accurately. This will also reduce the regulatory burden, especially when combined with a new, streamlined PCD template and process that we will engage separately on.

Supply chain and workforce

SSMC summary

5.231 In our SSMC, we set out that delivery risks in ED3 could be increasingly driven by supply chain and workforce constraints. We considered that fixed-period price controls do not inherently incentivise steady project delivery. This can weaken the longer-term demand signals needed for manufacturers, contractors and training providers to invest with confidence ahead of demand. We noted that stakeholders identified emerging risks including longer lead times and higher prices for certain critical equipment, zero commitment contracts with uneven risk allocation between suppliers and DNOs, limited supplier competition, and widening skills shortages across DNOs, contractors and manufacturers, reflecting an ageing workforce, long training lead times, and limited training capacity.

5.232 We recognised that many of these risks are within DNOs' management control, through their approach to planning, procurement, contracting and workforce development. To address these risks, we consulted on a package to strengthen delivery planning, market visibility and accountability. This included requiring DNOs to translate long-term network investment plans into an execution-ready, publicly visible 10-year Delivery Strategy spanning ED3 and the following 5-year period. We suggested for this to be supported by DNOs publishing forecast equipment and workforce volumes to improve market visibility and support earlier mobilisation. We proposed that delivery strategies form part of the

business plan submission, supported by proportionate monitoring and refreshed evidence over time.

5.233 We clarified that, unlike electricity transmission, distribution price controls are largely funded upfront, meaning DNOs already receive certainty over a significant share of their revenues at the start of the five-year period. As a result, extending the Advanced Procurement Mechanism to the DNOs would not provide additional consumer benefit. But where early preparatory activity is needed to maintain continuity into ED3, we consulted on using three RIIO-ED2 Load Related Expenditure (LRE) reopener windows to enable targeted mobilisation where this is justified and provides consumer benefit and reduces delivery risk.

5.234 Finally, we recognised the opportunity for ED3 investment to support domestic supply chains and social value. We sought evidence on current UK content in DNO supply chains and potential barriers within the price control framework, to inform whether further proportionate action may be needed in ED3 or future price controls.

Summary of consultation responses

5.235 For Q111 to Q118, we received responses from 16 stakeholders including DNOs, supply chain stakeholders and industry bodies.

Delivery strategy (Q111 to Q114)

5.236 Support was strongest for the core proposition that DNOs should operationalise long-term integrated network plans into an execution-ready Delivery Strategy, supported by greater visibility of forecast asset and workforce needs. 12 out of 13 stakeholders supported requiring a 10-year Delivery Strategy and 11 out of 11 stakeholders supported publishing volumes. Views were more mixed on BPI stages and delivery monitoring. On BPI, four out of eight stakeholders supported inclusion in both stages A and C, while the remaining four were less supportive, preferring Stage A as a minimum standard and cautioning against using Stage C to assess an overarching strategy that is difficult to compare objectively.

5.237 On monitoring, eight out of 10 stakeholders supported introducing a framework, one was less supportive (UKPN) and one opposed (NGED). Respondents that supported monitoring said it should be proportionate, aligned with existing reporting, and focused on delivery risks. NGED opposed an inputs-based approach, citing risks to efficiency and flexibility. UKPN linked its position to concerns about how fixed the strategy would become in practice. ADE: Demand highlighted the role of consumer-led flexibility in smoothing delivery bottlenecks.

5.238 Stakeholders supported the direction of travel but emphasised the need for requirements to remain outcome-focused and proportionate. Three expectations emerged:

Decision ED3 Sector Specific Methodology Decision

- seven respondents said volume publication must be based on structured, comparable data, with common definitions, consistent templates, and clear redaction principles. Our BPDT tables were suggested as a practical starting point
- five respondents supported a 10-year horizon but asked for clearer distinction between more certain ED3 commitments and more indicative ED4 planning, to preserve flexibility while maintaining a credible forward view
- four respondents said volume publication alone is insufficient, and that capacity growth depends on clear, early signals, including phasing and visibility of delivery approaches

5.239 Sector views were consistent. DNOs supported the requirements but emphasised flexibility, clarifying accountability, and avoiding incentives that could constrain procurement or drive over-commitment. Supply chain stakeholders and industry bodies placed greater emphasis on standardisation, clarity on justified volume redactions, and forward visibility to support investment decisions. EA Technology focused on the need for common metrics and alignment between delivery strategies, monitoring and BPDT structures.

Mobilisation funding windows (Q115)

5.240 All nine stakeholders that responded to this question supported using RIIO-ED2 LRE re-opener windows to enable critical early works ahead of ED3. Respondents aligned on the purpose to reduce delivery risk and cost escalation through timely mobilisation, particularly where long-lead equipment, early design, or partner mobilisation would otherwise be delayed.

5.241 Stakeholders converged on three design priorities:

- Clear scope of eligible activities: four stakeholders (Energy UK, SSEN-D, NGED and NPg) emphasised early design and surveys, consents and land activity, early procurement steps (for example deposits or factory slots), and mobilisation of delivery partners and workforce capability. UKPN favoured applying existing RIIO-ED2 LRE re-opener rules, including scope and materiality thresholds, and proposed linking access to forecast utilisation of RIIO-ED2 allowances and delivery of committed outputs.
- Workable evidence requirements: three stakeholders (Energy UK, SSEN-D and NGED) supported clear evidence of need and progress, while cautioning against overly rigid requirements that would be difficult to apply in practice.
- Timely decisions: three stakeholders (SPEN, SSEN Transmission and Hitachi Energy) stressed that existing timings may not support day-one ED3 delivery and called for faster decisions or additional mechanisms to support early procurement. NPg cautioned that repeated re-openers could undermine certainty if not tightly scoped.

Enabling growth (Q116 to Q118)

- 5.242 These questions explored how ED3 can support domestic capability, workforce development and social value, consistent with Ofgem’s growth duty and procurement constraints. Responses were supportive and largely aligned with our evidence gathering approach.
- 5.243 Five stakeholders (including BEAMA, Hitachi Energy and NPg) indicated that DNOs are already actively and effectively engaged in these programmes, and that additional regulatory requirements should be limited. The consistent message was that Ofgem should focus on enabling coordination and stepping in where gaps arise, rather than introducing duplicative or prescriptive obligations.
- 5.244 On UK content and social value (Q117), respondents agreed that current data is inconsistent and not comparable, with several noting that UK-based spend is a weak proxy for domestic capability. This is because a significant share of spend recorded with UK-based suppliers reflects globally sourced equipment or corporate pass-through structures, rather than domestic manufacturing or value added. Respondents also highlighted that UK contribution is concentrated in services (such as design, civils and installation), while much of the underlying equipment supply chain remains international. The clear ask was for better definitions and structured data before considering further intervention.
- 5.245 On barriers and enablers to domestic content in DNO supply chains (Q118) respondents consistently identified procurement regulation particularly the Utilities Contracts Regulations and the Procurement Act as the primary constraint. These frameworks impose strict compliance requirements, limiting the ability to favour specific suppliers or SMEs, including UK-based firms, unless such decisions can be objectively justified on overall value-for-money grounds.
- 5.246 UKPN and NGED both emphasised that these legal constraints materially shape procurement decisions. UKPN said that, within the current framework, DNOs are required to run fair, open and non-discriminatory competitions, which limits the extent to which procurement can be used to prioritise domestic suppliers. It therefore emphasised that any policy intervention should focus on enabling UK suppliers to be competitive on value, rather than introducing requirements that could conflict with procurement law.
- 5.247 NGED similarly highlighted that procurement obligations require decisions to be made on a transparent and objective value-for-money basis and cautioned against approaches that could restrict competition or increase costs to consumers. It emphasised that social value considerations must be clearly defined, proportionate, and legally robust, and integrated in a way that remains consistent with procurement requirements.
- 5.248 Within these constraints, respondents pointed to a small number of practical levers:

Decision ED3 Sector Specific Methodology Decision

- four stakeholders supported a shift toward best value, including resilience, security of supply and whole-life considerations, rather than lowest upfront cost
- four stakeholders highlighted long-term visibility and transparent procurement pipelines as the main mechanism to enable UK suppliers and SMEs to invest and compete
- two stakeholders emphasised the need for clear, trade-compliant approaches to embedding social value in evaluation criteria

5.249 Across responses, the consistent message was that progress depends on how procurement frameworks are applied, rather than creating new obligations that risk conflicting with existing legislation.

SSMD decision and rationale

5.250 We are proceeding with our proposed approach to supply chain and workforce in ED3, focused on improving delivery confidence through clearer long-term planning, stronger market signals, and proportionate accountability.

5.251 On Delivery Strategies (as set out in the Business Plan Guidance that accompanies this document), we are requiring DNOs to produce a 10-year Delivery Strategy aligned to their overall business plan, setting out how they will deliver their investment programme across ED3 and the following 5-year period. This reflects strong stakeholder support for longer-term, execution-ready planning, while addressing concerns about rigidity by ensuring that content remains proportionate and adaptive over time, with a clearer distinction between firm ED3 commitments and more indicative forward planning.

5.252 Consultation responses highlighted the importance of volume visibility in enabling suppliers and training providers to invest with confidence ahead of demand. We are considering these responses and will engage further with stakeholders on the question of mandatory publication of forward-looking network asset and workforce volumes. At present, we strongly encourage DNOs to assess for themselves the level of detail that they can publish while remaining compliant with competition law and minimising risk of reducing competition in supplier markets, and to publish on that basis. Our expectation is that DNOs ensure funded outputs and consumer outcomes are delivered at the right place and at the right time. DNOs should demonstrate in their Delivery Strategy how improved forward visibility to the supply chain supports timely and efficient delivery, while managing any potential risks to supplier competition.

5.253 Within their Strategy, we require DNOs to propose a proportionate set of key performance indicators to support the early identification and addressal of delivery risks. These metrics will be integrated into ED3 annual reporting arrangements (the Regulatory Reporting Pack) and focused on actionable

indicators, in line with stakeholder feedback that monitoring should remain outcome-focused and avoid duplication.

- 5.254 Delivery Strategies will be assessed under BPI Stage A as a minimum requirement, but we will not extend assessment to Stage C. This reflects stakeholder concerns that the quality of strategies would be difficult to assess on a consistent and objective basis at Stage C, and that doing so could incentivise overly rigid or detailed commitments.
- 5.255 On ED3 mobilisation, we will accept submissions for preparatory works via the remaining RIIO-ED2 LRE re-opener window in January 2027 to support preparatory activity ahead of ED3. In response to consultation feedback, we:
- will consider inviting draft applications this Autumn, ahead of formal submissions to support faster decision-making
 - confirm that applications may include indirect costs, where these are clearly and directly linked to ED3 load-related investments
 - expect DNOs to reflect anticipated mobilisation activity within their Delivery Strategy, supporting a coherent and transparent delivery narrative
- 5.256 These refinements balance the need for timely, effective mobilisation with the importance of maintaining proportionality and consistency with the existing framework.
- 5.257 On enabling growth, we will maintain an evidence-led approach. Consultation responses confirmed that there is currently no consistent or comparable data on UK content or social value across DNO supply chains, and that clearer definitions and reporting are needed before further intervention.
- 5.258 We are progressing this through our ongoing work on Growing Great Britain's electricity network supply chains, where we are considering developing proportionate, standardised reporting on procurement and supply chain activity.⁵² We are reviewing responses, including evidence shared on domestic capability, demand visibility and procurement practices. This will inform whether further policy action is required in ED3 or future price controls.
- 5.259 Respondents were clear that procurement regulation, including the Utilities Contracts Regulations and the Procurement Act, is the primary constraint to location-based supplier preferences. We recognise these limits and will not introduce mechanisms that conflict with legal requirements or undermine competition.
- 5.260 However, existing price control frameworks allow DNOs to take a broader view of efficiency. Our approach to cost assessment means that additional costs can be considered efficient and economic if there is evidence of consumer value. This

⁵² [Growing Great Britain's electricity network supply chains: Ofgem position and call for evidence | Ofgem](#)

can be demonstrated in a variety of ways. For example, demonstration that a supplier is investing in new UK-based manufacturing capacity or expanding its GB workforce is evidence of a positive contribution to long-term supply chain resilience and competition. The value of the investment that a supplier is making, and the number of new roles being added may be relevant considerations. We expect DNOs to substantiate that evidence as with any other cost during the assessment process. Where such costs are allowed, we will engage stakeholders on any additional measures needed to ensure funds are directed to the intended outcomes

5.261 For more on economic growth, see Paragraphs 3.432 to 3.433.

5.262 Overall, our approach reflects strong stakeholder support for improving long-term visibility and coordination, while ensuring requirements remain proportionate and focused on consumer value by addressing delivery risks before they materialise.

6. Managing uncertainty and adaptation

In the SSMC, we set out our proposed approach to managing uncertainty in ED3, recognising that distribution networks will face both expected and unforeseen changes as electrification accelerates, strategic planning evolves and wider policy emerges.

We confirmed that while we expect the majority of funding to be set ex ante, a suite of uncertainty mechanisms will remain essential to adjust allowances, outputs or timings where justified, ensuring consumer protection alongside delivery flexibility.

We propose retaining all core uncertainty mechanism types, including pass-through costs, volume drivers, re-openers and UIOLI allowances, but will refine and rationalise their application for ED3 so that the overall toolkit remains proportionate and is efficient and responsive to the sector's needs.

SSMC questions

Q119. Do you agree with our proposals for pass-through costs? Why?

Q120. Do you agree that we should consider incentivising DNOs to reduce costs associated with business rates? Why?

Q121. Do you agree with our proposals for volume drivers? Why?

Q122. Do you agree with our proposals to consolidate re-openers relating to resilience and cyber? Why?

Q123. Do you agree that costs associated with Wayleaves and Diversions and Streetworks should be included in baseline allowances? Why?

Q124. Do you agree with retaining the existing RIIO-ED2 materiality threshold at which re-openers can be submitted at 0.5% of baseline revenue? Why?

Pass-through costs

SSMC summary

- 6.1 On pass-through costs, we consulted on updating the list of cost categories where costs are passed through to consumers, to reflect where costs are genuinely outside of DNO control, including exploring whether some items, such as business rates, should move into baseline allowances, and whether a miscellaneous pass-through should be reinstated for unforeseeable and uncontrollable cost items.
- 6.2 We also signalled the need for clear, consistent treatment of transmission connection and capacity charges, to provide regulatory certainty and avoid perverse incentives across companies and customer groups. These proposals sought to strike a balance between efficient risk allocation and protection of consumers from uncertainty that DNOs cannot influence.

Summary of consultation responses

- 6.3 10 stakeholders responded to Question 119, including DNOs, consumer bodies, environmental organisations and industry representatives. Views on our proposals for pass-through costs were mixed, with no clear consensus across the stakeholder groups. While some respondents, including Citizens Advice and the Centre for Sustainable Energy, supported elements of the proposals, such as improving alignment of cost treatment with the controllability principle, DNOs raised a number of concerns about specific elements, particularly the potential movement of business rates into baseline allowances.
- 6.4 The question of business rates generated the strongest divergence in views. Several consumer-oriented stakeholders agreed with the proposal to bring business rates into baseline allowances to strengthen incentives for cost management, whereas all DNOs opposed this. Network companies noted that business rates are fundamentally outside of their control and subject to external valuation processes, making them unsuitable for totex treatment. Respondents including SPEN, SSEN-D, UKPN and NGED highlighted the risk that moving these costs into baseline could introduce volatility, create forecasting challenges and, in some cases, impact investment incentives due to the interaction between the RAV and rateable value.
- 6.5 There was broader support for the introduction of a miscellaneous pass-through category, with some DNOs (such as SSEN-D and NGED) considering it appropriate for truly unforeseeable costs. However, stakeholders also emphasised that such a mechanism would require clear governance to avoid diluting efficiency incentives or creating ambiguity around scope. Citizens Advice expressed particular concern that a broadly defined miscellaneous category could weaken incentives for efficient delivery. Other respondents, including SPEN, argued that any such term should be supported by transparent consultation processes to maintain clarity and consumer protection.
- 6.6 Stakeholders provided more aligned views on the treatment of transmission connection charges, with several DNOs, including SPEN, NPg and NGED, noting that New Transmission Capacity Charges (NTCC)⁵³, which relate to works at grid supply points (GSPs) that will be energised during the ED3 period, are driven entirely by external factors and should therefore be treated as pass-through, in the same way that existing Transmission Connection Point (TCP) Charges are currently. Respondents emphasised the importance of consistency in regulatory treatment across DNOs and with wider industry codes. This view was broadly

⁵³ New Transmission Connection Charges (NTCC) means 'those elements of Transmission Connection Point Charges that are attributable (in whole or in part) to connection assets first becoming energised on or after 1 April 2028 pursuant to a requirement of the licensee for the provision of new or reinforced connection points between the GB Transmission System and the licensee's Distribution System.'

shared by consumer groups, including Citizens Advice, who supported action to ensure consistent treatment and minimise the risk of perverse incentives.

- 6.7 Overall, the responses to Question 119 were supportive of maintaining a stable and clearly governed pass-through framework, but stakeholders did raise significant concern around changes that would alter the treatment of business rates or reduce clarity over cost allocation. While some respondents supported Ofgem's intentions to improve efficiency and transparency, many emphasised the need to maintain clear alignment between cost control, risk allocation and the principles of controllability underpinning uncertainty mechanisms in ED3.
- 6.8 11 stakeholders responded to Question 120, including DNOs, gas networks, industry bodies, and one water utility. Across this group, there was a clear and consistent view that business rates are largely determined by external factors such as government policy, Valuation Office Agency (VOA) methodologies and rating multipliers, and therefore fall outside the scope of cost areas that can be influenced by DNO management action. Respondents including SPEN, SSEN-D, ENA, NGED and National Gas all highlighted that the uncontrollable nature of business rates makes them unsuitable for incentive-based regulation.
- 6.9 Stakeholders also emphasised that introducing an incentive to reduce business rates could distort the regulatory framework. SPEN noted that moving business rates into baseline totex would add to the RAV, creating returns for DNOs rather than driving efficiency. Cadent and others warned of potential unintended consequences and questioned the consumer benefit of an incentive targeted at costs that DNOs cannot influence. Several respondents argued that existing licence obligations already require DNOs to minimise such costs and that adding a further incentive would not materially change behaviour.
- 6.10 Respondents further observed that business rates are difficult to forecast accurately, making it challenging to set fair and robust ex ante allowances. SPEN and SSEN-D raised concerns that uncertainty in future business rate valuations and the link between RAV and rateable values could create funding and investment risks if business rates were incorporated into baseline allowances. Stakeholders also emphasised that removing pass-through treatment could expose customers and companies to avoidable volatility.
- 6.11 Only one respondent, Thames Water, suggested there might be merit in exploring measures that could reduce consumer costs, though even this response did not support an incentive mechanism. ADE: Demand and NPg provided more neutral views but did not endorse any changes from the current approach. No stakeholder expressed support for incentivising DNOs to reduce business rates.
- 6.12 Overall, respondents did not support the introduction of a financial incentive on DNOs to reduce business rates. The predominant view across all network operators and industry bodies was that business rates should continue to be

treated as a pass-through cost, and that creating a financial incentive in this area would not improve efficiency, could lead to distortions, and would not be in the interest of consumers.

SSMD decision and rationale

Business Rates

- 6.13 We have decided to retain business rates as a pass-through term in ED3, and will continue to rely on Special Condition (SpC) 6.1.4 of the Distribution Licence to ensure DNOs engage proactively with the VOA to secure the best outcome for consumers.
- 6.14 In doing so, we expect DNOs to engage early and constructively with the VOA, to provide complete, accurate and timely asset information and to actively challenge draft valuations where appropriate in order to minimise costs for consumers.
- 6.15 Business rate revaluations are currently undertaken on a three-year cycle, led by the VOA. The most recent VOA revaluation concluded earlier this year, with the next expected during the ED3 period (2029 and potentially 2032). As highlighted by stakeholders, the uncertainty created by in-period revaluations means that it would be difficult to accurately forecast business rates on an ex ante totex basis. Given the scale of business rates, we therefore do not think that it would be appropriate to expose such uncertain costs to the Totex Incentive Mechanism (TIM), even on a partial basis. In addition, the timing, evidential requirements and outcomes of VOA revaluations remain outside the direct control of DNOs and Ofgem, despite best endeavours by companies to influence outcomes through engagement and representation.
- 6.16 Furthermore, one consequence of moving business rates into totex would be to add a proportion of these costs to the RAV; the proportion being a function of the capitalisation rate that is applied to all costs. Doing so would increase costs for consumers in the long term, with DNOs earning a return on the additional RAV, which would not be appropriate, since no additional long-term value is being created for consumers.
- 6.17 Finally, we believe that it is important for us to be consistent about the treatment of business rates across different energy network price controls.
- 6.18 We have decided that the existing licence condition SpC 6.1.4⁵⁴ provides the necessary controls to ensure that DNOs engage meaningfully with the VOA and to ensure that costs are minimised where possible, through dialogue and the

⁵⁴ SpC 6.1.4 - As part of any periodic revaluation, the licensee must (a) engage with the Relevant Valuation Agency; and (b) use reasonable endeavours to minimise the amount of the Prescribed Rates to which it is liable.

provision of information. We are satisfied that the DNOs are meeting their obligations under SpC 6.1.4 and will continue to rely on this mechanism to ensure costs are minimised. We will continue to monitor DNOs' compliance with SpC 6.1.4, including the quality and timeliness of their engagement with the VOA and will consider further regulatory intervention should evidence emerge that companies are not meeting these expectations.

New Transmission Capacity Charges (NTCC)

- 6.19 We have decided not to make a decision on the treatment of NTCC at this stage, but will confirm the position at Draft Determinations. Such costs include both capacity charges and capital connection charges for works at connection asset sites (GSPs that supply only one DNO), where such costs are levied onto DNOs and are subsequently either socialised, ie funded through the price control, or recovered from connecting customers.
- 6.20 Code modifications⁵⁵ are being considered by industry relating to the distribution of these costs. The recommendations arising from these code modifications may affect our approach to treatment in ED3.
- 6.21 As part of their ED3 business plans we are asking DNOs to include costs for all connection works (gross costs) relating to new capacity at connection asset sites and clearly show where these relate to one or more specific customer (rather than underlying demand increases) and the potential customer contributions.
- 6.22 These gross costs can then either be included in baseline plans, used as a forecast of likely pass-through costs or separated out as connection charges outside of the price control as appropriate.

Miscellaneous pass-through category

- 6.23 We have decided to include this category in ED3 to enable pass through of new costs that might arise in period, and which are outside of the management control, by direction, in period.
- 6.24 This approach enables Ofgem to act where appropriate, to manage risks arising for companies and consumers in period. We note stakeholder concerns about the scope of any such category and will work with industry and other stakeholders as we develop the detailed scope and definition of activities that could be funded through this mechanism.

⁵⁵ Code Modifications: [DCP461](#) and [CMP460](#)

Connections reform pass-through term

- 6.25 In 2025 we introduced a new pass-through term, recognising that the DNOs may need to incur costs to implement the Gate 2 to Whole Queue (G2tWQ) exercise.⁵⁶
- 6.26 We have decided to retain the new ED2 connections reform pass through term in ED3, to the extent that DNOs provide the evidence that these costs continue into ED3.

Volume drivers

SSMC summary

- 6.27 We proposed retaining volume drivers, where volumes are uncertain but unit costs are stable and activities replicable and standardised, but propose the removal of the polychlorinated biphenyl (PCB) volume driver given the expected completion of compliance activity before ED3 commences. The SSMC also notes that the role of mechanisms such as the indirects scalar may need to be re-examined in light of greater ex ante funding, and that calibration and transparency will be critical to avoid distortions and maintain predictability.

Summary of consultation responses

- 6.28 Eight stakeholders provided responses to Question 121, including DNOs, consumer groups, environmental organisations and demand-side representatives. Across respondents, there was broad support for retaining volume drivers where they continue to be appropriate, recognising their value in managing uncertainty where workload volumes vary and unit costs are stable. This view was expressed clearly by Citizens Advice, which supported continued use of volume drivers alongside strengthened accountability, and by the Centre for Sustainable Energy, which endorsed their use where demand is uncertain but delivery costs are well understood.
- 6.29 There was unanimous agreement that the PCB volume driver should be removed in ED3. Stakeholders noted that the vast majority of PCB-related activity is expected to be completed before the start of the next price control period, in line with legislation. DNOs including SSEN-D, NPg, NGED and UKPN all confirmed that the PCB driver is no longer required, with some indicating that any residual work could be addressed through baseline funding rather than a dedicated uncertainty mechanism.
- 6.30 Views on the indirects scalar were more varied. Several DNOs, including SSEN-D, NGED, NPg and UKPN, argued that the scalar should remain under review, as

⁵⁶ [Annex-B-Connections-reform-costs-governance-document.pdf](#)

indirect costs may still change with workload and therefore require adjustment through an uncertainty mechanism. These respondents highlighted the need to ensure that indirect costs remain appropriately reflected in allowed revenues if volume drivers are retained or re-shaped in ED3. By contrast, Citizens Advice highlighted the importance of introducing additional oversight should indirect-related allowances move into baseline, emphasising the need for transparency and strengthened accountability.

- 6.31 A number of DNOs also presented alternative mechanisms that could change the role of traditional volume drivers. For example, NPg and UKPN argued that their proposed TANJI mechanism could replace the need for some load-related volume drivers by providing a more targeted metric-driven framework for agile investment. SPEN suggested that, in some cases, a ring-fenced UIOLI approach might be more appropriate than a volume driver, especially where activities are less standardised or unit costs are less predictable. These proposals reflected a broader industry view that the ED3 uncertainty mechanism package may need to evolve beyond the ED2 toolkit to support more dynamic investment requirements.
- 6.32 Overall, the responses to Question 121 suggest that while stakeholders broadly agree that volume drivers continue to have a role in ED3, they emphasise the need for improved calibration, alignment with other uncertainty mechanisms, and lessons learned from ED2. Respondents identified a continued need for flexibility, particularly in areas such as secondary reinforcement, but also highlighted the importance of ensuring that volume drivers operate transparently and remain proportionate. In summary, stakeholders supported refining rather than removing volume drivers in ED3, with consensus on discontinuing the PCB volume driver.

SSMD decision and rationale

- 6.33 We have decided to remove the PCB volume driver in ED3. The Environmental Protection (Disposal of Polychlorinated Biphenyls and other Dangerous Substances) (England and Wales) Regulations 2000, as amended, require that transformers contaminated with PCBs on 31 December 2025 are decontaminated or disposed of as soon as possible. ED3 will begin over two years after this date and therefore funding should no longer be required.
- 6.34 Other volume drivers, including the indirects scalar volume driver and the two existing load related volume drivers (low voltage services and secondary reinforcement), remain under review. We will continue to explore the continued role for volume drivers as part of an agile funding framework for load related investment, operating above baseline funding should additional capacity increases be required. We will continue to review the most appropriate funding mechanisms for indirect costs associated with uncertainty mechanisms, with decisions expected at Draft Determinations.

Re-openers

SSMC summary

- 6.35 In the SSMC we proposed retaining re-openers as a core element of the ED3 uncertainty framework, while simplifying and rationalising their structure compared to RIIO-ED2. Re-openers remain essential where both cost and volume uncertainty prevent accurate ex ante forecasting, and where in-period adjustments are necessary to maintain alignment with policy, standards or system needs. The SSMC proposed reducing the overall number of re-openers to a more focused set with clear scopes, ensuring that mechanisms remain proportionate, transparent and easier to administer.
- 6.36 The proposals included combining several mechanisms into a single resilience re-opener, covering climate resilience, physical security, electricity system restoration and other resilience related requirements, with a separate, consolidated, cyber re-opener.
- 6.37 On Wayleaves and Diversions, we proposed that costs should be incorporated into ED3 baseline allowances, reflecting that these activities are largely predictable, stable and primarily volume driven. For Streetworks, the consultation tested whether this category should also be included in baseline allowances, recognising both the potential for improved forecasting relative to ED2, and the ongoing uncertainty associated with local authority policies, lane rental schemes and evolving statutory requirements.
- 6.38 We also consulted on an appropriate materiality threshold. We proposed retaining the 0.5% materiality threshold for most re-openers, ensuring that the price control is only reopened where changes are sufficiently significant to justify intervention. At the same time, the SSMC acknowledged that re-openers must continue to provide an effective pathway for managing compliance-driven or externally mandated obligations, and that mechanisms should operate with clear triggers, defined scopes and strong evidential requirements to protect consumers.
- 6.39 Together these proposals aimed to simplify and reduce reliance on re-openers and provide stronger upfront funding certainty. This approach was intended to reduce administrative complexity, ensure proportionate regulatory oversight, and allow responsiveness to material changes in requirements.

Summary of consultation responses

- 6.40 Stakeholders provided 10 responses to Question 122, and whilst most agreed that consolidating re-openers could reduce complexity and improve clarity, this support was conditional. Respondents such as Citizens Advice, Friends of the Lake District, ADE: Demand, SPEN and NPg agreed that a more streamlined set

of mechanisms would be beneficial, particularly if it offered clearer scopes and reduced administrative burden. These stakeholders emphasised the importance of symmetry, allowing both Ofgem and DNOs to trigger re-openers, and highlighted the need for strong governance to ensure these mechanisms remain responsive to new standards and resilience requirements.

- 6.41 However, several DNOs also raised significant reservations about consolidating resilience and cyber re-openers into a single mechanism. NGED and UKPN argued that the drivers and timing of different resilience-related obligations vary substantially, making a combined mechanism less efficient and potentially restrictive. SSEN-D opposed consolidation outright, preferring to retain separate cyber and resilience re-openers with expanded scope, greater agility, and the removal of materiality thresholds for compliance-driven areas. These respondents stressed that consolidation must not undermine the flexibility required to respond to evolving threats, policy changes or mandated activities.
- 6.42 A common theme across DNO responses was the need for clear triggers, flexible timing arrangements, and the ability for DNOs to initiate re-openers. Many stakeholders, including SPEN, NGED, SSEN-D and NPg, emphasised that compliance-driven re-openers cannot be subject to materiality thresholds, given that obligations such as cyber-security or physical protection are often externally mandated and time-sensitive. Some respondents also outlined alternative frameworks, such as NGED's proposed Policy Delivery Uncertainty Mechanism, which they argued could retain clarity while simplifying administration.
- 6.43 Overall, while the majority of stakeholders agreed with the principle of consolidation, the feedback highlighted significant concerns about over-consolidation. Stakeholders generally supported combining cyber-related re-openers and consolidating elements of resilience where appropriate, but were clear that mechanisms must remain flexible, capable of responding to distinct categories of resilience risk, and designed with clarity around scope, triggers and thresholds. The responses indicate support for simplification, but only if consolidation is carefully calibrated to avoid reducing regulatory responsiveness or undermining compliance obligations.
- 6.44 Stakeholders offered eight responses to Question 123, with views divided between those supporting baseline inclusion of Wayleaves and Diversions and those emphasising continued uncertainty, particularly for Streetworks. Several stakeholders, including the Friends of the Lake District and ADE: Demand, supported bringing both categories into baseline allowances, arguing that greater certainty could streamline processes and reduce reliance on re-openers.
- 6.45 Most DNOs agreed that Wayleaves and Diversions are generally predictable and manageable, and could therefore be included in baseline. DNOs such as SSEN-D, NGED, NPg and UKPN indicated that forecasting for these activities has

improved since ED2. However, stakeholders also highlighted specific areas of uncertainty, particularly wayleave terminations, with SSEN-D and NPg arguing for either a dedicated re-opener or close-out mechanism to address these unpredictable cases.

- 6.46 By contrast, the majority of DNOs strongly opposed baseline inclusion of Streetworks costs, on the grounds that these remain subject to substantial external uncertainty. SPEN, SSEN-D, NPg and UKPN all cited ongoing variation in Local Authority requirements, the expansion of lane rental schemes, and evolving regulations such as waste classification and NRSWA amendments, as reasons to retain a Streetworks re-opener. Stakeholders argued that these cost drivers are not sufficiently stable or controllable to support ex ante allowances.
- 6.47 Overall, stakeholders generally favoured a differentiated approach: relatively broad support for including Wayleaves and Diversions in baseline, coupled with strong resistance to baseline treatment of Streetworks. Respondents were aligned in recognising the need for flexibility tools, whether through a retained re-opener or a close-out mechanism, to manage specific high-uncertainty scenarios.
- 6.48 Six stakeholders provided responses to Question 124. Views were divided on whether to retain the current RIIO-ED2 materiality threshold of 0.5% of baseline revenue. Some respondents, including ADE: Demand, NPg and SSEN-D, supported retention on the basis of regulatory precedent and the need to maintain a proportionate threshold that prevents unnecessary reopening of allowances. These stakeholders noted that a threshold helps maintain stability and ensures the price control is only reopened when changes are sufficiently material.
- 6.49 Other stakeholders argued that the 0.5% threshold is no longer appropriate. SPEN recommended a zero threshold for all re-openers, particularly given the likely prevalence of mandatory compliance-driven obligations in ED3. UKPN also opposed retention, noting that higher baseline totex levels in ED3 would raise the absolute value of the threshold, potentially making it harder for DNOs to access uncertainty mechanisms even when justified. UKPN further argued that consolidation of re-openers means some combined scopes would include areas that currently have no threshold, making a uniform 0.5% level inappropriate.
- 6.50 SSEN-D, NGED and SPEN all proposed that re-openers arising from compliance-driven changes eg legislation or security requirements, should not require DNOs to meet a minimum financial threshold before seeking adjustment.
- 6.51 Some respondents, including NGED, expressed conditional support for retaining the threshold but stated it should remain flexible and be reassessed once business plans are submitted. This reflects uncertainty about the scale and profile of ED3 investment.

SSMD decision and rationale

6.52 Following our review and the receipt of stakeholder feedback following the SSMC, we have decided to rationalise the number of re-openers in ED3, reducing the total number from fourteen in RIIO-ED2 to nine in ED3. The proposed ED3 re-openers are as follows:

- Coordinated Adjustment Mechanism (CAM)
- Digitalisation
- Cyber
- Decarbonisation and Environmental Policy
- Resilience
- High Value Projects (Non-load)
- Load Related Expenditure
- Specified Streetworks Costs
- Wayleaves & Diversions

6.53 In each case the detailed scope and conditions surrounding the use of these mechanisms will be confirmed at Final Determinations. However, in developing the detail for each reopener, we will apply the following design principles.

- **Scope:** the scope for each re-opener will be specific and clear
- **Timing:** changes in circumstances prior to the start of the price control period will not be considered unless those changes can be linked to very specific circumstances which could not be assessed at the point at which business plans were submitted. An example could be changes in legislation
- **Materiality threshold:** adjustments to allowed revenue will only be made if the proposed adjustment as assessed by the Authority, when multiplied by the TIM rate, exceeds 0.5% of annual average ex ante base revenue
- **RPEs:** we do not expect that additional allowances provided through re-openers would be subject to RPEs. The only potential exception (consistent with RIIO-3) would be long term (multi-year), network infrastructure projects
- **Submission windows:** the number of windows will be dependent on the re-opener. All windows will be in April and/or October in any given years. The Authority is able to direct additional windows should they be required
- **Application of Ongoing Efficiency (OE):** we will take a case-by-case approach in relation to applying OE to re-opener mechanisms
- **Triggering party:** re-opener specific (tbd)

6.54 On the materiality threshold, we consider that it is appropriate to retain a materiality threshold for all re-openers, even where such re-openers are triggered by compliance related matters. This is consistent with position that we have confirmed for the RIIO-3 sectors; the rationale being that it would not be proportionate for companies, or for Ofgem, to spend time and resources going

Decision ED3 Sector Specific Methodology Decision

through the process of reopening the price control, for changes that have a relatively small (<0.5%) financial impact on companies. In addition, the TIM provides some protection for network companies from unforeseen costs, and companies should be expected to manage some degree of risk. We think a 0.5% threshold strikes an appropriate balance between flexibility and risk management.

- 6.55 The scope of the CAM and Digitalisation re-openers are expected to remain largely unchanged but will be reviewed in accordance with the above principles. The ED2 cyber-OT and IT re-openers will be consolidated and, as noted at 5.226, will become authority triggered only.
- 6.56 We will introduce a single, new Decarbonisation and Environmental Policy re-opener for ED3, consistent with the approach that we have taken as part of the RIIO-3 price controls. This will replace the two existing and separate Net Zero and Environmental re-openers, with the detailed scope and other design parameters to be confirmed in our Draft Determinations.
- 6.57 A new Resilience reopener will be introduced for ED3. The scope and rationale is set out from para 5.208 onwards, but in summary this will replace the existing RIIO-ED2 Electricity System Restoration and Physical Security re-openers and incorporate these and other resilience related policy matters that may emerge during ED3.
- 6.58 The High Value Projects and LRE re-openers will be carried forward into ED3 with the detailed scope and other parameters reviewed in accordance with the above principles and confirmed in our Draft Determinations.
- 6.59 We will continue to review the scope of the Streetworks, and Wayleaves and Diversions re-openers following SSMC stakeholder feedback. In the case of the Wayleaves and Diversions reopener, we think this is still needed but we do expect a reduction in scope, given greater certainty in some areas, However, we do also intend to include diversions resulting from rail electrification projects within this scope, currently managed through a stand-alone re-opener in RIIO-ED2.
- 6.60 The Storm Arwen reopener is not required in ED3 and will not be carried forward.
- 6.61 Bespoke re-openers will be considered where these can be demonstrated to be in the consumers' interest.

7. Business plan, delivery and efficiency incentives

As set out in other parts of this decision, a strong incentive package will remain a key feature of ED3. We recognise the importance of maintaining a stable and attractive regulatory regime, that both protects consumers and provides opportunities for companies to be rewarded for the very highest levels of service.

The SSMC set out our proposals for the evolution of the Business Plan Incentive (BPI) and Totex Incentive Mechanism (TIM). We explored different options for providing greater consumer protections and said that we expect further evolution of the regulatory framework, particularly in areas that are unlikely to be otherwise captured by specific ODIs or PCDs, with a greater focus on holding companies to account for the efficient delivery of their plans.

SSMC questions

- Q125. Do you agree with our proposals to retain Stage A of the BPI as per RIIO-3 BPI? Why?
- Q126. Do you consider that an asymmetric incentive for Stage B, weighted towards rewards, would deliver the greatest benefit for consumers, as per RIIO-3 and if not, do you consider that BPI Stage B should be removed?
- Q127. Do you agree with our proposed changes to Stage C of the BPI, including our approach to seeking early proposals and the principle of deferred rewards? Why?
- Q128. Do you have any views on the strength of the BPI?
- Q129. Do you agree with our proposed approach to setting TIM sharing factors? Why?
- Q130. Do you agree with our proposals regarding the application of PCDs? Why?
- Q131. Do you think that additional delivery incentives might be needed in ED3 and if so in which areas?

Business Plan Incentive

SSMC summary

- 7.1 In the SSMC, we said that the ED3 Business Plan Incentive (BPI) should be strengthened and more closely linked to delivery, reflecting the scale and pace of change expected in the next price control period. We explained that ED3 will require higher-quality, more ambitious and more credible business plans than in previous price controls, and that the BPI must therefore drive plans that are strategically aligned, analytically robust, and capable of being delivered in practice.
- 7.2 We set out a multi-stage BPI framework, continuing the RIIO-3 structure but refining its purpose for ED3. We said that Stage A would remain focused on minimum requirements, covering completeness, compliance, evidence quality and alignment with guidance. We also said that failure at Stage A should

Decision ED3 Sector Specific Methodology Decision

continue to attract penalties but that meeting baseline expectations should not attract rewards.

- 7.3 At Stage B, we consulted on continuing to reward efficient and well justified cost proposals. We said Stage B must ensure companies present efficient costs, supported by strong evidence, while discouraging inflated or poorly justified plans, and asked for views on whether the asymmetric structure used in RIIO-3, remains appropriate.
- 7.4 We explained that Stage C should evolve more substantially for ED3 and introduced the concept of “early proposals”, enabling companies to come forward with innovative, sector-leading commitments ahead of business plan submission. We said that early proposals adopted into baseline requirements for all DNOs could attract BPI rewards, recognising companies that demonstrate leadership and accelerate good practice across the sector. We published a structured early-proposals template to ensure transparency and comparability.
- 7.5 In addition, we said the BPI should place a greater emphasis on delivery, reflecting the need for credible planning and supply-chain readiness. We said companies would be required to submit detailed delivery strategies and noted that the quality of these strategies could potentially be considered as part of any BPI rewards or penalties. We also proposed that part of any Stage C reward could potentially be deferred until delivery, ensuring that companies are only financially rewarded when ambitious plans translate into outcomes for consumers.
- 7.6 We sought views on the appropriate strength of the BPI for ED3, noting that the RIIO-3 BPI (worth up to 60 bps of RoRE) may represent a stronger financial signal than the RIIO-ED2 BPI ($\pm 2\%$ of totex). We emphasised that the BPI should remain proportionate, targeted and closely tied to delivering value for consumers.

Summary of consultation responses

Stage A

- 7.7 We received nine responses to Question 125 from DNOs, a consumer body, a gas network, a demand-side organisation and an industry association. All supported retaining Stage A (minimum requirements). Stakeholders viewed Stage A as necessary to drive consistency, completeness and baseline quality across plans, with most agreed on the principle that DNOs should receive penalties for non-compliance but that meeting minimum requirements should not be rewarded.
- 7.8 Several respondents suggested that the minimum requirements should explicitly include quality and, in some cases, clarity alongside completeness. Citizens Advice supported making both completeness and quality, necessary to avoid penalty. NPg and NGED supported moving clarity into Stage A; NGED went

further, suggesting a potential reward for clarity, whereas most others favoured penalty-only. Respondents asked that the requirements be proportionate, clearly articulated and communicated early.

- 7.9 Stakeholders also cautioned against double counting across the BPI and cost assessment. They encouraged keeping Stage A as a limited compliance test, leaving efficiency and ambition signals to Stages B and C, respectively. No respondents called for removing Stage A or weakening its role.

Stage B

- 7.10 Stakeholders provided a wide range of views on Stage B (Question 126), with no clear consensus on the most appropriate design. Several network companies, including NGED, NPg, SSEN-D and UKPN, supported moving Stage B to reward only, arguing that this approach encourages companies to reveal efficient costs but avoids penalising companies twice when combined with the setting of allowances at the level of the benchmark company, for less efficient companies.
- 7.11 Other stakeholders, most notably Citizens Advice, ADE: Demand, ENA and SPEN, expressed greater caution. They questioned whether asymmetric rewards are supported by evidence of consumer benefit and warned that a reward-only model risks overpaying for plans or encouraging strategic behaviour. Citizens Advice favoured retaining a penalty component, while ADE highlighted risks that companies may “play safe” and limit ambition. ENA and SPEN emphasised the importance of ensuring that Stage B aligns with the approach to cost assessment, to avoid double counting.
- 7.12 SSEN-D, raised the option of removing Stage B entirely, citing concerns that incentives of this type, based on experience in the water sector, may drive unrealistic low-cost plans with long-term deliverability risks. Others also stressed that Stage B must not undermine delivery or lead to perverse incentives.

Stage C

- 7.13 We received responses from DNOs, the ENA, a consumer and a demand-side body to our proposals for Stage C of the BPI, including the use of early proposals and deferred rewards. Respondents broadly accepted Stage C’s role in driving ambition and delivery accountability, and several supported the principle of early proposals to establish consistent approaches and allow sufficient time for robust assessment of complex commitments. However, respondents asked for clear process design to avoid unintended competition between networks, limit regulatory burden, and ensure only high-value proposals qualify for rewards.
- 7.14 Views were divided on the proposal to defer BPI rewards to delivery. Some stakeholders, such as NPg, supported deferral and proposed removing or deferring penalties to enable ambitious commitments to be delivered, while

Decision ED3 Sector Specific Methodology Decision

others including SSEN-D were not supportive, emphasising that the BPI should remain a business plan quality incentive and that delivery should be managed through other accountability mechanisms (eg SLC50, PCDs) to avoid double counting.

- 7.15 NGED argued deferred rewards do not fit the BPI's intent but, if adopted, Stage C should be reward-only and strengthened; UKPN asked for clarity on reward timing, calibration and how changes beyond DNO control might be managed.
- 7.16 There was support for moving clarity from Stage C into Stage A (minimum requirements) to lift baseline standards and ensure the comparability of submissions.
- 7.17 Respondents also stressed the need for proportionality and for avoiding duplicative penalties across BPI, TIM and delivery mechanisms; in particular, some opposed including Delivery Strategies or Innovation Strategies within Stage C, suggesting that these should either sit within the minimum requirements or be addressed through separate regulatory mechanisms.

BPI Strength

- 7.18 While all respondents emphasised the importance of the BPI within the wider incentive framework, stakeholders provided mixed views on the appropriate strength of the BPI for ED3.
- 7.19 SPEN and SSEN-D favoured an evidence-based approach, with SSEN-D noting that the RIIO-3 BPI provides a reasonable starting point but may require adjustment as decisions on other incentives (particularly relating to cost assessment and delivery mechanisms) become clearer. By contrast, NGED and NPg argued for a stronger, more reward-driven BPI, particularly within Stages B and C. NGED supported increasing Stage C rewards, especially if deferred rewards are adopted. NPg proposed a higher upside for efficient and ambitious plans with a meaningful penalty for failing minimum requirements. These respondents saw a stronger BPI as essential to driving high-quality, forward-looking business plans.
- 7.20 The DNOs consistently highlighted the need to avoid double-penalty effects and ensure the BPI remains proportionate and aligned with the cost assessment framework and the TIM. They also stressed that the BPI must remain achievable, noting that actual rewards in RIIO-ED2 and RIIO-3 fell significantly below theoretical maxima.

SSMD decision and rationale

- 7.21 We have decided to implement a three-stage BPI framework, building on the RIIO-3 BPI structure, but simplifying the mechanism for ED3. Further details of the decisions on the three stages are provided below.

Stage A - Minimum Requirements

- 7.22 Stage A will be focused on minimum requirements, covering completeness, compliance, evidence quality and alignment with guidance. A full list of the ED3 minimum requirements is included at Chapter 9 of the Business Plan Guidance.
- 7.23 Failure to submit the minimum requirements may result in a penalty of up to 20 bps RoRE. However, unlike the RIIO-3 BPI, a failure of any single minimum requirement will not necessarily trigger the full penalty. The level of any penalty will be determined by Ofgem at Final Determinations, taking into consideration the overall consumer detriment, and the time, resource and any resulting limitations on the regulator's ability to set the price control in the interest of consumers. Our assessment will take into account both the business plan and any subsequent additional material, or changes to the business plan that we receive ahead of Final Determinations.
- 7.24 This approach will ensure that penalties can be applied on a more proportionate and targeted basis, where appropriate, rather than the binary pass/fail of the RIIO-ED2 and RIIO-3 BPI. This reflects the fact that different levels of non-compliance with the minimum requirements could have a materially different impact on our ability to set the price control.
- 7.25 We will ensure that our assessment of minimum requirements and our determination of any resulting penalties up to the maximum level, is carried out with regard to the principles of proportionality.

Stage B - Efficient Costs

- 7.26 For Stage B, we have decided to retain an incentive on companies to submit efficient costs as part of their ED3 business plans.
- 7.27 We will reward those companies whose costs are below the benchmark company's costs, following our assessment of efficient costs. Where a company submits costs below our benchmark, this helps us to lower the cost that we can apply to other companies in the sector, because it lowers the overall benchmark. However, without a counter-balancing incentive, methodological choices in our approach to cost assessment disincentivise companies from doing so. For further information please read Chapter 6: Cross-Cutting Issues in our SSMD Cost Assessment Annex and the section entitled "Efficiency challenges and the ratchet"
- 7.28 The value of this Stage B incentive will be capped at 40 bps RoRE and calculated as the difference between the benchmark company's costs and the DNO's business plan (accounting for any pre-modelling or workload adjustments), multiplied by the TIM sharing factor.
- 7.29 In this situation, the company would receive its submitted (adjusted/normalised) costs, plus the Stage B BPI reward.

- 7.30 We have decided to remove the penalty element from the cost efficiency part of the incentive on the basis that companies above the benchmark would receive less allowances than they have requested in any event, as they would be funded at the level of the benchmark company. For a genuinely inefficient company, the combination of a lower allowance plus a penalty could be overly punitive. We will be transparent in our assessment of the relative efficiency of companies at Draft and Final Determinations, creating an additional incentive on companies who may not wish to be seen as inefficient compared to their peers.
- 7.31 The value of the Stage B 40 bps RoRE cap for each DNO will be calculated at Final Determinations. The cap shall be calculated ex ante for each ED3 Regulatory Year as 40 bps, multiplied by the equity portion of the forecast NPV-neutral RAV for each year, based on the relevant notional gearing assumption for each licensee. The NPV-neutral RAV for the purpose of the Stage B cap calculation shall be derived from the baseline ED3 totex set at Final Determinations, excluding reopeners, UIOLI allowances, opex escalator, ongoing efficiency and RPEs, but including totex associated with baseline volumes in volume drivers and PCDs. The total Stage B cap shall be the sum of the respective annual values.

Stage C - Early Proposals

- 7.32 We have decided to limit the scope of Stage C to early proposals. In our ED3 SSMC we asked DNOs to submit early proposals for new commitments, incentives or other mechanisms that could be incorporated into the regulatory framework and/or other DNO business plans. The objective is to drive best practice across the sector and to ensure that consumers across GB benefit from the best ideas and service levels wherever they live.
- 7.33 Thirty-five early proposals were subsequently received from companies, covering a range of policy areas and regulatory mechanisms. A summary of all early proposals is provided in Appendix 2.
- 7.34 Following an initial assessment, we have indicated to the companies that twenty-one of these proposals appear to align strongly to the key outcomes and objectives for the ED3 period and appear to have the potential to improve the effectiveness of the regulatory framework and deliver significant benefits for consumers. However, we are not making decisions at this time about which of these early proposals might ultimately be rewarded. Ultimately, decisions relating to rewards will be reserved until after business plans have been received and we have developed the full suite of mechanisms. The timing of any decisions relating to early proposals will therefore align with wider BPI decisions at Final Determinations.
- 7.35 Our decision to progress with these twenty-one proposals now should not be taken to mean that these proposals will be rewarded in the future. The

opportunity for rewards under Stage C remains subject to proposals being considered further by Ofgem, as part of our wider development of the detailed regulatory framework for ED3. In some cases further work will also need to be undertaken by the companies to develop proposals to allow their value to the regulatory framework and consumers to be better understood.

- 7.36 We have decided not to reward/penalise the quality of delivery strategies and innovation strategies through Stage C. We agree with stakeholders that the completeness and quality of these strategies can be better managed and assessed as minimum requirements, and we have focused on ensuring that our Business Plan Guidance is clear in terms of our expectations for these submissions.
- 7.37 We have also decided that we will not explicitly incentivise stretching 'commitments' through the BPI, given challenges around the (subjective) assessment of commitments, different approaches to determining value and difficulty understanding whether commitments are genuinely stretching. However, through the Business Plan Guidance we continue to ask companies to establish metrics to determine the effectiveness of their actions, as well as firm commitments to implement or undertake specified activities to effectively deliver their strategies, particularly where such actions are not included within the scope of regulatory mechanisms.
- 7.38 We have decided that the maximum reward for early proposals will be 20bps RoRE. We will align our decisions on rewards for early proposals with wider BPI decisions at Final Determinations.
- 7.39 We have decided not to defer rewards arising under Stage C of the BPI, a proposal that we consulted on at SSMC. Given the focus of Stage C is now exclusively on early proposals, we do not think that this would be appropriate. The principle of deferred rewards was most relevant to those elements of Stage C that we have decided not to take forward, including those relating to the quality of delivery strategies and the submission of stretching commitments. We think that companies should be rewarded at the start of ED3 for developing early proposals that help us to set a better price control.

Incentive Strength

- 7.40 In ED3 we will calculate maximum BPI rewards and penalties using basis points of RoRE against the equity portion of the RAV, rather than against a proportion of allowed totex as was used in RIO-ED2. This is to ensure consistency with other incentives in ED3, 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.
- 7.41 When considering the strength of the incentive we have sought to maintain consistency with RIIO-3 where possible. The maximum BPI reward in ED3 will be

Decision ED3 Sector Specific Methodology Decision

capped at 60 bps RoRE, with maximum rewards for Stages B and C at 40 and 20 bps RoRE respectively. Stage A remains penalty only at up to -20 bps RoRE. This means that overall, the ED3 BPI is asymmetric, with the opportunity for rewards greater than the potential penalty. This is justified on the basis that rewards will be strongly linked to additional consumer value, either through the lowering of the efficient benchmark company costs (Stage B) or through the introduction of proposals that offer additional value to consumers.

- 7.42 To an extent, this asymmetry in the BPI is counter balanced by asymmetry in cost assessment, in that companies are likely to receive some form of reduction against their requested allowance and in any event will not receive a higher baseline allowance than they have requested.
- 7.43 On a like for like basis, the 60 bps RoRE reward is slightly stronger across the sector, than 2% totex, consistent with our Framework Decision. However, there are differences in the level of increase against the RIIO-ED2 BPI strength for different companies, because of the change in calculation basis from allowed totex to equity RAV. This is because network companies can have materially different ratios of totex to equity RAV.
- 7.44 The maximum BPI penalty of -20bps RoRE is less strong than RIIO-3 and RIIO-ED2. This is largely a function of the removal of penalties in Stages B and C, due to the revised focus and outcomes being sought in these areas ie targeting tangible additional consumer value.
- 7.45 Overall we believe that -20/+60 bps of RoRE achieves an appropriate balance between ensuring the BPI continues to drive companies to provide the minimum information needed to set the price control, to come forward with efficient cost submissions and to incentivise the companies to develop ambitious proposals that will drive the whole sector forward in the interest of consumers.
- 7.46 The monetary value of the BPI will be calculated at Final Determinations and applied annually and shall be the sum of the rewards and penalties across the three stages, with the calculation for each stage set out below.
- The calculation of the monetary value of any Stage B rewards will be undertaken in accordance with para 7.28 and capped at 40 bps RoRE, with the cap calculated as described at 7.31.

- The values of Stages A and C shall be calculated ex ante for each forecast year as the assessed total reward or penalty measured in basis points of RoRE, 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 ED3 totex set at Final Determinations, excluding reopeners, UIOLI allowances, opex escalator, ongoing efficiency and RPEs, but including totex associated with baseline volumes in volume drivers and PCDs. The total monetary value of Stages A and C of the BPI for the ED3 price control period shall be the sum of the respective annual values.

7.47 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. We will publish a summary of our assessment for each company at Draft Determinations.

Efficiency: Totex Incentive Mechanism

SSMC summary

- 7.48 In the SSMC, we said that we intend to retain the Totex Incentive Mechanism (TIM) in ED3, but with strengthened links to delivery so that companies only retain efficiency benefits where they have delivered the outputs funded in their business plans. We said that the TIM should therefore become increasingly conditional on delivery. This ensures that DNOs only share in efficiencies where the underlying outputs have been delivered in full and to the expected standard.
- 7.49 We said that we expected the main mechanism for delivering this conditionality would be a greater use of PCDs, across a wider range of network investment activity. We said that such PCDs might reflect an aggregate programme of work, with clear outputs, as well as the delivery of specific, large, individual projects. Under our proposals, the TIM would not apply to funding associated with outputs that have not been delivered.
- 7.50 We said that this approach is essential to avoid the risk of consumer harm from under-delivery. Without these protections, companies may be able to retain apparent efficiencies that arise from deferring investment or deciding not to deliver parts of their business plan that they have been funded to deliver. In ED3, where we are expecting a step-change in investment to support electrification and connections reform, we made clear that this would not be acceptable.
- 7.51 We emphasised that this strengthening of the TIM does not mean removing the incentive for cost efficiency. Rather, it means ensuring that efficiency rewards are earned only where DNOs have delivered the outputs that underpin consumer benefit. We said that the TIM should continue to play a key role in encouraging

companies to innovate and deliver more efficiently, but on the basis of genuine efficiency, not cost savings achieved through non-delivery.

- 7.52 We also said that the design of the TIM cannot be considered in isolation from the wider accountability framework. We noted that elements such as our proposals for deferred BPI rewards, PCDs, and potential delivery incentives all interact with the TIM to create a coherent package. We asked stakeholders for views on whether these mechanisms, taken together, would be sufficient to hold companies to account, or whether further delivery-related incentives might be needed.

Summary of consultation responses

- 7.53 Stakeholders expressed a wide range of views on our proposals for TIM sharing factors (Question 129). While several respondents, including Citizens Advice and ADE: Demand, supported a consistent sector-wide sharing factor, many network companies raised concerns about the use of qualitative cost-confidence assessments or bespoke sharing factors for individual companies or cost categories. These respondents emphasised the need for transparency, predictability and comparability, warning that differentiated sharing factors could undermine investor confidence and dilute the incentive properties of the TIM.
- 7.54 Network operators including SSEN-D, NGED, UKPN and NPg were generally opposed to company-specific or category-specific factors. They argued that all companies should have the same level of cost confidence and that differences risk creating unnecessary complexity. Several also cautioned against linking TIM to annual delivery targets or early ED2 underspend trends, highlighting that such approaches may erode the TIM's effectiveness as a long-term efficiency incentive.
- 7.55 NPg suggested that differentiated incentives might be justified in limited, high-risk, ring-fenced categories. More broadly, respondents stressed the importance of aligning TIM calibration with the wider regulatory package, including cost assessment, the BPI and delivery incentives, to ensure a balanced approach that rewards efficiency without creating double penalties or discouraging necessary investment.
- 7.56 Stakeholder responses to Question 130 showed a wide range of views on the appropriate role of PCDs in ED3. Some stakeholders, including Citizens Advice, BEAMA and ADE: Demand, supported an expanded role for PCDs, agreeing with our proposal that PCDs should cover the majority of the investment plan to strengthen delivery accountability and ensure that consumers only fund outputs that are delivered. These respondents saw PCDs as an essential tool for enforcing delivery-conditionality within the broader ED3 framework.

Decision ED3 Sector Specific Methodology Decision

- 7.57 Other respondents expressed more qualified support. SPEN and SSEN-D accepted that PCDs should apply to high-value or strategic investments but cautioned against over-reliance. They emphasised the need for flexibility, particularly for projects that may require scope adjustments due to external factors. Both highlighted the importance of balancing delivery certainty with adaptability and warned of potential administrative burden where PCDs are applied too broadly.
- 7.58 A number of network operators, including NGED, NPg and UKPN, strongly opposed expanding PCD coverage. These respondents argued that the widespread use of PCDs risks stifling innovation, undermining the effectiveness of the TIM, increasing regulatory complexity, and constraining companies' ability to optimise delivery in response to in-period developments. They favoured either a more targeted application limited to large, well-specified projects, or the use of evaluative close-out mechanisms instead.
- 7.59 Across responses, there was broad agreement that while PCDs are valuable for driving accountability, their scope must be carefully calibrated to avoid unintended consequences. Stakeholders stressed the need for a coherent overall package that balances certainty, flexibility and proportionality, and ensures that delivery incentives work effectively alongside the TIM and other accountability mechanisms in ED3.
- 7.60 Overall, responses indicate support for simplicity and transparency, with a preference for a single sector-wide sharing factor unless strong justification exists for targeted exceptions. Stakeholders suggested that TIM design should be finalised only once the broader ED3 framework is set.

SSMD decision and rationale

- 7.61 No decisions will be taken on sharing factors until Final Determinations, ensuring that the TIM can be properly calibrated in the context of the overall regulatory framework.
- 7.62 In setting TIM sharing factors we will seek to avoid unnecessary complexity; we agree with stakeholders that transparency, predictability and comparability are important principles. As noted at SSMC, we will consider TIM symmetry further and keep open the potential for an asymmetric TIM where there is evidence that this would be in the interest of consumers in ED3.
- 7.63 We do not believe that early underspends in ED2 demonstrate a structural issue with the TIM and we do not intend weakening the core efficiency mechanism where it can be linked to delivery. Instead, these underspends reinforce the need for additional consumer protections and delivery controls where there is a weaker link to delivery or output incentives. Our decisions in respect of these additional controls are set out in the section below.

Delivery Accountability

SSMC summary

- 7.64 In the SSMC, we said that although ex ante funding certainty will be an enabler of investment in ED3, it may not be sufficient on its own to ensure that DNOs deliver the required outputs on time and to the expected standard. We explained that strong delivery and accountability mechanisms are essential if we are to translate planned investment into timely, tangible outcomes, particularly given the scale of network build required during the 2030s.
- 7.65 We highlighted that we are considering whether additional delivery incentives, including the potential for financial penalties for under-delivery, might be required to reinforce the importance of timely performance. We said that this question should be seen in the context of the broader ED3 incentive framework, which already includes the TIM, strengthened PCD arrangements and enhanced connection incentives.
- 7.66 We said that the TIM, if made more explicitly conditional on delivery, could itself provide strong incentives for DNOs to deliver network capacity proactively and efficiently. Under our proposals, companies would only retain efficiencies once delivery has been completed, reducing the risk that they benefit from deferring investment or delivering less than planned. We therefore noted that, if the TIM and other delivery-linked mechanisms are sufficiently strong, adding further incentives could risk over-complicating the overall framework or diluting the clarity of incentives elsewhere.
- 7.67 At the same time, we recognised that ED3 represents a step change in investment, and so we must consider carefully whether additional incentives could meaningfully support delivery without creating unintended consequences. We said that any such incentives would need to be proportionate, targeted and designed to complement rather than duplicate existing mechanisms.
- 7.68 We also emphasised the need to avoid double-counting or “double-penalty” effects. Because our proposals already include delivery-conditional TIM adjustments and the potential for PCDs across a wide range of investments, we were clear that new incentives must not penalise companies twice for the same shortfall. Any additional delivery measures must therefore be carefully designed to ensure integration with the wider regulatory framework.

Summary of consultation responses

- 7.69 Stakeholders expressed a wide range of views on whether additional delivery incentives are required for ED3, with consumer groups generally supportive and most DNOs expressing significant caution. Citizens Advice and BEAMA argued that further incentives could help reinforce delivery discipline, particularly given

the risk that early underspend signals under delivery rather than genuine efficiency. They supported tools such as strengthened close-out mechanisms and zero-sum incentives to protect consumers while still driving performance.

- 7.70 Most DNOs, including SPEN, SSEN-D, NGED and UKPN, did not support introducing new delivery incentives. They argued that the combination of TIM conditionality, PCDs, ODIs and upfront planning requirements already provides a strong accountability framework. These companies warned that new incentives could create duplication, distort decision-making, undermine the TIM, or increase regulatory burden. Several noted that delivery delays often stem from external dependencies, making new penalties inappropriate.
- 7.71 A small number of DNOs highlighted specific areas where delivery incentives might be relevant, such as DSO activities, LCT connections and Streetworks. However, these respondents also stressed the need for proportionality and alignment with the broader ED3 framework. Stakeholders agreed that ED3 must ensure stronger delivery accountability but diverged on whether this should be achieved through additional incentives or better calibration of existing mechanisms.
- 7.72 In summary, while all respondents recognised the importance of timely delivery in ED3, there was no broad support for new delivery incentives beyond what already exists in the ED3 proposals. The prevailing view among DNOs was that a well-designed combination of PCDs, TIM conditionality, existing ODIs and strong planning expectations would be sufficient to hold companies to account, without introducing new complexity or unintended consequences.

SSMD decision and rationale

- 7.73 We have decided to take a number of targeted steps, to address concerns around capex under-delivery across both load and non-load activities, increasing the likelihood of achieving outputs and outcomes, whilst at the same time protecting consumers where delivery falls short.
- 7.74 Firstly, we will seek to move a greater proportion of allowances into output-based mechanisms where possible and strengthen reporting and monitoring where necessary. For non-load capital expenditure, we will continue to consider options to improve accountability around those asset health activities that are not currently included within the NARM framework as set out in more detail in Chapter 5. For load expenditure we will focus on the development of a new output-based performance metric as set out in Chapter 2.
- 7.75 Secondly, we will increase the number of PCDs, by better defining project deliverables and linking funding directly to these projects. We will act proportionately when considering the projects or programmes of work where PCDs would be appropriate, considering the materiality of such projects or programmes.

- 7.76 Thirdly, we expect to introduce limits on the application of the totex incentive mechanism (TIM) to remaining capital allowances. Decisions on the extent of any limits on remaining capital allowances will be taken at Final Determinations but could involve removing access to TIM altogether, eg using a UIOLI mechanism, or by capping the level of TIM rewards through the application of a TIM cap, building on the concept used in the RIIO-ED2 Load Related Expenditure (LRE) Closeout Adjustment.
- 7.77 We think that any such limits should be at an aggregate cost category level rather than placing tight restrictions around individual sub-cost categories. This would effectively still allow fungibility within large parts of the capex spend but would remove (or significantly limit) the opportunity to trade capex allowances with opex, or other unrelated capex expenditure.
- 7.78 In reaching our decision we considered three high-level options;
- Firstly, rolling forward the current framework, with no further controls or limitations to the fungibility of allowances. This option was discounted on the grounds that we identified early in the ED3 process that the risk of consumer harm remains, and we signalled the potential for a more targeted use of TIM through the ED3 framework decision. We have not seen anything in the ED2 performance data that changes this position.
 - Secondly, placing tight restrictions around many specific areas of spend, essentially removing the concept of totex in ED3. We have decided not to progress this option given the broad consumer benefits of output-based regulation. This approach would limit the companies' ability to adapt to priorities in period and would not be compatible with our cost assessment approach, which relies heavily on totex modelling.
 - Thirdly, an approach that would see a proportionate reduction in fungibility in some parts of the price control;
 - which relate to capital investment in the network, where the risk of inaction or non-investment has the potential to create problems in the future
 - where we are observing some evidence of under-delivery
 - where there is a weak link between such investments, outputs and incentives, and where it is not considered sensible or possible to define suitable and proportionate outputs
- 7.79 We have decided to progress with the third option above on the basis that this approach would create additional protections for consumers whilst at the same time providing companies with some flexibility; maintaining the principle of fungible allowances but limiting the scope of that fungibility to a smaller proportion of totex.

8. Appendices

Appendix	Name of appendix	Page number
1	Approach to Impact Assessment	251
2	BPI early proposals	255
3	Background information on electricity distribution and price controls	262
4	Send us your feedback	265

Appendix 1. Approach to Impact Assessment

- A1.1 In our SSMC we consulted on the approach to take to Impact Assessment (IA) at Draft Determinations. This included what decisions should be considered in the 'do minimum' option and our preferred approach, views on the scope of the IA including the analysis of bill impacts, and views on how we would assess how the price control would meet other duties set to Ofgem in recent legislation.
- A1.2 In this Appendix we summarise key areas of our SSMC proposals on the IA methodology, the responses received in relation to these, and our decisions. We did not ask any formal consultation questions in relation to the proposed IA approach, but we invited views on the following four areas:
- the appropriateness of the counterfactuals and ED3 network option
 - the robustness of the assessment criteria
 - the transparency and accessibility of the IA methodology
 - opportunities to improve scenario modelling, assumptions, direct and indirect impacts
- A1.3 We received responses from four stakeholders: SPEN, two energy suppliers and a consumer group. We have grouped their responses under each relevant area below.

Options being assessed

- A1.4 In our SSMC we proposed that, as with the IA for our RIIO-3 price controls, the scope of the IA at Draft Determinations will cover the full price control. This means that we will consider the collection of policy decisions, incentives etc together as a single option to be assessed against a counterfactual (see below), rather than seeking to undertake many smaller IAs of individual policy decisions. This helps to ensure that our IA is proportionate.
- A1.5 We also highlighted in our SSMC that the IA on our Draft Determinations will not seek to justify individual policy positions, as these will be discussed and evidenced elsewhere in the ED3 Draft Determinations publications.
- A1.6 We did not receive any feedback directly on these points, and so we will proceed with this approach to the scope of the IA.

Counterfactual

- A1.7 We also proposed that we will assess the ED3 Draft Determinations against a counterfactual that represents an evolution to the current price control ("RIIO-ED2 Evolution") as we consider this to be the closest regulatory option to a do-minimum scenario.

Decision ED3 Sector Specific Methodology Decision

- A1.8 This recognises that we are required to implement a new price control on 1 April 2028 to replace RIIO-ED2, and that even if we were to continue with the existing RIIO-ED2 methodology we may need to make small changes to recognise changes in the energy industry or wider economy. We set out in our SSMC the similarities to and changes from RIIO-ED2 that we would include in that counterfactual.
- A1.9 We did not receive any feedback directly on this proposal, and so we will implement this as our counterfactual. We will engage with DNOs and wider stakeholders on the detail of the counterfactual as we set this out closer to the Draft Determinations.

Domestic bill impacts

- A1.10 We proposed that our IA would include bill impacts on domestic consumers, including a comparison between ED3 and RIIO-ED2 considering 'business-as-usual' and additional ED3 investments such as for network build.
- A1.11 One energy supplier and a consumer group requested that we publish estimated bill impacts earlier than we have done in previous price controls, as well as considering the impact that these would have on different consumer groups. We agree that there are benefits to early assessment and communication of the potential bill impacts, as the IA is an iterative process that feeds into policymaking and is not just an assessment of the final proposals and decisions. We will seek to engage with the DNOs and wider stakeholders as we develop our understanding of the potential impacts of our ED3 policy decisions in the lead up to Draft Determinations. This engagement may take the form of working groups and/or bilateral meetings, as appropriate.
- A1.12 One consumer group stated that we need to better capture how ED3 will impact different consumers, including how the costs and benefits of unlooping and connections will be spread, to aid policy design. As part of our IA, we will set out the impacts on consumers, both direct impacts on distribution costs and indirect effects on other costs and benefits. We agree that it is important to consider these costs alongside Ofgem's charging review, and we will consider the impact of ED3 when forming our views on cost allocation and recovery.
- A1.13 Another supplier suggested that we set out upfront an "affordable bill increase" that would then inform policy decisions and companies' business plans. We consider that it would be difficult to set out a definitive "affordability envelope", as affordability is subjective and dependent on many wider factors alongside network costs. We appreciate the importance of the IA as part of the decision-making process and in informing our Business Plan Guidance. As above, we will engage with DNOs on this prior to Draft Determinations.

Non-domestic bill impacts

- A1.14 We did not propose to conduct bill analysis for non-domestic customers, but explained our intention to provide high level analysis where possible. SPEN highlighted a risk that large non-domestic consumers could face substantial cost increases, with the potential for these costs to be passed through to end consumers.
- A1.15 We agree that it is important to consider the impact on non-domestic consumers. However, this is difficult to demonstrate clearly, as non-domestic consumers are more diverse than domestic consumers. We propose to draw out the impact on types of non-domestic consumers to assess the impact, as we did for the RIIO-3 Final Determinations.⁵⁷

Range of factors considered

- A1.16 SPEN responded that our Draft Determinations IA needs to consider a broader range of economic benefits including valuing the impact of reduced emissions, innovation, and regional development. It also said that we need to set out a clearer rationale (as compared to the RIIO-3 IA) for why we have chosen to include or exclude specific impacts. SPEN also stated that we should consider benefits beyond the end of ED3 in March 2033, as limiting benefits to the ED3 period understates the longer-term benefits.
- A1.17 We will review the impacts that we are able to include in the Draft Determinations IA, seeking to cover all impacts that have a clear direct or indirect impact and which we can reasonably quantify. Selecting the right period is difficult, and the longer the period the less certain our estimates will become. However, we will consider longer-term effects in our overall assessment of the recommended ED3 option compared with the counterfactual.
- A1.18 Any proposed changes that result from that review will be set out and explained in our Draft Determinations IA, so that stakeholders can review and respond to these proposals. We will engage with DNOs to understand the inputs and data they can provide, and to inform the development of our approach.

Statutory duties

- A1.19 In the IA we will assess the impact of our policies in relation to our statutory duties. In our SSMC we highlighted that the focus of our IA would be in relation to our principal duty to act in the interests of current and future energy consumers, alongside our newer statutory duties in relation to net zero and economic growth.

⁵⁷ [RIIO-3-Final-Determinations-impact-assessment.pdf](#)

Decision ED3 Sector Specific Methodology Decision

- A1.20 The Ofgem Review⁵⁸ signalled government’s intention to retain our existing principal objective to protect existing and future consumers (the “Consumer Duty”), while introducing new principal objectives to require that we facilitate net zero (strengthening our “Net Zero Duty”) and promote economic growth, (strengthening our existing "Growth Duty").
- A1.21 In our SSMC we highlighted that our Net Zero Duty (Energy Act 2023) means that, in determining what is in consumers’ interests, we must include their interest in the UK Government meeting its net zero 2050 target and interim carbon budgets. This duty is mostly addressed through the individual policies and investment decisions made through ED3, including facilitating the DNOs in delivering the RESP as required to support government targets. We did not receive feedback about assessment of the Net Zero Duty as part of our IA. In the coming months we will review our approach considering the strengthening of our Net Zero Duty, and consider what changes may be appropriate on both a policy level and on our ED3-wide IA.
- A1.22 In our SSMC we highlighted that our Growth Duty (Economic Growth (Regulatory Functions) (Amendment) Order 2024) means that we must have regard to the desirability of promoting economic growth. SPEN responded that we should make sure we consider a wider range of impacts that reflect growth areas. We will continue to review the appropriate areas to include in our IA, and we will engage with DNOs during our development of the Draft Determinations IA to ensure we take a robust and consistent approach. We will also review what changes may need to be made to ensure that our assessment is in line with our strengthened Growth Duty.
- A1.23 More broadly in relation to the growth duty, we will assess the growth impact of our policy decisions, based on analysis of the macroeconomic drivers of economic growth and the channels through which ED3 decisions may influence them. The form of this assessment will depend on the nature of our ED3 draft and final determinations, the direction of any impacts on growth, and whether there are trade-offs between the growth effects and the rest of the economic impacts that we identify that arise from our ED3 decisions.

⁵⁸ [The Ofgem Review final report | Department for Energy Security and Net Zero | April 2026](#). Action 1

Appendix 2. BPI early proposals

- A2.1 35 submissions were received from DNOs following our request for early proposals at SSMC. NGED (12); SPEN (8); UKPN (9); SSEN-D (6); NPg (1).⁵⁹ A full list of proposals is included at the end of this appendix.
- A2.2 Following our initial assessment, we identified 21 proposals for further consideration under the BPI. 16 of the 21 proposals support the development and evolution of regulatory mechanisms; these include new connection and Distribution System Operation (DSO) incentives, new investment accountability frameworks and proposals that have the potential to deliver higher quality services for customers.
- A2.3 Other proposals that will be taken forward for consideration include DNO pilots that support the development of new energy efficiency and low carbon technology (LCT) delivery policies, proposed frameworks to better understand and quantify the wider economic and social benefits of DNO activities and proposals that support supply chain resilience.
- A2.4 A high level description of early proposals by key policy areas is provided below. The number of proposals being taken forward (x) and the total received (y) are noted in brackets beside each heading (x/y).
- A2.5 As noted in paragraph 7.34, our decision to progress with certain proposals now should not be taken to mean that these proposals will necessarily be rewarded in the future. Ultimately decisions relating to rewards will be reserved until after business plans have been received and the full suite of mechanisms developed. The timing of any decisions relating to early proposals will therefore align with wider BPI decisions at Final Determinations.

Connections (4/4)

- A2.6 Three of the four proposals relating to connections link to our development of new connection incentives, with particular focus on minor connections.
- A2.7 The fourth proposal (LCT-readiness information platform) would see customer facing digital platforms rolled out across the sector, enabling those wishing to install LCTs to understand the suitability of their existing connection and whether additional works (such as unlooping and fuse upgrades) might be needed.

DSO (4/4)

- A2.8 Three of the four proposals relating to DSO were submitted by NGED and relate to the development of DSO policy for ED3. These include the establishment of a new role at the Transmission/Distribution (T/D) boundary, the production of a

⁵⁹ NPg's proposal was submitted jointly with UKPN. This joint proposal is one of UKPN's 9 proposals.

holistic DSO strategy and a new incentive focused on system outcomes; accelerating distributed renewables connections and minimising curtailment using flexibility services (largely demand turn up).

- A2.9 The fourth proposal from UKPN aims to minimise interruptions, in particular planned outages, for distributed generation following a similar model to the Interruptions Incentive Scheme (IIS) with Generation Interruptions (GIs) and Generation Minutes Lost (GMLs). We set out our current thinking in this area in paragraph 4.228.

Vulnerability (4/7)

- A2.10 We received seven early proposals relating to vulnerability. We would like to see elements of all seven of these proposals progressed but at this stage we would only expect four to be considered for rewards under the BPI.
- A2.11 Of the four that could be rewarded through the BPI, two relate to improving and standardising the support that customers receive in the event of interruptions due to storms. Another proposes a multi-channel Customer Satisfaction (CSAT) approach that enables vulnerable customers to provide meaningful feedback on the quality of service. The fourth, a Priority Services Register (PSR) data quality metric, proposes the development of a metric within the Consumer Vulnerability Incentive (CVI) to assess data integrity and the alignment of recorded needs with actual circumstances.
- A2.12 Three further proposals relating to the priority services register (PSR) were received from NGED, SSEN-D and UKPN. At this stage we would not expect to see these rewarded through the BPI for the reasons set out below. However, we are interested in seeing progress in these areas as part of our wider work to better protect the most vulnerable consumers.
- A2.13 Two of these proposals relate to the creation of a more consistent, targeted, and outcome-based service delivery model, based on needs codes (SSEN-D's 'Service Based PSR' proposal) and PSR segmentation to better understand vulnerability and provide proportionate and consistent support (NGED). These proposals raise important questions beyond the electricity distribution price control that relate to other sectors and the development of a more holistic approach to data collection, segmentation and prioritisation for vulnerable customers. For these reasons we do not currently think that it would be appropriate to reward these proposals through the ED3 BPI.
- A2.14 The third, UKPN's 'Tell Us Once' proposal, links to the development of a multi-sector PSR, and whilst this is considered important, we do not currently think that it would be appropriate to isolate this question to the ED3 price control and reward this proposal through the ED3 BPI.
- A2.15 Improving services for the most vulnerable in society remains a key priority across the utility sector. These proposals seek to address this by introducing

Decision ED3 Sector Specific Methodology Decision

greater consistency in the way that vulnerable customers are identified and in the segmentation and prioritisation of services to different groups of vulnerable customers. Whilst we do not currently think that it would be appropriate to reward these three PSR proposals through the ED3 BPI for the reasons set out above, we will keep this position under review and, depending on how these proposals evolve in the coming months, we may decide at Final Determinations that these proposals should be rewarded. In the meantime, we will continue to work with the DNOs to progress these proposals.

Load Delivery Metric (3/3)

A2.16 We received three proposals relating to the development of a new load accountability metric. These proposals are feeding into the work that we are doing to develop a robust framework to hold companies to account in the delivery of their load related investment plans.

LCT & EE Delivery (2/4)

A2.17 The two LCT & EE Delivery proposals, that we are minded to take forward, relate to place-based pilot programmes of energy efficiency and low carbon technology installation.

A2.18 UKPN proposed focusing on disadvantaged areas, funding and optimising solar, batteries and heat electrification to show system benefits and customer bill savings. Under this proposal UKPN would coordinate local infrastructure upgrades and align with existing schemes to support effective installations.

A2.19 SPEN's proposal is to install LCTs in domestic properties with a commitment to maintain post-install and work with partners on delivery. SPEN's proposal focuses less on understanding system benefits.

A2.20 Both proposals would allow us to test different potential DNO roles in LCT rollout and generate evidence that would help to inform future decisions on wider implementation.

A2.21 Two other proposals were received in this area, which we are minded not to take forward. One proposed carrying forward two bespoke Outcome Delivery Incentive (ODI-Fs) into ED3 and making them common for all DNOs; another related to the DNO enhanced coordination role. Whilst we consider both proposals may be sensible, neither was sufficiently novel to be taken forward through the early proposal process.

Impact Assessment (2/2)

A2.22 These two proposals relate to the development of frameworks to determine the wider value generated by DNO investments and services.

A2.23 NGED's Consumer Value Framework (CVF) proposal has been tested with other DNOs and Citizens Advice (CitA) and while there is consensus on some of

Decision ED3 Sector Specific Methodology Decision

the benefits, we do not consider that now is the right time to take this forward. We have confirmed at paragraph 3.431 that we would like to see the concept tested and developed further, led by DNOs/Energy Networks Association (ENA), with input from Citizens Advice and ISGs.

- A2.24 SPEN's proposal builds on its ET3 submission and proposes developing a common, independent methodology to determine the economic value of ED3 business plans.

Network Investment Planning (1/2)

- A2.25 SSEN-D submitted a proposal that links to our longer-term and more granular approach to network planning. It proposes that all networks should adopt the approach that they are taking to network development ie the development of Strategic Development Plans (SDPs) for each Grid Supply Point (GSP). These plans utilise Regional Energy Strategy Plans (RESP) and would underpin Long Term Integrated Network Development Plans (LINP). Questions remain over being overly prescriptive about different approaches to network planning, since this is an area where we already have clear outputs, for example Network Development Plans (NDPs), Long Term Development Statements (LTDS), headroom reports and licence conditions, but we will consider further.
- A2.26 We are not proposing to take forward SPEN's Load Related Expenditure (LRE) UIOLI early proposal, as we do not consider it to be sufficiently novel.

Supply Chain (1/1)

- A2.27 SSEN-D's proposal on supply chain enablers covers two areas. Firstly, it proposes a common, collective procurement model for the ED sector and the development of a central repository for critical spares and other assets. Secondly, it proposes that Ofgem should set a minimum (%) level of assets that should be sourced from local supply chains. Both ideas have considerable implementation challenges, including legislative and commercial barriers. However, we are continuing to explore both ideas, given the importance of this topic for the sector in ED3.

Climate Resilience (0/2)

- A2.28 NGED and SPEN submitted climate resilience proposals. While these proposals align with our broad direction of travel, we are not minded to take these specific proposals forward. One goes beyond Ofgem's Climate Resilience Metrics and Indicators (CRMI) direction without strong supporting evidence. The other proposed the development of a qualitative framework but provided no detail regarding what the framework might include or how it related to our SSMC proposals.

Digi & Data (0/2)

Decision ED3 Sector Specific Methodology Decision

A2.29 NGED submitted two early proposals relating to digitisation and data. We have decided not to take either forward on the basis that the proposals overlap with existing sector initiatives around data sharing and AI.

Reliability (0/3)

A2.30 We received three proposals relating to reliability from NGED and UKPN. These related to elements of the Interruptions Incentive Scheme (IIS), a mechanism that we had already signalled in the framework decision would be subject to development in ED3. Ultimately, these proposals were not considered sufficiently novel, covered mechanisms that we had already signalled in the SSMC or were not consistent with the direction that we have decided to take policy in this area.

Resilience (0/1)

A2.31 SSEN-D's Resilience as a Service proposal was not sufficiently clear on what it was seeking to achieve, since DNOs can already contract resilience services from battery energy storage systems (BESS) or other decentralised assets, if third parties are willing to provide them.

A2.32 List of ED3 Early Proposals

Organisation Proposal

SSEN-D	Supply Chain Enablers
SSEN-D	Enhanced Storm Support
SSEN-D	Service Based PSR
SSEN-D	SDP+ for GSPs and Investment Drivers to 2050
SSEN-D	Enhanced Coordinator Role for Energy Efficiency (ed2-cvp+)
SSEN-D	Resilience as a Service
NGED	Transmission Boundary Management: Whole system resilience (DSO)
NGED	Integrated Local System Planning: Accelerating demand (DSO)
NGED	Local System Operation: Affordable & reliable access (DSO)
NGED	Local flexibility market development: Accelerating distributed energy
NGED	Consumer Value Framework (CVF)
NGED	Enhanced Customer Service Segmentation
NGED	Evolution of Connections performance monitoring
NGED	LCT-readiness information platform
NGED	Reliability & resilience: Ensuring no one's left behind
NGED	Network Resilience to Climate Change
NGED	Data Standards Framework
NGED	AI Collaboration Hub
NPG	TANCI (joint)
UKPN	TANCI (joint)

Organisation Proposal

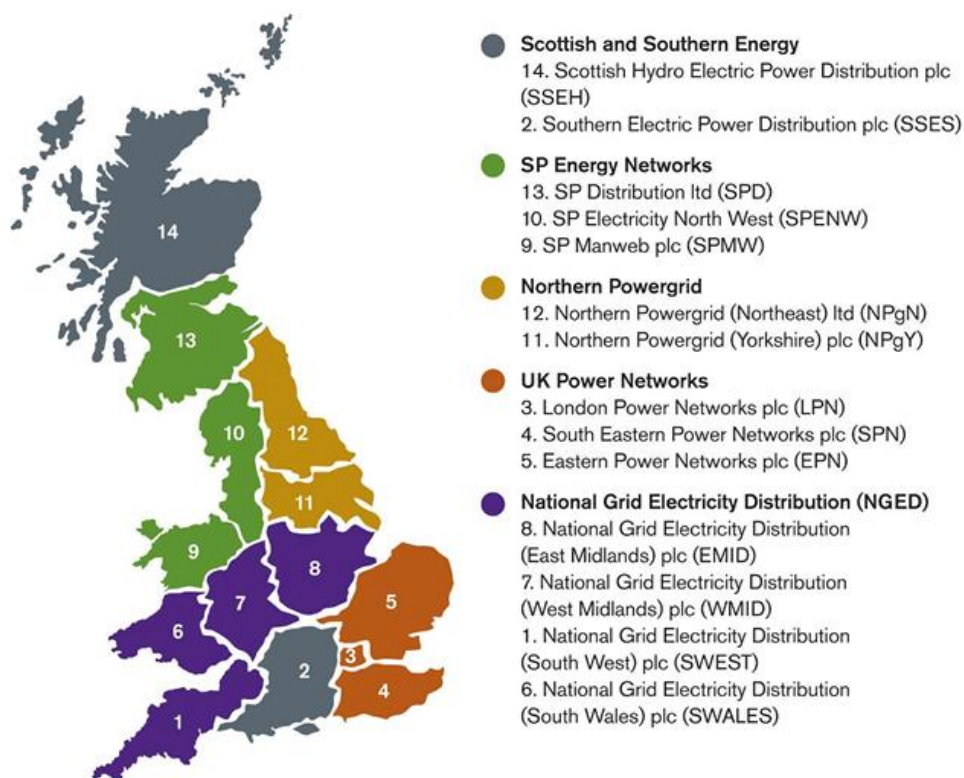
UKPN	PSR Tell Us Once
UKPN	PSR Data Quality Metric
UKPN	Enhancing Customer Satisfaction Measurement
UKPN	Energy Efficiency
UKPN	New Connections Incentive
UKPN	IIS+
UKPN	Short Interruptions
UKPN	DSO Incentive
SPEN	Customer Storm Support Strategy
SPEN	Load Index Metric
SPEN	LRE UIOLI
SPEN	Reactive LCT connections incentive
SPEN	Economic Growth common analysis and outputs
SPEN	Climate Resilience Metrics and Standards Framework
SPEN	DNO LCT scheme pilot
SPEN	Holistic Streetworks Package

Appendix 3. Background information on electricity distribution and price controls

Electricity Distribution

- A3.1 The Electricity Distribution network comprises approximately 800,000km of overhead lines and underground cables across GB, transporting electricity from the transmission system to homes and businesses. Private companies own and operate these networks, and consumers pay for them through energy bills.
- A3.2 The electricity distribution network carries electricity from the high voltage transmission network, reducing its voltage through distribution transformers, to homes and businesses on the local network. There are 14 electricity distribution licensees across GB, managed by five DNOs. The current structure is shown in Figure 3.

Figure 3: Great Britain's Distribution Network Operators



A3.3

A3.4 DNOs are regional monopolies. We therefore regulate the revenues they can recover from consumers to ensure they deliver an efficient and reliable service. In doing so, we are required to further our principal objective: protecting the interests of current and future energy consumers, including in relation to the UK's net zero targets. This includes ensuring current and future consumers pay a fair price while receiving the level of service they require.

- A3.5 We have used the Revenue = Incentives + Innovation + Outputs (RIIO) framework for the economic regulation of electricity distribution networks since 2015. RIIO involves setting baseline allowances to deliver core service and minimum standards and incentives to deliver innovation and outputs that consumers value.
- A3.6 RIIO-ED1 ran from April 2015 to March 2023. RIIO-ED2 started in April 2023 and will conclude on 31 March 2028, at which point new arrangements will be implemented through the Electricity Distribution Licence. ED3 will start on 1 April 2028.

Price control terminology

- A3.7 Across successive price controls, we have developed a suite of tools and mechanisms to implement a price control framework. We intend to use these tools for ED3 to best protect the interests of current and future consumers. This involves retaining elements of previous price control frameworks that continues to protect the consumers interest, simplifies and streamlines arrangements where possible, adapting and evolving to reflect the emerging challenges and opportunities we now face.
- A3.8 In this section we briefly describe the tools that we intent to use to build our framework for ED3.

Outputs and incentives

- A3.9 We use outputs to capture the aspects of network service quality that matter most to current and future consumers (including those in vulnerable situations). Outputs should be specific, measurable and substantively within the control of network companies to deliver. Generally, we expect the delivery level of an output to be funded through baseline allowances.
- A3.10 We or cost for consumers, an Output Delivery Incentive (ODI) can be applied to measure how far a company's performance deviates from the expected level. ODIs can be financial (reward and/or penalty) (ODI-F) or reputational (ODI-R) to drive company performance.
- A3.11 Licence Obligations (LOs) set the minimum standards expected of companies and they must be met. If a company fails to meet an LO, they may face formal enforcement action from Ofgem.
- A3.12 We can also use Price Control Deliverables (PCDs) to Link baseline totex funding to the delivery of a specific output. PCDs allow us to return money to consumers if the output is not delivered. There are two types of PCD:
- mechanistic PCDs are used where the cost and scope of an activity are well understood, with under-delivery automatically resulting in funding adjustments

- evaluative PCDs are used for larger or more complex projects which have clearly defined scopes. This type of PCD allows for an assessment of the output delivered and an adjustment to allowances, if necessary, to protect consumers

Uncertainty Mechanisms (UMs)

- A3.13 We intend to set most revenues upfront (ex ante), enabling companies to finance and deliver their investment programmes efficiently within budget.
- A3.14 However, there are some activities are introduced during the control period or have costs that cannot be forecast with a high degree of confidence at the time of setting the price control. To manage this, we use uncertainty mechanisms, to adjust allowances in period as more information becomes available and there is more certainty. These can take the form of:
- volume drivers - where unit rates are stable, but we can adjust allowances based on quantity
 - re-openers - where there is uncertainty on both price and quantity
 - Use It or Lose It (UIOLI) - where the specific nature of the work to deliver an output is unclear but it is expected to be of relatively low materiality
 - pass through costs - where expenditure is entirely outside of their control
 - indexation - where there is material uncertainty in the evolution of prices at the start of the control period, we may use indexation to avoid forecasting errors
- A3.15 We expect all these mechanisms to have a role in ED3. Chapter 6 sets out our decisions on some of these mechanisms in ED3.

Totex Incentive Mechanism (TIM)

- A3.16 The TIM is a means through which over or underspend incurred against baseline allowances are shared between the company and consumers. This incentivises companies to seek out efficiencies to lower costs and retain a share of this benefit and avoid cost increases. At the same time, it provides some protection to investors from the risk of costs significantly overrunning which helps to lower the cost of financing the companies. Both these are in the interest of consumers. Chapter 7 sets out some of our decisions on the use of the TIM in ED3.

Appendix 4. Send us your feedback

We believe that consultation is at the heart of good policy development. We are keen to receive your comments about this decision. We would also like to get your answers to these questions:

- Do you have any comments about the quality of this document?
- Do you have any comments about its tone and content?
- Was it easy to read and understand? Or could it have been better written?
- Are its conclusions balanced?
- Did it make reasoned recommendations?
- Do you have any further comments?

Please send your feedback to stakeholders@ofgem.gov.uk.